

ΕN

2024

Product Guide

European Union North America 60Hz **South America 60Hz International 50Hz**







The company

Giordano Riello, founder of Aermec, assisted by his son Alessandro and daughter Raffaella, has solidly associated the Company name with precise values:

Respect for the environment

By using new eco-friendly refrigerants as well as innovative installations using water as the carrier fluid.

Noise pollution control

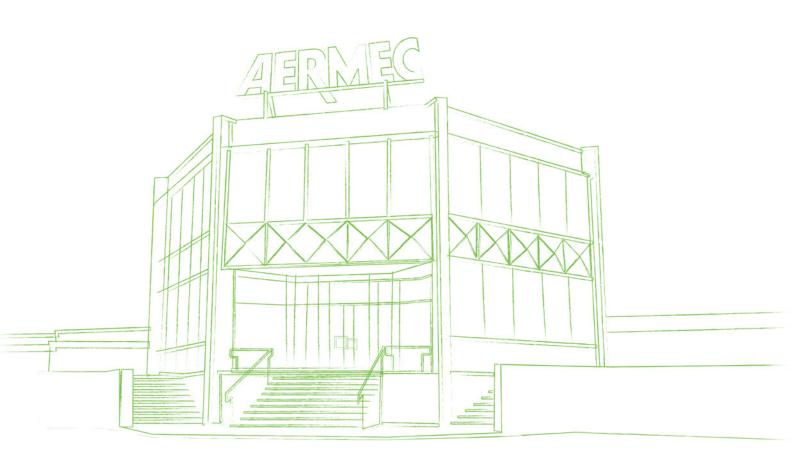
With low-noise emission products, which undergo scrupulous testing before being put on the market.

Energy saving

The great challenge of the Third Millennium, with the development of combined heating and air conditioning systems where appliances are used only as and when necessary.

Health care

With special filters that hold back the smallest suspension particles, the Cold Plasma Generator system that guarantees effective air purification (making for a healthier environment), and the new photocatalytic device, this air purification system is ideal for places where the highest degree of hygiene is required.



History

1961

Giordano Riello sets up Riello Condizionatori, initially producing for contractors only. The story begins.

1963

The Aermec brand is born and marks all future company products designed and manufactured on site. The brand name gains a stronghold as a major product name in Italy and throughout Europe.

1970

Aermec can already supply fresh and warm air. Aermec presents the first dual section conditioner: the first "split-system". Fancoil production starts.

1973

Aermec receives European Award Gold Mercury.

1980

The Eighties sees the development of water chillers and air handling units.

1990

The Nineties mark the definitive consolidation of the company on the market. The Aermec brand is associated with advanced technology and high quality design.

1998

The name makes the company. From 1 January Aermec becomes the company name as well as product brand.

2002

Design and technology: Aermec launched Omnia a new generation of fancoils, designed for domestic applications. OMNIA is the result of co operation with a worldwide prestigious designer.

2004

The international market ask for number and Aermec answer. Giordano Riello make the producing system more technogical. High producing, quality and assistance: the success of Aermec is going to continue.

2008

Aermec responds with more and more efficient units to the world challenge of energy saving with a special attention for our environment.

2011

Aermec turns 50. The company has developed and enlarged, always willing to understand and anticipate the needs of the market. Promoter of "integrated design" between designer and architect.

2015

The news Europe's largest test facility for air conditioning applications was inaugurated.

2017

Aermec receives Innovation Award from the US Organizations ASHRAE, AHRI and AHR. Aermec receives "Prime Company" certificate for the economic strength and commercial reliability from the international rating company Dun & Bradstreet.

2018

Aermec awards first prize in "RAC Cooling Industry Award 2018" in London by an Internationally qualified Jury. 2019 Sales force Business plan, takes place for the first time at the new Centre of Research "Raffaello Riello".

2019

Aermec receives the prizes: "NATIONAL ACR & HEAT PUMPS AWARDS 2019" in the category of Data Centre Rooftop Chiller installation, "H&V News Awards 2019" attributed by a HVAC technical jury the United Kingdom.

2020

For the second year in a row, Aermec receives the prize ACR NEWS AWARDS for Data Centers category in the UK.

2021

Aermec turns 60.

Aermec's 60th anniversary coincides with the Covid 19 pandemic.

The company opens a vaccination hub available not only to its own employees but to the entire population of the area.

2022

Aermec breaks through the barrier of 300 million turnover.

2023

Founder Giordano Riello leaves us on May 14.

LOGO INDEX:

CERTIFICATIONS:

 ϵ

CE marking

REFRIGERANT:

R1234

R1234ze refrigerant

№134

R134a refrigerant

R32

R32 refrigerant

Ř407c

R407C refrigerant

Ř410

R410A refrigerant

XP10

XP10 refrigerant

OPERATIONAL TYPES:



Evaporating unit

辮

Cooling and heating

Cooling only



DHW



Condensing unit

Free-Cooling

Heating only





Multipurpose



For four pipes plants



For three pipes plants



For two pipes plants

INSTALLATION TYPES:

န္ဂ

Cassette installation



Ceiling installation



Ducted installation



Floor installation



Wall installation



Air indoor unit



Air outdoor unit



Water indoor unit

KINDS OF EXCHANGERS:



Heat recovery



Plate exchanger



Pump kit



Shell and tube exchanger



Water tank

KINDS OF COMPRESSORS:



Centrifugal compressor



Inverter centrifugal compressor



Rotary compressor



Inverter rotary compressor



Scroll compressor



Inverter scroll compressor



Inverter twin screw compressor

KINDS OF FANS:



Axial fan



Inverter axial fan



Centrifugal fan



Inverter centrifugal fan



EC fan



Inverter EC fan



Plug fan



Inverter plug fan

EXTRA:



Inverter device



Compatible with ModBus protocol



Cold Plasma device



Touch control



Compatible with VMF system (Variable Multi Flow)



Aermec is one of the companies belonging to $\overline{\text{G}}$ iordano Riello International Group and takes part to Eurovent programme for NCD series.



Aermec takes part to EUROVENT Programmes: FCH - FCHP for fan coil series. Aermec is involved in EUROVENT Programme: LCP for chiller range. The products involved appear on the website www.eurovent-certification.com



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INDEX

	FAN COILS		Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	With cabinet; universal in					
	FCZ	On/Off	110-1300	0,65-7,62	1,45-17,02	12
	FCZI	Inverter	140-1140	0,89-8,60	2,02-17,10	25
	FCZ-D	On/Off	140-720	0,89-4,25	2,02-8,50	34
	FCZI-D	Inverter	140-720	0,89-4,25	2,02-8,50	38
	FCZ-H	On/Off	140-1140	0,89-8,60	2,02-17,10	43
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new	Omnia UL	On/Off	80-460	0,53-2,79	1,06-5,94	55
new	Omnia ULI	Inverter	110-460	0,69-2,79	0,76-5,94	60
	Omnia ULS	On/Off	36-427	0,30-3,00	0,30-6,15	64
	Omnia ULSI	Inverter	46-427	0,37-3,00	0,35-5,73	68
new	Omnia Radiant	On/Off o inverter with radiant panel	190-460	1,42-2,83	2,89-5,94	72
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	FCY	On/Off	148-1050	0,93-5,80	1,05-12,09	76
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	FCZI P	Inverter	140-1140	0,89-8,60	2,02-17,10	110
	Omnia UL P	On/Off	80-460	0,53-2,79	0,52-5,94	122
	Omnia ULI P	Inverter	110-460	0,69-2,79	0,76-5,94	126
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	VED 030I-340I	Inverter with static pressure 21-66Pa	161-775	0,98-5,27	0,90-10,95	136
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	VED 530I-741I	Inverter with static pressure 32-69Pa	1060-2358	6,05-16,08	6,70-31,71	148
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new	VDCB-D	Fan coil unit for ducted installations	200-3200	0,53-14,32	1,04-18,63	162
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	VEC-I	Inverter with coanda effect	130-613	0,80-4,28	0,95-9,18	178
	FCL	On/Off	300-1750	1,14-10,83	1,74-21,75	182
	FCLI	Inverter	300-1750	1,15-10,87	1,10-21,75	189
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new	FCW	On/Off	280-1082	1,37-7,00	1,42-14,00	196
new	FCW I	Inverter	280-1082	1,37-7,00	1,42-14,00	200
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	EHT	Active chilled beams	17-947	0,4-5,0	-	203
	Ventilcassaforma	Template for recessed installation of fancoils in the wall	-	-	-	210
	Control panels	Range of control panels for fan coils	-	-	-	213
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	REPURO	With cross-flow exchanger	100-650	_	_	233
	TRS	Heat recovery unit with enthalpy exchanger	250-1300	_	_	239
	RPLI	Counter-current flow heat recovery unit with inverter motor	200-3900	_	_	241
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	ERSR	High-efficiency heat recovery with rotary recovery unit	1000-3300	-	-	262

			Air flow rate		Heat. Cap.	Dago
	AIR HANDLIN		(m³/h)	(kW)	(kW)	Page
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	TS	Air flow rate 810÷4225 m³/h	810-4225	4,39-24,93	8,89-52,44	286
	TA	Air flow rate 800÷5000 m³/h	800-5000	4,2-39,6	3,9-72,8	290
	TN	Air flow rate 3000÷23000 m³/h	3000-23000	12,6-127,8	14,7-277,3	295
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	SPL 160-250	For wellness areas	16000-25000	-	-	309
	Packaged ROOF-TOP u			40.70.40.05	12 50 50 70	242
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	RTX 09-16	For medium crowding applications	-	50-135	49-141	318
	RTX 17-23	For medium crowding applications	-	151-307	152-310	324
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			Air flow rate	Cool. Cap.	Heat. Cap.	D
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	HMI	Reversible air/water heat pump	-	3,0-14,5	4,0-15,5	342
	ВНР	Air/Water split type reversible heat pump	-	3,2-11,5	4,0-16,0	348
new	HMG	Reversible air/water heat pump	-	32-60	35-65	360
	HMG_P		-	33-60	36-65	
	ANLI	Reversible heat pumps inverter	-	29,0-42,3	31,4-33,3	368
	ANK 020-150	Reversible air/water heat pump optimised for use in heating mode	-	6,8-39,8	8,0-35,3	374
	SWP	High temperature air cooled heat pumps for production of DHW	-	-	1,9	381
new	MIC	Air-water chiller	-	3	-	384
	ANL 021-202	Air-water chiller	-	5,7-43,3	-	389
	ANL 021H-203H	Reversible air/water heat pump	-	5,7-49,1	6,2-43,3	395
	NRK 0090-0150	Reversible air/water heat pump optimised for use in heating mode	-	18,4-31,0	20,8-34,4	406
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	NRV 0550	Air-water chiller	-	108,3	-	416
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	NRG 0282H-0804H	Reversible air/water heat pump	-	52,5-212,0	56,6-214,4	448
	NRGI 151-602	Air-water chiller	-	31,0-132,2	-	456
	NRGI 151H-602H	Reversible air/water heat pump Air-water chiller	-	28,9-123,7	31,6-133,9	461
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	NRG 0800-2400		-	225,7-725,0	-	477
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	NRB 0800H-2406H	Reversible air/water heat pump (plate heat exchanger) Reversible air/water heat pump (shell and tube heat exchanger)	-	196,4-647,7	209,8-683,9	513
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	CL 025H-200H	Air-water chiller with Plug Fan	-		7,7-44,8 -	
	NLC 0280-1250 NLC 0280H-1250H	Air-water chiller with Plug Fan Reversible air/water heat pump with Plug Fan	-	53-322 53-322	55-342	541 548
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	NSM 1402-9603	Air-water chiller	_	302-2100	_	553
	NSMI 1251-6102	Chiller with Inverter screw compressors	_	285,6-1342,6		567
	NSH	Reversible air/water heat pump	-	251-731	281-786	571
	NSG	Air-water chiller (with R1234ze)	-	228-1580	-	577
	Units with centrifugal of			120 1300		311
	TBA 1300-4325	Air-water chiller	-	328-1404	-	589
	TBG 1230-4310	Air-water chiller	-	200-1165	-	594
	-					

	AIR / WATER CH	IILLERS WITH FREECOOLING	Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compres		(111 /11)	(KW)	(KVV)	
	NRG 0282-0754 F	Air-water chiller with free-cooling	_	58-190	_	602
new	NRG 0800-2400-F	Air-water chiller with free-cooling	_	224-717	_	607
new	NRG 0800-2400-B	Air-water chiller with free-cooling glycol free		224-717		613
iew	NRB 0800-2406 F	Air-water chiller with free-cooling grycornee		211-680		619
	NRB 0800-2406 B	Air-water chiller with free-cooling glycol free	-	211-680		627
	NRV 0550 F	Air-water chiller with free-cooling grycornee		99,9-105,4		634
	Units with screw compres		-	99,9-105,4	-	034
	NSM 1402-9603 F	Air-water chiller with free-cooling		306-2028		638
	NSM 1402-9603 P	Air-water chiller with free-cooling Air-water chiller with free-cooling glycol free	-	305,8-2028,1	-	651
	NSM-HWT-1402-9603-F	·	-		-	
		Air-water chiller with free-cooling	-	306-2001	-	662
	NSM-HWT-1402-9603-B	Air-water chiller with free-cooling glycol free	-	306-1991	-	671
	NSMI 1251-6102 F	Air-water chiller with free-cooling and Inverter screw compressors	-	286-1280	-	679
	TBA 1300-3350 F	Air-water chiller with free-cooling	-	317,2-1223,6		684
	TBG 1230-4310 F	Air-water chiller with free-cooling	-	238-1110	-	689
			Air flow rate	Cool. Cap.	Heat. Cap.	Page
		CHILLERS AND HEAT PUMPS	(m³/h)	(kW)	(kW)	Page
	Units with scroll compres					
	WRL 026H-161H	Reversible water-cooled heat pump, gas side	-	6,0-40,0	8,0-48,0	696
	WRL 026-161	Water cooled heat pump reversible water side	-	6,6-44,2	7,5-48,0	703
	WRL 180H-650H	Reversible water-cooled heat pump, gas side	-	44,9-157,4	53,0-183,3	709
	WRL 180-650	Water cooled heat pump reversible water side	-	49,0-174,0	55,0-192,0	713
	WRK	Reversible water-cooled heat pump, gas side	-	38,9-165,9	48,5-207,7	718
	WWB 0300-0900	Water-water heat pumps only	-	-	56,7-265,9	726
	WWM	Water cooled heat pump reversible water side	-	96	110	731
	NXW 0503-1654	Water cooled heat pump reversible water side	-	111-511	127-582	737
	NXW 0503H - 1654H	Reversible water-cooled heat pump, gas side	-	106-477	125-565	742
new	NGW-0500-2600	Water cooled heat pump reversible water side	-	116,2-788,3	-	747
new	NGW-0350H-2600H	Reversible water-cooled heat pump, gas side	_	106,9-744,8	_	751
	Units with screw compre			, , .		
	WS 0601-2802	Water cooled heat pump reversible water side	_	147-700	164-778	755
	HWS 0601 - 2802	Water cooled heat pump reversible water side	_	147-369	165-778	759
	HWSG	Water cooled heat pump reversible water side		110-396	122-595	763
	WSH	Reversible water-cooled heat pump, gas side	-	165,8-269,7	183,3-300,3	767
	WFGI		-	217-1765	243-1960	777
		Water cooled heat pump reversible water side	-			
	WFGN	Water cooled heat pump reversible water side	-	136-1727	153-1921	781
	WFI	Water cooled heat pump reversible water side	-	291-2406	326-2664	788
	WFN	Water cooled heat pump reversible water side	-	182-2349	205-2610	797
	Units with centrifugal co			2004 2012		005
	WMX	Water/water chiller (with R134a)	-	280,1-324,2		805
	WMG	Water/water chiller (with R1234ze)	-	282,3-312,4		808
	WTX	Water/water chiller	-	222,9-1958,4		811
	WTG	Water/water chiller (with R1234ze)	-	246,6-1959,4	-	816
		<u>.</u>	Air flow rate	Cool. Cap.	Heat. Cap.	Dage
	MULTI-PURPOS	E Total Control Contro	(m³/h)	(kW)	(kW)	Page
	NRP 0200-0750	Air-water multipurpose (plate heat exchanger)	-	43-185	46-205	822
	NRP 0804-2406	Air-water multipurpose (plate heat exchanger)	-	207-639	208-662	829
iew	NPG 0800-2400	Air-water multipurpose (plate heat exchanger)	-	206,5-657,8	212,0-670,8	836
	CPS	Multifunction unit with multiple temperature level capability	-	164-491	176-505	845
	NXP 0500-1650	Water-water multipurpose (plate heat exchanger)	-	108-502	122-549	850
			Air flow rate	Cool, Cap.	Heat. Cap.	
	DOUGLASIA A LO	CONDITIONING	(m³/h)	(kW)	(kW)	Page
	PRECISION AIR		(111 /11)	(KVV)		
	P 10-932		-	7-160	-	858
		Direct expansion (air or water cooled); chilled water Direct expansion (air or water cooled); chilled water	-		-	858 863

	ROOM AIR CON	IDITIONERS	Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Pag
	Monobloc					
	FK	Monobloc window	-	2,7-3,6	-	874
	CMP (COMPACT)	Monobloc without outdoor unit	-	2,35	2,36	877
	PSL	Portable air conditioner	-	2,6-3,4	2,3-2,7	880
	Monosplit					
	SPG	Monosplit	-	2,5-6,2	2,8-6,5	883
	SGE	Monosplit	-	2,8-5,9	2,9-6,0	888
new	SCG	Monosplit	-	7,2-12,5	7,9-14,5	892
	CKG	Monosplit	-	2,7-6,6	2,9-6,8	896
	LPG	Monosplit	-	3,5-16,0	4,0-17,0	901
	MVAS	Monosplit high head duct	-	22,4-28,0	24,0-30,0	910
	Multisplit					
	MPG	Multisplit	-	4,1-12,1	4,4-13,0	913
	MGE	Multisplit		4,1-7,9	4,4-8,2	930
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new	MVBM - MVAS - MVBHR	Direct expansion variable refrigerant flow system VRF	-	12,1-246,0	14,0-276,0	938
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			(, ,,			
	DHW Systems and solar k	its	(//			
	GSA - KSA - CXS		(//			966
	•	its DHW systems, solar kits with high efficiency panels and vacuum solar manifolds				966
	GSA - KSA - CXS Thermal Buffers tank SAF	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production		-	-	970
	GSA - KSA - CXS Thermal Buffers tank SAF SAP	its DHW systems, solar kits with high efficiency panels and vacuum solar manifolds		- -	-	
	GSA - KSA - CXS Thermal Buffers tank SAF SAP Plug&Play hydronic kit	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production Buffer tank with capacity from 75 to 3500 litres		-	-	970 972
	GSA - KSA - CXS Thermal Buffers tank SAF SAP Plug&Play hydronic kit WST evo	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production		- - 80-1500	-	970
	GSA - KSA - CXS Thermal Buffers tank SAF SAP Plug&Play hydronic kit	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production Buffer tank with capacity from 75 to 3500 litres Hydronic kit plug & play		- - 80-1500	-	970 972
	GSA - KSA - CXS Thermal Buffers tank SAF SAP Plug&Play hydronic kit WST evo Cooling towers TRA	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production Buffer tank with capacity from 75 to 3500 litres Hydronic kit plug & play Cooling towers		- - 80-1500	-	970 972
	GSA - KSA - CXS Thermal Buffers tank SAF SAP Plug&Play hydronic kit WST evo Cooling towers TRA Remote condensers - Dry	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production Buffer tank with capacity from 75 to 3500 litres Hydronic kit plug & play Cooling towers coolers		- - 80-1500	-	970 972 975 978
	GSA - KSA - CXS Thermal Buffers tank SAF SAP Plug&Play hydronic kit WST evo Cooling towers TRA Remote condensers - Dry CSE	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production Buffer tank with capacity from 75 to 3500 litres Hydronic kit plug & play Cooling towers coolers Remote condensers		3-650		970 972 975 978 980
	GSA - KSA - CXS Thermal Buffers tank SAF SAP Plug&Play hydronic kit WST evo Cooling towers TRA Remote condensers - Dry CSE CVR	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production Buffer tank with capacity from 75 to 3500 litres Hydronic kit plug & play Cooling towers coolers Remote condensers Remote condensers		-		970 972 975 978
	GSA - KSA - CXS Thermal Buffers tank SAF SAP Plug&Play hydronic kit WST evo Cooling towers TRA Remote condensers - Dry CSE CVR CDR	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production Buffer tank with capacity from 75 to 3500 litres Hydronic kit plug & play Cooling towers coolers Remote condensers Remote condensers Remote condensers Remote condensers		3-650 44-500 150-590		970 972 975 978 980 982 984
	GSA - KSA - CXS Thermal Buffers tank SAF SAP Plug&Play hydronic kit WST evo Cooling towers TRA Remote condensers - Dry CSE CVR	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds Thermal Buffer tank kit with instantaneous Domestic Hot Water production Buffer tank with capacity from 75 to 3500 litres Hydronic kit plug & play Cooling towers coolers Remote condensers Remote condensers		3-650 44-500		970 972 975 978 980

140-1200

3-500

56-350

90-430

180-1100

100-950

2,9-4,0

2,7-7,1

4,3-5,2

988

990

992

994

996

998

1000

1002

1005

1008

CMV

WTE

 WTR

WDR

WGA

 WMV

FW-R

new DMT

CWX-CWXM

Dehumidifier

DMH-DMV

Water cooled condensing unit

Remote condensers

Water-cooled air conditioner

Water motocondensing unit

Dry cooler

Dry cooler

Dry cooler

Dry cooler

Dry cooler

Dehumidifier

Dehumidifier



BIM

Building Information Modeling

3D digital information system

- · Easy and intuitive downloading
- RFA (Autodesk Revit Family File) format



DESCRIPTION

Aermec BIM models contain information that is useful in the MEP plant design phase. BIM technology offers multiple advantages such as: greater efficiency and productivity, fewer errors, lower costs, greater interoperability, maximum sharing of information, more timely and consistent control of units, overcoming the inefficiencies and inaccuracies of the design method that traditionally characterises conventional professional practices, allowing for full integration between the design and execution phases.

Search and download HVAC products for heating, ventilation and air conditioning. Browse the library of BIM families to select the products to be used in your project.

FEATURES

Aermec BIM models contain the following information:

- Performance in heating and cooling mode data
- Energy data
- Electrical data
- Sound data
- Features of the hydraulic connections
- Construction features
- Dimensional data

COMPATIBILITY

Aermec BIM models are downloadable in rfa (Autodesk Revit Family File) format and on request also in .ifc interchange format to ensure maximum compatibility with all BIM software.

MODELS AVAILABLE

- Fan coils
- Recovery unitsAir treatment units
- Air-to-water chillers and heat pumps
- Freecooling air/water chillers
- Water-to-water chillers and heat pumps
- Multipurpose
- Rooftop

By scanning the QR code below you can access the AERMEC download area where you can select and download the desired unit:



FAN COILS

In this area of climate control, Aermec is real leader:

a major company in Italy and one of the top in Europe.

A leading position gained through long-standing experience that has gained ground year after year. Special attention to detail, quality materials state-of-the-art technology ensure optimal performance with virtually imperceptible noise levels, especially at low speed;

attention paid to dimensions and overall size, comparable to those of standard radiators, to enable installation in all residential and commercial environments;

exclusive design, anticipating trends and in harmony with interior design requirements;

new electronic control panel to enable automatic operation and achieve the most user-friendly climatisers to date. Aermec fancoils boast all these features and more.

	FAN COILS		Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	With cabinet; universa	al installation				
	FCZ	On/Off	110-1300	0,65-7,62	1,45-17,02	12
	FCZI	Inverter	140-1140	0,89-8,60	2,02-17,10	25
	FCZ-D	On/Off	140-720	0,89-4,25	2,02-8,50	34
	FCZI-D	Inverter	140-720	0,89-4,25	2,02-8,50	
	FCZ-H	On/Off	140-1140	0,89-8,60	2,02-17,10	43
	FCZI-H	Inverter	140-1140	0,89-8,60	2,02-17,10	49
new	Omnia UL	On/Off	80-460	0,53-2,79	1,06-5,94	55
new	Omnia ULI	Inverter	110-460	0,69-2,79	0,76-5,94	60
	Omnia ULS	On/Off	36-427	0,30-3,00	0,30-6,15	64
	Omnia ULSI	Inverter	46-427	0,37-3,00	0,35-5,73	68
new	Omnia Radiant	On/Off o inverter with radiant panel	190-460	1,42-2,83	2,89-5,94	72
	Without cabinet; conc	ealed installation with low static pressure				
	FCY	On/Off	148-1050	0,93-5,80	1,05-12,09	76
	FCYI	Inverter	123-799	0,80-4,70	0,90-10,15	86
	FCZ P - PO	On/Off	110-1300	0,65-7,62	1,45-17,02	95
	FCZI P	Inverter	140-1140	0,89-8,60	2,02-17,10	110
	Omnia UL P	On/Off	80-460	0,53-2,79	0,52-5,94	122
	Omnia ULI P	Inverter	110-460	0,69-2,79	0,76-5,94	126
	Without cabinet; duct	installation with high static pressure				
	VED 030-340	On/Off with static pressure 21-66Pa	161-775	0,97-5,26	0,90-10,95	130
	VED 030I-340I	Inverter with static pressure 21-66Pa	161-775	0,98-5,27	0,90-10,95	136
	VED 430-741	On/Off with static pressure 24-75Pa	750-2358	4,54-16,10	5,20-31,71	142
	VED 530I-741I	Inverter with static pressure 32-69Pa	1060-2358	6,05-16,08	6,70-31,71	148
new	VDCA-D	Fan coil unit for ducted installations	260-2800	0,79-12,81	1,57-16,67	155
new	VDCB-D	Fan coil unit for ducted installations	200-3200	0,53-14,32	1,04-18,63	162
	MZC	Plenum with motor-driven dampers for channelling fan coils				170
	Cassette; ceiling insta	llation				
	VEC	On/Off with coanda effect	130-613	0,80-4,28	0,95-9,18	174
	VEC-I	Inverter with coanda effect	130-613	0,80-4,28	0,95-9,18	178
	FCL	On/Off	300-1750	1,14-10,83	1,74-21,75	182
	FCLI	Inverter	300-1750	1,15-10,87	1,10-21,75	189
	Wall installation					
new	FCW	On/Off	280-1082	1,37-7,00	1,42-14,00	196
new	FCW I	Inverter	280-1082	1,37-7,00	1,42-14,00	200
	Chilled beams					
	EHT	Active chilled beams	17-947	0,4-5,0		203
	Ventilcassaforma	Template for recessed installation of fancoils in the wall				210
	Control panels	Range of control panels for fan coils				213
	VMF	Variable Multi Flow system for plant management				216

























FCZ



- Very quiet
- Touch controller mounted on-board. allows remote control with smart devices

Fan coil for universal and floor installation

Cooling capacity 0,65 ÷ 7,62 kW Heating capacity 1,45 ÷ 17,02 kW





DESCRIPTION

fan coil can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Depending on the version, the distribution grille may be adjustable.

Ventilation group

Consisting of double suction centrifugal fans that are particularly silent, statically and dynamically balanced, and directly coupled with the motor

The motor is wired for single phase and has three speeds, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.

Extractable shrouds for easy, effective cleaning

Finned pack heat exchanger

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Reversibility of the water connections during installation only for units with a standard or boosted main heat exchanger, or standard with BV accessory. Not reversible in all other configurations. In any case, units with the coil water connections on the right are available at the time of ordering.

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean. In the APC version, air purification is guaranteed by the Cold Plasma purifier.

The purifier is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours.

VERSIONS

A High, with fixed air distribution grille and built-in command

ACT High, with air distribution grille and electronic thermostat

AF High, without built-in command but with front intake

APC High, with air distribution grille, electronic thermostat and Cold Plasma purifier

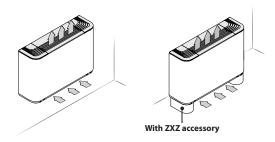
AS High, with air distribution grille without built-in command

U Universal, with adjustable air distribution grille but without built-in thermostat

UA Universal, with fixed air distribution grille but without built-in thermostat

UF Universal, with adjustable air distribution grille but without built-in thermostat and with front intake grille

Versions with fixed grille (high cabinet)



FCZ A

With built-in selector.

FCZ_AS

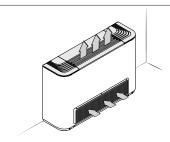
- Compatibility with VMF system.
- Without installed switch

FCZ_ACT

With electronic thermostat for 2-pipe systems only.

FCZ_APC

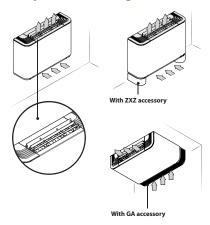
- With electronic thermostat for 2-pipe systems only.
- Cold Plasma purifier



FCZ_AF

- Without installed switch
- Compatibility with VMF system.
- Front intake grille.

Versions with adjustable and fixed grille (universal)

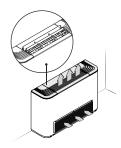


FCZ_U

- Compatibility with VMF system.
- Without installed switch
- Distribution grille with adjustable louvers. Sizes 1, 2 and 3 have a single grille, whereas sizes 4, 5, 6, 7, 8, 9 and 10 have three grilles fully independent of each other. When all the fins have closed, the unit switches off.
- Vertical and horizontal installation for 2-pipe and 4-pipe systems.

FCZ_UA

- Compatibility with VMF system.
- Without installed switch
- Air distribution grille with fixed louvers.
- Vertical and horizontal installation for 2-pipe and 4-pipe systems.



FCZ_UF

- Compatibility with VMF system.
- Without installed switch
- Air delivery grille with adjustable louvers.
- Front intake grille.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Fiel	d	Description
1,2,	,3	FCZ
4		Size 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
5		main heat exchanger
	0	Standard
	5	Oversized
6		Secondary heat exchanger
	0	Without exchanger
	1	Standard
	2	Oversized
7		Version
		Only vertical installation.
	Α	High, with fixed air distribution grille and built-in command
	ACT	High, with air distribution grille and electronic thermostat
	AF	High, without built-in command but with front intake
	APC	High, with air distribution grille, electronic thermostat and Cold Plasma purifier
	AS	Free standing without installed switch
		Vertical and horizontal installation.
	U	Universal, with adjustable air distribution grille but without built-in thermostat
	UA	Universal, with fixed air distribution grille but without built-in thermostat
	UF	Universal, with adjustable air distribution grille but without built-in thermostat and with front intake grille

SIZE AVAILABLE FOR VERSION

Size		100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
Versions produced	(by size)																				
Varriana available	A,AS,U,UA	•	•	•		•	•	•	•	•	•		•	•	•	•	•			•	•
Versions available	ACT,APC		-	-		•	-	-	•	•	-	-	•		-	-		•	-	-	•
(by size)	AF,UF	•	-	-	•	•	-	-	•	•	-	-	•	•	-	-	•	•	-	-	•
Size		600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001			
Versions produced	(by size)																				
V!! - - -	A,AS,U,UA		•				•	•	•	•		•	•	•	•		•				
Versions available	ACT,APC	•	-	-	•	•	-	-	•	•	-	-		•	-	•	•	-			
(by size)	AF,UF	-	-	-	-	-	-	-	-	-	-	-	-	•	-	•	•	-			

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PX2Z:** On-board electromechanical switch.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

T-TOUCH: Touch control on board the machine, for controlling fan coils with asynchronous motors. In 2-pipe systems, it can control standard fan coils or those equipped with an electric heater, with air purifying devices or with FCZ-D twin delivery (Dualjet). In 4-pipe systems, only standard fan coils.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

TXB: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

 $\boldsymbol{WMT10:}$ Electronic thermostat, white, with thermostated or continuous ventilation.

WMT16: Electronic thermostat with thermostated ventilation.

WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E22: User interface on the machine, to be combined with the VMF-E19 and VMF-E19l accessory.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils

with LH connections, and X4R for fan coils with RH connections. 230V \sim 50Hz power supply.

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components.

The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

(Heating only) additional coil

BV: Hot water heat exchanger with 1 row.

RX: Armoured electric coil with safety thermostat.

Installation accessories

PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.

GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.

FIKIT: Metal supports for vertical installation of the GA grille.

DSCZ4: Condensate drainage device.

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. **AMP:** Wall mounting kit

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	100	101	102	150	200	201	202	250
\FDF03ID (4)	AF,UF	•			•	•			•
ER503IR (1)	AS,U,UA	•	•	•	•	•	•	•	•
	AF,UF	•			•	•			
X2Z	AS,U		•	•	•	•	•	•	
	AF, UF	•			•	•			
A5 (2)	AS,U,UA	•	•	•	•	•	•	•	
SIT3 (3)	AS,U,UA	•	•	•	•	•	•	•	
SIT5 (4)	AS,U,UA	•	•	•	•	•	•	•	
	AF,AS,UF	•			•	•			
SW3 (2)	U,UA	•	•	•	•	•	•	•	•
	AF,UF	•			•	•			
SW5 (2)	AS,U,UA	•	•	•	•	•	•	•	
	AF,UF	•		<u> </u>	•	•	· · · · · · · · · · · · · · · · · · ·		•
-TOUCH (5)	AS,U	•	•	•	•	•	•	•	•
	AF,UF	•		•	•	•		•	•
X (6)	AS,U,UA	•	•		•	•	•	•	•
	AF,UF	•	•	•	•		•	•	
XB (5)	AF,UF AS,U,UA	•			•	•			•
			•	•			•	•	•
WMT10 (6)	AF,UF	•			•	•			•
	AS,U,UA	•	•	•	•	•	•	•	•
WMT16 (6)	AF,AS,U,UA,UF	•			•	•			•
VMT16CV (6)	AF,UF	•			•	•			•
	AS,U	•	•		•	•	•	•	•
Model	Ver	300	301	302	350	400	401	402	450
VEDENSID (1)	AF,UF	•			•	•			•
AER503IR (1)	AS,U,UA	•	•	•	•	•	•	•	•
N77	AF,UF	•			•	•			•
PX2Z	AF,UF AS,U	•	•	•	•	•	•	•	•
	AS,U AF,UF		•	•			•	•	
	AS,U	•	•		•	•	•		•
A5 (2)	AS,U AF,UF	•			•	•			•
5A5 (2) 5IT3 (3)	AS,U AF,UF AS,U,UA	•	•	•	•	•	•	•	•
A5 (2) SIT3 (3) SIT5 (4)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA	•	•	•	•	•	•	•	•
SA5 (2) SIT3 (3) SIT5 (4)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AS,U,UA	•	•	•			•	•	•
A5 (2) IT3 (3) IT5 (4) IW3 (2)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AS,U,UA U,UA U,		•				•	•	
A5 (2) IT3 (3) IT5 (4) IW3 (2)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF		•				•	•	
SAS (2) SIT3 (3) SIT5 (4) SW3 (2)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA								
SAS (2) SIT3 (3) SIT5 (4) SW3 (2)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF								
SAS (2) SIT3 (3) SIT5 (4) SW3 (2) SW5 (2)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA								
SAS (2) SIT3 (3) SIT5 (4) SW3 (2) SW5 (2)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U								
SAS (2) SIT3 (3) SIT5 (4) SW3 (2) SW5 (2) T-TOUCH (5) TX (6)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U								
AS (2) AS (3) AS (4) AS (5) AS (6) AS (7) AS (7) AS (8) AS (8)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U AF,UF AS,U AF,UF								
SAS (2) SIT3 (3) SIT5 (4) SW3 (2) SW5 (2) F-TOUCH (5) TX (6)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U,UA								
SAS (2) SIT3 (3) SIT5 (4) SW3 (2) SW5 (2) F-TOUCH (5) TX (6)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF								
AS (2) AS (3) AS (4) AS (5) AS (6) AS (7) AS (8) AS (8)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U,UA								
SAS (2) SIT3 (3) SIT5 (4) SW3 (2) SW5 (2) F-TOUCH (5) TX (6) NMT10 (6) NMT16 (6)	AS,U AF,UF AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U,UA								
SAS (2) SIT3 (3) SIT5 (4) SW3 (2) SW5 (2) F-TOUCH (5) TX (6) WMT10 (6)	AS,U AF,UF AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U,UA								
PX2Z SAS (2) SIT3 (3) SIT5 (4) SW3 (2) SW5 (2) TTOUCH (5) TX (6) TXB (5) WMT10 (6) WMT16 (6)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U AF,UF AS,U,UA								
SA5 (2) SIT3 (3) SIT5 (4) SW3 (2) SW5 (2) TTOUCH (5) TX (6) TXB (5) WMT10 (6)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA								
SAS (2) SIT3 (3) SIT5 (4) SW3 (2) F-TOUCH (5) TX (6) WMT10 (6) WMT16 (6) WMT16CV (6)	AS,U AF,UF AS,U,UA AS,U,UA AS,U,UA AF,AS,UF U,UA AF,UF AS,U,UA AF,UF AS,U,UA AF,UF AS,U AF,UF AS,U,UA								

Model	Ver	500	501	502	550	600	601	602	650
	AF,UF	•			•				
PX2Z	AS,U	•	•	•	•	•	•	•	•
CAE (2)	AF,UF	•			•				
SA5 (2)	AS,U,UA	•	•	•	•	•	•	•	•
SIT3 (3)	AS,U,UA	•	•	•	•	•	•	•	•
SIT5 (4)	AS,U,UA	•	•	•	•	•	•	•	•
	AF,UF	•			•				
SW3 (2)	AS	•			•	•	•	•	•
	U,UA	•	•	•	•	•	•	•	•
SW5 (2)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
T-TOUCH (5)	AF,UF	•			•				
	AS,U	•	•	•	•	•	•	•	•
TX (6)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
TXB (5)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
WMT10 (6)	AF,UF	•			•				
	AS,U,UA	•	•	•	•	•	•	•	•
WMT16 (6)	AF,UF AS,U,UA	•			•		, _		
	AS,U,UA AF,UF	•			•	•			•
WMT16CV (6)	AF,UF AS,U	•	•	•	•		•	•	•
Model AFDSOND (4)	Ver	700	701	702	750	800	801	802	850
AER503IR (1)	AS,U,UA	•	•	•	•	•	•	•	•
PX2Z	AS,U	•	•	•	•	•	•	•	•
SA5 (2)	AS,U,UA	•	•	•	•	•	•	•	•
SIT3 (3)	AS,U,UA	•	•	•	•	•	•	•	•
SIT5 (4) SW3 (2)	AS,U,UA AS,U,UA	•	•	•	•	•	•	•	•
SW5 (2)	AS,U,UA AS,U,UA	•	•	•	•	•	•	•	•
T-TOUCH (5)	AS,U	•	.	•	· ·	.	•	•	•
TX (6)	AS,U,UA	•	•	•	· ·	· ·	•	•	•
TXB (5)	AS,U,UA	•	•	•	•	•	•	•	•
WMT10 (6)	AS,U,UA	•	•	•	•	•	•	•	•
WMT16 (6)	AS,U,UA	•			•	•			•
WMT16CV (6)	AS,U	•		•	•	•	•		•
		000		001		F0	1000		1001
Model	Ver AF,UF	900		901		50	1000		1001
AER503IR (1)	AS,U,UA	•		•		•	•		•
	AF,UF	•		•		•	•		•
PX2Z	AS,U	•		•		•	•		•
	AF,UF	<u> </u>		<u> </u>		•	•		<u> </u>
SA5 (2)	AS,U,UA	•		•		•	•		•
	AF,UF						•		
SIT3 (3)	AS,U,UA	•				•	•		
CITE (A)	AF,UF						•		
SIT5 (4)	AS,U,UA	•		•		•	•		•
	AF,UF					•	•		
SW3 (2)	AS	•		•		•	•		
	U,UA	•		•		•	•		•
SW5 (2)	AF,UF					•	•		
(א) נאונ	AS,U,UA	•		•		•	•		•
T-TOUCH (5)	AF,UF	•				•	•		
1 100(11(3)	AS,U	•		•		•	•		•
TX (6)	AF,UF					•	•		
·/· (0)	AS,U,UA	•		•		•	•		•
TXB (5)	AF,UF	•				•	•		
.// (2)	AS,U,UA	•		•		•	•		•
WMT10 (6)	AF,UF	•				•	•		
	AS,U,UA	•		•		•	•		•
WMT16 (6)	AF,AS,U,UA,UF	•				•	•		
WMT16CV (6)	AF,UF	•				•	•		
	AS,U	•		•		•	•		•

Wall-mount installation.
 Probe for AERSO3IR-TX thermostats, if fitted.
 Cards for AERSO3IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
 Probe for AERSO3IR-TX thermostats, if fitted.
 Installation on the fan coil.
 Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system
For more information about VMF system, refer to the dedicated documentation.

VMF system

/MF System											
Model	Ver	100	101	102	150	200	201	202	250	300	301
124	AF,AS,U,UA,UF	•				•			•	•	
	AF,UF	•									
MF-E19 (1)	AS,U,UA	•	•		•	•	•		•	•	
			•	•			•	•			•
MF-E2Z	AF,UF	•			•	•			•	•	
VII LZZ	AS,U,UA	•	•	•	•	•	•	•	•	•	•
	AF,UF				•	•			•	•	
MF-E3	U,UA		•	•	•		•		•	•	
							· · · · · · · · · · · · · · · · · · ·	•			
MF-E4DX	AF,UF	•			•	•			•	•	
III LIDA	AS,U,UA	•	•	•	•	•	•	•	•	•	•
	AF,UF					•			•		
MF-E4X	AS,U,UA		•	•	•	•			•	•	
				•				•			
MF-IR	AF,UF	•			•	•			•	•	
	U,UA	•	•	•	•	•	•	•	•	•	•
4F CW	AF,UF	•			•				•	•	
NF-SW	AS,U	•	•		•			•	•	•	
	AF,UF				•				•		
MF-SW1		•				•				•	
	AS,U	•	•	•	•	•	•	•	•	•	•
ИНІ	AF,UF	•			•	•			•	•	
νιπι	AS,U,UA				•				•	•	
odel	Ver	302	350	400	401	402	450	500	501	502	550
24	AF,AS,U,UA,UF						•				
	AF,UF						•				•
ΛF-E19 (1)											
	AS,U,UA	•	•	•	•	•	•	•	•	•	•
MF-E2Z	AF,UF		•	•			•	•			•
/II -LZZ	AS,U,UA										
	AF,UF						•				
MF-E3											
	U,UA	•	•	•	•	•	•	•	•	•	•
MF-E4DX	AF,UF		•	•			•	•			•
VII -L 4 DA	AS,U,UA	•	•	•	•				•	•	•
	AF,UF		•				•	•			
MF-E4X	AS,U,UA										
		•	•	•	•	•	•	•	•	•	•
MF-IR	AF,UF		•	•			•	•			•
VII -IIV	U,UA	•	•	•	•	•	•	•	•	•	•
	AF,UF										
MF-SW	AS,U		•		•			•	•	•	
		.									
MF-SW1	AF,UF		•	•			•	•			•
WII 2001	AS,U	•	•	•	•	•	•	•	•	•	
	AF,UF		•								
MHI	AS,U,UA								•	•	
		•		<u> </u>		•	<u> </u>	<u> </u>	•		
odel	Ver	600	601	602	650	700	701	702	750	800	801
24	AF,AS,U,UA,UF								•		
<u> </u>											
ΛF-E19 (1)	AS,UA	•	•	•	•	•	•	•	•	•	•
VII E17 (1)	U		•	•			•	•			•
	AS,UA					•	•			•	•
AF-E2Z	U						•				
			•	•			•	•			
MF-E3	AF,UF	•		-	•	•			•	•	
	U,UA	•	•	•	•	•	•	•	•	•	•
4F F4DV	AS,UA		•	•	•	•	•	•	•	•	•
AF-E4DX	U										
							-				
ΛF-E4X	AS,UA	•	•	•	•	•	•	•	•	•	•
	U		•	•			•	•			•
	AFUE					•				•	
AT ID	AF,UF	•									
NF-IR			•	•	•	•		•		•	•
1F-IR	U,UA	•	•	•	•	•	•	•	•	•	•
	U,UA AS		•	•	•	•	•	•		•	
	U,UA AS U	•							•		
NF-SW	U,UA AS	•	•	•			•	•	•		
NF-SW	U,UA AS U AS	•	•	•	•	•	•	•	•	•	•
NF-SW	U,UA AS U AS U U		•	•	•	•	•	•	•	•	•
MF-IR MF-SW MF-SW1 MHI	U,UA AS U AS U AS U AS,UA	•		•	•	•	•		•	•	•
NF-SW	U,UA AS U AS U U		•	•	•	•	•	•	•	•	•
AF-SW1	U,UA AS U AS U AS U AS,UA					•				•	•
AF-SW1 AHI	U,UA AS U AS U AS U AS,UA U					•	•			•	•
AF-SW1	U,UA AS U AS U AS,UA U Ver AF,AS,U,UA,UF					•				•	•
AF-SW1 AHI	U,UA AS U AS U AS U AS,UA U					•				•	•
IF-SW1 IHI Indel	U,UA AS U AS U AS,UA U Ver AF,AS,U,UA,UF AF,UF			850	900			950		•	
IF-SW IF-SW1 IHI	U,UA AS U AS U AS,UA U Ver AF,AS,U,UA,UF							950		•	•

Model	Ver	802	850	900	901	950	1000	1001
	AF,UF					•		
VMF-E2Z	AS,UA	•	•	•		•	•	•
	U	•		•		•	•	•
	AF					•		
VMF-E3	U,UA	•	•	•	•	•	•	•
	UF		•	•		•	•	
	AF,UF					•		
VMF-E4DX	AS,UA	•	•	•	•	•	•	•
	U				•	•	•	•
	AF,UF					•		
VMF-E4X	AS,UA	•	•	•	•	•	•	•
	U	•		•	•	•	•	•
	AF		•	•		•		
VMF-IR	U,UA	•	•		•	•	•	•
	UF		•	•		•	•	
	AF,UF					•		
VMF-SW	AS	•	•	•	•	•	•	•
	U	•		•	•	•	•	•
	AF,UF					•		
VMF-SW1	AS	•	•	•	•	•	•	•
	U	•		•	•	•	•	•
	AF,UF					•		
VMHI	AS,UA	•	•	•	•	•	•	•
	U	•			•	•	•	•

Additional coil "BV"

(1) Also the accessory VMF-SIT3V	is mandatory if the ur	it exceeds ().7 Amperes	i.												
Water valves																
3 way valve kit																
	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZ41	VCZ41	VCZ41	VCZ41	VCZ41	VCZ41	VCZ41	VCZ41	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42
maili coli	VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224
Secondary coil	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-	-	VCF44 VCF4424	VCF44 VCF4424	-
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF444 VCF4424	-	-	-
	500	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850
Main sail	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42
Main coil	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224
Secondary coil	_	VCF44	VCF44	-	-	VCF44	VCF44	-	_	VCF44	VCF44	-	_	VCF44	VCF44	-
	ver	VCF4424	VCF4424		1165.44	VCF4424	VCF4424		1165.44	VCF4424	VCF4424		116544	VCF4424	VCF4424	
Additional coil "BV"	VCF44 VCF4424	-	-	-	VCF4424	-	-	-	VCF44 VCF4424	-	-	-	VCF4424	-	-	-
	VCF4424				VCF4424				VCF4424				VCF4424			
	900	901	950	1000	1001											
Main sell	VCZ43	VCZ43	VCZ43	VCZ43	VCZ43	•										
Main coil	VCZ4324	VCZ4324	VCZ4324	VCZ4324	VCZ4324											
Secondary coil	_	VCF45	_	_	VCF45											
		VCF4524			VCF4524											
Additional coil "BV"	VCF45	-	-	VCF45	-											
	VCF4524			VCF4524												
2 way valve kit																
	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZD1	VCZD1	VCZD1	VCZD1	VCZD1	VCZD1	VCZD1	VCZD1	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2
Maili Cuii	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224
Secondary coil	_	VCFD4	VCFD4	_	_	VCFD4	VCFD4	_	_	VCFD4	VCFD4	_	_	VCFD4	VCFD4	_
	V.CED 4	VCFD424	VCFD424		11650.4	VCFD424	VCFD424		11650.4	VCFD424	VCFD424		11550.4	VCFD424	VCFD424	
Additional coil "BV"	VCFD424	-	-	-	VCFD424	-	-	-	VCFD424	-	-	-	VCFD424	-	-	-
	VCFD424				VCFD424				VCFD424				VCFD424			
	500	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850
	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2
Main coil	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224
Cocondomicail		VCFD4	VCFD4			VCFD4	VCFD4			VCFD4	VCFD4			VCFD4	VCFD4	
Secondary coil	-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-

VCFD4

VCFD424

VCFD424 VCFD424

VCFD4

VCFD424

VCFD4

VCFD424

VCFD4

VCFD424

	100	101	102	150	200	201 202	250	300	301	302	350	400	401	402	
	900	901	950	1000 1	001										
lain sail	VCZD3	VCZD3	VCZD3		CZD3										
ain coil	VCZD324	VCZD324	VCZD324	VCZD324 VC	ZD324_										
econdary coil	-	VCFD4 VCFD424	-	_	CFD4 FD424										
dditional coil "BV"	VCFD4 VCFD424	-	-	VCFD4 VCFD424	-										
alve Kit for 4 pipe sys	tems - Require	es a the	mostat	with valv	e man	agement									
lodel	V		100		101	102		150	200		201		202		250
CZ1X4L (1)	AF,AS,U		.						•						
CZ1X4R (1)	AF,AS,L	J,UA,UF													
odel		er	300		301	302		350	400		401		402		450
CZ2X4L (1)	AF,AS,U		•					•	•						•
ZZ2X4R (1)		J,UA,UF							•						
odel	V		500		501	502		550	600		601		602		650
		,UF	•		301			•	000		001		002		050
CZ2X4L (1)	AS,L		•					•	•						
C72\/4D /4\	AF,		•												
CZ2X4R (1)	AS,L								•						
odel	V	er	700		701	702		750	800		801		802		850
CZ2X4L (1)	AS,L		•					•	•				- · · -		•
CZ2X4R (1)	AS,l								•						
lodel	V			900		901		0	50		1000			1001	
CZ3X4L (1)	AF,AS,U			•		701			•		•			1001	
CZ3X4R (1)		J,UA,UF		•					•		•				
) The valves can be combined wit				aging them.											
ombined Adiustment	and Balancine	g Valve	Kit												
					101	102		150	200		201		202		250
lodel	V	er	100 •		101	102		150	200		201		202	,	250
Combined Adjustment Model UP060 (1)	V o ACT,	er ,APC	100		101	102					201		202		
J P060 (1)	V	er ,APC J,UA	100					•	•						•
JP 060 (1)	V (ACT, AS,U	APC J,UA J,APC	100 •					•	•						
PO60 (1) PO60M (2)	Vo ACT, AS,U ACT,	er Jape Jape Jape Jape			•	•		•	•		•		•		•
JP060 (1) JP060M (2)	VI ACT, AS,U ACT, AS,U	er Jape Jape Jape Jape			•	•		•	•		•		•		•
JP060 (1) JP060M (2)	V. ACT, AS,L ACT, AS,L ACT, AS,L V. ACT, AS,L	er ,APC J,UA ,APC J,UA er ,APC J,UA	100		•	•		350	•		•		•		•
JP060 (1) JP060M (2) JP060 (1)	V. ACT, AS,L ACT, AS,L V. ACT, AS,L ACT, AS,L	er J,UA J,UA J,UA J,UA er J,UA J,UA	100		301	. 302		350	•		•		•		•
JP060 (1) JP060M (2) JP060 (1)	V. ACT, AS,L ACT, AS,L V. ACT, AS,L ACT, AS,L	er J,UA J,UA J,UA Er APC J,UA J,UA	100		301	. 302		350	•		•		•		•
JP060 (1) JP060M (2) JP060M (1) JP060M (2)	V. ACT, AS,L ACT, AS,L V. ACT, AS,L ACT, AS,L ACT, AS,L ACT, AS,L	er J,UA J,UA ,APC J,UA er APC J,UA ,APC J,UA	300		301	302		350	•		•		•		•
JP060 (1) JP060M (2) JP060M (1) JP060M (2)	V. ACT, AS,L ACT, AS,L V. ACT, AS,L ACT, AS,L	er J,UA J,UA ,APC J,UA er APC J,UA ,APC J,UA	300		301	302		350	400		•		•		450
	VV. ACT, AS,L	er J,UA J,UA J,UA Er APC J,UA APC J,UA APC J,UA APC J,UA	300		301	302		350	400		•		. 402		450
JP060 (1) JP060M (2) JP060M (1) JP060M (1) JP060M (2) JP060M (2)	V. ACT, AS,L ACT, AS,L V. ACT, AS,L ACT, AS,L ACT, AS,L ACT, AS,L	er J,UA J,UA J,UA Er APC J,UA APC J,UA APC J,UA APC J,UA	300		301	302		350	400		•		. 402		450
lodel	Vi ACT, AS, ACT, ACT, AS, ACT, AS, ACT, AS, ACT, AS, ACT, ACT, AS, ACT, ACT, AS, ACT, ACT, ACT, AS, ACT, AC	er ,APC J,UA ,APC J,UA er ,APC J,UA ,APC J,UA ,APC J,UA ,APC	300		301	302		350	400		. 401		402		450
	V. ACT, AS,L V. ACT, AS,L	er ,APC J,UA ,APC J,UA er ,APC J,UA ,APC J,UA ,APC J,UA ,APC	300		301	302		350	400		401		402		450
JP060 (1) JP060M (2) Indel JP060 (1) JP060M (2) JP060M (2) JP090 (1) JP090M (2)	Vi ACT, AS, ACT, AS, AS, AS, ACT, AS, AS, ACT, ACT, ACT, AS, ACT, ACT,	er ,APC J,UA ,APC J,UA er ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA	300		301	302		350	400		401		402		450
JP060 (1) JP060M (2) JP060M (2) JP060 (1) JP060M (2) JP090 (1) JP090M (2) JP090M (2)	VV. ACT, AS,L ACT, AS,L ACT, AS,L ACT, AS,L ACT, AS,L ACT, AS,L ACT, AS,L ACT, AS,L ACT, AS,L ACT, AS,L	er ,APC J,UA ,APC J,UA er ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA	300		301	302		350	400		. 401		. 402		450
JP060 (1) JP060M (2) JP060M (2) JP060 (1) JP060M (2) JP090 (1) JP090M (2)	V() ACT, AS,L ACT, AS,L V() ACT, AS,L	er "APC J,UA "APC J,UA er "APC J,UA "APC J,UA "APC J,UA "APC J,UA "APC J,UA	100		301	302		350	400		. 401		. 402		450
JP060 (1) JP060M (2) JP060M (2) JP060 (1) JP060M (2) JP090 (1) JP090M (2) JP090 (1) JP090M (2)	VV ACT, AS, ACT, ACT, AS, ACT, ACT, ACT, AS, ACT, ACT,	er ,APC J,UA ,APC J,UA er ,APC J,UA	100 - - - - - - - - - - - - -					350			. 401		. 402		· · · · · · · · · · · · · · · · · · ·
JP060 (1) JP060M (2) JP060M (2) JP060 (1) JP060M (2) JP090 (1) JP090M (2) JP090M (2)	VV. ACT, AS,L	er ,APC J,UA ,APC J,UA er ,APC J,UA	100 - - - - - - - - - - - - -					350			. 401		. 402		
JP060 (1) JP060M (2) JP060M (2) JP060M (2) JP060M (2) JP090 (1) JP090M (2) JP090 (1) JP090M (2) JP090M (2) JP090M (2)	VV. ACT, AS,L	er ,APC J,UA ,APC J,UA er ,APC J,UA	100 - - - - - - - - - - - - -					350			. 401		. 402 		
Pode Pode	VV. ACT, AS,L	er ,APC J,UA ,APC J,UA er ,APC J,UA	100 - - - - - - - - - - - - -					350			. 401		. 402		
odel P060 (1) P060M (2) odel P060 (1) P060M (2) P090 (1) P090M (2) odel P090 (1) P090M (2) P150 (1) P150M (2)	V. ACT, AS,I	er ,APC J,UA APC J,UA er ,APC J,UA er ,APC J,UA APC	100 - - - - - - - - - - - - -					350			. 401		. 402 		
odel P060 (1) P060M (2) odel P060 (1) P060M (2) P090 (1) P090M (2) odel P090 (1) P090M (2) P150 (1) P150M (2) odel	V. ACT, AS,I	er ,APC J,UA APC J,UA er ,APC J,UA er ,APC J,UA APC	100 300					550			. 401		. 402 		· · · · · · · · · · · · · · · · · · ·
odel P060 (1) P060M (2) odel P060 (1) P060M (2) P090 (1) P090M (2) odel P090 (1) P090M (2) P150 (1) P150M (2) odel	VV. ACT, AS,L	er ,APC J,UA ,APC J,UA er ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC	100 					550			. 401				
odel P060 (1) P060M (2) P060M (2) P060 (1) P060M (2) P090 (1) P090M (2) P090 (1) P090M (2) P150 (1) P150M (2) P150 (1) P150 (1)	VV. ACT, AS,L	er ,APC J,UA ,APC J,UA er ,APC J,UA	100 		501	502 		550			. 401				
odel P060 (1) P060M (2) P060M (2) P060 (1) P060M (2) P090 (1) P090M (2) P090 (1) P090M (2) P150 (1) P150M (2) P150 (1) P150 (1)	VV. ACT, AS,L	er ,APC J,UA ,APC J,UA er ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC J,UA ,APC	100 		501	502		550			. 401		. 402 		
	Vi ACT, AS, ACT, ACT, AS, ACT, ACT, AS, ACT, ACT,	er ,APC J,UA ,APC J,UA er ,APC J,UA er ,APC J,UA	100 	900	501	502 		550 			. 401				
odel P060 (1) P060M (2) odel P060M (2) P060M (2) P090 (1) P090M (2) odel P090 (1) P150 (1) P150M (2) odel P150 (1) P150M (2) odel Odel Odel Odel Odel Odel Odel Odel	Vi ACT, AS, ACT, AC	er ,APC J,UA ,APC J,UA er ,APC J,UA er ,APC J,UA	100 	900	501	502		550 							
	Vi	er ,APC J,UA er ,APC J,UA er ,APC J,UA er ,APC J,UA APC J,UA	100 		501	502		550 							
	Vi	er ,APC J,UA er ,APC J,UA er ,APC J,UA APC J,UA ,APC J,UA APC	100 	•	501			550 						1001	

(1) 230V~50Hz (2) 24V

(Heating only) additional coil

Heating only additional coil

Model	Ver	100	101	102	150	200	201	202	250
BV117 (1)	A,AF,AS,U,UA,UF	•							
BV122 (1)	A,AF,AS,U,UA,UF					•			
Model	Ver	300	301	302	350	400	401	402	450
BV132 (1)	A,AF,AS,U,UA,UF	•							
BV142 (1)	A,AF,AS,U,UA,UF					•			
Model	Ver	500	501	502	550	600	601	602	650
BV142 (1)	A,AF,AS,U,UA,UF	•							
BVZ800 (1)	A,AS,U,UA					•			
Model	Ver	700	701	702	750	800	801	802	850
BVZ800 (1)	A,AS,U,UA	•				•			
Model	Ver	900		901	9:	50	1000		1001
BV162 (1)	A,AF,AS,U,UA,UF						•		

⁽¹⁾ Not available for sizes with oversized main coil.

Electric coil - Requires a thermostat with heater management. Not available for sizes with an oversized main coil.

Model	Ver	100	101	102	150	200	201	202	250
RX17 (1)	AF,AS,U,UA,UF	•							
RX22 (1)	AF,AS,U,UA,UF					•			
Model	Ver	300	301	302	350	400	401	402	450
RX32 (1)	AF,AS,U,UA,UF	•							
RX42 (1)	AF,AS,U,UA,UF					•			
Nodel	Ver	500	501	502	550	600	601	602	650
RX52 (1)	AF,AS,U,UA,UF	•							
XZ800 (1)	AS,U,UA					•			
/lodel	Ver	700	701	702	750	800	801	802	850
RXZ800 (1)	AS,U,UA	•				•			
Model	Ver	900		901	9:	50	1000		1001
RX62 (1)	AF,AS,U,UA,UF		'						

⁽¹⁾ It requires a thermostat with heater management and the units without a housing also require the PCR1 or PCR2 accessory, depending on the unit. The heater is not available for sizes with a larger main battery.

Installation accessories

Wall mounting kit

Ver	100	101	102	150	200	201	202	250
U,UA	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20
UF	AMP20	-	-	AMP20	AMP20	-	-	AMP20
Ver	300	301	302	350	400	401	402	450
U,UA	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20
UF	AMP20	-		AMP20	AMP20	-	_	AMP20
Ver	500	501	502	550	600	601	602	650
U,UA	AMP20	AMP20	AMP20	AMP20	AMPZ	AMPZ	AMPZ	AMPZ
UF	AMP20	-	-	AMP20	-	-	-	
accessory cannot b	oe fitted on the configurat	ions indicated with -						
Ver	700	701	702	750	800	801	802	850
U,UA	AMPZ	AMPZ	AMPZ	AMPZ	AMPZ	AMPZ	AMPZ	AMPZ
Ver	900		901	9.	50	1000		1001
U,UA	AMPZ		AMPZ	AN	MPZ	AMPZ		AMPZ

Condensate recirculation device

Model	Ver	100	101	102	150	200	201	202	250
DCC74 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
DSCZ4 (1)	ACT,APC	•			•	•			•
Model	Ver	300	301	302	350	400	401	402	450
DCC74 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
DSCZ4 (1)	ACT,APC	•			•	•			•
Model	Ver	500	501	502	550	600	601	602	650
DCC74 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
DSCZ4 (1)	ACT,APC	•			•	•			•
Model	Ver	700	701	702	750	800	801	802	850
	A,AS,U,UA	•	•	•	•	•	•	•	•
DSCZ4 (1)	n,no,u,un								

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Model	Ver	900	901	950	1000	1001
DC(74 (1)	A,AS,U,UA	•	•	•	•	•
DSCZ4 (1)	ACT,APC	•		•		

⁽¹⁾ DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Condensate drip

Condens	sate drip								
Model	Ver	100	101	102	150	200	201	202	250
BCZ4 (1) -	A,AS,U,UA	•	•	•	•	•	•	•	•
DCZ4 (1)	ACT,APC	•			•	•			•
BCZ5 (2) —	A,AS,U,UA	•	•	•	•	•	•	•	•
DCZ3 (2)	ACT,APC	•			•	•			•
Model	Ver	300	301	302	350	400	401	402	450
BCZ4 (1) -	A,AS,U,UA	•	•	•	•	•	•	•	•
DCZ4 (1)	ACT,APC	•			•	•			•
DC7E (2)	A,AS,U,UA	•	•	•	•	•	•	•	•
BCZ5 (2) —	ACT,APC	•			•	•			•
Model	Ver	500	501	502	550	600	601	602	650
DC74 (1)	A,AS,U,UA	•	•	•	•	•	•	•	•
BCZ4 (1) —	ACT,APC	•			•	•			•
BCZ5 (2) —	A,AS,U,UA	•	•	•	•	•	•	•	•
DCZ3 (Z)	ACT,APC	•			•	•			•
Model	Ver	700	701	702	750	800	801	802	850
DC74 /1\	A,AS,U,UA	•	•	•	•	•	•	•	•
BCZ4 (1) —	ACT,APC	•			•	•			•
DC7F (2)	A,AS,U,UA	•	•	•	•	•	•		•
BCZ5 (2) —	ACT,APC	•			•	•			•
Model	Ver	900		901	9	50	1000		1001
	A,AS,U,UA	•		•		•	•		•
BCZ4 (1) —	ACT,APC	•				•	•		
DC76 (2)	A,AS,U,UA	•		•		•	•		•
BCZ6 (2) —	ACT,APC	•				•	•		

Panel closing the rear of the unit

Model	Ver	100	101	102	150	200	201	202	250
0.7100	A,AS,U,UA	•	•	•	•				
PCZ100	ACT, APC	•			•				
0.77200	A,AS,U,UA					•	•	•	
PCZ200	ACT,APC								
Nodel	Ver	300	301	302	350	400	401	402	450
067200	A,AS,U,UA	•	•		•				
PCZ300	ACT,APC								
007500	A,AS,U,UA					•	•	•	
PCZ500	ACT,APC					•			
Nodel	Ver	500	501	502	550	600	601	602	650
0.77700	A,AS,U,UA	•	•	•	•				
PCZ500	ACT, APC	•			•				
0.67000	A,AS,U,UA					•		•	
PCZ800	ACT,APC					•			
Nodel	Ver	700	701	702	750	800	801	802	850
C7000	A,AS,U,UA	•	•	•	•	•	•	•	•
PCZ800	ACT,APC	•			•	•			
Model	Ver	900	,	901	9.	50	1000	1	1001
	A,AS,U,UA		'	•	,	•	•		•
PCZ1000	ACT,APC								

Lower intake grille

Ver	100	101	102	150	200	201	202	250
U,UA	•	•	•	•				
U,UA					•	•	•	•
Ver	300	301	302	350	400	401	402	450
U,UA	•	•	•	•				
U,UA					•	•	•	•
Ver	500	501	502	550	600	601	602	650
U,UA	•	•	•	•				
U,UA							•	•
	Ver U,UA U,UA Ver U,UA Ver U,UA Ver U,UA	Ver 100 U,UA • U,UA • Ver 300 U,UA • U,UA • U,UA • U,UA •	Ver 100 101 U,UA • • U,UA • • Ver 300 301 U,UA • • U,UA • • Ver 500 501 U,UA • •	U,UA · · · · · · · · · · · · · · · · · · ·	Ver 100 101 102 150 U,UA · · · · U,UA · · · · Ver 300 301 302 350 U,UA · · · · · U,UA · · · · · U,UA · · · · · ·	Ver 100 101 102 150 200 U,UA · · · · · Ver 500 501 502 550 600 U,UA · · · · ·	Ver 100 101 102 150 200 201 U,UA · · · · · · · U,UA ·	Ver 100 101 102 150 200 201 202 U,UA ·

⁽¹⁾ For vertical installation.(2) For horizontal installation.

Model	Ver	700	701	702	750	800	801	802	850
GA800	U,UA	•		•		•	•	•	•
Model	Ver	900	1	901	950)	1000		1001
GA800	U,UA	•		•	•		•		•
Supports to	be combined with	the ornament	al grille (GA) fo	r floor installati	ion of the fan o	coil			
Model	Ver			102	150	200	201	202	250
FIKIT100	A,AS,U		•	•	•				
111111100	ACT,AF,AI				•				
FIKIT200	A,AS,U ACT,AF,AI					•	•	•	•
						<u> </u>			•
Model	Ver			302	350	400	401	402	450
FIKIT300	A,AS,U		•	•	•				
	ACT,AF,AI A,AS,U				•	•	•	•	•
FIKIT500	ACT,AF,AI					•	· ·	•	<u>.</u>
Model	Ver) 501	502	550	600	601	602	650
	A,AS,U		, 301			000	001	002	030
FIKIT500	ACT,AF,AI		<u> </u>	<u> </u>	•				
	A,AS,U					•	•	•	•
FIKIT800	ACT,A								•
Model	Ver	700	701	702	750	800	801	802	850
FIKIT800	ACT,A				•	•			•
	U,UA	•	•	•	•	•	•	•	•
Model	Ver		900	901		950	1000		1001
FIKIT800	A,AS,U		•	•		•	•		•
	ACT,AF,AI	PC,UF	•			•	•		
	h structural feet								
Model	Ver	100	101	102	150	200	201	202	250
ZXZ	A,AS,U,UA ACT,APC	•	•	•	•	•	•	•	•
Model	Ver	300	301	302	350	400	401	402	450
ZXZ	A,AS,U,UA ACT,APC	•	•	•	•	•	•	•	•
Model	Ver	500	501	502	550	600	601	602	650
ZXZ	A,AS,U,UA ACT,APC	•	•	•	•	•	•	•	•
Model	Ver	700	701	702	750	800	801	802	850
	A,AS,U,UA	•	•	•	•	•	•	•	•
ZXZ	ACT, APC	•			•	•			•
Model	Ver	900		901	950)	1000		1001
ZXZ	A,AS,U,UA	•		•	•		•		•
LNL	ACT,APC	•			•		•		

PERFORMANCE SPECIFICATIONS

2-pipe

2-pipe						74.50		F.672.0												C7.10	_		<i></i>	_						_
		_	CZ100	$\overline{}$		Z150	1	FCZ20			CZ250			CZ300	\rightarrow	_	CZ350	_		CZ400			CZ450	$\overline{}$		Z500			FCZ55(_
		1	2	3	1		3 1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	0C (1)	L	М	Н	L	M I	1 L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	M	Н	L	М	Н
Heating performance 70 °C / 60		1 45	2.00	2.40	1 [[2.19 2.	(F 2 A	2 205	2.70	2 20	2 10	4.05	2 47	1.10	r ro	2 77	4.02	(15	4 22	F 7A	7 1 [4 57	(20	7 02	F 27	7 71	0.50	r 02	0.24	0.75
Heating capacity	kW	, .		, .	,	, , ,	, ,		-, -	, .		,	- /	, .	,,	-,		., .	, -	- /	, .		-, -	, .	- /	,-	.,	.,.	- / -	
Water flow rate system side	I/h			_		192 2	_			193		-			_	330		\rightarrow		503	627			685			745	510		855
Pressure drop system side	kPa	4	7	9	5	9 1	2 6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16	12	21	28	10	20	26
Heating performance 45 °C / 40	kW	0,72	0.00	1,19	0,77	1 00 1	21 1 0	0 1 46	1 0 /	1.00	1 [0	2.01	1 77	2 21	2 72	1 07	2.44	2 06	2 1/	2 0 5	2 [[2 27	2 12	2 00	262	2 (2	4 22	2 00	111	100
Heating capacity	I/h		173	-		189 2	_	1,46	319	190		350				325	2,44 425	531	373	495	617	394		675	2,62 455		734	502	720	842
Water flow rate system side	kPa	4	7	10	5	9 1	_		18	8	15	22	8		18	8	14	20	10	16	24	6	11	16		21	28	10	20	
Pressure drop system side Cooling performance 7 °C / 12 °C		4	_/_	10)	9 1	2 0	12	10	0	13		0	IZ	10	0	14	20	10	10	24	0	- 11	10	12	21	20	10	20	26
	kW	0,65	0.04	1,00	0,80	1,06 1,	27 0,8	9 1,28	1 60	1,06	1,55	1 04	1,68	2,17	2 65	1,89	2,46	2 02	2,20	2 02	3,60	2,41	3,21	4,03	2,68	2 (0	4,25	2,91	/ 12	4.70
Cooling capacity Sensible cooling capacity	kW		0,69		0,60		_	1 1,05		0,79		1,94 1,52		1,65			1,76			2,92		1,69		2,90				-	4,13 2,98	2.40
Water flow rate system side	I/h			-		182 2°				182		334			456		460	_			619	,	-,	694		634	., .	,	711	
	kPa	4	6	8	6	12 1	_		18	8	17	25	8		18	11	18	25	10	16	24	9	15	22	13	22	29	12	22	
Pressure drop system side	Krd	4		0	0	IZ I	3 0	12	10	0	17	23	0	13	10	- 11	10	23	IU	10	24	7	נו	22	13	22	27	12	22	28
Fan	tuno														Contril	fugal														
Type Fan motor	type														Centrif synchr															
Fan motor	type		1			1		1	_		1			2 AS	Synchi	UIIOUS	2			2			2			2			2	
Number Air flow rate	no.	110	<u> </u>	200	110		00 144		200	1/0	<u> </u>	200	260		150	260		150	220		600	220		600	400		720	400		720
Air flow rate	m³/h W	110				160 20				140						260 25				460	600	330					720	400	600	720
Input power	W	19 V1	29	35	19 V1	29 3			33	25 V1	29	33	25 V1	33	44 V2		33	44 V2	30 V1	43 V2	57 V2	30 V1	43	57	38 V1	52	76 V2	38 V1	52 V2	76
Electrical wiring		V1_	V2_	V3	V1	V2 V	3 V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)	JD/A)	21.0	20.0	45.0	21.0	20.0 41	. 0 25	0 46 0	F1.0	25.0	46.0	F1 0	240	41.0	40.0	240	41.0	40.0	27.0	44.0	F1 0	27.0	44.0	F1 0	42.0	F1 A	FC 0	42.0	F1 0	F/ 0
Sound power level						38,0 45			51,0			_	34,0		48,0													42,0		56,0
Sound pressure	UB(A)	23,0	30,0	3/,0	23,0	30,0 37	,0 27,	0 38,0	43,0	27,0	38,0	43,0	20,0	33,0	40,0	20,0	33,0	40,0	29,0	30,0	43,0	29,0	30,0	43,0	34,0	43,0	48,0	34,0	43,0	48,0
Diametre hydraulic fittings	σ.		1/2//			1 /2//		1/2//			1/2//			2/4//			2/4//			2/4//			2/4//			2/4//			2/4//	
Main heat exchanger	Ø		1/2"			1/2″		1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4″			3/4"	
Power supply															201/	FOLI-														
Power supply		_													230V~	5UHZ														_
			FCZ60	0		FCZ65	0	F	CZ700			FCZ75	0		FCZ8	300		FC	Z850			FCZ90	0		FCZ9	50		FC	Z1000)
		1	2	3	1	2	3	1	2	3	1	2	3	1	2		-	1	2	3	1	2	3	1	2		_	1	2	3
		L	М	Н	L	M	Н	L	М	Н	L	М	Н	L	М		Н	L	М	Н	L	М	Н	L	M	ŀ	1	L	М	Н
Heating performance 70 °C / 60	°C (1)																													
Heating capacity	kW	6,50	8,10	10,00	7,19	9,15	11,50	8,10	9,80	11,00	9,10		12,50	9,80	10,8	80 12	,00 11	1,30 1	2,35	14,00	10,77	13,35	15,14	111,2	20 14,4	12 17	,10 12	2,53	15,24	17,02
Water flow rate system side	I/h	570	710	877	631	802	1008	710	860	964	798	991	1096	859	94	7 10)52 9	91 1	083	1227	945	1171	1328	982	2 126	4 15	00 1	101	1337	1493
Pressure drop system side	kPa	12	18	26	14	21	31	17	24	29	10	15	18	22	27	7 3	32	17	20	25	12	17	22	16	24	3	3 .	22	32	38
Heating performance 45 °C / 40	°C (2)																													
Heating capacity	kW	3,32	4,03	4,97	3,57	4,55	5,72	4,03	4,87	5,47	4,52	5,62	6,21	4,87	5,3	7 5,			,14	6,96	5,35	6,64		5,5	7 7,1	7 8,	50 6	,24	7,58	8,46
Water flow rate system side	l/h	561	699	863	621	790	993	699	846	950	786	975	1079	846	93	2 10	036 9	75 1	066	1209	930	1152	1307	967	7 124	5 14	76 1	084	1316	1469
Pressure drop system side	kPa	12	18	26	14	20	31	16	24	29	10	14	18	22	26	5 3	32	6	20	25	12	17	22	15	24	. 3	3	22	31	38
Cooling performance 7 °C / 12 °C																														
Cooling capacity	kW					4,80		3,92																	7 7,3					7,62
Sensible cooling capacity	kW	2,56	3,17	3,92	2,78	3,43	4,12	2,99	3,76	4,30	3,20	4,05	4,72	3,72	4,4	2 4,	,83 4,	,00 4	,83	5,36	2,97	3,78	5,68					,42	5,34	5,53
Water flow rate system side	l/h	554	671	800	595	825	975	675	841	946	734	918	1056	833	97	4 10)49 9	04 1	082	1189	738	860	1189	992	2 125	9 14	79 9	979	1183	1311
Pressure drop system side	kPa	14	19	26	15	21	28	16	24	30	10	14	18	20	26	5 3	30 1	14	20	23	10	12	22	15	22	3	0	22	31	36
Fan																														
Туре	type													(Centrif	fugal														
Fan motor	type													As	synchr	onous	5													
Number	no.		3			3			3			3			3				3			3			3				3	
		520	720	920	520	720	920	700	930	1140	700	930	1140	900	112	20 13	300 9	000 1	120	1300	700	930	1140	700	930	11	40 9	900	1120	1300
Air flow rate	m³/h			91	38	60	91	59	80	106	59	80	106	80	10	0 1	31 8	80 1	100	131	59	80	106	59	80	10)6	80	100	131
	m³/h W	38	60	91					1/2	V3	1/1	Wa	1/2	V1	V2	2 \	/3 \	V1	V2	V3	٧1	V2	V3	۷1	V2	V	2	V1	V2	V3
Air flow rate		38 V1	60 V2	V3	V1	V2	V3	V1	V2	٧٥	V1	V2	V3	V I					12	٧.,	V I	٧Z	٧.,	V I	V Z	. V	J	V I	12	_
Air flow rate Input power				_	_		V3	V1	V2	VO	VI	VZ	V3	VI					12	٧,5	V 1	12	٧,5	V I	V Z	. v	J	VI		
Air flow rate Input power Electrical wiring		V1	V2	V3	V1						50,0	57,0	62,0	56,0) 61,			6,0 6	1,0	66,0	51,0				0 57,				61,0	
Air flow rate Input power Electrical wiring Fan coil sound data (3)	W	V1 42,0	V2 51,0	V3 57,0	V1 42,0	V2	57,0	50,0		62,0	50,0	57,0		56,0) 61,		6,0 5 8,0 4	6,0 6	1,0	66,0		57,0	62,0	51,	0 57,	0 62	.,0 5	6,0		66,0
Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level	dB(A)	V1 42,0	V2 51,0	V3 57,0	V1 42,0	V2 51,0	57,0	50,0	57,0	62,0	50,0	57,0	62,0	56,0) 61,			6,0 6	1,0	66,0	51,0	57,0	62,0	51,	0 57,	0 62	.,0 5	6,0	61,0	66,0
Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level Sound pressure	dB(A)	V1 42,0	V2 51,0	V3 57,0	V1 42,0	V2 51,0	57,0	50,0	57,0	62,0	50,0	57,0	62,0	56,0) 61,	,0 58		6,0 6	1,0	66,0	51,0	57,0	62,0	51,	0 57,	0 62	.,0 5	6,0	61,0	66,0
Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level Sound pressure Diametre hydraulic fittings	dB(A)	V1 42,0	V2 51,0	V3 57,0	V1 42,0	V2 51,0	57,0	50,0	57,0	62,0	50,0	57,0	62,0	56,0) 61,) 53,	,0 58		6,0 6	1,0	66,0	51,0	57,0	62,0	51,	0 57,	0 62	.,0 5	6,0	61,0	66,0
Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level Sound pressure Diametre hydraulic fittings Main heat exchanger	dB(A)	V1 42,0	V2 51,0	V3 57,0	V1 42,0	V2 51,0	57,0	50,0	57,0	62,0	50,0	57,0	62,0	56,0 48,0) 61,) 53,	,0 58 4"	8,0 4	6,0 6	1,0	66,0	51,0	57,0	62,0	51,	0 57,	0 62	.,0 5	6,0	61,0	66,0

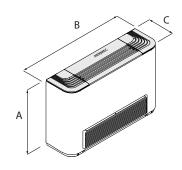
⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

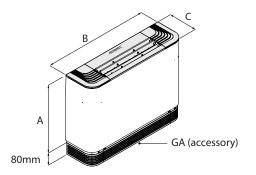
4-pipe

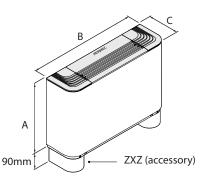
			CZ10	1		FCZ20	1		CZ30	1		FCZ40	1		CZ50	ī		FCZ60	1		CZ70	1		FCZ80	1		CZ90	1	F	CZ100)1
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 65 °C / 55 °	C (1)																														
Heating capacity	kW	0,75	1,01	1,17	1,02	1,35	1,60	1,80	2,18	2,56	2,21	2,65	3,12	2,59	3,34	3,73	2,96	3,67	4,36	3,66	4,29	4,94	4,20	4,79	5,35	4,73	5,63	5,72	4,85	5,56	6,08
Water flow rate system side	l/h	65	89	102	89	118	140	158	191	224	186	232	273	227	293	327	259	321	381	320	375	437	368	419	467	414	492	501	424	487	532
Pressure drop system side	kPa	2	4	4	4	8	10	16	23	30	4	6	8	6	8	10	8	12	16	11	14	18	16	20	24	8	12	12	10	14	16
Cooling performance 7 °C / 12 °C																															
Cooling capacity	kW	0,65	0,84	1,00	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25	3,22	3,90	4,65	3,92	4,89	5,50	4,84	5,66	6,10	4,29	5,00	6,91	5,69	6,88	7,62
Sensible cooling capacity	kW	0,51	0,69	0,83	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18	2,56	3,17	3,92	2,99	3,76	4,30	3,72	4,42	4,83	2,97	3,78	5,68	4,42	5,34	5,53
Water flow rate system side	I/h	112	144	172	153	221	275	288	374	456	379	503	619	460	634	731	554	671	800	675	841	946	833	974	1049	738	860	1189	979	1183	1311
Pressure drop system side	kPa	4	6	8	6	12	18	8	13	18	10	16	24	13	22	29	14	19	26	16	24	30	20	26	30	10	12	22	22	31	36
Fan																															
Туре	type															Centr	ifugal														
Fan motor	type														I	Asynch	ronou	IS													
Number	no.		1			1			2			2			2			3			3			3			3			3	
Air flow rate	m³/h	110	160	200	140	220	290	260	350	450	330	460	600	400	600	720	520	720	920	700	930	1140	900	1120	1300	700	930	1140	900	1120	1300
Input power	W	19	29	35	25	29	33	25	33	44	30	43	57	38	52	76	38	60	91	59	80	106	80	100	131	59	80	106	80	100	131
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	٧1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	٧1	V2	V3
Fan coil sound data (2)																															
Sound power level	dB(A)	31,0	38,0	45,0	35,0	46,0	51,0	34,0	41,0	48,0	37,0	44,0	51,0	42,0	51,0	56,0	42,0	51,0	57,0	50,0	57,0	62,0	56,0	61,0	66,0	51,0	57,0	62,0	56,0	61,0	66,0
Sound pressure	dB(A)	23,0	30,0	37,0	27,0	38,0	43,0	26,0	33,0	40,0	29,0	36,0	43,0	34,0	43,0	48,0	34,0	43,0	49,0	42,0	49,0	54,0	48,0	53,0	58,0	43,0	49,0	54,0	48,0	53,0	58,0
Diametre hydraulic fittings																															
Main heat exchanger	Ø		1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"	
Secondary heat exchanger	Ø															1/	/2"														
Power supply																															
Power supply																230V-	~50Hz	Z													

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS







		FCZ100	FCZ101	FCZ102	FCZ150	FCZ200	FCZ201	FCZ202	FCZ250	FCZ300	FCZ301	FCZ302	FCZ350	FCZ400	FCZ401	FCZ402	FCZ450
Dimensions and weights																	
A	mm	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486
В	mm	640	640	640	640	750	750	750	750	980	980	980	980	1200	1200	1200	1200
C	mm	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
Empty weight	kg	13	14	14	14	15	15	16	16	17	18	19	19	33	23	23	24
		FCZ500	FCZ501	FCZ502	FCZ550	FCZ600	FCZ601	FCZ602	FCZ650	FCZ700	FCZ701	FCZ702	FCZ750	FCZ800	FCZ801	FCZ802	FCZ850
Dimensions and weights																	
		40.6	40.0	406	40.0	100	100	40.0	100	40.0	40.6	100	40.0	40.0	40.0	40.6	100

		FCZ300	r(Z)UI	FCZ3UZ	rczssu	FCZOUU	r(Z001	r(Z00Z	FCZOOU	FC2/00	FCZ/UI	FCZ/UZ	FCZ/30	rczouu	r(ZOV1	FCZOUZ	rczosu
Dimensions and weights																	
A	mm	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486
В	mm	1200	1200	1200	1200	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
(mm	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
Empty weight	kg	24	22	23	24	24	29	31	33	29	31	33	33	29	29	31	33

		FCZ900	FCZ901	FCZ950	FCZ1000	FCZ1001
Dimensions and weights						
A	mm	591	591	591	591	591
В	mm	1320	1320	1320	1320	1320
C	mm	220	220	220	220	220
Empty weight	kg	34	34	34	34	34

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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FCZI



- Very quiet
- Touch controller mounted on-board. allows remote control with smart devices

Fan coil for universal and floor installation

Cooling capacity 0,65 ÷ 7,62 kW Heating capacity 1,45 ÷ 17,02 kW





DESCRIPTION

fan coil can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Depending on the version, the distribution grille may be adjustable.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans. They are statically and dynamically balanced and directly coupled to the motor shaft.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

The air flow can be continuously changed through a $1-10\,\mathrm{V}$ signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

The plastic augers are extractable for easy and efficient cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Reversibility of the water connections during installation only for units with a standard or boosted main heat exchanger, or standard with BV accessory. Not reversible in all other configurations. In any case, units with the coil water connections on the right are available at the time of ordering.

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.

Versions

ACT High, with air distribution grille and electronic thermostat

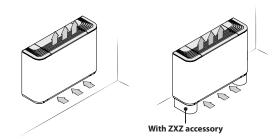
AF High, without built-in command but with front intake

AS Free standing without installed switch

U Universal, with adjustable air distribution grille but without built-in thermostat

 ${\bf UF}$ Universal, with adjustable air distribution grille but without built-in thermostat and with front intake grille

Versions with fixed grille (high cabinet)

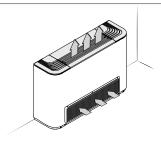


FCZI_AS

- Compatibility with VMF system.
- Without installed switch

FCZI ACT

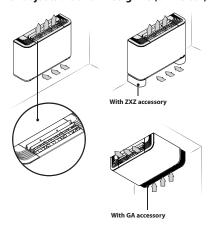
— With electronic thermostat for 2-pipe systems only.



FCZI_AF

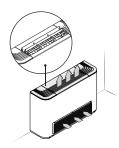
- Without installed switch
- Compatibility with VMF system.
- Front intake grille.

Versions with adjustable and fixed grille (universal)



FCZI_U

- Compatibility with VMF system.Without installed switch
- Distribution grille with adjustable fins. Sizes 2 and 3 have a single grille, whereas sizes 4, 5, 7 and 9 have three grilles fully independent of each other. When all the louvers have closed, the unit switches off.
- Vertical and horizontal installation for 2-pipe and 4-pipe systems.



FCZI_UF

- Compatibility with VMF system.
- Without installed switch
- Air delivery grille with adjustable louvers.— Vertical and horizontal installation.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

-	
Field	Description
1,2,3,4	FCZI
5	Size 2, 3, 4, 5, 7, 9
6	main heat exchanger
0	Standard
5	Oversized
7	Secondary heat exchanger
0	Without coil
1	Standard
2	Oversized
8,9,10	Version
	Only vertical installation.
ACT	High, with air distribution grille and electronic thermostat
AF	High, without built-in command but with front intake
AS	Free standing without installed switch
	Vertical and horizontal installation.
U	Universal, with adjustable air distribution grille but without built-in thermostat
	Universal, with adjustable air distribution grille but without built-in thermostat and
	with front intake grille
UF	Universal, with adjustable air distribution grille but without built-in thermostat and with front intake grille

SIZE AVAILABLE FOR VERSION

JIZE AVAILABLE	OIL VEILS	JION											
Size		200	201	202	250	300	301	302	350	400	401	402	450
Versions produced (by size)													
Varriana available (bu sine)	AS,ACT,U	•	•	•		•							•
Versions available (by size)	AF,UF	•	_	-	•	•	-	-	•	•	-	-	•
		500	501	502	550	700	701	702	750	900	901	950	
Versions produced (by size)													
Varriana available (by sine)	A,AS,U,UA	•	•	•		•	•	•	•	•	•	•	
Versions available (by size)	AF,UF	•	-	-	•	-	-	-	-	•	-	•	

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

T-TOUCH-I: Touch control on board the machine, for controlling fan coils with brushless motors. In 2-pipe systems, it can control standard fan coils or those equipped with an electric heater, with air purifying devices or with FCZI-D twin delivery (Dualjet). In 4-pipe systems, only standard fan coils.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

TXBI: On board thermostat for fan coils 2/4 pipes of the FCZI series with brushless motor, complete with water probe and air probe to be positioned in the dedicated housings. The thermostat in 2-pipe systems it can control standard fan coils or those equipped with electrical resistors, with purification devices (Cold Plasma and germicidal lamp) with the radiating plate or with double flow FCZI-D (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19I: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe, it controls systems with 2 pipes, 4 pipes, 2 pipes + Cold Plasma, 2 pipes + UV lamps, 2 pipes + Heating element. Equipped with an external contact to be used as a remote ON-OFF at low voltage. By means of 2-wire serial communication, this thermostat allows for the creation of a single fan coil area (1 master + maximum 5 slaves). Compared to the previous model, thanks to a different dip switch

configuration, it allows implementing new features:In systems with two pipes and a heating element - the latter can be activated as a complete replacement - allowing you to warm the environment exclusively with this accessory - Dualjet features are available in standard software and can be set via dip switch - Economy contact/presence sensor - Additional water sensor for overall control in 4-pipe systems (with VMF-SW1 accessory) - Serial RS485, ModBus RTU protocol, for centralised control - Possibility of inserting expansion boards for future developments. The VMF-E19 accessory must be therefore used in masters in the presence of multiple zones, or for communication with the chiller/heat pump - Compatibility with the VMF-IO accessory - Compatibility with VMF-LON expansion board. The thermostat is protected by a fuse.

VMF-E22: User interface on the fan coil, with two selectors, one for temperature and the other for speed control; to be combined with accessories VMF-E19 and VMF-E19I.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control

VMF-E4X: A wall-mounted user interface to be combined with VMF-E19, VMF-E19I, VMF-E19I, VMF-E24 ed VMF-E24I accessories. Featuring an innovative, extremely slim and cost-effective design, it allows running functions via a capacitive touchscreen keyboard with LCD display. You can choose to adjust the environment temperature with a panel-mounted sensor probe (standard), or with the VMF-E19/E19I probe, or through mediated reading. It also enables the activation of an air purifier (Cold Plasma/ UV lamp) and a heating element. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Additional coil

BV: Hot water heat exchanger with 1 row.

Installation accessories

PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.

GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.

FIKIT: Metal supports for vertical installation of the GA grille.

DSCZ4: Condensate drainage device.

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. AMP: Wall mounting kit

ZXZ: Pair of stylish and structural feet.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
	AF,UF	•			•	•			•	•			
AER503IR (1)	AS,U	•	•		•	•						•	•
DDOCOS	AF,UF	•			•	•			•	•			•
PR0503	AS,U	•	•	•	•	•		•	•		•	•	
CAT (2)	AF,UF	•								•			
SA5 (2)	AS,U	•	•	•	•	•	•		•	•	•	•	•
SW3 (2)	AF,UF	•			•	•			•	•			•
3W3 (2)	AS,U	•	•	•		•	•	•	•	•	•	•	•
SW5 (2)	AF,UF	•			•	•			•	•			•
3W3 (Z)	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
T-TOUCH-I	AF,UF	•			•	•			•	•			•
1-100CП-1	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
TX (3)	AF,UF	•			•	•			•	•			•
IN (3)	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
TXBI (4)	AF,UF	•			•	•			•	•			•
IADI (4)	AS,U	•	•	•			•					•	•
Model	Ver	500	501	502	550	700	701		702	750	900	901	950
		500	501	502	550	700	701		702	750	900	901	950
Model AER503IR (1)	Ver		501	502		700	701		702	750		901	
AER503IR (1)	Ver AF,UF	•			•						•		•
	Ver AF,UF AS,U	•			•						•		•
AER503IR (1) PR0503	Ver AF,UF AS,U AF,UF	•	•	•	•	•	•		•	•	•	•	•
AER503IR (1)	Ver AF,UF AS,U AF,UF AS,U	•	•	•	•	•	•		•	•	•	•	•
AER503IR (1) PR0503 SA5 (2)	Ver AF,UF AS,U AF,UF AS,U AF,UF AS,U	•	•	•			•		•			•	
AER503IR (1) PR0503	Ver AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U		•	•	•		•		•			•	•
AER503IR (1) PR0503 SA5 (2) SW3 (2)	Ver AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF		•	•			•		•			•	
AER503IR (1) PR0503 SA5 (2)	Ver AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U		•	•			•		•			•	
AERSO3IR (1) PRO503 SAS (2) SW3 (2) SW5 (2)	Ver AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF												
AER503IR (1) PR0503 SA5 (2) SW3 (2)	Ver AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U AF,UF AS,U												
AERSO3IR (1) PR0503 SA5 (2) SW3 (2) SW5 (2) T-TOUCH-I	Ver AF,UF AS,U AF,UF											•	
AERSO3IR (1) PRO503 SAS (2) SW3 (2) SW5 (2)	Ver AF,UF AS,U											•	
AER503IR (1) PR0503 SA5 (2) SW3 (2) SW5 (2) T-TOUCH-I	Ver AF,UF AS,U AF,UF												

VMF system For more information about VMF system, refer to the dedicated documentation.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
DI24	AF,UF	•			•	•			•	•			•
DIZ4	AS,U		•			•							•
VMF E101 (1)	AF,UF	•			•	•			•	•			•
VMF-E19I (1)	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E2Z	AF,UF				•	•			•	•			•
VIVIT-EZZ	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VME E2	AF,UF	•			•	•			•	•			•
VMF-E3	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4X	AF,UF	•			•	•			•	•			•
VIVIT-E4A	AS,U		•	•	•	•	•	•	•	•	•	•	•
VMF-IO	AF,UF	•			•	•			•	•			•
VIVIT-IU	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IR	AF,UF	•			•	•			•	•			•
VIVIT-IN	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VME LON	AF,UF				•	•			•	•			•
VMF-LON	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW	AF,UF	•			•	•			•	•			•
VVC-JIVIV	AS,U	•	•	•	•	•	•	•	•	•	•	•	•
VMF CW1	AF,UF	•			•	•			•	•			•
VMF-SW1	AS,U		•	•	•		•	•		•	•		•

Wall-mount installation.
 Probe for AERSO3IR-TX thermostats, if fitted.
 Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.
 Installation on the fan coil.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
VALU	AF,UF	•							•				
VMHI	AS,U	•	•	•		•	•	•	•	•	•	•	
Model	Ver	500	501	502	550	700	701		702	750	900	901	950
DI24	AF,UF	•				•				•	•		•
VIZ4	AS,U	•	•	•	•	•	•		•	•	•	•	•
VMF-E19I (1)	AF,UF	•			•						•		•
VIVIF-E191(1)	AS,U	•	•	•	•	•			•	•	•	•	•
VMF-E2Z	AF,UF	•			•						•		•
VIVIF-EZZ	AS,U	•	•	•		•			•	•	•	•	•
VMF-E3	AF,UF	•			•	•				•	•		•
VIVIF-ED	AS,U	•	•	•	•	•	•		•	•	•	•	•
VAAT EAV	AF,UF	•			•						•		•
VMF-E4X	AS,U	•	•	•		•				•	•	•	•
VMF-IO	AF,UF	•			•						•		•
VIVIT-IU	AS,U	•	•	•		•				•	•	•	•
VMF-IR	AF,UF	•			•	•				•	•		•
VIVIT-IN	AS,U	•											
VME ION	AF,UF	•									•		•
VMF-LON	AS,U	•											
VME CW	AF,UF	•			•						•		•
VMF-SW	AS,U	•	•	•	•	•	•		•	•	•	•	•
VMF CW1	AF,UF	•									•		•
VMF-SW1	AS,U	•	•	•	•	•	•		•	•	•	•	•
VAALII	AF,UF	•									•		
VMHI	AS,U	•		•									

(1) Mandatory accessory.

Water valves

3 way valve kit

	200	201	202	250	300	301	302	350	400	401	402	450
	VCZ41	VCZ41	VCZ41	VCZ41	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42
Main coil	VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224
		VCF44	VCF44			VCF44	VCF44			VCF44	VCF44	
Secondary coil	-	VCF4424	VCF4424	-	-	VCF4424	VCF4424	-	-	VCF4424	VCF4424	-
Additional coil "BV"	VCF44				VCF44				VCF44			
Additional coll BV	VCF4424		_		VCF4424	-	_	<u>-</u>	VCF4424	_	-	
	500	501	502	550	700	701	702	750	900	901	950	
Main coil	VCZ42	VCZ43	VCZ43	VCZ43								
Main coil	VCZ4224	VCZ4324	VCZ4324	VCZ4324								
C		VCF44	VCF44			VCF44	VCF44			VCF45		
Secondary coil	-	VCF4424	VCF4424	-	-	VCF4424	VCF4424	-	-	VCF4524	-	
Addisional sail //DV//	VCF44				VCF44				VCF45			
Additional coil "BV"	VCF4424	-	-	-	VCF4424	-	-	-	VCF4524	-	-	

VCZ41 - 42 - 43; VCF44 - 45 (230V~50Hz) VCZ4124 - 4224 - 4324; VCF4224 - 4524 (24V)

2 way valve kit

2 way valve kit												
	200	201	202	250	300	301	302	350	400	401	402	450
Main coil	VCZD1	VCZD1	VCZD1	VCZD1	VCZD2							
Main Coil	VCZD124	VCZD124	VCZD124	VCZD124	VCZD224							
Cocondonycoil		VCFD4	VCFD4			VCFD4	VCFD4			VCFD4	VCFD4	
Secondary coil	-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-
Additional coil "BV"	VCFD4				VCFD4				VCFD4			
Additional coll BV	VCFD424	-	-	-	VCFD424	-	-	-	VCFD424	-	-	-
	500	501	502	550	700	701	702	750	900	901	950	
Main coil	VCZD2	VCZD3	VCZD3	VCZD3								
Main coil	VCZD224	VCZD324	VCZD324	VCZD324								
Carandam call		VCFD4	VCFD4			VCFD4	VCFD4			VCFD4		
Secondary coil	-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-	-	VCFD424	-	
Additional coil "BV"	VCFD4				VCFD4				VCFD4	-		
AUUILIONAI CON BV	VCFD424	-	-	-	VCFD424	-	-	-	VCFD424	-	-	

VCZD1 - 2 - 3; VCFD4 (230V~50Hz) VCZD124 - 224 - 324; VCFD424 (24V)

Valve Kit for 4 pipe systems

valve factor 4 pr	pe systems												
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
VCZ1X4L (1)	AF,AS,U,UF	•			•								
VCZ1X4R (1)	AF,AS,U,UF	•			•								
VCZ2X4L (1)	AF,AS,U,UF					•			•	•			•
VCZ2X4R (1)	AF,AS,U,UF					•							•

Model	Ver	500	501	502	550	700	701	702	750	900	901	950
VCZ2X4L (1)	AF,UF	•			•							
VCZZA4L (1)	AS,U	•			•	•			•			
VCZ2X4R (1)	AF,UF	•			•							
VCZZA4K (1)	AS,U	•			•	•			•			
VCZ3X4L (1)	AF,AS,U,UF											•
VCZ3X4R (1)	AF,AS,U,UF									•		•

 $(1) \ \ The \ valves \ can \ be \ combined \ with \ the \ units \ if \ there \ is \ a \ control \ panel \ for \ managing \ them.$

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
VIDOCO (1)	ACT,AS,U	•	•						•				
VJP060 (1)	AF,UF	•				•			•				
VIDOCOM (2)	ACT,AS,U	•	•						•				
VJP060M (2)	AF,UF	•			•	•			•				
VID000 (1)	ACT,AS,U									•	•	•	•
VJP090 (1)	AF,UF									•	-		
VIDOOOM (2)	ACT,AS,U									•	•	•	•
VJP090M (2)	AF,UF									•			
Model	Ver	500	501	502	550	700	70)1	702	750	900	901	950
	ACT,AS,U	•	•	•	•								
VJP090 (1)	AF,UF				•								
VIDOOOM (2)	ACT,AS,U	•	•	•	•								
VJP090M (2)		•	•	•	•								
	ACT,AS,U AF,UF		•	•		•			•	•	•	•	•
VJP090M (2) VJP150 (1)	ACT,AS,U		•	•		•			•	•	•	•	•
	ACT,AS,U AF,UF ACT,AS,U		•	•			,			•		•	

(1) 230V~50Hz (2) 24V

(Heating only) additional coil

(incuting only)													
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
BV122 (1)	ACT,AF,AS,U,UF	•											
BV132 (1)	ACT,AF,AS,U,UF					•							
BV142 (1)	ACT,AF,AS,U,UF												
Model	Ver	500	501	502	550	700	70)1	702	750	900	901	950
Model BV142 (1)	Ver ACT,AF,AS,U,UF	500	501	502	550	700	70)1	702	750	900	901	950
			501	502	550	700	70)1	702	750	900	901	950

(1) Not available for sizes with oversized main coil.

Installation accessories

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
AMP20	U	•	•	•	•	•	•	•	•	•	•	•	•
AMPZ	U	•	•		•	•	•	•	•	•	•	•	•
Model	Ver	500	501	502	550	700	7	01	702	750	900	901	950
AMP20	U	•	•	•	•								
AMPZ	U	•	•	•	•	•		•	•	•	•	•	•
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
									330	100	701	702	150
DC(74 (1)	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•	•
DSCZ4 (1)	ACT,AS,U AF,UF	•	•									-	•
DSCZ4 (1) Model		500	501				•			•		-	950
	AF,UF	•	-	•	•	•	7	•	•	•	•	•	•

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
BCZ4 (1)	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•	•
DCZ4 (1)	AF,UF												
DC7C (2)	ACT,AS,U	•	•	•	•	•		•	•		•	•	•
BCZ5 (2)	AF,UF	•			•	•			•	•			•
Model	Ver	500	501	502	550	700	701		702	750	900	901	950
DC74 (1)	ACT,AS,U	•	•	•	•	•	•		•	•	•	•	•
BCZ4 (1)	AF,UF	•											•
DC75 (2)	ACT,AS,U		•	•		•			•				
BCZ5 (2)	AF,UF	•											
DC7C (2)	ACT,AS,U										•	•	•
BCZ6 (2)	AF,UF												

⁽¹⁾ For vertical installation.(2) For horizontal installation.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450
PCZ200	ACT,AS,U	•	•	•	•								
(2200	AF,UF	•			•								
PCZ300	ACT,AS,U					•	•	•	•				
C2300	AF,UF					•			•				
PCZ500	ACT,AS,U									•	•	•	•
1 (2)00	AF,UF									•			•
Model	Ver	500	501	502	550	700	70	1	702	750	900	901	950
PCZ1000	ACT,AS,U										•	•	•
7(21000	AF,UF										•		•
PCZ500	ACT,AS,U		•										
(2500	AF,UF	•											
PCZ800	ACT,AS,U					•			•	•			
Nodel	Ver	200	201	202	250	300	301	302	350	400	401	402	450
. 4.200	AF,UF	•											
5A200	AS,U	•	•	•	•								
***************************************	AF,UF					•							
GA300	AS,U						•	•					
1,500	AF,UF									•			•
A500	AS,U										•		•
Nodel	Ver	500	501	502	550	700	70	1	702	750	900	901	950
	AF,UF												
A500	AS,U	•	•	•									
1000	AF,UF												•
5A800	AS,U					•			•	•		•	•
Nodel	Ver	200	201	202	250	300	301	302	350	400	401	402	450
	AF,UF												
IKIT200	AS,U	•	•										
II/IT200	AF,UF					•			•				
IKIT300	AS,U					•	•		•				
IKIT500	AF,UF												
TRITOUU	AS,U									•			
Nodel	Ver	500	501	502	550	700	70	1	702	750	900	901	950
	AF,UF												
IKIT500	AS,U												
	AF,UF										•		
IKIT800	AS,U												
Nodel	Ver	200	201	202	250	300	301	302	350	400	401	402	450
	ACT,AS,U	•	•	•	•	•	•	•	•	•	•	•	•
ZXZ	AF,UF	•			•	•			•	•			
Model	Ver	500	501	502	550	700	70	11	702	750	900	901	950
	ACT,AS,U	•				•			•	•	•	•	•
XXZ	1101,10												

PERFORMANCE SPECIFICATIONS

Technical data - 2-pipe systems (main coil) 2-pipe

2-pipe		F	CZ1200)		CZI25	0	F	CZI30	0	F	CZ135	0	F	CZI40	0	F	CZ145	0		FCZI50	0		CZI55	0
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82	5,27	7,31	8,50	5,82	8,34	9,75
Water flow rate system side	I/h	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685	462	641	745	510	731	855
Pressure drop system side	kPa	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16	12	21	28	10	20	26
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88	2,62	3,63	4,22	2,89	4,14	4,85
Water flow rate system side	I/h	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675	455	631	734	502	720	842
Pressure drop system side	kPa	6	12	18	8	15	22	8	12	18	9	14	21	10	16	24	6	11	16	12	21	28	10	20	26
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,89	1,28	1,60	1,06	1,55	1,94	1,68	2,17	2,65	1,89	2,46	3,02	2,20	2,92	3,60	2,41	3,21	4,03	2,68	3,69	4,25	2,91	4,13	4,79
Sensible cooling capacity	kW	0,71	1,05	1,33	0,79	1,20	1,52	1,26	1,65	2,04	1,33	1,76	2,18	1,59	2,14	2,67	1,69	2,30	2,90	1,94	2,73	3,18	2,07	2,98	3,49
Water flow rate system side	l/h	153	221	275	182	267	334	288	374	456	350	460	560	379	503	619	414	552	694	460	634	731	501	711	824
Pressure drop system side	kPa	6	12	18	8	17	25	8	13	18	11	18	25	10	17	24	9	15	22	13	23	29	12	22	28
Fan																									
Туре	type												Centr	ifugal											
Fan motor	type												Inve	rter											
Number	no.	<u> </u>	1			1			2			2			2			2			2			2	
Air flow rate	m³/h	-	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600	400	600	720	400	600	720
Input power	W	5	8	14	5	8	14	5	7	13	5	7	13	5	10	18	5	10	18	7	18	34	7	18	38
Signal 0-10V	%	44	68	90	44	68	90	52	70	90	52	70	90	49	68	90	49	68	90	50	74	90	50	74	90
Fan coil sound data (3)		,																							
Sound power level	dB(A)	35,0	46,0	51,0	35,0	46,0	51,0	34,0	41,0	48,0	34,0	41,0	48,0	37,0	44,0	51,0	37,0	44,0	51,0	42,0		56,0	42,0	51,0	56,0
Sound pressure	dB(A)	27,0	38,0	43,0	27,0	38,0	43,0	26,0	33,0	40,0	26,0	33,0	40,0	29,0	36,0	43,0	29,0	36,0	43,0	34,0	43,0	48,0	34,0	43,0	48,0
Diametre hydraulic fittings																							_		
Main heat exchanger	Ø		1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"	
Power supply																									
Power supply		<u> </u>											230V	~50Hz											
				FCZ	700					FCZ	750					FCZ	900					FCZ	1950		
		1			2		3	1			2		3	1			2				1		2		3
		L		N	Л		1	L	-	N	Л		H	l		N	Л	ŀ	1		L		И		H
Heating performance 70 °C / 60 °C (1)		_																							,10
Heating capacity	kW	8,1			80	11,		9,		11,			,50	10,		13		15,		_	1,20	14	,42		
Heating capacity Water flow rate system side	l/h	71	0	86	50	96	54	79	98	99	91	10	196	94	15	11	71	13	28	9	82	14	64	15	500
Heating capacity Water flow rate system side Pressure drop system side			0		50		54	_	98	99		10			15		71		28	9		14		15	
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2)	I/h kPa	71	7	86	3	96	54 9	79 1	98 0	99	91 5	10)96 8	94	15 2	11	71 7	13	28	9	16 16	14 12 2	164	15	500 33
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity	I/h kPa kW	71 17	0 7 3	2 4,	50 3 87	96 2 5,	54 9 47	79	98 0 50	99 1 5,	91 5 60	10)96 8 20	94 1 5,	15 2 35	11 1 6,	71 7 64	13 2	28 2 53	9 1 5,	182 16 ,57	14 12 2	164 15	15 3	500 33
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side	I/h kPa kW I/h	71 17 4,0 69	0 7 03 9	4,	50 3 87 46	96 2 5,	9 47 50	79 11 4,5 78	98 0 50 36	99 1 5,	91 5 60 75	10 1 6, 10)96 8 20 79	92 1 5,	15 2 35 80	11 1 6,	71 7 64 52	7, 13	28 2 53 07	9 1 5,	82 16 ,57	14 12 2 7,	164 17 145	15 3 8,	500 33 50 476
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side	I/h kPa kW	71 17	0 7 03 9	4,	50 3 87	96 2 5,	9 47 50	79	98 0 50 36	99 1 5,	91 5 60 75	10 1 6, 10)96 8 20	94 1 5,	15 2 35 80	11 1 6,	71 7 64 52	13 2	28 2 53 07	9 1 5,	182 16 ,57	14 12 2 7,	164 15	15 3 8,	500 33
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C	I/h kPa kW I/h kPa	71 17 4,0 69	0 7 03 9	86 2 4, 84 2	87 16 4	96 2 5,0 95 2	64 9 47 50 9	79 10 4,5 78	98 0 50 36 0	99 1 5, 97	91 5 60 75 5	10 1 6, 10	996 8 20 79 8	9/2 1 5,3 93	15 2 35 80 2	6, 11	71 7 64 52 7	7,; 13 2	28 2 53 07 2	9 1 5, 9	.57 .67	14 12 2 7, 12	17 145 144	15 3 8, 14 3	500 33 50 50 476 33
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity	l/h kPa kW l/h kPa	71 17 4,0 69 17	0 7 7 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	4, 84 2	87 46 4	5, 95 2	64 9 47 50 9	79 11 4,5 78 11	98 0 50 86 0	5, 97 1	91 5 60 75 5	10 1 6, 10 1	096 18 20 079 18	92 1 5,3 93 1	35 36 30 2	6, 11 1 5,	71 7 64 52 7	7,, 13 2 7,, 13 2	28 2 53 07 2	9 1 5, 9 1	,57 ,67 15	14 12 2 7, 12 2	164 15 17 145 14 14	15 3 8, 14 3	500 33 50 50 176 33
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity	I/h kPa kW I/h kPa kW kW	71 17 4,0 69 17 3,9 2,9	0 7 7 9 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9	86 2 4, 8 ⁴ 2 4, 3,	87 16 4 89	5, 96 2 5, 95 2	64 9 47 50 9	79 10 4,5 78 10 4,2 3,2	98 0 50 36 0	5, 97 1 5, 97 1	91 5 60 75 5 34	10 1 6, 10 1 6, 4,	096 8 20 079 8 8	9 ² 11 5,3 93 11 4,3 2,9	35 30 2 2 29	6, 11 1 1 1 5, 3,	71 7 64 52 7 00 78	7,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	28 2 53 07 2 91 68	9 1 5, 9 1 5, 3,	82 16 ,57 667 15 ,77	14 12 2 7, 12 2 7, 4,	17 145 14 32 87	8, 14 3 8, 5,	500 33 50 50 476 33 60 78
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side	I/h kPa kW I/h kPa kW I/h	71 17 4,0 69 17 3,9 2,9	0 7 9 7 7 9 9 9 5	86 2 4, 84 2 4, 3, 84	50 3 87 46 4 4 89 76	5,, 9, 2 5,, 4,	54 9 47 50 9 50 30 46	79 11 4,5 78 11 4,2 3,2 73	98 0 50 86 0 27 20 84	99 1 5, 97 1 5, 4,	91 5 60 75 5 34 05	10 1 6, 10 1 6, 4,	096 8 20 079 8 14 72	9 ² 1 5,; 93 1 4,; 2,9	35 36 30 2 2 29 97	11 6, 11 1 5, 3,	71 7 64 52 7 00 78	7,; 13 2 7,; 13 2 6,; 5,;	28 2 53 07 2 91 68 89	9 1 5, 9 1 5, 3,	82 16 ,57 667 115 ,77 ,80	14 12 2 7, 12 2 7, 4,	164 15 17 145 14 14 187 159	15 3 8, 14 3 8, 5,	500 33 50 50 476 33 60 78
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side	I/h kPa kW I/h kPa kW kW	71 17 4,0 69 17 3,9 2,9	0 7 9 7 7 9 9 9 5	86 2 4, 84 2 4, 3, 84	87 16 4 89	5,, 9, 2 5,, 4,	64 9 47 50 9	79 10 4,5 78 10 4,2 3,2	98 0 50 86 0 27 20 84	99 1 5, 97 1 5, 4,	91 5 60 75 5 34	10 1 6, 10 1 6, 4,	096 8 20 079 8 8	9 ² 11 5,3 93 11 4,3 2,9	35 36 30 2 2 29 97	11 6, 11 1 5, 3,	71 7 64 52 7 00 78	7,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	28 2 53 07 2 91 68 89	9 1 5, 9 1 5, 3,	82 16 ,57 667 15 ,77	14 12 2 7, 12 2 7, 4,	17 145 14 32 87	15 3 8, 14 3 8, 5,	500 33 50 50 476 33 60 78
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan	I/h kPa kW I/h kPa kW L/h kPa kW kW I/h kPa	71 17 4,0 69 17 3,9 2,9	0 7 9 7 7 9 9 9 5	86 2 4, 84 2 4, 3, 84	50 3 87 46 4 4 89 76	5,, 9, 2 5,, 4,	54 9 47 50 9 50 30 46	79 11 4,5 78 11 4,2 3,2 73	98 0 50 86 0 27 20 84	99 1 5, 97 1 5, 4,	91 5 60 75 5 34 05	10 1 6, 10 1 6, 4,	20 079 18 14 72 056	9 ² 1 5,, 93 1 4,, 2,, 73	35 36 30 2 2 29 97	11 6, 11 1 5, 3,	71 7 64 52 7 00 78	7,; 13 2 7,; 13 2 6,; 5,;	28 2 53 07 2 91 68 89	9 1 5, 9 1 5, 3,	82 16 ,57 667 115 ,77 ,80	14 12 2 7, 12 2 7, 4,	164 15 17 145 14 14 187 159	15 3 8, 14 3 8, 5,	500 33 50 50 476 33 60 78
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type	kW I/h kPa kW kW L/h kPa type	71 17 4,0 69 17 3,9 2,9	0 7 9 7 7 92 99	86 2 4, 84 2 4, 3, 84	50 3 87 46 4 4 89 76	5,, 9, 2 5,, 4,	54 9 47 50 9 50 30 46	79 11 4,5 78 11 4,2 3,2 73	98 0 50 86 0 27 20 84	99 1 5, 97 1 5, 4,	91 5 60 75 5 34 05	10 1 6, 10 1 6, 4,	20 179 8 14 77 175 175 179 179 179 179 179 179 179 179 179 179	92 1 5,, 93 1 4,, 2,! 73 1	35 36 30 2 2 29 97	11 6, 11 1 5, 3,	71 7 64 52 7 00 78	7,; 13 2 7,; 13 2 6,; 5,;	28 2 53 07 2 91 68 89	9 1 5, 9 1 5, 3,	82 16 ,57 667 115 ,77 ,80	14 12 2 7, 12 2 7, 4,	164 15 17 145 14 14 187 159	15 3 8, 14 3 8, 5,	500 33 50 50 476 33 60 78
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor	kW I/h kPa kW kW I/h kPa type type	71 17 4,0 69 17 3,9 2,9	0 7 9 7 7 92 99	86 2 4,4 84 2 4,4,3 3,8 44 2	889 776 111 155	5,, 9, 2 5,, 4,	54 9 47 50 9 50 30 46	79 11 4,5 78 11 4,2 3,2 73	98 0 50 86 0 27 20 84	999 1 1 5,5,9 9 1 1 5,4 4,4 9 9 1 1 1	91 5 5 660 775 5 5 5 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	10 1 6, 10 1 6, 4,	20 179 8 14 77 175 175 179 179 179 179 179 179 179 179 179 179	9 ² 1 5,, 93 1 4,, 2,, 73	35 36 30 2 2 29 97	11 1 1 6,6, 11 1 1 5,3 3,8 80	71 7 7 7 52 7 7 000 00 8 550 3 3	7,; 13 2 7,; 13 2 6,; 5,;	28 2 53 07 2 91 68 89	9 1 5, 9 1 5, 3,	82 16 ,57 667 115 ,77 ,80	144 122 27 7,7,7 122 27 7,7,4,4,122 27	17 17 145 145 145 147 159 133	15 3 8, 14 3 8, 5,	500 33 50 50 476 33 60 78
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number	kW I/h kPa kW kW I/h kPa type type no.	71 17 4,0 69 17 3,9 2,9 67	0 7 7 33 9 9 7 7 7 2 2 9 9 7 7	86 2 4,4,4 84 2 4,4,3,8 84 2	887 887 886 44 889 889 776 811 811 83	9(6) 22 5,7 9(5) 2 2 5,7 4,7 9,7 3 3	664 99 47 47 99 550 99 650 60 60 60 60 60 60 60 60 60 60 60 60 60	79 11 4,4,7 78 11 4,2 3,2 11	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	999 1 1 5,7 5,7 5,7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	91 5 5 5 5 5 5 5 5 5 7 5 5 5 7 5 5 5 5 7 5 5 5 7 5 5 7 5 5 7 5 7 5 7 5 7	100 100 100 100 100 100 100 100 100 100	20 179 8 14 772 156 19	944 1 1 5,3,3 93 1 1 4,4,7 73 1 1 1 ifugal	35 22 23 35 36 30 22 29 97 88 80 0	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 7 7 7 7 7 7 7 7 7 7 7 8 5 9 0 0 0 0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	133 2 7,/, 133 2 6,/, 111 2 2	28 2 2 53 007 2 2 91 668 889 2 2	99 1 5, 99 1 1 5, 3, 9 9	882 116 167 115 177 180 192	144 122 27 7, 122 27 7, 4, 4, 122 2	17 17 1445 144 32 87 159 33	155 3 3 8, 8, 144 3 3 8, 5, 144 3 3	500 33 50 50 50 60 60 60 78 179 60
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h	711 173 4,0 699 173 3,9,9 67 173 70	0 7 7 33 99 7 7 7 7 7 7	868 844 4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,	33 3887 466 44 44 111 55	9(9) 9(9) 2 2 5,7 9(9) 4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,	47 47 550 99 550 330 446 00	79 11 4,8 78 11 4,7 3,2 73 11	000 00 00 00 00 00 00	9999 1 1 5,5 999 1 1 5 5,4 4,4 999 999	91 5 5 660 775 5 5 5 8 8 8 8 8	100 100 100 100 100 100 100 100 100 100	20 0779 8 8 14 772 19 Centr Inve	9.4 1 1 5,, 9.3 9.3 1 1 4,, 7.3 7.3 1 1 1 ifugal erter	35 22 23 35 36 30 22 22 29 77 88 80 0	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 7 7 664 552 7 7 7 8 8 8 8 8 8 8	133 2 7,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	28 22 253 007 22 291 68 889 22	99 11 5, 99 11 5, 3, 99 11	882 116 167 115 115 115 115 115 115	144 12 2 7,7,7 12 2 7,7,4 4,0 12 2	17 17 1445 144 145 149 149 149 149 149 149 149 149 149 149	155 3 3 8, 144 3 3 8, 5, 144 3 3	500 33 33 50 60 60 78 179 80
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h W	4,0,0 699 17 3,9,3,9 2,9,9 17 70 70 3,0	0 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	868 844 4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,	33 387 46 44 44 41 55 33 30 00	9(6) 9(7) 9(7) 9(7) 9(7) 9(7) 9(7) 9(7) 9(7	47 47 550 99 550 330 46 0	79 11 4,4,7 78 11 4,7 3,2 73 11 70 70	000 00 00 00 00 00 00 00	9999 1 1 1 5,7 9,7 9,7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	991 55 55 55 55 55 55 55 55 55 55 55 55 55	100 6,0 100 110 110 110 110 110 110 110 110 1	20 079 8 8 14 77 19 Centr Inve	9,2 1 5,3 93 1 1 4,4,7 73 1 1 ifugal erter	35 22 335 360 22 22 977 388 00 00 00	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 77 77 664 552 77 77 8560 33 3 3 80 0	133 2 7,7,7 133 2 6,7,7 111 111 2 2 111 8	28 2 2 53 007 2 2 2 2 40 0	99 11 5, 99 11 15 77 23	882 116 167 167 115 177 180 192 115	144 12 2 7,7, 122 2 7,7, 4,6 122 2	17 1445 1445 1446 1447 1447 1448 1448 1449 1449 1449 1449 1449 1449	155 3 3 8, 8, 144 3 3 8, 5, 5, 14 3 3 11 8	500 33 50 50 60 60 7.78 179 180 140 180
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h	711 173 4,0 699 173 3,9,9 67 173 70	0 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	868 844 4,444 2 2 4 4,444 2 2 4 4 4,444 2 2 4 4 4,444 2 2 4 4 4,444 2 2 4 4 4 4	33 387 46 44 44 41 55 33 30 00	9(9) 9(9) 2 2 5,7 9(9) 4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,	47 47 550 99 550 330 46 0	79 11 4,8 78 11 4,7 3,2 73 11	000 00 00 00 00 00 00 00	9999 1 1 5,5 999 1 1 5 5,4 4,4 999 999	991 55 55 55 55 55 55 55 55 55 55 55 55 55	100 6,0 100 110 110 110 110 110 110 110 110 1	20 0779 8 8 14 772 19 Centr Inve	9.4 1 1 5,, 9.3 9.3 1 1 4,, 7.3 7.3 1 1 1 ifugal erter	35 22 335 360 22 22 977 388 00 00 00	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 77 77 664 552 77 77 8560 33 3 3 80 0	133 2 7,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	28 2 2 53 007 2 2 2 2 40 0	99 11 5, 99 11 15 77 23	882 116 167 115 115 115 115 115 115	144 12 2 7,7, 122 2 7,7, 4,6 122 2	17 17 1445 144 145 149 149 149 149 149 149 149 149 149 149	155 3 3 8, 8, 144 3 3 8, 5, 5, 14 3 3 11 8	500 33 33 50 60 60 78 179 80
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3)	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h W	71 17 4,0 69 17 3,9 2,9 67 17 70 3.6 56	0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	86 2 4,4,4 84 2 4,7 3,3,8 4 2 2	560 33 887 886 44 44 889 76 81 81 83 80 80 80 80 80 80 80 80 80 80	9(2 5,/9! 2 5,/4,4,94 3 3	47 47 47 550 9 9 550 650 646 6 0 0	799 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	088 00 00 00 00 00 00 00 00 00	999 1 1 5,7 977 1 1 5,7 977 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	991 55 56 60 60 775 55 5 5 5 8 8 8 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 10 6,6,6,10 10 10 10 11 11 11 11 12 12 13 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	20 20 20 779 8 14 772 1056 19 Centr Investigation of the control of the	9,4 1 1 5,7 9,2 1 1 4,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	22 22 23 35 80 22 29 97 88 00 00 00 00	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 77 77 77 77 77 77 77 78 660 778 860 80 90 90 90 90 90 90 90 90 90 90 90 90 90	133 22 7,7,133 22 6,6,5,1 111 22	28 2 2 3 3 07 2 2 91 88 9 2 2 40 0 0	99 11 5, 99 11 5, 3, 99 11	882 116 ,57 ,57 115 ,77 ,80 1992 115	144 122 27,7,122 27,7,4,4,122 20,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7	17 17 145 144 144 145 144 145 144 145 145 145	153 3 8, 144 3 3 8, 5, 14 3 3	500 33 50 50 60 78 78 79 80 80 80 80 80 80 80 80 80 80
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level	kW I/h kPa kW I/h kPa kW kW I/h kPa type type no. m³/h W %	4,0,0 6999 17 3,9,9,0 67 17 70 30 3,5,0 50,0	0 7 7 33 9 9 7 7 22 29 99 5 5 7 7	3, 3, 4 4, 4, 4, 3, 3, 8 4 2 2 2 5 7 7 5 7 7 5 7 7 5 7 7 5 7 7 5 7	560 33 887 446 44 44 889 776 111 55 33 360 00 22	9(2 5,/ 9! 2 2 5,/ 4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4	47 47 550 9 9 550 550 46 0 0	799 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	088 00 00 050 00 00 00 00 00 00 00	999 11 5,/997 11 5,,-4,/,-4,/,-1 11 999 44 77	91 55 660 660 675 55 55 83 84 905 918 918 919 919 919 919 919 919 919 919	10 6,6,6,1 10 6,7 10 11 11 11 11 12 5	996 88 20 779 88 14 772 1056 19 Centr Inves	9,4 1 1 5,7 9,2 1 1 4,4,4 7,7 7,7 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	35 22 335 300 22 22 997 388 00 00 00 66	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 77 77 77 77 78 664 77 78 78 660 33 33 83 80 90 90 90 90 90 90 90 90 90 90 90 90 90	133 22 7,7,133 22 6,6,2,5,1 111 22	28 2 2 553 007 2 2 2 91 889 2 2 40 0 0	99 11 5, 99 11 5, 3, 3, 99 11	82 116 116 115 115 115 115 110 110 110 110 110 110	144 122 277,7,122 277,7,44,122 277,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7	17 17 145 145 144 145 144 145 145 147 145 145 147 145 145 145 145 145 145 145 145 145 145	155 3 3 3 8 8 8 9 14 3 3 3 5 5 14 3 3 3 5 5 14 3 3 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	500 33 50 50 60 60 78 78 79 80 80 80 80 80 80 80 80 80 80
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level Sound pressure	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h W	71 17 4,0 69 17 3,9 2,9 67 17 70 3.6 56	0 7 7 33 9 9 7 7 22 29 99 5 5 7 7	3, 3, 4 4, 4, 4, 3, 3, 8 4 7, 57, 57, 57, 57, 57, 57, 57, 57, 57, 5	560 33 887 886 44 44 889 76 81 81 83 80 80 80 80 80 80 80 80 80 80	9(2 5,/9! 2 5,/4,4,94 3 3	47 47 550 9 9 550 550 46 0 0	799 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	088 00 00 050 00 00 00 00 00 00 00	999 11 5,/997 11 5,,-4,/,-4,/,-1 11 999 44 77	991 55 56 60 60 775 55 5 5 5 8 8 8 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 6,6,6,1 10 6,7 10 11 11 11 11 12 5	20 20 20 779 8 14 772 1056 19 Centr Investigation of the control of the	9,4 1 1 1 1 1 4,,,,,,,,,,,,,,,,,,,,,,,,,	22 22 23 35 80 22 29 97 88 00 00 00 00	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 77 77 77 77 77 77 77 78 660 778 860 80 90 90 90 90 90 90 90 90 90 90 90 90 90	133 22 7,7,133 22 6,6,5,1 111 22	28 2 2 553 007 2 2 2 91 889 2 2 40 0 0	99 11 5, 99 11 5, 3, 3, 99 11	882 116 ,57 ,57 115 ,77 ,80 1992 115	144 122 277,7,122 277,7,44,122 277,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7	17 17 145 144 144 145 144 145 144 145 145 145	155 3 3 3 8 8 8 9 14 3 3 3 5 5 14 3 3 3 5 5 14 3 3 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	500 33 50 50 60 78 78 79 80 80 80 80 80 80 80 80 80 80
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level Sound pressure Diametre hydraulic fittings	kW I/h kPa kW I/h kPa kW kW I/h kPa type type no. m³/h W % dB(A)	4,0,0 6999 17 3,9,9,0 67 17 70 30 3,5,0 50,0	0 7 7 33 9 9 7 7 22 29 99 5 5 7 7	3, 3, 4 4, 4, 4, 3, 3, 8 4 7, 57, 57, 57, 57, 57, 57, 57, 57, 57, 5	560 33 887 446 44 44 889 776 111 55 33 360 00 22	9(2 5,/ 9! 2 2 5,/ 4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4	47 47 550 9 9 550 550 46 0 0	799 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	088 00 00 050 00 00 00 00 00 00 00	999 11 5,/997 11 5,,-4,/,-4,/,-1 11 999 44 77	91 55 660 660 675 55 55 83 84 905 918 918 919 919 919 919 919 919 919 919	10 6,6,6,1 10 6,7 10 11 11 11 11 12 5	20 1779 18 14 1772 1556 19 Centr Inves	9,93 11 4,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	35 22 335 300 22 22 997 388 00 00 00 66	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 77 77 77 77 78 664 77 78 78 660 33 33 83 80 90 90 90 90 90 90 90 90 90 90 90 90 90	133 22 7,7,133 22 6,6,2,5,1 111 22	28 2 2 553 007 2 2 2 91 889 2 2 40 0 0	99 11 5, 99 11 5, 3, 3, 99 11	82 116 116 115 115 115 115 110 110 110 110 110 110	144 122 277,7,122 277,7,44,122 277,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7	17 17 145 145 144 145 144 145 145 147 145 145 147 145 145 145 145 145 145 145 145 145 145	155 3 3 3 8 8 8 9 14 3 3 3 5 5 14 3 3 3 5 5 14 3 3 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	500 33 50 50 60 60 78 78 79 80 80 80 80 80 80 80 80 80 80
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level Sound pressure Diametre hydraulic fittings Main heat exchanger	kW I/h kPa kW I/h kPa kW kW I/h kPa type type no. m³/h W %	4,0,0 6999 17 3,9,9,0 67 17 70 30 3,5,0 50,0	0 7 7 33 9 9 7 7 22 29 99 5 5 7 7	3, 3, 4 4, 4, 4, 3, 3, 8 4 7, 57, 57, 57, 57, 57, 57, 57, 57, 57, 5	560 33 887 446 44 44 889 776 111 55 33 360 00 22	9(2 5,/ 9! 2 2 5,/ 4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4	47 47 550 9 9 550 550 46 0 0	799 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	088 00 00 050 00 00 00 00 00 00 00	999 11 5,/997 11 5,,-4,/,-4,/,-1 11 999 44 77	91 55 660 660 675 55 55 83 84 905 918 918 919 919 919 919 919 919 919 919	10 6,6,6,1 10 6,7 10 11 11 11 11 12 5	20 1779 18 14 1772 1556 19 Centr Inves	9,4 1 1 1 1 1 4,,,,,,,,,,,,,,,,,,,,,,,,,	35 22 335 300 22 22 997 388 00 00 00 66	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 77 77 77 77 78 664 77 78 78 660 33 33 83 80 90 90 90 90 90 90 90 90 90 90 90 90 90	133 22 7,7,133 22 6,6,2,5,1 111 22	28 2 2 553 007 2 2 2 91 889 2 2 40 0 0	99 11 5, 99 11 5, 3, 3, 99 11	82 116 116 115 115 115 115 110 110 110 110 110 110	144 122 277,7,122 277,7,44,122 277,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7	17 17 145 145 144 145 144 145 145 147 145 145 147 145 145 145 145 145 145 145 145 145 145	155 3 3 3 8 8 8 9 14 3 3 3 5 5 14 3 3 3 5 5 14 3 3 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	500 33 50 50 60 60 78 78 79 80 80 80 80 80 80 80 80 80 80
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level Sound pressure Diametre hydraulic fittings	kW I/h kPa kW I/h kPa kW kW I/h kPa type type no. m³/h W % dB(A)	4,0,0 6999 17 3,9,9,0 67 17 70 30 3,5,0 50,0	0 7 7 33 9 9 7 7 22 29 99 5 5 7 7	3, 3, 4 4, 4, 4, 3, 3, 8 4 7, 57, 57, 57, 57, 57, 57, 57, 57, 57, 5	560 33 887 446 44 44 889 776 111 55 33 360 00 22	9(2 5,/ 9! 2 2 5,/ 4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4,4	47 47 550 9 9 550 550 46 0 0	799 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	088 00 00 050 00 00 00 00 00 00 00	999 11 5,/997 11 5,,-4,/,-4,/,-1 11 999 44 77	91 55 660 660 675 55 55 83 84 905 918 918 919 919 919 919 919 919 919 919	10 6,6,6,1 10 6,7 10 11 11 11 11 12 5	20 20 7779 8 8 114 772 1056 199 Centr Inves 1440 30 00 31	9,93 11 4,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	35 22 335 300 22 22 997 388 00 00 00 66	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	71 77 77 77 77 78 664 77 78 78 660 33 33 83 80 90 90 90 90 90 90 90 90 90 90 90 90 90	133 22 7,7,133 22 6,6,2,5,1 111 22	28 2 2 553 007 2 2 2 91 889 2 2 40 0 0	99 11 5, 99 11 5, 3, 3, 99 11	82 116 116 115 115 115 115 110 110 110 110 110 110	144 122 277,7,122 277,7,44,122 277,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7	17 17 1445 1445 1445 1445 1445 1445 1445	155 3 3 3 8 8 8 9 14 3 3 3 5 5 14 3 3 3 5 5 14 3 3 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	500 33 50 50 60 60 78 78 79 80 80 80 80 80 80 80 80 80 80

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

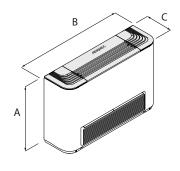
Technical data - 4-pipe systems (main coil + secondary coil)

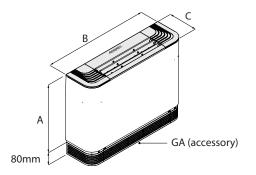
4-pipe

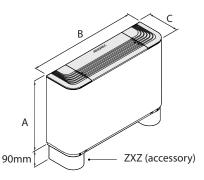
- Phys			FCZI201			FCZI301			FCZI401			FCZI501			FCZI701			FCZI901	
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 65 °C / 55 °C (1)																			
Heating capacity k	W	1,02	1,35	1,60	1,80	2,18	2,56	2,21	2,65	3,12	2,59	3,34	3,73	3,66	4,29	4,94	4,73	5,63	5,72
Water flow rate system side	/h	89	118	140	158	191	224	186	232	273	227	293	327	320	375	437	414	492	501
Pressure drop system side k	Pa	5	8	11	17	23	31	5	7	9	6	9	11	11	15	19	9	12	12
Cooling performance 7 °C / 12 °C																			
Cooling capacity k	W	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25	3,92	4,89	5,50	4,29	5,00	6,91
Sensible cooling capacity k	W	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18	2,99	3,76	4,30	2,97	3,78	5,68
Water flow rate system side	/h	153	221	275	289	374	456	379	503	619	461	635	731	675	841	946	738	860	1188
Pressure drop system side k	Pa	7	13	18	8	13	18	14	24	34	13	23	29	17	25	30	10	12	22
Fan																			
Type ty	/pe									Centr	ifugal								
Fan motor ty	/pe									Inve	erter								
	10.		1			2			2			2			3			3	
Air flow rate m	³/h	140	220	290	260	350	450	330	460	600	400	600	720	700	930	1140	700	930	1140
Sound pressure level (10 m) dB	B(A)	27,0	38,0	43,0	26,0	33,0	40,0	29,0	36,0	43,0	34,0	43,0	48,0	42,0	49,0	54,0	43,0	49,0	54,0
Sound power level (2) dB	3(A)	35,0	46,0	51,0	34,0	41,0	48,0	37,0	44,0	51,0	42,0	51,0	56,0	50,0	57,0	62,0	51,0	57,0	62,0
Diametre hydraulic fittings																			
Type ty	/pe										-								
Main heat exchanger	Ø		1/2"			3/4"			3/4"			3/4"			3/4"			3/4"	
Fan																			
Input power \	W	7	8	14	5	7	13	5	10	18	7	16	31	30	40	80	30	40	80
Signal 0-10V	%	44	68	90	52	70	90	49	68	90	50	74	90	56	72	90	56	72	90
Power supply																			
Power supply										230V-	~50Hz								

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS







2-pipe

		FCZI200		FCZI25	0	FC	ZI30	0	F	CZ135	0		FCZI4	00	F	CZ145	0	F	CZI5	00	F	CZI5	50		CZ17	00	F	CZ175	50	F	CZI90	00	F	CZ195	0
		1 2	3	1 2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L M	Н	L M	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Dimensions and v	weights																																		
A	mm	486	T	486			486			486			486	;		486			486			486			486			486			591			591	
В	mm	750	T	750			980			980			120	0		1200			1200)		1200			1320			1320)		1320			1320	
С	mm	220	\exists	220			220			220			220)		220			220			220			220			220			220			220	
Empty weight	kg	15		16			17			18			22			24			22			24			29			31			34			34	

4-pipe

			FCZI201			FCZI301			FCZI401			FCZI501			FCZI701			FCZI901	
•		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	M	Н	L	М	Н	L	М	Н
Dimensions and	weights																		
A	mm		486			486			486			486			486			591	
В	mm		750			980			1200			1200			1320			1320	
C	mm		220			220			220			220			220			220	
Empty weight	kg		15			17			23			23			30			34	

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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FCZ-D



- Fully silent operation
- Backlit touch command with programming via a smart device
- · Total comfort in every season

Fan coil for vertical wall-mounting or free-standing installation

Cooling capacity 0,89 ÷ 4,25 kW Heating capacity 2,02 ÷ 8,50 kW





DESCRIPTION

The perception of uneven temperature distribution in various settings, especially in the vertical direction, is one of the main factors leading to a drastic reduction in the well-being perceived by occupants.

FCZ D are able to provide a pleasant sensation of comfort by directing the air in a way that ensures uniform temperature distribution throughout the setting. In winter, hot air is direct downwards; in summer, cool air is directed upwards.

Air supply switching at the front or from the top by operating directly on the orientable grille.

They can be installed in any type of 2 / 4 pipe system and in combination with any heat generator even at low temperatures. Thanks to the availability of several versions and configurations, it is easy to choose the optimal solution for every requirement.

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Ventilation group

Consisting of double suction centrifugal fans that are particularly silent, statically and dynamically balanced, and directly coupled with the motor shaft

The motor is wired for single phase and has three speeds, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.

Extractable shrouds for easy, effective cleaning

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

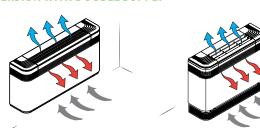
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

The hydraulic connections can be inverted during installation.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.

VERSION WITH DOUBLE SUPPLY



FCZ D

With on-board thermostat.

FCZ D

- Compatibility with VMF system.
- Without installed switch

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3	FCZ
4	Size 2, 3, 4, 5
5	main heat exchanger
0	Standard
6	Secondary heat exchanger
0	Without coil
7	Version
D	Dualjet with thermostat TXB on-board the system
D:	Dualiet without on-board thermostat

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air puri-

fying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

PRO503: Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

T-TOUCH: Touch control on board the machine, for controlling fan coils with asynchronous motors. In 2-pipe systems, it can control standard fan coils or those equipped with an electric heater, with air purifying devices or with FCZ-D twin delivery (Dualiet). In 4-pipe systems, only standard fan coils.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with

plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E22: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Installation accessories

PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.

GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.

FIKIT: Metal supports for vertical installation of the GA grille.

DSCZ4: Condensate drainage device.

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	200	300	400	500
AER503IR (1)	DS	•	•	•	•
PR0503	DS	•	•	•	•
SA5 (2)	DS	•	•	•	•
SW3 (2)	DS	•	•	•	•
SW5 (2)	DS	•	•	•	•
T-TOUCH (3)	DS	•	•	•	•
TX (4)	DS	•	•	•	•

- (1) Wall-mount installation.
- (2) Probe for AER503IR-TX thermostats, if fitted
- (3) Installation on the fan coil.
- (4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

For more information about VMF system, refer to the dedicated documentation.

Model	Ver	200	300	400	500
DI24	DS	•	•	•	•
VMF-E19 (1)	DS	•	•	•	•
VMF-E2Z	DS	•	•	•	•
VMF-E3	DS	•	•	•	•
VMF-E4DX	DS	•	•	•	•
VMF-E4X	DS	•	•	•	•
VMF-I0	DS	•	•	•	•
VMF-IR	DS	•	•	•	•
VMHI	DS	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Water valves

3 way valve kit

Model	Ver	200	300	400	500
VCZ41 (1)	D,DS	•			
VCZ4124 (2)	D,DS	•			
VCZ42 (1)	D,DS		•		•
VCZ4224 (2)	D.DS		•	•	•

(1) 230V~50Hz (2) 24V

2 way valve kit

Model	Ver	200	300	400	500
VCZD1 (1)	D,DS	•			
VCZD124 (2)	D,DS	•			
VCZD2 (1)	D,DS		•	•	•
VCZD224 (2)	D.DS		•	•	•

(1) 230V~50Hz (2) 24V

Valve Kit for 4 pipe systems - Requires a thermostat with valve management

Model	Ver	200	300	400	500
VCZ1X4L (1)	D,DS	•			
VCZ1X4R (1)	D,DS	•			
VCZ2X4L (1)	D,DS		•	•	•
VCZ2X4R (1)	D.DS		•	•	•

 $(1) \ \ The \ valves \ can \ be \ combined \ with \ the \ units \ if \ there \ is \ a \ control \ panel \ for \ managing \ them.$

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	300	400	500
VJP060 (1)	D,DS	•	•		
VJP060M (2)	D,DS	•	•		
VJP090 (1)	D,DS			•	•
VJP090M (2)	D,DS			•	•

(1) 230V~50Hz (2) 24V

Installation accessories

Condensate recirculation device

Model	Ver	200	300	400	500
DSCZ4 (1)	D,DS	•	•	•	•

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Condensate drip

Model	Ver	200	300	400	500
BCZ4 (1)	D,DS	•	•	•	•

(1) For vertical installation.

Panel closing the rear of the unit

Model	Ver	200	300	400	500
PCZ200	D,DS	•			
PCZ300	D,DS		•		
PCZ500	D,DS			•	•

Ornamental grille

Model	Ver	200	300	400	500
GA200	D,DS	•			
GA300	D,DS		•		
GA500	D,DS			•	•

Supports to be combined with the ornamental grille (GA) for floor installation of the fan coil

Model	Ver	200	300	400	500
FIKIT200	D,DS	•			

Model	Ver	200	300	400	500
FIKIT300	D,DS		•		
FIKIT500	D,DS			•	•

Pair of stylish structural feet

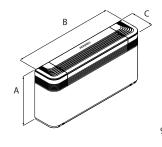
Model	Ver	200	300	400	500
ZXZ	D,DS	•	•	•	•

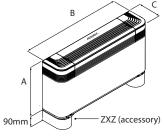
PERFORMANCE SPECIFICATIONS

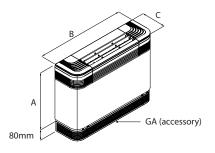
2-pipe													
			FCZ200D			FCZ300D			FCZ400D			FCZ500D	
		1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	M	Н
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	2,02	2,95	3,70	3,47	4,46	5,50	4,32	5,74	7,15	5,27	7,31	8,50
Water flow rate system side	l/h	177	258	324	304	391	482	379	503	627	462	641	745
Pressure drop system side	kPa	6	12	18	7	12	18	9	16	24	12	21	28
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	1,00	1,46	1,84	1,72	2,21	2,73	2,14	2,85	3,55	2,62	3,63	4,22
Water flow rate system side	l/h	174	254	319	299	385	475	373	495	617	455	631	734
Pressure drop system side	kPa	6	12	18	8	12	18	10	16	24	12	21	28
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25
Sensible cooling capacity	kW	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18
Water flow rate system side	l/h	153	221	275	288	374	456	379	503	619	460	634	731
Pressure drop system side	kPa	7	13	18	8	13	18	10	17	24	13	23	29
Fan													
Туре	type						Centr	ifugal					
Fan motor	type						Asynch	ronous					
Number	no.		1			2			2			2	
Air flow rate	m³/h	140	220	290	260	350	450	330	460	600	400	600	720
Input power	W	13	25	35	25	33	44	30	43	57	38	52	76
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)													
Sound power level	dB(A)	35,0	46,0	51,0	34,0	41,0	48,0	37,0	44,0	51,0	42,0	51,0	56,0
Sound pressure	dB(A)	27,0	38,0	43,0	26,0	33,0	40,0	29,0	36,0	43,0	34,0	43,0	48,0
Finned pack heat exchanger													
Water content main heat exchanger	I		0,5			0,8			1,0			1,0	
Diametre hydraulic fittings													
Main heat exchanger	Ø		1/2"			3/4"			3/4"			3/4"	
Power supply													
Power supply							230V	~50Hz					

- (1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
 (2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
 (3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS







		FCZ200D	FCZ300D	FCZ400D	FCZ500D
Dimensions and weights					
A	mm	486	486	486	486
В	mm	750	980	1200	1200
(mm	220	220	220	220
Empty weight	kg	15	17	23	22

 $\label{lem:continuous} \mbox{Aermec reserves the right to make any modifications deemed necessary.}$ All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

Aermec S.p.A. Via Roma, 996 - 37040 Bevilacqua (VR) - Italia Tel. 0442633111 - Telefax 044293577 www.aermec.com





















FCZI-D

Fan coil for vertical wall-mounting or free-standing installation

Cooling capacity 0,89 ÷ 4,25 kW Heating capacity 2,02 ÷ 8,50 kW



- Total comfort in every season
- Electric saving equal to 50% with respect to a fan coil with 3-speed motor
- Fully silent operation
- Backlit Touch command with programming via a smart device (DT vesion)





DESCRIPTION

The perception of uneven temperature distribution in various settings, especially in the vertical direction, is one of the main factors leading to a drastic reduction in the well-being perceived by occupants.

FCZI D are able to provide a pleasant sensation of comfort by directing the air in a way that ensures uniform temperature distribution throughout the setting. In winter, hot air is direct downwards; in summer, cool air is directed upwards.

Air supply switching at the front or from the top by operating directly on the orientable grille.

They can be installed in any type of 2 / 4 pipe system and in combination with any heat generator even at low temperatures. Thanks to the availability of several versions and configurations, it is easy to choose the optimal solution for every requirement.

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans. They are statically and dynamically balanced and directly coupled to the motor shaft.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

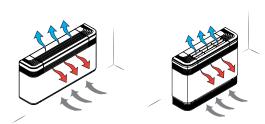
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

The hydraulic connections can be inverted during installation.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.

VERSION WITH DOUBLE SUPPLY



FCZI D

With on-board thermostat.

FCZI_DT

- With thermostat T-TOUCH-I on-board the system
- Compatibility with VMF system.

FCZI_DS

- Without installed switch
- Compatibility with VMF system.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	TO SEEECHING THE COSSIDEE CONTIGURATIONS
Fie	ld	Description
1,2	,3,4	FCZI
5		Size
_		2, 3, 4, 5
6		main heat exchanger
-	0	Standard
7		Secondary heat exchanger
	0	Without coil
8		Version
	D	Dualjet with thermostat TXBI on-board the system
	DS	Dualjet without on-board thermostat
	DT	Dualjet with T-Touch-I thermostat

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: Water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E22: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L=2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Installation accessories

PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.

GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.

FIKIT: Metal supports for vertical installation of the GA grille.

DSCZ4: Condensate drainage device.

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. **ZXZ:** Pair of stylish and structural feet

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	200	300	400	500
AER503IR (1)	DS	•	•	•	•
PR0503	DS	•	•	•	•
SA5 (2)	DS	•		•	•
SW3 (2)	DS	•	•	•	•
SW5 (2)	DS	•	•	•	•
TX (3)	DS	•	•	•	•

For more information about VMF system, refer to the dedicated documentation.

Model	Ver	200	300	400	500
DI24	DS	•	•	•	•
VMF-E19I (1)	DS	•	•	•	•
VMF-E2Z	DS	•	•	•	•
VMF-E3	DS,DT	•	•	•	•
VMF-E4DX	DS,DT	•	•	•	•
VMF-E4X	DS,DT	•	•	•	•
VMF-IO	DS	•	•	•	•
VMF-IR	DS	•	•	•	•
VMF-SW	DS	•	•	•	•
VMHI	DS	•	•	•	•

⁽¹⁾ Mandatory accessory.

Water valves

3 way valve kit

Model	Ver	200	300	400	500
VCZ41 (1)	D,DS,DT	•			
VCZ4124 (2)	D,DS,DT	•			
VCZ42 (1)	D,DS,DT		•	•	•
VCZ4224 (2)	D,DS,DT		•	•	•

^{(1) 230}V~50Hz (2) 24V

2 way valve kit

Model	Ver	200	300	400	500
VCZD1 (1)	D,DS,DT	•			
VCZD124 (2)	D,DS,DT	•			
VCZD2 (1)	D,DS,DT		•	•	•
VCZD224 (2)	D,DS,DT		•	•	•

^{(1) 230}V~50Hz (2) 24V

Valve Kit for 4 pipe systems

Model	Ver	200	300	400	500
VCZ1X4L (1)	D,DS,DT	•			
VCZ1X4R (1)	D,DS,DT	•			
VCZ2X4L (1)	D,DS,DT		•	•	•
VCZ2X4R (1)	D,DS,DT		•	•	•

⁽¹⁾ The valves can be combined with the units if there is a control panel for managing them.

Combined Adjustment and Balancing Valve Kit

,									
Model	Ver	200	300	400	500				
VJP060 (1)	D,DS,DT	•	•						
VJP060M (2)	D,DS,DT	•	•						
VJP090 (1)	D,DS,DT			•	•				
VJP090M (2)	D.DS.DT			•	•				

^{(1) 230}V~50Hz (2) 24V

Installation accessories

Condensate recirculation device

Model	Ver	200	300	400	500
DSCZ4 (1)	D,DS,DT	•	•		•

⁽¹⁾ DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

⁽¹⁾ Wall-mount installation.
(2) Probe for AERSO3IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

Condensate drip

Model	Ver	200	300	400	500
BCZ4 (1)	D,DS,DT	•	•	•	•

(1) For vertical installation.

Panel closing the rear of the unit

Model	Ver	200	300	400	500
PCZ200	D,DS,DT	•			
PCZ300	D,DS,DT		•		
PCZ500	D,DS,DT			•	•

Ornamental grille

Model	Ver	200	300	400	500
GA200	D,DS,DT	•			
GA300	D,DS,DT		•		
GA500	D,DS,DT			•	•

Supports to be combined with the ornamental grille (GA) for floor installation of the fan coil

Model	Ver	200	300	400	500
FIKIT200	D,DS,DT	•			
FIKIT300	D,DS,DT		•		
FIKIT500	D,DS,DT			•	•

Pair of stylish structural feet

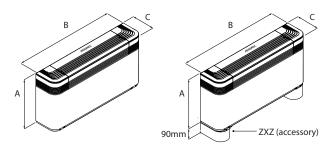
Model	Ver	200	300	400	500
ZXZ	D,DS,DT	•	•	•	•

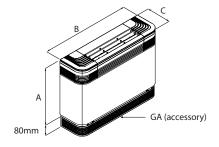
PERFORMANCE SPECIFICATIONS

2-ріре			FCZI200D			FCZI300D			FCZI400D			FCZI500D	
		1		3	1		3	1		3	1	FCZIOUU	
		<u> </u>	2 M	3 H		2 M	H	1	2 M	H	1		H
Heating newformance 70 °C / 60 °C (1)		L	IVI	п	L	IVI	П	L L	IVI	п	L	IVI	n
Heating performance 70 °C / 60 °C (1)	kW	2,02	2.05	3.70	3,47	1.10	5,50	422	5.74	7.15	F 27	7.31	0.50
Heating capacity			2,95		3,47	4,46		4,32			5,27		8,50
Water flow rate system side	l/h	177	258	324		391	482	379	503	627	462	641	745
Pressure drop system side	kPa	6	12	18	7	12	18	9	16	24	12	21	28
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	1,00	1,46	1,84	1,72	2,21	2,73	2,14	2,85	3,55	2,62	3,63	4,22
Water flow rate system side	l/h	174	254	319	299	385	475	373	495	617	455	631	734
Pressure drop system side	kPa	6	12	18	8	12	18	10	16	24	12	21	28
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25
Sensible cooling capacity	kW	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18
Water flow rate system side	l/h	153	221	275	288	374	456	379	503	619	460	634	731
Pressure drop system side	kPa	7	13	18	8	13	18	10	17	24	13	23	29
Fan													
Туре	type						Centr	ifugal					
Fan motor	type						Inve	erter					
Number	no.		1			2			2			2	
Air flow rate	m³/h	140	220	290	260	350	450	330	460	600	400	600	720
Input power	W	5	8	14	5	7	13	5	10	18	8	18	34
Signal 0-10V	%	44	68	90	52	70	90	49	68	90	50	74	90
Fan coil sound data (3)													
Sound power level	dB(A)	31,0	43,0	50,0	34,0	41,0	48,0	37,0	44,0	41,0	42,0	51,0	56,0
Sound pressure	dB(A)	23,0	35,0	42,0	26,0	33,0	40,0	29,0	36,0	53,0	34,0	43,0	48,0
Finned pack heat exchanger	`												
Water content main heat exchanger	- 1		0,5			0,8			1,0			1,0	
Diametre hydraulic fittings													
Main heat exchanger	Ø		1/2"			3/4"			3/4"			3/4"	
Power supply													
Power supply							230V	~50Hz					

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS





		FCZ1200D	FCZI300D	FCZI400D	FCZI500D
Dimensions and weights					
A	mm	486	486	486	486
3	mm	750	980	1200	1200
-	mm	220	220	220	220
Empty weight	kg	15	17	23	22



















FCZ-H

Fan coil with the photocatalytic device, for universal and floor installation



- Photocatalytic device
- Tested effectiveness against viruses, bacteria and allergens
- Active against the SARS-CoV-2 virus, even on surfaces
- Backlit touch command (accessory)





DESCRIPTION

Fan coil with built-in photocatalytic device.

Active against the airborne Sars-CoV-2 virus (95%-99% abatement efficacy after 20 minutes of operation tested at the Virostatics laboratory in Alghero).

Active against the SARS-CoV-2 virus, even on surfaces - 84% effectiveness after 12 h (tests carried out in collaboration with the Department of Microbiology of the University of Padua).

Suitable for air conditioning in places requiring optimum hygiene levels, such as:

- Hospitals
- Dentists' surgeries
- Doctors' and vets' surgeries
- Analysis laboratories
- Waiting rooms
- Public premises

They can be installed in any type of 2-pipe system (version for 4-pipe systems available upon request) and in combination with any heat generator, even at low temperatures. Thanks to the availability of several versions and configurations, it's easy to find the right solution for every need.

VERSIONS

- H Unit with shell without thermostat vertical and horizontal installation.
- HP Unit without shell and without thermostat vertical and horizontal installation. Can also be supplied in a configuration equipped with a boosted asynchronous motor (HPO).
- HT Unit with shell and thermostat vertical installation.

FEATURES

Case

Metallic protective cabinet with rustproofing polyester paint RAL 9003. The head with adjustable air distribution grille is made of plastic RAL 7047. When the grille closes, the fan coil automatically switches off.

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.

The electric motor is single-phase and asynchronous, mounted on anti-vibration supports, and has a permanently engaged condenser.

The scroll that protects the fan can be extracted and inspected, for easy and effective cleaning.

Apart from the traditional asynchronous motor, each unit can also be supplied with an inverter (brushless) motor. Refer to the relative FCZI - H datasheet

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

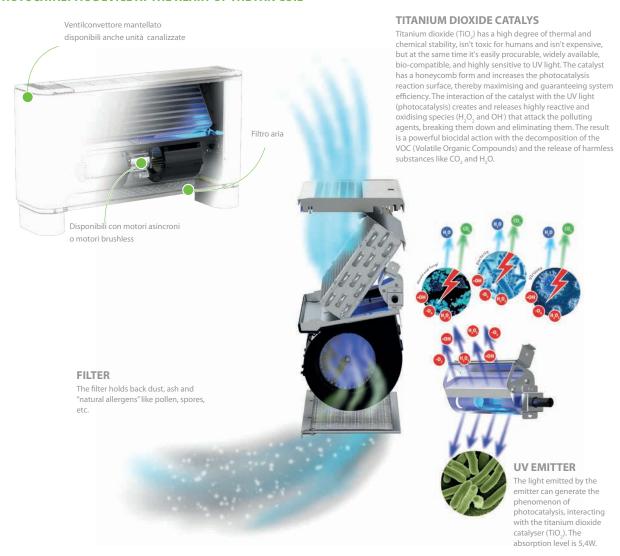
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

The coil is not reversible during installation but, when ordering, you can choose units with the coil water connections on the right (at no extra charge).

Air filter

Air filter class **COARSE 25%** for all versions; easy to pull out and clean. Shrouds can be pulled out and inspected for easy and effective cleaning.

PHOTOCATALYTIC DEVICE AT THE HEART OF THE FAN COIL



GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Configuration options FCZ - H

Field	Description
1,2,3	FCZ
4	Size 2, 3, 4, 5, 6, 9
5	main heat exchanger
0	Standard
5	Oversized
6	Secondary heat exchanger
0	Without coil
7	Version
Н	Unit with shell without thermostat - vertical and horizontal mount
HP	Unit without shell and thermostat - vertical and horizontal mount
HPO	Unit without shell and thermostat with upgraded motor - vertical and horizontal mount
HPOR	Unit without shell and thermostat with upgraded motor - vertical and horizontal installation - water connections on the right
HPR	Unit without shell and thermostat - vertical and horizontal installation - water connections on the right
HR	Unit with shell without thermostat - vertical and horizontal installation - water connections on the right
HT	Unit with shell with thermostat - vertical mount
HTR	Unit with shell with thermostat - vertical mount - water connections on the right

ACCESSORIES

Control panels and dedicated accessories - FCZ-H

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those

with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air puri-

fying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

PRO503: Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SA503: Wall-mountable ambient sensor, compatible with AER503IR.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

TXB: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

VMF system

■ The fan coil can also be teamed up with the VMF system; please contact headquarters about compatibility with the various system components.

Common accessories

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.

VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit.

AMP: Wall mounting kit

DSC: Condensate drainage device.

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.

GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.

FIKIT: Metal supports for vertical installation of the GA grille.

ZXZ: Pair of stylish and structural feet

BC: Condensate drip.

Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.

SPCZ: Brackets to fix the fan coil to the floor.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories - FCZ-H

Model	Ver	200	250	300	350	400	450	500	550	600	650	900	950
AER503IR (1)	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
PR0503	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
SA5 (2)	H,HP,HT	•	•	•	•	•	•	•	•	•	•	•	•
SA503 (3)	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
SIT3 (4)	H,HP,HT	•		•	•	•	•	•	•	•	•	•	•
SIT5 (5)	H,HP,HT	•			•				•	•		•	•
SW3 (2)	H,HP,HT	•		•	•	•	•	•	•	•	•	•	•
SW5 (2)	H,HP,HT	•	•	•	•	•	•	•	•	•	•	•	•
TX (6)	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
TXB (7)	H,HP			•	•	•	•	•	•	•	•		•

- (1) Wall-mount installation.(2) Probe for AERSO3IR-TX thermostats, if fitted.
- (2) Thorough Transformers diefinosates, in inceed.
 (3) Thermostat probe for AERSO3IR favailable.
 (4) Cards for AERSO3IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
- (5) Probe for AER503IR-TX thermostats, if fitted.
- (6) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required. (7) Installation on the fan coil.

Common accessories

3 wav valve kit

J way valve kit													
Model	Ver	200	250	300	350	400	450	500	550	600	650	900	950
VCZ41 (1)	H,HP,HT	•	•										
VCZ4124 (2)	H,HP,HT	•	•										
VCZ42 (1)	H,HP,HT			•	•	•	•	•	•	•	•		
VCZ4224 (2)	H,HP,HT			•	•	•	•	•	•	•	•		
VCZ43 (1)	H,HP,HT											•	•
VCZ4324 (2)	H,HP,HT											•	•

(1) 230V~50Hz

2 way valve kit

Model	Ver	200	250	300	350	400	450	500	550	600	650	900	950
VCZD1 (1)	H,HP,HT	•	•										
VCZD124 (2)	H,HP,HT		•										

Model	Ver	200	250	300	350	400	450	500		600 650	900	950
VCZD2 (1)	H,HP,HT			•	•	•	•	•	•	• •		
VCZD224 (2)	H,HP,HT			•	•	•	•	•	•	• •		
VCZD3 (1)	H,HP,HT										•	•
VCZD324 (2)	H,HP,HT										•	•
(1) 230V~50Hz (2) 24V												
Combined Adjustment and	d Balancing Va	alve Kit								,		
Model	Ver	200	250	300	350	400	450	500	550	600 650	900	950
VJP060 (1)	H,HP,HT	•	•	•	•							
VJP060M (2)	Н,НР,НТ	•	•	•	•							
VJP090 (1)	Н,НР,НТ					•	•	•	•	• •		
VJP090M (2)	H,HP,HT					•	•	•	•	• •		
VJP150 (1)	Н,НР,НТ										•	•
VJP150M (2)	Н,НР,НТ										•	•
(1) 230V~50Hz (2) 24V												
Wall mounting kit												
Ver	200	250	300	350	400	450	500	550	600	650	900	950
H,HP	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20
Condensate drainage												
Model	Ver	200	250	300	350	400	450	500	550	600 650	900	950
DSCZ4 (1)	HP				•	•		•				•
(1) DSCZ4 due to space problems inside contact the head office.	the unit, the VCZ1-2-	-3-4 X4L/R valve	s cannot be m	nounted togetl	ner with the an	mp/AMPZ acces	sories, with all	I the condensa	te collection tra	ays. With the VMF	E19/E19I then	mostats, ple
Condensate drip Ver	200	250	300	350	400	450	500	550	600	650	900	950
	BCZ4 (1),	BCZ4 (1),	BCZ4 (1),	BCZ4 (1),	BCZ4 (1),	BCZ4 (1),	BCZ4 (1),	BCZ4 (1),	BCZ4 (1),	BCZ4 (1),	700	
H,HP,HT	BCZ5 (2)	BCZ5 (2)	BCZ5 (2)	BCZ5 (2)	BCZ5 (2)	BCZ5 (2)	BCZ5 (2)	BCZ5 (2)	BCZ5 (2)	BCZ5 (2)	BCZ6 (2)	BCZ6 (2)
(1) For vertical installation. (2) For horizontal installation.									'			
Ver	200	250	300	350	400	450	500	550	600	650	900	950
HP	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC9 (1)	BC9 (1)
(1) For horizontal installation.												
Panel closing the rear of th	ne unit											
Ver	200	250	300	350	400	450	500	550	600	650	900	950
H,HT	PCZ200	PCZ200	PCZ300	PCZ300	PCZ500	PCZ500	PCZ500	PCZ500	PCZ800	PCZ800	PCZ1000	PCZ1000
Grille also applicable for fl	oor installatio	on										
Ver	200	250	300	350	400	450	500	550	600	650	900	950
H,HP,HT	GA200	GA200	GA300	GA300	GA500	GA500	GA500	GA500	GA800	GA800	GA800	GA800
Metal supports for GA gril	le											
Ver	200	250	300	350	400	450	500	550	600	650	900	950
H,HP,HT	FIKIT200	FIKIT200	FIKIT300	FIKIT300	FIKIT500	FIKIT500	FIKIT500	FIKIT500	FIKIT800	FIKIT800	FIKIT800	FIKIT800
Ventilcassaforma												
Ver	200	250	300	350	400	450	500	550	600	650	900	950
HP	CHF22	CHF22	CHF32	CHF32	CHF42	CHF42	CHF42	CHF42	CHF62	CHF62	CHF62	CHF62
										,		
Brackets to fix the fan coil Ver	200	250	300	350	400	450	500	550	600	650	900	950
H,HT	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ	SPCZ
11,111	J1 CL	Ji CL	Ji CL	J1 (L	J1 (L	Ji CL	JI CL	JI CL	JI (L	J1 (L	J1 (L	JI CL
Pair of stylish structural fe	et											

H,HP,HT

ZXZ

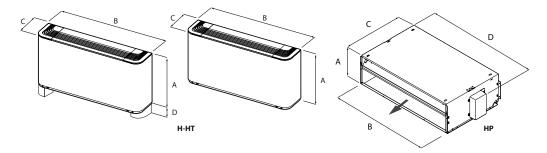
PERFORMANCE SPECIFICATIONS

2-pipe

2-pipe			FCZ200H	1		FCZ250H			FCZ300H	1		FCZ350H	Ī		FCZ400H	Ī		FCZ450H	H
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82
Water flow rate system side	I/h	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685
Pressure drop system side	kPa	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88
Water flow rate system side	l/h	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675
Pressure drop system side	kPa	6	12	18	8	15	22	8	12	18	8	14	20	10	16	24	6	11	16
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	0,89	1,28	1,60	1,06	1,55	1,94	1,68	2,17	2,65	1,89	2,46	3,02	2,20	2,92	3,60	2,41	3,21	4,03
Sensible cooling capacity	kW	0,71	1,05	1,33	0,79	1,20	1,52	1,26	1,65	2,04	1,33	1,76	2,18	1,59	2,14	2,67	1,69	2,30	2,90
Water flow rate system side	l/h	153	221	275	182	267	334	288	374	456	350	460	560	379	503	619	414	552	694
Pressure drop system side	kPa	7	13	18	8	17	25	8	13	18	11	18	25	10	17	24	9	15	22
Fan																			
Туре	type	(entrifuga	al		Centrifuga	l	(Centrifuga	al	(Centrifuga	al	(Centrifuga	al	(Centrifuga	al
Fan motor	type	As	ynchrono	ous	A:	synchrono	us	As	ynchrono	ous	A:	synchrono	us	As	synchrono	ous	As	synchrono	ous
Number	no.		1			1			2			2			2			2	
Air flow rate	m³/h	140	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600
Input power	W	25	29	33	25	29	33	25	33	44	25	33	44	30	43	57	30	43	57
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Diametre hydraulic fittings																			
Туре	type		Gas - F			Gas - F			Gas - F			Gas - F			Gas - F			Gas - F	
Main heat exchanger	Ø		1/2"			1/2"			3/4"			3/4"			3/4"			3/4"	
Fan coil sound data (3)																			
Sound power level	dB(A)	35,0	46,0	51,0	35,0	46,0	51,0	34,0	41,0	48,0	34,0	41,0	48,0	37,0	44,0	51,0	37,0	44,0	51,0
Sound pressure	dB(A)	27,0	38,0	43,0	27,0	38,0	43,0	26,0	33,0	40,0	26,0	33,0	40,0	29,0	36,0	43,0	29,0	36,0	43,0
Power supply																			
Power supply		2	30V~50I	Нz	2	230V~50H	Z	2	30V~50H	Hz	2	230V~50l	łz	2	230V~50H	łz	2	.30V~50l	Hz
			FCZ500H	_		FCZ550H			FCZ600H	-		FCZ650H			FCZ900H	_		FCZ950H	
			2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		1			-									_					
		L	M	Н	L	М	Н	Ĺ	M	Н	L	M	Н	L	M	Н	L	M	Н
Heating performance 70 °C / 60 °C (1)		<u> </u>	М		_			Ĺ			Ĺ		Н	_	М	Н			
Heating performance 70 °C / 60 °C (1) Heating capacity	kW	<u> </u>			_		H 9,75	L 6,50	M 8,10	H 10,00	<u> </u>	M 9,15	H 11,50	_				M 14,42	H 17,10
	kW I/h	L	М	Н	L	М	9,75 855	Ĺ	M 8,10 710	H 10,00 877	7,19 631	М	Н	10,77 945	М	H 15,14 1328	Ĺ	M 14,42 1264	H 17,10
Heating capacity Water flow rate system side Pressure drop system side		L 5,27	7,31	H 8,50	L 5,82	M 8,34	H 9,75	L 6,50	M 8,10	H 10,00	7,19	M 9,15	H 11,50	L 10,77	M 13,35	H 15,14	L 11,20	M 14,42	Н
Heating capacity Water flow rate system side	l/h	5,27 462	7,31 641	8,50 745	5,82 510	M 8,34 731	9,75 855	6,50 570	M 8,10 710	H 10,00 877	7,19 631	9,15 802	H 11,50 1008	10,77 945	M 13,35 1171	H 15,14 1328 22	11,20 982	M 14,42 1264	17,10 1500
Heating capacity Water flow rate system side Pressure drop system side	l/h	5,27 462	7,31 641	8,50 745	5,82 510	M 8,34 731	9,75 855	6,50 570	M 8,10 710	H 10,00 877	7,19 631	9,15 802	H 11,50 1008	10,77 945	M 13,35 1171	H 15,14 1328	11,20 982	M 14,42 1264	H 17,10 1500 33
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2)	I/h kPa	5,27 462 12	7,31 641 21	8,50 745 28	5,82 510 10	M 8,34 731 20	9,75 855 26	6,50 570 12	M 8,10 710 18	H 10,00 877 26	7,19 631 14	9,15 802 21	H 11,50 1008 31	10,77 945 12	M 13,35 1171 17	H 15,14 1328 22	11,20 982 16	M 14,42 1264 25	H 17,10 1500 33 8,50
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity	I/h kPa kW	5,27 462 12	7,31 641 21 3,63	H 8,50 745 28 4,22	5,82 510 10	M 8,34 731 20 4,14	9,75 855 26 4,85	6,50 570 12	M 8,10 710 18 4,03	H 10,00 877 26 4,97	7,19 631 14	9,15 802 21 4,55	H 11,50 1008 31 5,72	10,77 945 12 5,35	M 13,35 1171 17 6,64	H 15,14 1328 22 7,53	11,20 982 16	M 14,42 1264 25 7,17	H 17,10 1500 33 8,50
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side	I/h kPa kW I/h kPa	5,27 462 12 2,62 455	7,31 641 21 3,63 631 21	8,50 745 28 4,22 734 28	5,82 510 10 2,89 502	8,34 731 20 4,14 720 20	9,75 855 26 4,85 842 26	6,50 570 12 3,32 561	M 8,10 710 18 4,03 699 18	H 10,00 877 26 4,97 863 26	7,19 631 14 3,57 621 14	9,15 802 21 4,55 790 20	H 11,50 1008 31 5,72 993 31	10,77 945 12 5,35 930 12	M 13,35 1171 17 6,64 1152 17	H 15,14 1328 22 7,53 1307 22	11,20 982 16 5,57 967	M 14,42 1264 25 7,17 1245 24	H 17,10 1500 33 8,50 1476 33
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity	I/h kPa kW I/h kPa	5,27 462 12 2,62 455	7,31 641 21 3,63 631	8,50 745 28 4,22 734	5,82 510 10 2,89 502	M 8,34 731 20 4,14 720	9,75 855 26 4,85 842 26	6,50 570 12 3,32 561 12	M 8,10 710 18 4,03 699 18	H 10,00 877 26 4,97 863 26	7,19 631 14 3,57 621	9,15 802 21 4,55 790	H 11,50 1008 31 5,72 993	10,77 945 12 5,35 930	M 13,35 1171 17 6,64 1152	H 15,14 1328 22 7,53 1307 22 6,91	11,20 982 16 5,57 967	M 14,42 1264 25 7,17 1245	H 17,10 1500 33 8,50 1476
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity	I/h kPa kW I/h kPa kW	5,27 462 12 2,62 455 12 2,68 1,94	7,31 641 21 3,63 631 21 3,69 2,73	H 8,50 745 28 4,22 734 28 4,25 3,18	5,82 510 10 2,89 502 10 2,91 2,07	M 8,34 731 20 4,14 720 20 4,13 2,98	H 9,75 855 26 4,85 842 26 4,79 3,49	6,50 570 12 3,32 561 12 3,22 2,56	M 8,10 710 18 4,03 699 18 3,90 3,17	H 10,00 877 26 4,97 863 26 4,65 3,92	7,19 631 14 3,57 621 14 3,95 2,78	M 9,15 802 21 4,55 790 20 4,80 3,43	H 11,50 1008 31 5,72 993 31 5,67 4,12	10,77 945 12 5,35 930 12 4,29 2,97	M 13,35 1171 17 6,64 1152 17 5,00 3,78	H 15,14 1328 22 7,53 1307 22 6,91 5,68	11,20 982 16 5,57 967 15 5,77 3,80	M 14,42 1264 25 7,17 1245 24 7,32 4,87	H 17,10 1500 33 8,50 1476 33 8,60 5,78
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side	I/h kPa kW I/h kPa kW I/h kPa	5,27 462 12 2,62 455 12 2,68 1,94 460	M 7,31 641 21 3,63 631 21 3,69 2,73 634	H 8,50 745 28 4,22 734 28	5,82 510 10 2,89 502 10 2,91 2,07 501	M 8,34 731 20 4,14 720 20 4,13 2,98 711	9,75 855 26 4,85 842 26 4,79 3,49 824	6,50 570 12 3,32 561 12 3,22 2,56 554	M 8,10 710 18 4,03 699 18 3,90 3,17 671	H 10,00 877 26 4,97 863 26 4,65 3,92 800	7,19 631 14 3,57 621 14 3,95 2,78 595	M 9,15 802 21 4,55 790 20 4,80 3,43 825	H 11,50 1008 31 5,72 993 31 5,67 4,12 975	10,77 945 12 5,35 930 12 4,29 2,97 738	M 13,35 1171 17 6,64 1152 17	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189	11,20 982 16 5,57 967 15	M 14,42 1264 25 7,17 1245 24 7,32 4,87 1259	H 17,10 1500 33 8,50 1476 33 8,60 5,78
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity	I/h kPa kW I/h kPa kW	5,27 462 12 2,62 455 12 2,68 1,94	7,31 641 21 3,63 631 21 3,69 2,73	H 8,50 745 28 4,22 734 28 4,25 3,18	5,82 510 10 2,89 502 10 2,91 2,07	M 8,34 731 20 4,14 720 20 4,13 2,98	H 9,75 855 26 4,85 842 26 4,79 3,49	6,50 570 12 3,32 561 12 3,22 2,56	M 8,10 710 18 4,03 699 18 3,90 3,17	H 10,00 877 26 4,97 863 26 4,65 3,92	7,19 631 14 3,57 621 14 3,95 2,78	M 9,15 802 21 4,55 790 20 4,80 3,43	H 11,50 1008 31 5,72 993 31 5,67 4,12	10,77 945 12 5,35 930 12 4,29 2,97	M 13,35 1171 17 6,64 1152 17 5,00 3,78	H 15,14 1328 22 7,53 1307 22 6,91 5,68	11,20 982 16 5,57 967 15 5,77 3,80	M 14,42 1264 25 7,17 1245 24 7,32 4,87	H 17,10 1500 33 8,50 1476 33 8,60 5,78
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side	I/h kPa kW I/h kPa kW I/h kPa	2,62 455 12 2,68 1,94 460 13	M 7,31 641 21 3,63 631 21 3,69 2,73 634 23	H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	M 8,34 731 20 4,14 720 20 4,13 2,98 711 22	H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554	M 8,10 710 18 4,03 699 18 3,90 3,17 671 19	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	M 9,15 802 21 4,55 790 20 4,80 3,43 825 21	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28	10,77 945 12 5,35 930 12 4,29 2,97 738 10	M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 13	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	11,20 982 16 5,57 967 15 5,77 3,80 992	M 14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23	H 17,100 1500 33 8,50 1476 33 8,60 5,78 1479 30
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan	I/h kPa kW I/h kPa kW I/h kPa	2,62 455 12 2,68 1,94 460 13	M 7,31 641 21 3,63 631 21 3,69 2,73 634	H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	M 8,34 731 20 4,14 720 20 4,13 2,98 711	H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554	M 8,10 710 18 4,03 699 18 3,90 3,17 671	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	M 9,15 802 21 4,55 790 20 4,80 3,43 825	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28	10,77 945 12 5,35 930 12 4,29 2,97 738 10	M 13,35 1171 17 6,64 1152 17 5,00 3,78 860	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	11,20 982 16 5,57 967 15 5,77 3,80 992	M 14,42 1264 25 7,17 1245 24 7,32 4,87 1259	H 17,100 15000 33 8,50 1476 33 8,60 5,78 1479 30
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan	I/h kPa kW I/h kPa kW kW I/h kPa	2,62 455 12 2,68 1,94 460 13	M 7,31 641 21 3,63 631 21 3,69 2,73 634 23	H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	M 8,34 731 20 4,14 720 20 4,13 2,98 711 22	9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	M 8,10 710 18 4,03 699 18 3,90 3,17 671 19	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	M 9,15 802 21 4,55 790 20 4,80 3,43 825 21	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28	10,77 945 12 5,35 930 12 4,29 2,97 738 10	M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 13	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	11,20 982 16 5,57 967 15 5,77 3,80 992 15	M 14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23	H 17,100 33 8,50 1476 33 8,60 5,78 1479 30
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor	kW I/h kPa kW I/h kPa kW kW I/h kPa type type no.	2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 23 Centrifuga	8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga	H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	8,10 710 18 4,03 699 18 3,90 3,17 671 19	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifuga	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28	10,77 945 12 5,35 930 12 4,29 2,97 738 10	M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 13	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	11,20 982 16 5,57 967 15 5,77 3,80 992 15	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifuga 3	17,100 1500 33 8,50 1476 33 8,60 5,78 1479 30
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number	kW I/h kPa kW kW I/h kPa type type	2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 23	H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga	9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	8,10 710 18 4,03 699 18 3,90 3,17 671 19	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	9,15 802 21 4,55 790 20 4,80 3,43 825 21	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28	10,77 945 12 5,35 930 12 4,29 2,97 738 10	M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 13	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	11,20 982 16 5,57 967 15 5,77 3,80 992 15	M 14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifugas	17,100 1500 33 8,50 1476 33 8,60 5,78 1479 30
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power	kW I/h kPa kW I/h kPa kW kW I/h kPa type type no.	5,27 462 12 2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 23 Eentrifuggynchronoc 2 600 52	8,50 745 28 4,22 734 28 4,25 3,18 731 29 720 76	5,82 510 10 2,89 502 10 2,91 2,07 501 12	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga 5 600 52	9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	8,10 710 18 4,03 699 18 3,90 3,17 671 19 Centrifuga ynchronoc 3 720 60	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifuga 3 720 60	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28	10,77 945 12 5,35 930 12 4,29 2,97 738 10	13,35 1171 17 6,64 1152 17 5,00 3,78 860 13	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140 106	11,20 982 16 5,57 15 5,77 3,80 992 15	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifuga 3 930 80	17,100 1500 33 8,500 1476 33 8,600 5,78 1479 30 1140 106
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power	kW I/h kPa kW I/h kPa kW kW I/h kPa type type no. m³/h	5,27 462 12 2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 23 Eentrifuga 2,600	8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga 2 5,90 600	9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	8,10 710 18 4,03 699 18 3,90 3,17 671 19	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifuga 3 720	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28 900	10,77 945 12 5,35 930 12 4,29 2,97 738 10	13,35 1171 17 17 6,64 1152 17 5,00 3,78 860 13	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140	11,20 982 16 5,57 15 5,77 3,80 992 15	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifuga 3 930	H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30 al
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring	kW I/h kPa kW I/h kPa kW kW I/h kPa type type no. m³/h	2,62 12 2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 23 Eentrifuggynchronoc 2 600 52	8,50 745 28 4,22 734 28 4,25 3,18 731 29 720 76	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 38	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga 5 600 52	9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	8,10 710 18 4,03 699 18 3,90 3,17 671 19 Centrifuga ynchronoc 3 720 60	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifuga 3 720 60	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28 900 91	10,77 945 12 5,35 930 12 4,29 2,97 738 10	13,35 1171 17 6,64 1152 17 5,00 3,78 860 13 Centrifuga 3 930 80	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140 106	11,20 982 16 5,57 967 15 5,77 3,80 992 15	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifuga 3 930 80	17,100 1500 33 8,500 1476 33 8,600 5,78 1479 30 1140 106
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Diametre hydraulic fittings Type	kW I/h kPa kW I/h kPa kW kW I/h kPa type type no. m³/h	2,62 12 2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 23 Eentrifuggynchronoc 2 600 52	8,50 745 28 4,22 734 28 4,25 3,18 731 29 720 76	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 38	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga synchrono 2 600 52 V2	9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	M 8,10 710 18 4,03 699 18 3,90 3,17 671 19 Centrifuga ynchronc 3 720 60 V2	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifugg 60 V2	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28 900 91	10,77 945 12 5,35 930 12 4,29 2,97 738 10	13,35 1171 17 6,64 1152 17 5,00 3,78 860 13 Centrifuga synchrono 3 930 V2	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140 106	11,20 982 16 5,57 967 15 5,77 3,80 992 15	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifugg 80 V2	H 17,10 15000 33 8,500 1476 33 8,600 5,78 1479 30 1140 106
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Diametre hydraulic fittings Type	kW I/h kPa kW kW I/h kPa type type no. m³/h W	2,62 12 2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 23 Eentrifuga yynchronoc 2 600 52 V2	8,50 745 28 4,22 734 28 4,25 3,18 731 29 720 76	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 38	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga 2 600 52 V2	9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	8,10 710 18 4,03 699 18 3,90 3,17 671 19 Eightrifuga ynchrono 3 720 60 V2	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifuga 3 720 60 V2	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28 900 91	10,77 945 12 5,35 930 12 4,29 2,97 738 10	13,35 1171 17 6,64 1152 17 5,00 3,78 860 13 Centrifuga 3 930 80 V2	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140 106	11,20 982 16 5,57 967 15 5,77 3,80 992 15	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifuga 3 930 80 V2	H 17,10 15000 33 8,500 1476 33 8,600 5,78 1479 30 1140 106
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Diametre hydraulic fittings Type Main heat exchanger	l/h kPa kW l/h kPa kW kW l/h kPa type type no. m³/h W	2,62 12 2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 23 23 centrifuga ynchronoc 2 600 52 V2	8,50 745 28 4,22 734 28 4,25 3,18 731 29 720 76	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 38	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga synchrono 2 600 52 V2	9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	M 8,10 710 18 4,03 699 18 3,90 3,17 671 19 Centrifuga ynchronc 3 720 60 V2	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifugg 60 V2	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28 900 91	10,77 945 12 5,35 930 12 4,29 2,97 738 10	13,35 1171 17 6,64 1152 17 5,00 3,78 860 13 Centrifuga synchrono 3 930 V2	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140 106	11,20 982 16 5,57 967 15 5,77 3,80 992 15	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifugg 80 V2	H 17,10 15000 33 8,500 1476 33 8,600 5,78 1479 30 1140 106
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Diametre hydraulic fittings Type Main heat exchanger Fan coil sound data (3)	l/h kPa kW l/h kPa kW kW l/h kPa type type no. m³/h W	2,62 12 2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 23 23 centrifuga ynchronoc 2 600 52 V2	8,50 745 28 4,22 734 28 4,25 3,18 731 29 720 76	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 38	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga synchrono 2 600 52 V2	9,75 855 26 4,85 842 26 4,79 3,49 824 28	6,50 570 12 3,32 561 12 3,22 2,56 554 14	8,10 710 18 4,03 699 18 3,90 3,17 671 19 Centrifuga ynchronoc 3 720 60 V2	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26 26	7,19 631 14 3,57 621 14 3,95 2,78 595 15	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifugg 60 V2	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28 900 91	10,77 945 12 5,35 930 12 4,29 2,97 738 10	13,35 1171 17 6,64 1152 17 5,00 3,78 860 13 Centrifuga synchrono 3 930 V2	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140 106	11,20 982 16 5,57 967 15 5,77 3,80 992 15	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifugg 80 V2	H 17,1(1 15000 33 8,50 1476 33 8,60 5,78 1479 30 1140 106 V3
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fressure drop system side Fan Type	I/h kPa kW I/h kPa kW kW I/h kPa type type no. m³/h W	2,62 12 2,62 455 12 2,68 1,94 460 13 400 38 V1	7,31 641 21 3,63 631 21 3,69 2,73 634 23 centrifuga ynchronoc 2 600 52 V2	8,50 745 28 4,22 734 28 4,25 3,18 731 29 720 76 V3	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 38 V1	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga 600 52 V2 Gas-F 3/4"	9,75 855 26 4,85 842 26 4,79 3,49 824 28 1 1 us	3,32 561 12 3,22 2,56 554 14 (As	8,10 710 18 4,03 699 18 3,90 3,17 671 19 Eentrifuga yynchrono 3 720 60 V2	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26 26 900 91 V3	7,19 631 14 3,57 621 14 3,95 2,78 595 15 A: 520 38 V1	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifuga 3 720 60 V2	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28 900 91 V3	10,77 945 12 5,35 930 12 4,29 2,97 738 10 6 A:	13,35 1171 17 6,64 1152 17 5,00 3,78 860 13 Centrifuga 930 80 V2	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140 106 V3	11,20 982 16 5,57 967 15 5,77 3,80 992 15 700 59 V1	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifuga 930 80 V2	H 17,100 1500 33 8,50 1476 33 8,60 5,78 1479 30 1140 V3
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Pressure drop system side Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Diametre hydraulic fittings Type Main heat exchanger Fan coil sound data (3) Sound power level Sound pressure	l/h kPa kW l/h kPa kW kW l/h kPa type type no. m³/h W type Ø dB(A)	2,62 12 2,62 455 12 2,68 1,94 460 13 400 38 V1	7,31 641 21 3,63 631 21 3,69 2,73 634 23 Centrifuga ynchrono 52 V2 Gas-F 3/4" 51,0	8,50 745 28 4,22 734 28 4,25 3,18 731 29 720 76 V3	L 5,82 510 10 10 2,89 502 10 2,91 2,07 501 12 400 38 V1 42,0 42,0	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga 600 52 V2 Gas-F 3/4" 51,0	H 9,75 855 26 4,85 842 26 4,79 3,49 824 28 1 us 720 76 V3	6,50 570 12 3,32 561 12 3,22 2,56 554 14	8,10 710 18 4,03 699 18 3,90 671 19 Centrifuga 720 60 V2 Gas-F 3,4"	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26 900 91 V3	7,19 631 14 3,57 621 14 3,95 2,78 595 15 A: 42,0	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifuga 720 60 V2 Gas-F 3,4"	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28 900 91 V3	10,77 945 12 5,35 930 12 4,29 2,97 738 10 6 A: 700 59 V1	13,35 1171 17 6,64 1152 17 5,00 3,78 860 13 13 Centrifuga 930 80 V2	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140 106 V3	11,20 982 16 5,57 967 15 5,77 3,80 992 15 700 59 V1	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifuga 3 930 V2 Gas-F 3/4" 57,0	H 17,1(1 15000 33 8,50 1476 33 8,60 5,78 1479 30 1140 V3
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Water flow rate system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Diametre hydraulic fittings Type Main heat exchanger Fan coil sound data (3) Sound power level	l/h kPa kW l/h kPa kW kW l/h kPa type type no. m³/h W type Ø dB(A)	2,62 455 12 2,62 455 12 2,68 1,94 460 13 400 38 V1	7,31 641 21 3,63 631 21 3,69 2,73 634 23 Centrifuga ynchrono 52 V2 Gas-F 3/4" 51,0	8,50 745 28 4,22 734 28 4,25 3,18 731 29 76 V3	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 38 V1	8,34 731 20 4,14 720 20 4,13 2,98 711 22 Centrifuga 600 52 V2 Gas-F 3/4" 51,0	9,75 855 26 4,85 842 26 4,79 3,49 824 28 1 1 us 56,0 48,0	6,50 570 12 3,32 561 12 3,22 2,56 554 14 (As 520 38 V1	8,10 710 18 4,03 699 18 3,90 671 19 Centrifuga 720 60 V2 Gas-F 3,4"	H 10,00 877 26 4,97 863 26 4,65 3,92 800 26 91 V3	7,19 631 14 3,57 621 14 3,95 2,78 595 15 A: 42,0 34,0	9,15 802 21 4,55 790 20 4,80 3,43 825 21 Centrifuga 720 60 V2 Gas-F 3,4"	H 11,50 1008 31 5,72 993 31 5,67 4,12 975 28 900 91 V3	10,77 945 12 5,35 930 12 4,29 2,97 738 10 6 A: 700 59 V1	13,35 1171 17 6,64 1152 17 5,00 3,78 860 13 13 Centrifuga 930 80 V2	H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22 1140 106 V3	11,20 982 16 5,57 967 15 5,77 3,80 992 15 700 59 V1	14,42 1264 25 7,17 1245 24 7,32 4,87 1259 23 Centrifuga 3 930 V2 Gas-F 3/4" 57,0	H 17,100 1500 33 8,50 1476 33 8,60 5,78 1479 30 1140 V3

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C (2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT (3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



Size			200	250	300	350	400	450	500	550	600	650	900	950
Dimensions and weights														
Λ	H,HT	mm	486	-	486	-	486	-	486	-	486	-	591	591
A	HP	mm	216	-	216	-	216	-	216	-	216	-	216	216
В	H,HT	mm	750	-	980	-	1200	-	1200	-	1320	-	1320	1320
	HP	mm	562	-	793	-	1013	-	1013	-	1147	-	1147	1147
·	H,HT	mm	220	-	220	-	220	-	220	-	220	-	220	220
C	HP	mm	453	-	453	-	453	-	453	-	453	-	558	558
D	H,HT	mm	90	-	90	-	90	-	90	-	90	-	90	90
	HP	mm	522	-	753	-	973	-	973	-	1122	-	1122	1122
Empty weight	H,HT	kg	15	-	17	-	23	-	22	-	29	-	34	34
	HP	kg	12	-	14	-	20	-	23	-	29	-	32	32

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FCZI-H

Fan coil with the photocatalytic device, for universal and floor installation



- Photocatalytic device
- Tested effectiveness against viruses, bacteria and allergens
- Active against the SARS-CoV-2 virus, even on surfaces
- Backlit touch command (accessory)





DESCRIPTION

Fan coil with built-in photocatalytic device.

Active against the airborne Sars-CoV-2 virus (95%-99% abatement efficacy after 20 minutes of operation tested at the Virostatics laboratory in Alghero).

Active against the SARS-CoV-2 virus, even on surfaces - 84% effectiveness after 12 h (tests carried out in collaboration with the Department of Microbiology of the University of Padua).

Suitable for air conditioning in places requiring optimum hygiene levels, such as:

- Hospitals
- Dentists' surgeries
- Doctors' and vets' surgeries
- Analysis laboratories
- Waiting rooms
- Public premises

They can be installed in any type of 2-pipe system (version for 4-pipe systems available upon request) and in combination with any heat generator, even at low temperatures. Thanks to the availability of several versions and configurations, it's easy to find the right solution for every need.

VERSIONS

- H Unit with shell without thermostat - vertical and horizontal installation.
- **НР** Unit without shell and without thermostat - vertical and horizontal installation.
- HT Unit with shell and thermostat - vertical installation.

FEATURES

Case

Metallic protective cabinet with rustproofing polyester paint RAL 9003. The head with adjustable air distribution grille is made of plastic RAL 7047. When the grille closes, the fan coil automatically switches off.

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

Continuous air flow rate variation is made possible by a 0-10V signal generated by Aermec adjustment and control commands or by independent regulation systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors). The scroll that protects the fan can be extracted and inspected, for easy and effective cleaning.

Apart from the brushless motor, each unit can also be supplied with a single-phase asynchronous motor. Refer to the relative FCZ - H datasheet

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air

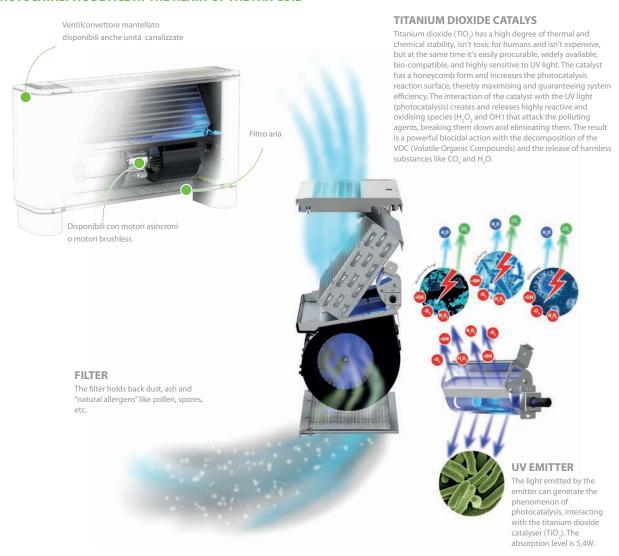
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

The coil is not reversible during installation but, when ordering, you can choose units with the coil water connections on the right (at no extra charge).

Air filter

Air filter class COARSE 25% for all versions; easy to pull out and clean. Shrouds can be pulled out and inspected for easy and effective cleaning.

PHOTOCATALYTIC DEVICE AT THE HEART OF THE FAN COIL



GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

	SELECTING THE POSSIBLE CONTIGURATIONS
Field	Description
1,2,3,4	FCZI
	Size
3	2, 3, 4, 5, 7, 9
6	main heat exchanger
0	Standard
5	Oversized
7	Secondary heat exchanger
0	Without coil
8	Version
Н	Unit with shell without thermostat - vertical and horizontal mount
HP	Unit without shell and thermostat - vertical and horizontal mount
HPR	Unit without shell and thermostat - vertical and horizontal installation - water connections on the right
HR	Unit with shell without thermostat - vertical and horizontal installation - water connections on the right
HT	Unit with shell with thermostat - vertical mount
HTR	Unit with shell with thermostat - vertical mount - water connections on the right

ACCESSORIES

Control panels and dedicated accessories - FCZI-H

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kir (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E22: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

 $\pmb{\mathsf{VMF-LON:}}$ Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.

VMF-SW1: Additional water probe (L=2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

VMF system

The fan coil can also be teamed up with the VMF system; please contact headquarters about compatibility with the various system components.

Common accessories

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit.

AMP: Wall mounting kit

DSC: Condensate drainage device.

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. **PCZ:** Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.

GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.

FIKIT: Metal supports for vertical installation of the GA grille.

ZXZ: Pair of stylish and structural feet

BC: Condensate drip.

Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.

SPCZ: Brackets to fix the fan coil to the floor.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	200	250	300	350	400	450	500
AER503IR (1)	H,HP	•	•	•	•	•	•	•
PR0503	H,HP	•	•	•	•	•	•	•
SA5 (2)	H,HP	•	•	•	•	•	•	•
SW3 (2)	H,HP,HT	•	•	•	•	•	•	•
CML (2)	H,HP	•	•	•	•	•	•	•
SW5 (2)	HT		•		•		•	
TX (3)	H,HP,HT	•	•	•	•	•	•	•
Model	Ver	550		700	750	900		950
Model AER503IR (1)	Ver H,HP	550		700	750	900		950
						1		950 •
AER503IR (1) PR0503	H,HP				•	1		950 • •
AER503IR (1)	H,HP H,HP	•		•	•	•		950
AER503IR (1) PR0503 SA5 (2) SW3 (2)	H,HP H,HP H,HP	•		•	•	•		950
AER503IR (1) PR0503 SA5 (2)	H,HP H,HP H,HP H,HP,HT	•		•	•	•		950

(1) Wall-mount installation.

(2) Probe for AER503IR-TX thermostats, if fitted.

(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
DI24	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E19I (1)	H.HP		•			•				•	•	•	•

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
VMF-E2Z	Н	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E3	H,HP										•		
VMF-E4DX	H,HP	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4X	H,HP												
VMF-IO	Н			•		•	•	•	•	•		•	
VMF-IR	H,HP		•	•	•	•	•	•	•	•	•		•
VMF-LON	Н		•	•	•	•				•			
VMF-SW1	H,HP	•	•	•	•	•				•	•		•
VMHI	H,HP	•		•			•	•	•		•	•	

Common accessories

3 way valve kit

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
VCZ41 (1)	H,HP,HT	•	•										
VCZ4124 (2)	H,HP,HT	•	•										
VCZ42 (1)	H,HP,HT			•		•	•	•	•	•	•		
VCZ4224 (2)	H,HP,HT			•	•	•	•		•	•	•		
VCZ43 (1)	H,HP,HT											•	•
VCZ4324 (2)	H,HP,HT												•

(1) 230V~50Hz (2) 24V

2 way valve kit

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
VCZD1 (1)	H,HP,HT	•	•										
VCZD124 (2)	H,HP,HT	•	•										
VCZD2 (1)	H,HP,HT			•	•	•	•	•	•	•	•		
VCZD224 (2)	H,HP,HT					•	•				•		
VCZD3 (1)	H,HP,HT											•	•
VCZD324 (2)	H.HP.HT											•	•

(1) 230V~50Hz (2) 24V

Combined Adjustment and Balancing Valve Kit

200

НР

250

Model	Ver	200	250	300	350	400	450	500	550	700	750	900	950
VJP060 (1)	H,HP,HT	•	•	•	•								
VJP060M (2)	H,HP,HT	•	•	•	•								
VJP090 (1)	H,HP,HT												
VJP090M (2)	H,HP,HT					•	•	•	•				
VJP150 (1)	H,HP,HT									•	•	•	•
VJP150M (2)	H,HP,HT											•	•

(1) 230V~50Hz (2) 24V

DSC4 (1)

Wall mounting kit

Ver

Н,НР	AMP20	AMP20										
Condensate drainage												
Model	Ver	200	250	300	350	400	450	500	550	700	750 900	950

400

450

500

700

750

900

950

(1) DSC4 cannot be mounted if even just one of these accessories is also installed: AMP - AMPZ valve VCZ1-2-3-4 X4L/R and all the condensate collection trays.

300

350

Condensate drip

Ver	200	250	300	350	400	450	500	550	700	750	900	950
HP	BCZ4 (1)											
(1) For vertical installation.												
Ver	200	250	300	350	400	450	500	550	700	750	900	950
HP	BC8 (1)	BC9 (1)	BC9 (1)									

(1) For horizontal installation.

Panel closing the rear of the unit

Ver	200	250	300	350	400	450	500	550	700	750	900	950
H,HT	PCZ200	PCZ200	PCZ300	PCZ300	PCZ500	PCZ500	PCZ500	PCZ500	PCZ800	PCZ800	PCZ1000	PCZ1000

Grille also applicable for floor installation

Ver	200	250	300	350	400	450	500	550	700	750	900	950
н,нр,нт	GA200	GA200	GA300	GA300	GA500	GA500	GA500	GA500	GA800	GA800	GA800	GA800

Metal supports for GA grille

Ver	200	250	300	350	400	450	500	550	700	750	900	950
H,HP,HT	FIKIT200	FIKIT200	FIKIT300	FIKIT300	FIKIT500	FIKIT500	FIKIT500	FIKIT500	FIKIT800	FIKIT800	FIKIT800	FIKIT800

Ver	200		250		300		350		400		50	50		550		700		750		900		950
HP	CHF2	22	CHF22	2	CHF32		CHF32	(HF42	СН	F42	CHF	12	CHF4	2	CHF62		CHF62	(HF62	(I	HF62
Brackets to fix the fan coil to																						
Ver H,HT	200 SPC		250 SPCZ		300 SPCZ		350 SPCZ	_	400 SPCZ		50 PCZ	50 0		550		700 SPCZ		750 SPCZ		900 SPCZ		950 SPCZ
,		<u></u>	3F CZ		Jr CZ		Jr (Z		DF CZ	٦٢	· CZ	310		31 (2		3FCZ		3FCZ		OF CZ		ruz
Pair of stylish structural feet			250		300		350		400							700		750		000		
Ver H.HP.HT	20 0		250 ZXZ		300 ZXZ		350 ZXZ		400 ZXZ		50 XZ	50 0		550 ZXZ		700 ZXZ		750 ZXZ		900 ZXZ		950 ZXZ
PERFORMANCE SPECIFI 2-pipe			LAL		LAL		L/L		LAL.		, L	274					1	LAL		LIL		
			CZI200		_	CZ1250			CZI300I		_	CZ13501	$\overline{}$		FCZI400			CZ14501			CZ1500	
		1	2 M	3 H	1	2 M	3 H	1	2 M	3 H	1	2 M	3 H	1	2 M	3 H	1	2 M	3 H	1	2 M	3 H
Heating performance 70 °C / 60 °C (1)		<u> </u>	IVI	п	L	IVI	п	L	IVI	п	L	IVI	п	L	IVI	п	L	IVI	п	L	IVI	п
Heating capacity	kW	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82	5,27	7,31	8,5
Water flow rate system side	l/h	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685	462	641	745
Pressure drop system side	kPa	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16	12	21	28
Heating performance 45 °C / 40 °C (2)																						
Heating capacity	kW	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88	2,62	3,63	4,2
Water flow rate system side Pressure drop system side	I/h kPa	174	254 12	319 18	190	274 15	350 22	299	385 12	475 18	325 8	425 14	531	373 10	495 16	617 24	394 6	543 11	675 16	455 12	631 21	734
Cooling performance 7 °C / 12 °C	NFa	U	١Z	10	0	13	ZZ	0	IΖ	10	0	14	20	10	10	24	U	- 11	10	1Z	41	20
Cooling capacity	kW	0,89	1,28	1,60	1,06	1,55	1,94	1,68	2,17	2,65	1,89	2,46	3,02	2,20	2,92	3,60	2,41	3,21	4,03	2,68	3,69	4,2
Sensible cooling capacity	kW	0,71	1,05	1,33	0,79	1,20	1,52	1,26	1,65	2,04	1,33	1,76	2,18	1,59	2,14	2,67	1,69	2,30	2,90	1,94	2,73	3,1
Water flow rate system side	l/h	153	221	275	182	267	334	288	374	456	350	460	560	379	503	619	414	552	694	460	634	73
Pressure drop system side	kPa	7	13	18	8	17	25	8	13	18	11	18	25	10	17	24	9	15	22	13	23	29
Fan		1																				
Type	type										(entrifug										
Fan motor Number	type		1			1			2			Inverter 2			2			2			2	
Number Air flow rate	no. m³/h	140	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600	400	600	720
Input power	W	5	8	14	5	8	14	5	7	13	5	7	13	5	10	18	5	10	18	7	18	34
Signal 0-10V	%	44	68	90	44	68	90	52	70	90	52	70	90	49	68	90	49	68	90	50	74	90
Diametre hydraulic fittings																						
Туре	type											Gas - F										
Main heat exchanger	Ø		1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"	
Fan coil sound data (3)	JD(A)	35.0	46.0	F1.0	25.0	46.0	F1 0	240	41.0	40.0	240	41.0	40.0	27.0	44.0	F1.0	27.0	44.0	F1.0	42.0	F1 A	
Sound power level	dB(A)	35,0	46,0 38,0	51,0	35,0	46,0	51,0	34,0	41,0	48,0 40,0	34,0	41,0	48,0 40,0	37,0	44,0	51,0	37,0	44,0	51,0	42,0	51,0	56,
Sound pressure Power supply	ub(A)	27,0	30,0	43,0	2/,0	38,0	43,0	26,0	33,0	40,0	26,0	33,0	40,0	29,0	36,0	43,0	29,0	36,0	43,0	34,0	43,0	48,
Power supply											2	30V~50H	 Iz									
			FC7	1550H			FC	Z1700H			_	CZ17501				FCZ190	nH	$\overline{}$		FCZ19	SOH	_
		1	102	2	3	1		2	3	+	1	2	3	+	1	2		3	1	2		3
		Ĺ		M	Н	i		M	Н	-	Ĺ	M	H		Ĺ	M		H	Ĺ	M		Н
Heating performance 70 °C / 60 °C (1)																						
Heating capacity	kW	5,82		3,34	9,75	6,5		8,10	10,00	_	,19	9,15	11,5		10,77	13,35		5,14	11,20	14,4		17,10
Water flow rate system side	I/h	510		731	855	57		710	877	_	531	802	100		945	1171		328	982	126		1500
Pressure drop system side	kPa	10		20	26	1.	<u>/</u>	18	26		14	21	31		12	17		22	16	25	1	33
Heating performance 45 °C / 40 °C (2) Heating capacity	kW	2,89	/	1,14	4,85	3,3	32	4,03	4,97	2	,57	4,55	5,7	2	5,35	6,64	7	,53	5,57	7,1	7	8,50
Water flow rate system side	I/h	502		720	842	56		699	863	_	521	790	99:	_	930	1152		307	967	124		1476
Pressure drop system side	kPa	10		20	26	1		18	26		14	20	31		12	17		22	15	24		33
Cooling performance 7 °C / 12 °C																						
Cooling capacity	kW	2,91	4	,13	4,79	3,2	22	3,90	4,65	3	,95	4,80	5,6	7	4,29	5,00	6	,91	5,77	7,3	2	8,60
Sensible cooling capacity	kW	2,07		2,98	3,49	2,5		3,17	3,92		.,78	3,43	4,1		2,97	3,78		,68	3,80	4,8		5,78
Water flow rate system side	I/h	501		711	824	55		671	800		595	825	97.	_	738	860		189	992	125		1479
Pressure drop system side	kPa	12		22	28	14	4	19	26		15	21	28	3	10	13		22	15	23	i	30
Fan Tyna	tuno	I										ontrifue	al									
Type Fan motor	type type											entrifug Inverter	_									
011 111111111	type					T		٦		_						3				3		
	nο)				1				١.										
Number	no.	400		2 600	720	52	.0	720	900		520	720	90	0	700		1	140	700			1140
	no. m³/h W	400			720 34	52			900	_	520 30		90	-	700 30	930		140	700 30	93	0	1140

Gas - F

3/4"

Diametre hydraulic fittings

Main heat exchanger

type

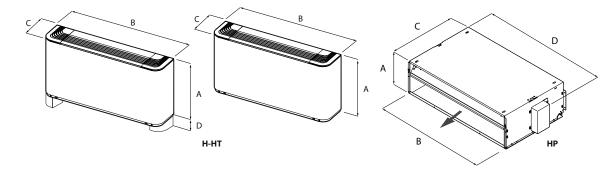
Ø

Туре

			FCZI550H			FCZI700H			FCZ1750H			FCZ1900H			FCZI950H	
Fan coil sound data (3)																
Sound power level	dB(A)	42,0	51,0	56,0	42,0	51,0	57,0	42,0	51,0	57,0	51,0	57,0	62,0	51,0	57,0	61,0
Sound pressure	dB(A)	34,0	43,0	48,0	34,0	43,0	49,0	34,0	43,0	49,0	43,0	49,0	54,0	43,0	49,0	53,0
Power supply																
Power supply			230V~50Hz													

- (1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
 (2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
 (3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



Size			200	250	300	350	400	450	500	550	700	750	900	950
Dimensions and weights														
A	H,HT	mm	486	486	486	486	486	486	486	486	486	486	591	591
Α	HP	mm	216	216	216	216	216	216	216	216	216	216	216	216
D	H,HT	mm	750	750	980	980	1200	1200	1200	1200	1320	1320	1320	1320
D	HP	mm	522	522	753	753	973	973	973	973	1122	1122	1122	1122
•	H,HT	mm	220	220	220	220	220	220	220	220	220	220	220	220
	HP	mm	453	453	453	453	453	453	453	453	453	453	558	558
D	H,HT	mm	90	-	90	-	90	-	90	-	90	-	90	90
U	HP	mm	562	-	793	-	1013	-	1013	-	1147	-	1147	1147
Emptywaight	H,HT	kg	15	16	17	18	22	24	22	24	29	31	34	34
Empty weight	HP	kg	12	14	14	16	20	22	23	24	26	31	32	32





















Omnia UL

Fan coil for universal installation



- · Fully silent functioning
- Ideal for residential or office solutions





DESCRIPTION

fan coil can be installed in any 2 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

VERSIONS

C Vertical installation, intake at base, electronic thermostat

PC Vertical installation, intake at base, electronic thermostat, Cold Plasma purifier

S Vertical and horizontal installation, intake at base, without commands **UL** Standard - Vertical installation, bottom intake, manual switch-over

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft. The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor. The plastic augers are extractable for easy and efficient cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air years.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Condensate drip

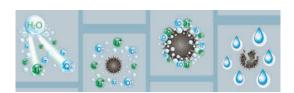
Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

The fan coils have, as standard, precharged electrostatic filters. These filters, thanks to their special execution, attracts and retains all suspended dust particles, thus garanteeing pure breathable air to the whole family.

APC versions equipped with Coldplasma Air purifier.

The purifier is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours.



ACCESSORIES

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kir (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet)

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

WMT16: Electronic thermostat with thermostated ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E2U: User interface on the machine, to be combined with the VMF-E19 and VMF-E19l accessory. It has 2 selector switches, one for temperature and the other for speed control.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

DSC5: Condensate drainage device.

PCU17: Sheet metal panel closing the rear of the unit.

VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.

ZU1: Pair of stylish and structural feet.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	UL12C	UL12PC	UL12S	UL17C	UL17PC	UL17S	UL27C	UL27PC	UL27S	UL37C	UL37PC	UL37S
AER503IR	•		•			•			•			•
PR0503	•		•			•			•			•
SA5	•		•			•			•			•
SW3	•	•	•	•	•	•	•	•	•	•	•	•
SW5	•		•			•			•			•
TX	•		•			•			•			•
WMT10	•		•			•			•			•
WMT16	•											

VMF system

•				
Accessory	UL12S	UL17S	UL27S	UL37S
DI24	•	•	•	•
VMF-E19	•	•	•	•
VMF-E2U	•	•	•	•
VMF-E3	•	•	•	•
VMF-E4DX	•	•	•	•
VMF-E4X	•	•	•	•
VMF-IR	•	•	•	•
VMHI		•		

3 way valve kit

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S
VCH	•	•	•	•	•		•	•	•	•	•	•

Accessory VCH			UL37			UL37C			UL37PC			UL37S	
VCH			•			•			•			•	
2 way valve kit													
Accessory		UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S
VCHD		•	•	•	•	•	•	•	•	•	•	•	•
Accessory			UL37			UL37C			UL37PC			UL37S	
VCHD			•			•		-	•			•	
TCHE													
Condensate dra	inage												
Accessory		UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S
DSC5 (1)		•	•		•	•	•	•		•	•	•	•
Accessory			UL37			UL37C			UL37PC			UL37S	
DSC5 (1)			•			•			•			•	
(1) The accessory canno	ot be fit if the accessory	BC10 or BC20	is installed.										
Wall mounting													
Accessory		UL	120	UL1	17(UI:	17PC	UL	D7(ULZ	.7PC	UL:	370
AMP10							•				•		•
Accessory							101	37PC					
AMP10								•					
71111 IV													
Panel closing th	ne rear of the u	nit											
Accessory		UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S
PCU12		•	•	•	•								
PCU17						•	•	•	•				
PCU27										•	•	•	•
PCU37													
Accessory			UL37			UL37C			UL37PC			UL37S	
PCU12													
PCU17													
PCU27													
PCU37			•			•			•			•	
Intake grids													
Accessory		UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S
GU12 (1)		•	•	•	•								
GU17 (1)						•	•	•	•				
GU27 (1)										•	•	•	•
GU37 (1)													
Accessory			UL37			UL37C			UL37PC			UL37S	
GU12 (1)													
GU17 (1)													
GU27 (1)													
GU37 (1)			•			•			•			•	
(1) The combination wi	th a pair of stylish and	structural fee	t is mandatory.										
Pair of stylish s	tructural feet												
Accessory		UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S
ZU1		•	•		•	•	•	•	•	•	•	•	•
Accessory			UL37			UL37C			UL37PC			UL37S	
ZU1			•			•			•			•	
Configuration													
Configuration of													
Field	Description												
1,2	UL												
3,4	Size												
5	12, 17, 27, 37 Version												
5	Version Vertical install	ation intake	at hace also	tronic thorms	ctat								
PC	Vertical install					ısma nurifier							
S	Vertical install												
UL	Standard - Ver												
UL	Staniualu - VEI	acui iiistaiid	וויטוו, טטננטווו	manc, manu	41 244 ICH - OVE								

PERFORMANCE SPECIFICATIONS

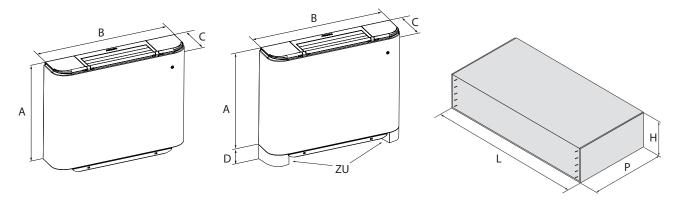
Technical data

2-pipe

			UL12			UL17			UL27			UL37	
		1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)	,												
Heating capacity	kW	1,06	1,46	2,01	1,54	2,12	2,91	2,89	3,83	4,62	3,63	4,87	5,94
Water flow rate system side	I/h	93	128	176	135	186	255	254	336	405	310	427	521
Pressure drop system side	kPa	1	1	2	1	2	4	5	8	11	3	5	7
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	0,52	0,73	1,00	0,76	1,05	1,44	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side	l/h	92	126	176	133	183	251	249	331	399	305	420	513
Pressure drop system side	kPa	1	1	2	2	3	3	5	8	11	7	13	18
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	0,53	0,67	0,82	0,69	0,87	1,17	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity	kW	0,38	0,52	0,68	0,52	0,69	0,96	0,97	1,30	1,61	1,13	1,59	2,00
Water flow rate system side	l/h	94	117	145	122	153	206	220	289	349	286	394	487
Pressure drop system side	kPa	1	2	2	2	3	5	5	8	11	7	13	19
Fan													
Туре	type		Centrifugal			Centrifugal			Centrifugal			Centrifugal	
Fan motor	type		0n-0ff			0n-0ff			0n-0ff			On-Off	
Number	no.		1			1			2			2	
Air flow rate	m³/h	80	120	180	110	160	240	190	270	350	240	350	460
Input power	W	8	18	18	23	25	32	24	27	35	30	35	42
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)													
Sound power level	dB(A)	31,0	37,0	46,0	34,0	43,0	48,0	35,0	43,0	48,0	34,0	43,0	50,0
Sound pressure	dB(A)	23,0	29,0	38,0	26,0	35,0	40,0	27,0	35,0	40,0	26,0	33,0	40,0
Finned pack heat exchanger													
Water content main heat exchanger	I		0,3			0,4			0,6			0,8	
Diametre hydraulic fittings													
Main heat exchanger	Ø		1/2"			1/2"			1/2"			1/2"	
Power supply													
Power supply			230V~50Hz			230V~50Hz		230V~50Hz 230V~50		230V~50Hz			

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



Dimensions and weights

		UL12	UL12C	UL12S	UL17	UL17S	UL17C	UL17PC	UL27	UL27S	UL27C	UL27PC	UL37	UL37S	UL37C	UL37PC
Dimensions and we	ights															
A	mm	485	485	485	485	485	485	485	485	485	485	485	485	485	485	485
В	mm	640	640	640	750	750	750	750	980	980	980	980	1200	1200	1200	1200
C	mm	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173
D	mm	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94
Empty weight	kg	12	12	12	14	14	14	14	17	17	17	17	20	20	20	20
Dimensions and we	ights for transp	ort														
Н	mm	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275
L	mm	710	710	710	820	820	820	820	1050	1050	1050	1050	1050	1050	1050	1050
P	mm	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590





















Fan coil for universal and floor installation



- Electric saving equal to 50% compared to a fancoil with 3-speed motor.
- · Fully silent functioning
- Ideal for residential or office solutions





DESCRIPTION

Fan coils with inverter technology for heating, cooling, and dehumidifying. Equipped with a state of the art ventilation unit with continuous modulation of the air flow rate, which allows for precise adaptation of the actual indoor ambient requirements without temperature oscillations, for increased comfort, also in terms of noise, and electrical savings.

It can be installed on 2-pipe systems and combined with any heat generator even at low temperatures. Choosing the optimal solution for any requirement is easy thanks to the various versions available and to the possibility of horizontal or vertical installation, depending on the version.

VERSIONS

 $\boldsymbol{\mathsf{C}}$ Vertical installation, intake at base, electronic thermostat

PC Vertical installation, intake at base, electronic thermostat, Cold Plasma purifier

S Vertical and horizontal installation, intake at base, without commands

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9002 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft. Brushless motor with continuous speed variation 0-100%.

The scroll that protects the fan can be extracted and inspected, for easy and effective cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Condensate drip

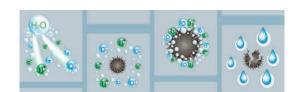
Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

The fan coils have, as standard, precharged electrostatic filters. These filters, thanks to their special execution, attracts and retains all suspended dust particles, thus garanteeing pure breathable air to the whole family.

APC versions equipped with Coldplasma Air purifier.

The purifier is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours



ACCESSORIES

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, DI24 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E2U: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory. It has 2 selector switches, one for temperature and the other for speed control.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC sys-

tem. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

AMP: Wall mounting kit

DSC: Condensate drainage device.

VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.

BC: Condensate drip.

GU: Intake grid covers the front space between the ornamental feet and does not interfere with the filter.

PCU: Sheet metal panel closing the rear of the unit.

ZU: Pair of stylish and structural feet.

ACCESSORIES COMPATIBILITY

Model	Ver	17	27	37
AER503IR (1)	S	•	•	•
PR0503	S	•	•	•
SA5 (2)	S	•	•	•
SW3 (2)	C,PC,S	•	•	•
SW5 (2)	S	•	•	•
TX (3)	S	•	•	•

VMF system

Model	Ver	17	27	37
DI24	S	•	•	•
VMF-E19I (1)	S	•	•	•
VMF-E2U	S	•	•	•
VMF-E3	S	•	•	•
VMF-E4DX	S	•	•	•
VMF-E4X	S	•	•	•
VMF-IR	S	•	•	•
VMHI	S	•	•	

(1) Mandatory accessory.

Condensate drip

Model	Ver	17	27	37
BC10 (1)	C,PC,S	•	•	•
BC20 (2)	C.PC.S	•	•	•

Condensate drainage

Model	Ver	17	27	37
DSC5 (1)	C,PC	•	•	•

⁽¹⁾ The accessory cannot be fit if the accessory BC10 or BC20 is installed.

3 way valve kit

Model	Ver	17	27	37
VCH	C,PC	•	•	•

2 way valve kit

Model	Ver	17	27	37
VCHD	C,PC	•	•	•

Wall mounting kit

Model	Ver	17	27	37
AMP10	S	•	•	•

Pair of stylish structural feet

Model	Ver	17	27	37
ZU1	C,PC,S	•	•	•

Wall-mount installation.
 Probe for AERSO3IR-TX thermostats, if fitted.
 Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

⁽¹⁾ For vertical installation.(2) For horizontal installation.

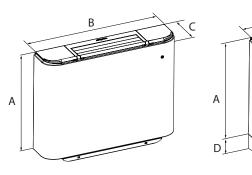
PERFORMANCE SPECIFICATIONS

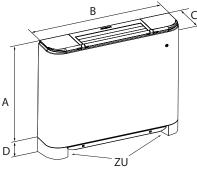
2-pipe

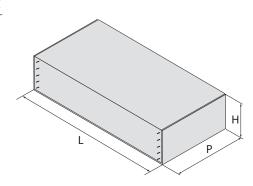
			ULI17			ULI27			ULI37	
		1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)										
Heating capacity	kW	1,54	2,12	2,91	2,89	3,83	4,62	3,53	4,87	5,94
Water flow rate system side	l/h	135	186	255	254	336	405	310	427	521
Pressure drop system side	kPa	1	2	4	5	8	11	3	5	7
Heating performance 45 °C / 40 °C (2)										
Heating capacity	kW	0,76	1,05	1,44	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side	l/h	133	183	251	249	331	399	305	420	513
Pressure drop system side	kPa	2	2	2	5	8	11	7	12	18
Cooling performance 7 °C / 12 °C										
Cooling capacity	kW	0,69	0,87	1,17	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity	kW	0,52	0,69	0,96	0,97	1,30	1,61	1,13	1,59	2,00
Water flow rate system side	l/h	122	153	206	220	289	349	286	394	487
Pressure drop system side	kPa	2	3	5	6	8	11	7	13	19
Fan										
Туре	type					Centrifugal				
Fan motor	type					Inverter				
Number	no.		1			2			2	
Air flow rate	m³/h	110	160	240	190	270	350	240	350	460
Input power	W	23	25	32	24	27	35	30	35	42
Signal 0-10V	%	38	56	83	49	70	90	48	70	90
Sound power level	dB(A)	34,0	43,0	48,0	35,0	43,0	48,0	34,0	43,0	50,0
Sound pressure level (10 m)	dB(A)	26,0	35,0	40,0	27,0	35,0	40,0	26,0	33,0	42,0
Finned pack heat exchanger										
Water content	I		0,4			0,6			0,8	
Diametre hydraulic fittings										
Main heat exchanger	Ø					1/2"				
Power supply										
Power supply						230V~50Hz				

- (1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C (2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT

DIMENSIONS







Size			17	27	37
Dimensions and weights					
A	C,PC,S	mm	513	513	513
В	C,PC,S	mm	750	980	1200
(C,PC,S	mm	173	173	173
D	C,PC,S	mm	93	93	93
Empty weight	C,PC,S	kg	14	16	20
Dimensions and weights for	transport				
Н	C,PC,S	mm	275	275	275
L	C,PC,S	mm	820	1050	1050
P	C,PC,S	mm	590	590	590

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Vertical wall-mounting or freestanding installation



- Compact dimensions, thickness 130 mm
- Low operating temperature
- · Cooling, heating, and dehumidification





DESCRIPTION

The Omnia Slim fan coils have been designed to meet the need to combine the typical features of a classic radiator - namely reduced depth and quiet operation - with the ability of a fan coil to air-condition rooms throughout the year.

They can be installed on any system with a 2-pipe system and it fits with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

VERSIONS

ULS Standard without control board
ULS C With on-board thermostat

FEATURES

Case

Structure in sheet metal, 12/10 and 8/10 mm.

Front cover in $8/10\,\mathrm{mm}$ galvanised sheet metal with RAL9003 white epoxy powder coating and thermal-acoustic insulation of 13 mm thickness.

Ventilation group

These fan coils have extremely silent ventilation by using special tangential fans, which quarantees maximum acoustic comfort.

The electric motor is a 3-speed single-phase motor with a permanently inserted condenser.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air years.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Contro

With thermostatic adjustment and manual or no-adjustment switching, for combination with any wall panel or with the AERMEC VMF system.

ACCESSORIES

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe ($L=2.5\,\mathrm{m}$) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: Water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

T-TOUCH-S: Touch control installation on-board the fan coil.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

TXBS: Thermostat installation on the fan coil.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, DI24 is compatible with

plates of the major brands available on the market, for more information please refer to our documentation.

KITSV: Kit for installing the VMF-E19/19I.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E2S: User interface on the fan coil, with two selectors - one for temperature and the other for speed control. For operation, the installation of either the VMF-E19 or VMF-E19I accessory is required.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

BCSV: Condensate collection tray, for valve kit.

DSC7: Condensate drainage device.

VCS2: 2-way motorised valve kit without insulating shell. The kit is made up of a valve, actuator and relative hydraulic fittings.

VCS3: 3-way motorised valve kit without insulating shell for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings.

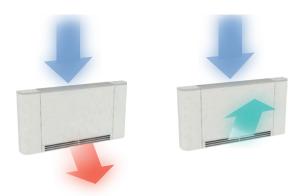
ZXS: Pair of stylish and structural feet.

MAIN FEATURES



- Air/water exchange coils with aluminium louvers and copper piping, arranged across 2 rows.
- 2 Front cover in 8/10 mm galvanised sheet metal with RAL9003 white epoxy powder coating and thermal-acoustic insulation of 13 mm thickness.
- 3 Plastic recovery grille with air filter.
- 4 Tangential fan driven by a 3-speed motor.
- Aluminium recovery grille and sheet metal delivery grille, with a special design conceived to create a homogeneous flow of air, both in summer and winter operation.

Flow rates



ACCESSORIES COMPATIBILITY

Model	Ver	10	20	30	40	50
AER503IR (1)	ULS	•	•	•	•	•
PR0503	ULS	•	•	•	•	•
SA5 (2)	ULS	•	•	•	•	•
SW3 (2)	ULS	•	•	•	•	•
SW5 (2)	ULS	•	•	•	•	•
T-TOUCH-S (3)	ULS	•	•	•	•	•
TX (4)	ULS	•	•	•	•	•
TXBS (3)	ULS	•	•	•		•

- Wall-mount installation.
 Probe for AERSO3IR-TX thermostats, if fitted.
 Installation on the fan coil.
 Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	10	20	30	40	50
DI24	ULS	•	•	•	•	•
KITSV (1)	ULS	•	•	•	•	•
VMF-E19 (2)	ULS	•	•	•	•	•
VMF-E2S (3)	ULS	•	•	•	•	•
VMF-E3	ULS	•	•	•	•	•
VMF-E4DX	ULS	•	•	•	•	•
VMF-E4X	ULS	•	•	•	•	•
VMF-IR	ULS	•	•	•	•	•
VMHI	ULS	•	•	•	•	•

- (1) Mandatory when the VMF-E19/19I thermostat is required.
 (2) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.
 (3) Installation on the fan coil.

3 way valve kit

Model	Ver	10	20	30	40	50
VCS3 (1)	וווצוווצ ר					

(1) Power supply 230V - Hydraulic connections Ø 1/2"

2 way valve kit

Model	Ver	10	20	30	40	50
VCS2 (1)	ULS,ULS_C	•	•	•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

Condensate drip

Model	Ver	10	20	30	40	50
BCSV	ULS.ULS C	•	•	•	•	•

Condensate drainage

Model	Ver	10	20	30	40	50
DSC7	ULS.ULS C	•	•	•	•	•

Pair of stylish structural feet

Model	Ver	10	20	30	40	50
ZXS	ULS,ULS_C	•	•	•	•	•

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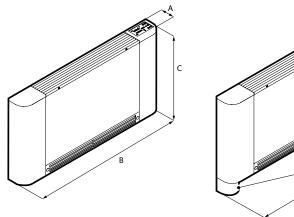
PERFORMANCE SPECIFICATIONS

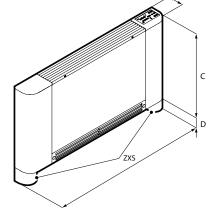
2-pipe

2 ріре		ULS10			ULS20			ULS30			ULS40			ULS50	
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)															
Heating capacity kW	0,61	1,16	1,64	1,14	2,18	3,08	1,48	2,84	4,00	1,89	3,64	5,13	2,27	4,37	6,15
Water flow rate system side I/h	53	102	144	99	191	269	129	248	350	166	318	448	199	382	538
Pressure drop system side kPa	1	4	7	4	11	21	3	8	15	4	13	25	3	9	16
Heating performance 45 °C / 40 °C (2)							•						•		
Heating capacity kW	0,30	0,58	0,82	0,56	1,09	1,53	0,73	1,41	1,99	0,94	1,81	2,55	1,13	2,17	3,06
Water flow rate system side I/h	52	101	142	98	189	266	128	245	346	164	315	443	196	378	532
Pressure drop system side kPa	1	4	7	4	12	22	3	9	16	4	14	26	3	9	17
Cooling performance 7 °C / 12 °C															
Cooling capacity kW	0,30	0,57	0,80	0,55	1,07	1,50	0,72	1,38	1,95	0,92	1,78	2,50	1,11	2,13	3,00
Sensible cooling capacity kW	0,22	0,43	0,62	0,42	0,81	1,17	0,54	1,05	1,52	0,69	1,35	1,95	0,83	1,62	2,34
Water flow rate system side I/h	51	97	137	95	183	257	124	238	335	158	305	429	190	366	515
Pressure drop system side kPa	1	4	8	4	13	25	3	10	18	5	16	29	3	10	19
Fan															
Type type								Tangential							
Fan motor type							A	synchronou	JS						
Number no.		1			1			1			2			2	
Air flow rate m ³ /h	36	75	134	62	141	241	76	164	301	91	204	370	103	243	427
Input power W	8	15	21	15	21	32	17	32	42	21	39	53	18	26	56
Electrical wiring	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)															
Sound power level dB(A	42,0	49,0	52,0	42,0	49,0	52,0	43,0	50,0	53,0	44,0	51,0	54,0	45,0	52,0	55,0
Sound pressure dB(A	34,0	41,0	44,0	34,0	41,0	44,0	35,0	42,0	45,0	36,0	43,0	46,0	39,0	44,0	47,0
Finned pack heat exchanger															
Water content main heat exchanger		0,5			0,9			1,2			1,5			1,8	
Diametre hydraulic fittings															
Main heat exchanger Ø								1/2"							
Power supply															
Power supply								230V~50H	7						

- (1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
 (2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
 (3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS





Size			10	20	30	40	50
Dimensions and weights							
A	ULS,ULS_C	mm	130	130	130	130	130
В	ULS,ULS_C	mm	745	940	1134	1328	1524
(ULS,ULS_C	mm	580	580	580	580	580
D	ULS,ULS_C	mm	80	80	80	80	80
Empty weight	ULS,ULS_C	kg	11	13	15	17	19

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Omnia ULSI

Vertical wall-mounting or freestanding installation



- Compact dimensions, thickness 130 mm
- Low operating temperature
- · Cooling, heating, and dehumidification





DESCRIPTION

The Omnia Slim fan coils have been designed to meet the need to combine the typical features of a classic radiator - namely reduced depth and quiet operation - with the ability of a fan coil to air-condition rooms throughout the year

They can be installed on any system with a 2-pipe system and it fits with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

VERSIONS

ULSI Inverter without control board
ULSI C Inverter with on-board thermostat

FEATURES

Case

Structure in sheet metal, 12/10 and 8/10 mm.

Front cover in $8/10\,\mathrm{mm}$ galvanised sheet metal with RAL9003 white epoxy powder coating and thermal-acoustic insulation of 13 mm thickness.

Ventilation group

These fan coils have extremely silent ventilation by using special tangential fans, which guarantees maximum acoustic comfort.

Brushless motor with continuous speed variation.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air years.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The coil has hydraulic connections on the left and is not reversible.

Control

With thermostatic adjustment and manual or no-adjustment switching, for combination with any wall panel or with the AERMEC VMF system.

ACCESSORIES

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

T-TOUCH-IS: Touch control installation on-board the fan coil.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

TXBIS: Thermostat installation on the fan coil.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, DI24 is compatible with

plates of the major brands available on the market, for more information please refer to our documentation.

KITSV: Kit for installing the VMF-E19/19I.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E25: User interface on the fan coil, with two selectors - one for temperature and the other for speed control. For operation, the installation of either the VMF-E19 or VMF-E19l accessory is required.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

BCSV: Condensate collection tray, for valve kit.

DSC7: Condensate drainage device.

VCS2: 2-way motorised valve kit without insulating shell. The kit is made up of a valve, actuator and relative hydraulic fittings.

VCS3: 3-way motorised valve kit without insulating shell for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings.

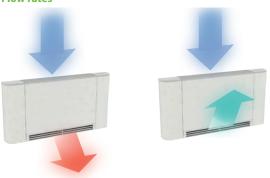
ZXS: Pair of stylish and structural feet.

MAIN FEATURES



- Air/water exchange coils with aluminium louvers and copper piping, arranged across 2 rows.
- Front cover in 8/10 mm galvanised sheet metal with RAL9003 white epoxy powder coating and thermal-acoustic insulation of 13 mm thickness.
- 3 Plastic recovery grille with air filter.
- 4 Tangential fan driven by a Brushless motor with continuous speed variation.
- Aluminium recovery grille and sheet metal delivery grille, with a special design conceived to create a homogeneous flow of air, both in summer and winter operation.

Flow rates



ACCESSORIES COMPATIBILITY

Model	Ver	10	20	30	40	50
AER503IR (1)	ULSI	•	•	•	•	•
PR0503	ULSI	•	•	•	•	•
SA5 (2)	ULSI	•	•	•	•	•
SW3 (2)	ULSI	•	•	•	•	•
SW5 (2)	ULSI	•	•	•	•	•
T-TOUCH-IS	ULSI	•	•	•	•	•
TX (3)	ULSI	•	•	•	•	•
TXBIS	ULSI	•	•	•	•	•

- Wall-mount installation.
 Probe for AERSO3IR-TX thermostats, if fitted.
 Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	10	20	30	40	50
DI24	ULSI,ULSI_C	•	•	•	•	•
KITSV (1)	ULSI	•	•	•	•	•
VMF-E19I (2)	ULSI	•	•	•	•	•
VMF-E2S (3)	ULSI	•	•	•	•	•
VMF-E3	ULSI	•	•	•	•	•
VMF-E4DX	ULSI	•	•	•	•	•
VMF-E4X	ULSI	•	•	•	•	•
VMF-IR	ULSI	•	•	•	•	•
VMHI	ULSI	•	•	•	•	•

- (1) Mandatory when the VMF-E19/19l thermostat is required. (2) Mandatory accessory. (3) Installation on the fan coil.

3 way valve kit

Model	Ver	10	20	30	40	50
VCS3 (1)	ULSI,ULSI_C			•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

2 way valve kit

,							
Model	Ver	10	20	30	40	50	
VCS2 (1)	ULSLULSI C	•	•	•	•		

(1) Power supply 230V - Hydraulic connections Ø 1/2"

Condensate drip

Model	Ver	10	20	30	40	50
BCSV	ULSI,ULSI_C	•	•	•	•	•

Condensate drainage

Model	Ver	10	20	30	40	50
DSC7	ULSI,ULSI_C	•	•	•	•	•

Pair of stylish structural feet

Model	Ver	10	20	30	40	50
ZXS	ULSI,ULSI_C	•	•	•	•	•

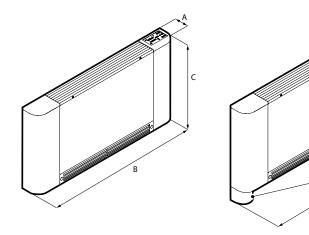
PERFORMANCE SPECIFICATIONS

2-pipe

2 рире			ULSI10			ULSI20			ULSI30			ULSI40			ULSI50	
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																
Heating capacity kV	/ (0,70	1,14	1,53	1,27	1,88	2,86	1,88	2,91	3,72	2,32	3,55	4,77	2,49	3,85	5,73
Water flow rate system side 1/h	1	61	100	134	111	165	251	165	254	326	203	311	418	218	337	501
Pressure drop system side kP.	a	2	4	7	5	10	20	6	14	22	6	13	22	5	10	21
Heating performance 45 °C / 40 °C (2)																
Heating capacity kW	/ (0,35	0,57	0,76	0,63	0,94	1,43	0,94	1,45	1,85	1,15	1,77	2,38	1,24	1,92	2,85
Water flow rate system side	1	61	99	132	110	163	248	163	251	322	201	307	413	216	333	495
Pressure drop system side kP.	a	2	4	7	5	9	20	6	14	22	6	13	22	5	10	21
Cooling performance 7 °C / 12 °C																
Cooling capacity kV	/ (0,37	0,60	0,80	0,67	0,98	1,50	0,98	1,52	1,95	1,22	1,86	2,50	1,30	2,02	3,00
Sensible cooling capacity kW	/ (0,25	0,42	0,57	0,46	0,68	1,08	0,68	1,06	1,39	0,84	1,30	1,79	0,90	1,40	2,15
Water flow rate system side 1/h		63	103	137	114	169	257	169	261	335	209	319	429	224	346	515
Pressure drop system side kPa	3	3	6	10	7	13	28	9	19	30	9	18	30	7	14	29
Fan																
Type typ	e								Tangential							
Fan motor typ	e								Inverter							
Number no			1			1			1			2			2	
Air flow rate m ³ /	h	46	82	134	78	128	241	109	188	301	126	218	370	127	225	427
Input power W		5	8	10	6	9	15	7	12	17	7	14	20	7	13	21
Signal 0-10V %		40	70	90	40	70	90	40	70	90	40	70	90	40	70	90
Fan coil sound data (3)																
Sound power level dB(,	A) 3	39,0	47,0	51,0	39,0	47,0	51,0	40,0	48,0	53,0	41,0	49,0	54,0	42,0	52,0	56,0
Sound pressure dB(a	A) 3	31,0	39,0	43,0	31,0	39,0	43,0	32,0	40,0	45,0	33,0	41,0	46,0	34,0	44,0	48,0
Finned pack heat exchanger																
Water content main heat exchanger			0,5			0,9			1,2			1,5			1,8	
Diametre hydraulic fittings																
Main heat exchanger Ø									1/2"							
Power supply																
Power supply									230V~50Hz	<u> </u>						

- (1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
 (2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
 (3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



Size			10	20	30	40	50
Dimensions and weights							
A	ULSI,ULSI_C	mm	130	130	130	130	130
В	ULSI,ULSI_C	mm	745	940	1134	1328	1524
C	ULSI,ULSI_C	mm	580	580	580	580	580
D	ULSI,ULSI_C	mm	80	80	80	80	80
Empty weight	ULSI,ULSI_C	kg	11	13	15	17	19

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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Omnia Radiant

Fan coils with radiant panel for residential use



- Low temperature radiation *
- Ventilated heating
- Cooling dehumidification
- Energy saving
- · Low operating temperature





DESCRIPTION

* Radiant technology under licence.

Omnia Radiant and Omnia Radiant Plus Aermec innovative solutions. In this particular worldwide market evolution, we are pleased to present to you OMNIA Radiant, which represents the innovation of the OMNIA AERMEC series, fan coils especially designed for residential comfort.

OMNIA Radiant inherits all the advantages of the OMNIA UL series, and is characterized by the introduction of the frontal plate for radiant heating.

OMNIA Radiant Plus is provided with the DC Brushless electric engine, equipped with the latest Inverter technology, granting the highest energy efficiency and able to regulate the air flow through the continuous fan speed modulation. This allows to achieve up to 60% in energy saving when compared to the traditional On-Off fan system, in both air conditioning and heating.

 \mbox{OMNIA} Radiant and Radiant Plus offer the following advantages when compared to the traditional systems:

- The radiant plate combination the finned coil allows the best winter comfort with the lower energy consumption because it provides heating with lower water temperature: only 45°C against the about 65°C needed for the traditional radiator. This not only increases the comfort for the user, but also significantly increases the overall efficiency in case of heat pumps usage;
- The fan system allows to quickly reach the desired temperature, meeting the requirement of a fast start-up;
- The unit can be combined other than the boiler, also to energy saving heat pumps: air to water, water to water and geothermic type;
- The electrostatic charge filter standard supplied, provides pure and clean air:
- During summer Omnia Radiant and Radiant Plus provide air conditioning and dehumidification in a fast and efficient way in every room.

THE FOUR DIFFERENT WORKING MODES OF OMNIA RADIANT ANNUAL FUNCTIONING









Radian

Heating through radiation, comfortable and noiseless, is granted by the radiant plate placed on the front of the fan coil cover; if necessary, the triple-fins delivery head can be closed to increases the heating of the plate, thus maximizing the radiant effect.

Radiant + Natural Convection

With the triple-fins open, heating through natural convection, obtained thanks to the bigger coil exchange surface, is added to the radiant heating. As for the radiant-only mode (see above), the fan groups are in off mode. This results in acoustic comfort and energy saving.

Radiant + Forced Convection

The electronic regulation, precise and reliable, continuously compares the effective indoor temperature with the desired temperature: whenever the difference between the two should prove to be too high (e.g. during the heating system start-up) the software will lead the fan system start-up.

Start-up is fast and efficient and grants significant energy savings especially in rooms that are occasionally used.

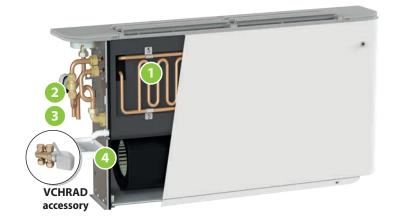
Omnia Radiant during summer provides air conditioning and dehumidification

Forced Convection

During summer, Omnia Radiant and Radiant Plus provide air conditioning and dehumidification for each room of the house in a fast and efficient way. Efficiency and quietness benefit from the quality that has always characterized the Omnia series.

FEATURES

- Radiant plate
- Switching valve
- Water probe
- Condensate storage container, hydraulic hoses



OMNIA Radiant (UL_R) standard features:

- Radiant plate
- Centrifugal fan
- Three-speed cross flow fan
- Condensate storage container, hydraulic hoses
- Two way valve
- Water temperature probe
- VMF-thermostat for asynchronous motor
- Compatibility with VMF system

OMNIA Radiant (UL_RI) standard features:

- Radiant plate
- Centrifugal fan
- Electric DC Brushless motor with Inverter
- Condensate storage container, hydraulic hoses
- Two way valve
- Water temperature probe
- VMF thermostat for DC Brushless motor

Compatibility with VMF system

Ventilation group

Thanks to special centrifugal fans, Omnia Radiant fan coils are incredibly silent, making them the best buy when it comes to acoustic comfort, given the total lack of peak noise.

"The heating by radiation at top speed ensures total silence regime"

The fan blades on the Omnia Radiant are easy to clean. As a matter of fact, the new versions now offer the possibility of opening the worm screw of the fan (the casing that encloses the blades) to perform routine cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

ACCESSORIES

VMF-E2U: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory. It has 2 selector switches, one for temperature and the other for speed control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

AMP: Wall mounting kit

GU: Intake grid covers the front space between the ornamental feet and does not interfere with the filter.

PCU: Sheet metal panel closing the rear of the unit.

ZU: Pair of stylish and structural feet.

VCHRAD: Kit consisting of motor-driven 3-way valve copper couplings and pipes

VMF-E5B: White recessed panel with backlit graphic LCD display and capacitive keyboard, it allows the centralised command/control of a complete hydronic system consisting of Fan coils: up to 64 fan coil zones consisting of 1 master + up to 5 slaves; Chiller/heat pump (accessory required for RS 485

interface), pumps: up to 12 configurable zone pumps; boiler: boiler hook-up management for hot water production; heat recovery units: up to 3 hookups per programmable recovery units based on time periods and/or by measuring air quality with the VMF-VOC accessory; domestic water module: complete management of the domestic hot water production through the control of: diverter valve/pump, integrated heating element, storage tank temperature sensor, anti-legionella circuit system.

VMF-E5N: Black recessed panel with backlit graphic LCD display and capacitive keyboard, it allows the centralised command/control of a complete hydronic system consisting of Fan coils: up to 64 fan coil zones consisting of 1 master + up to 5 slaves; Chiller/heat pump (accessory required for RS 485 interface), pumps: up to 12 configurable zone pumps; boiler: boiler hook-up management for hot water production; heat recovery units: up to 3 hookups per programmable recovery units based on time periods and/or by measuring air quality with the VMF-VOC accessory; domestic water module: complete management of the domestic hot water production through the control of: diverter valve/pump, integrated heating element, storage tank temperature sensor, anti-legionella circuit system.

For compatibility of the VMF-E5N / VMF-E5B with sizes 26R-36R contact the office.

ACCESSORIES COMPATIBILITY

VMF system

VMF system				
Accessory	UL27R	UL27RI	UL37R	UL37RI
VMF-E2U	•	•	•	•
VMF-E4DX	•	•	•	•
VMF-E4X	•	•	•	•
VMF-E5B		•		•
VMF-E5N		•		•
VMHI	•	•	•	•
Accessory	UL27R	UL27RI	UL37R	UL37RI
PCU27	•	•		
PCU37			•	•
Intake grids				
Accessory	UL27R	UL27RI	UL37R	UL37RI
GU27	•	•		
GU37			•	•
3 way valve kit				
Accessory	UL27R	UL27RI	UL37R	UL37RI
VCHRAD	•	•	•	•
Wall mounting kit				
Accessory	UL27R	UL27RI	UL37R	UL37RI
AMP10	•	•	•	•
Pair of stylish structural fee	et			
Accessory	UL27R	UL27RI	UL37R	UL37RI
ZU1	•	•	•	•

PERFORMANCE SPECIFICATIONS

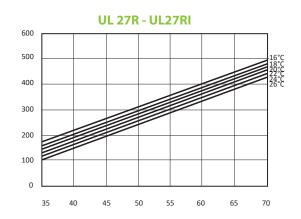
2-pipe

		UL27R			UL27RI			UL37R			UL37RI	
	1	2	3	1	2	3	1	2	3	1	2	3
	L	М	Н	L	М	Н	L	М	Н	L	М	Н
kW	2,89	3,83	4,62	2,89	3,83	4,62	3,53	4,87	5,94	3,53	4,87	5,94
kW	2,75	2,75	2,75	2,75	2,75	2,75	3,54	3,54	3,54	3,54	3,54	3,54
l/h	397	397	397	397	397	397	511	511	511	511	511	511
kPa	17	17	17	17	17	17	21	21	21	21	21	21
kW	0,65	0,65	0,65	0,65	0,65	0,65	0,75	0,75	0,75	0,75	0,75	0,75
kW	0,39	0,39	0,39	0,39	0,39	0,39	0,45	0,45	0,45	0,45	0,45	0,45
kW	0,20	0,20	0,20	0,20	0,20	0,20	0,23	0,23	0,23	0,23	0,23	0,23
kW	1,42	1,78	2,03	1,42	1,78	2,03	1,73	2,31	2,83	1,73	2,31	2,83
kW	1,05	1,37	1,64	1,05	1,37	1,64	1,28	1,79	2,04	1,28	1,79	2,04
l/h	349	349	349	349	349	349	487	487	487	487	487	487
kPa	18	18	18	18	18	18	22	22	22	22	22	22
type		Centrifugal			Centrifugal			Centrifugal			Centrifugal	
type		Asynchronous			Inverter			Asynchronous	;		Inverter	
no.		2			2			2			2	
m³/h	190	270	350	190	270	350	240	350	460	240	350	460
dB(A)	35,0	43,0	48,0	35,0	43,0	48,0	34,0	43,0	50,0	34,0	43,0	50,0
dB(A)	27,0	35,0	40,0	27,0	35,0	40,0	26,0	33,0	40,0	26,0	33,0	40,0
W	35	35	35	12	12	12	42	42	42	16	16	16
	V1	V2	V1	-	-	-	V1	V2	V3	-	-	-
%	-	-	-	5	7	9	5	-	-	5	7	9
Ø		1/2"			1/2"			1/2"			1/2"	
1		0,8			0,8			1,1			1,1	
		230V~50Hz			2201/ 5011-			2201/ 5011			2201/ 5011-	
	kW I/h kPa kW kW kW I/h kPa type type no. m³/h dB(A) dB(A)	L	1	1	1	1	1	1	1	1	1	1

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air 20 °C b.s.; Water (in) 50 °C; Water flow rate as in cooling mode (EUROVENT)
(3) Radiant power + natural convection; Hot water (in) 70 °C (water flow same as in heating cycle)
(4) Radiant power + natural convection; Hot water (in/*) 50 °C; (water flow same as in heating cycle)
(5) Radiant power + natural convection; Hot water (in/*) 50 °C; (water flow same as in heating cycle)
(6) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT
(7) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

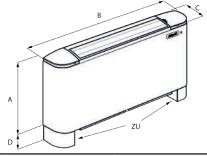
HEATING CAPACITY WITH FAN OFF

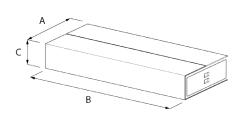




DIMENSIONS







		UL27R	UL27RI	UL37R	UL37RI
Dimensions and weights					
A	mm	513	513	513	513
В	mm	980	980	1200	1200
C	mm	173	173	173	173
D	mm	93	93	93	93
Empty weight	kg	20	20	24	24
Dimensions and weights for transport					
Н	mm	275	275	275	275
L	mm	1050	1050	1050	1050
P	mm	590	590	590	590

















FCY

Fan coil unit for ducted installations



- Plug and play installation only in horizontal
- Reduced dimensions
- Inspectable ventilation group





DESCRIPTION

Monobloc duct type fan coils for heating and/or cooling small and medium-sized environments for civil and commercial use.

They were designed and built for flush horizontal installation in any type of 2/4 pipe system and in combination with any heat generator, also at low temperatures.

Thanks to the availability of various versions and configurations, with a standard or oversized coil, it is easy to select the optimal solution for any requirement.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans. They are statically and dynamically balanced and directly coupled to the motor shaft.

The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.

The plastic augers are extractable for easy and efficient cleaning.

Heat exchanger coil

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.

Reversibility of the water connections during installation only for units with a main standard or oversized coil or standard with BV accessory. Not reversible in all other configurations.

Air filter

Where present, the Coarse 25% Class according to ISO16890 (G2 according to EN779) air filter, which is easy to remove and clean.

Condensate drip

In addition to the internal tray, all units are equipped with a **configurable external condensate collection tray** during installation.

The kit comprises a single element, which is made up of two pieces: the **tray** with a double drain to be installed on the right or left, and the **drip moulding**, which must be installed if mounting the valve kit and may not be used for installations without the valves with limited technical spaces.

Contro

The unit's electrical box is reversible, with the option of mounting it also on the same side of the water connections.

The standard equipment includes a single 10-pin control board as an interface for the electrical connections, the preparation for the VMF series thermostat fastener and the included supply of a DIN guide for the installation of a third-party control.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

ı	Description
3	FCY
	Size
	2, 3, 4, 5, 6, 7
	main heat exchanger (1)
0	Standard
5	Oversized
	Secondary heat exchanger
0	Without coil
1	Standard (2)
	Version
C	Compact
U	Universal (3)
	Connections
D	Water connections and electrical panel on the right
G	Water connections and electrical panel on the left
L	Hydraulic connections on the left and electric connections on the opposite side
R	Hydraulic connections on the right and electric connections on the opposite side
	Options
Н	Electric heater (500W) (4)
Р	With the photocatalytic device (4)
Χ	No present
	Filter
F	With air filter
Χ	No present
	0 5 5 0 1 1 C U U D G L R H P P X X

Reversibility of the water connections during installation only for units with a main standard or oversized coil. They are not reversible for units with a secondary coil.
 Only for the standard main coil

- (3) Only for sizes from 2 to 5(4) Options "P and H" are available only in units for 2-pipe systems.

SIZE AVAILABLE FOR VERSION

Cversion

CVCISION																		
Size	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
Versions produced (by size)																		
Versions available (by size)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Version U																		
Size		200	2	01	250	30	0	301	350		400	401	4	50	500	50	1	550
Versions produced (by size)																		
Varcione available (by cize)									•									•

INSTALLATION VERSIONS AND EXAMPLES

C: Compact version.

Compact structure with opposed intake and delivery lines, for an "H"shaped configuration.

The unit is provided without openings and without flanges, which can be purchased separately as an accessory.

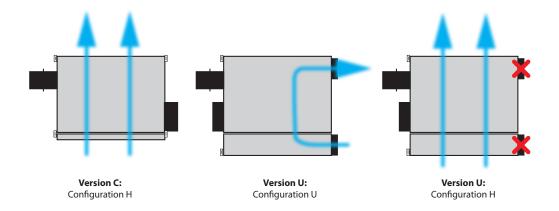
The delivery and intake part of the structure is designed to house flanges of Ø 200 mm (or Ø 160 mm) and one of the intake flanges can be replaced by a Ø 125 or 100 mm flange for the intake of outside air.

On the side, it can house \emptyset 125 or 100 mm flanges for the intake of outside air for delivery.

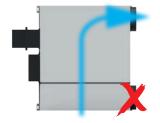
U: Universal version.

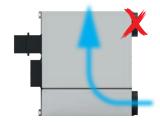
Structure for the "U" configuration with intake and delivery on the same side, opposite of the side with the water connections and the electrical box. The delivery and intake part of the structure is designed to house flanges of Ø 200 mm (or Ø 160 mm) and one of the intake or delivery flanges can be replaced by a Ø 125 or 100 mm flange for the intake of outside air.

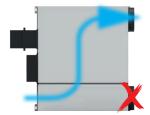
This version is called universal because it guarantees the possible installations permitted by the C version and adds additional possibilities.



POSSIBLE ALTERNATIVE CONFIGURATIONS OF THE U VERSION





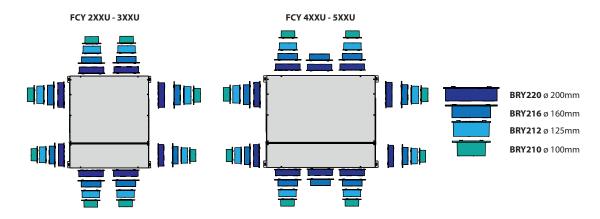


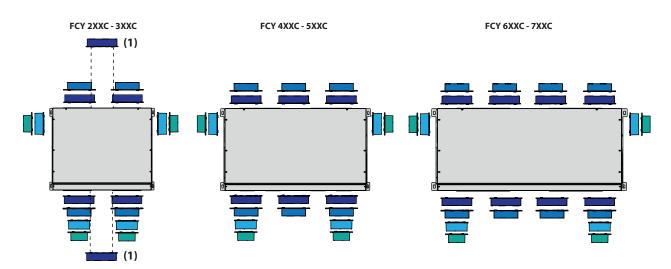
The performance data for the configurations shown here are equal to those for the U version in the U configuration.

POSSIBLE POSITIONS FOR THE INSTALLATION OF THE BRY ACCESSORIES

In every unit it is possible to use a maximum of one flange accessory for the intake of outside air (BRY210 or BRY212). The number and position of the preparations for the installation of the BRY accessories varies based on the unit size and version.

The standard **C version unit is supplied without flanges**, which can be purchased separately as an accessory.





1 There is a central preparation for the installation of an accessory BRY220 as an alternative to using the two more external preparations.

For the C version: it is necessary to use a number of recirculation air preparations at least equal to the maximum number possible for the size selected less 1.

Example: for FCY6xxC it is necessary to open at least 3 flange preparations for intake recirculation air and 3 flange preparations for delivery recirculation air (= maximum number - 1).

If the number of intake/delivery flanges used is less than the maximum possible for the considered size, their diameter must be 200 mm (BRY220).

For more information about the possible configurations for both versions, refer to the unit's selection software.

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19Y: Thermostat to be fixed to the side of the fan coil, and fitted as standard with an air probe and water probe. Depending on the option chosen (P - X - H), the VMF-E19 must be completed with the compulsory electric completion unit accessory (VMF-YCC or VMF-YCCH).

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L=2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMF-YCC: Electric on/off completion unit for the VMF-E19Y accessory (mandatory for the unit with options P and X).

VMF-YCCH: Electric on/off completion unit for the VMF-E19Y accessory (mandatory for the unit with option H).

Valves for main coil

VCY41 - 42 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left hydraulic connections.

VCYD for main and secondary coil: The 2-way motorised valve kit for the primary or secondary coil or an additional optional heat only coil. The kit consists of a valve, the actuator and the corresponding hydraulic fittings. It can be installed both on fan coils with right-hand and left-hand connections.

VDP15HF: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 230 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

VDP15HF24: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 24 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

VDP15HFM: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 24 V powered actuator with modulating function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

Valves for secondary coil

VCY44 - for secondary heat exchanger: 3-way motorized valve kit for hot only coil. The kit consists of a valve, actuator and relative hydraulic fittings, it is suitable for installation on both fan coils with hydraulic connections on the right and left.

VCYD for main and secondary coil: The 2-way motorised valve kit for the primary or secondary coil or an additional optional heat only coil. The kit consists of a valve, the actuator and the corresponding hydraulic fittings. It can be installed both on fan coils with right-hand and left-hand connections.

Additional hot water coil.

BV: Hot water heat exchanger with 1 row.

Valve support kit

KITVPI: Main coil VDP valve support kit. The kit consists of a bracket for supporting the valve and the corresponding hydraulic fittings.

KITVPI12H: VDP valve support kit for the secondary coil. The kit consists of a bracket for supporting the valve and the corresponding hydraulic fittings.

Installation accessories

BDP: 200 mm plug.

BRY: Flange with hydraulic "spigot" connection.

GMYC: Plate flange that makes it possible to install the accessory GM either in the intake section or in the delivery section. The accessory is comprised of a plate flange with gasket and 4 screws to fasten it to the unit.

AFY: the kit is comprised of a Coarse 25% class filter according to ISO16890 (G2 according to EN779) and four fastening brackets to insert in the grille GM17. To be used together with fan coils supplied without a filter installed in unit "X".

GMYU: Plate flange that makes it possible to install the accessory GM17 either in the intake section or in the delivery section. The accessory is comprised of a plate flange with gasket and 4 screws to fasten it to the unit.

DSC: Condensate drainage device.

BC: Condensate drip.

DAYKIT: Air deflector for U versions. To be installed in the delivery plenum, on the side opposite the air outlet, to facilitate the flow towards the delivery opening.

AMPY: Additional brackets for ceiling mount. Only for "U" version.

Accessories in multiple packages

DFA: Size of filter halved on the short side. The kit is comprised of two filters with a length equal to the standard filter and with half the height. This facilitates filter cleaning and/or replacement operations if there is a reduced space for vertical extraction. 20 piece package.

PPB: Protection for flanges to be used during installation to prevent dust from entering the unit before connecting the ducts. To be removed when making the connection. 100 piece package.

CHR12: Hydraulic connection kit for Ø 1/2" two-way valves, with soft coil side O-ring seal and with a flat plate and system side gasket, which can also be used for installing flat seal two-way valves. 50 piece package.

CHR34: Hydraulic connection kit for Ø 3/4" two-way valves, with soft coil side O-ring seal and with a flat plate and system side gasket, which can also be used for installing flat seal two-way valves. 30 piece package.

FLK60: Filter closure kit. Package of 60 pieces.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
AFDCOND (1)	С	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AER503IR (1)	U		•	•	•	•	•	•	•	•	•	•	•						
CAT (2)	C	•	•			•		•	•	•	•		•	•	•	•	•	•	•
SA5 (2)	U		•	•	•	•	•	•	•	•	•	•	•						
SIT3 (3)	C,U			•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIT5 (4)	U		•	•	•	•	•	•	•	•	•	•	•						
CM2 (2)	C	•	•	•	•	•		•	•	•	•	•	•	•			•	•	
SW3 (2)	U	•	•	•	•	•		•	•	•	•	•	•						
CME (2)	C	•																	
SW5 (2)	U	•	•	•	•	•	•	•	•	•	•	•	•						
TV (E)	C	•																	
TX (5)	U				•	•		•				•	•						

- (1) Wall-mount installation.(2) Probe for AER503IR-TX thermostats, if fitted.
- (3) Cards for AERSO3IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
 (4) Probe for AERSO3IR-TX thermostats, if fitted.
- (5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DID4	С			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DI24	U	•	•	•	•	•	•	•	•	•	•	•							
VMF F10V	C	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E19Y	U				•		•	•	•	•	•	•							
VME E2	C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E3	U	•																	
VMF FADV	C	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
VMF-E4DX	U	•																	
WAAF FAV	(•	•		•	•			•	•	•		•	•		•	•	•	•
VMF-E4X	U		•	•	•	•	•	•	•	•	•	•	•						
VALE ID	C	•	•	•	•	•	•	•	•	•	•			•		•	•	•	•
VMF-IR	U	•	•	•	•	•	•	•	•	•	•	•	•						
VME CW	C	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW	U	•			•	•	•	•	•	•	•	•	•						
VME CWA	C		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW1	U	•																	
VME VCC	(•	•	•	•	•				•		•	•				•	
VMF-YCC	U																		
WAE VOCIL	(•		•				•		•	•	•				•		
VMF-YCCH	U																		

Additional heat only coil for only option "X" (without an electric heater and without a photocatalytic device)

_	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
	(BV122	-	-	BV132	-	-	BV142	-	-	BV142	-	-	BVZ800	-	-	BVZ800	-	
_	U	BV122	-	-	BV132	-	-	BV142	-	-	BV142	-	-	-	-	-	-	-	

Combined adjustment and balancing valve

	200	201	250	300	301	350	400	401	450
	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF
Main coil	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24
	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM
		VDP15HF			VDP15HF			VDP15HF	
Secondary coil	-	VDP15HF24	-	-	VDP15HF24	-	-	VDP15HF24	-
		VDP15HFM			VDP15HFM			VDP15HFM	
	VDP15HF			VDP15HF			VDP15HF		
Additional coil "BV"	VDP15HF24	-	-	VDP15HF24	-	-	VDP15HF24	-	-
	VDP15HFM			VDP15HFM			VDP15HFM		
	500	501	550	600	601	650	700	701	750
	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF
Main coil							VDD1FUE34		VDD4 FUED 4
muni con	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24
muni con	VDP15HF24 VDP15HFM	VDP15HF24 VDP15HFM	VDP15HF24 VDP15HFM	VDP15HF24 VDP15HFM	VDP15HF24 VDP15HFM	VDP15HF24 VDP15HFM	VDP15HF24 VDP15HFM	VDP15HF24 VDP15HFM	VDP15HF24 VDP15HFM
muni con									
Secondary coil		VDP15HFM			VDP15HFM			VDP15HFM	
	VDP15HFM	VDP15HFM VDP15HF			VDP15HFM VDP15HF		VDP15HFM	VDP15HFM VDP15HF	
	VDP15HFM	VDP15HFM VDP15HF VDP15HF24			VDP15HFM VDP15HF VDP15HF24		VDP15HFM	VDP15HFM VDP15HF VDP15HF24	
	VDP15HFM -	VDP15HFM VDP15HF VDP15HF24		VDP15HFM -	VDP15HFM VDP15HF VDP15HF24		VDP15HFM -	VDP15HFM VDP15HF VDP15HF24	

Valves combinations for main and secondary coil

3-way valve kit - main and secondary coil or accessory BV coil

	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
Main coil	VCY41	VCY41	VCY41	VCY42														
Main Coli	VCY4124	VCY4124	VCY4124	VCY4224														
Caramdami sail		VCY44																
Secondary coil	-	VCY4424	-															
Additional coil "BV"	VCY44																	
Additional coll BV	VCY4424		-	VCY4424			VCY4424	-	-	VCY4424	-		VCY4424	-	-	VCY4424	-	

2-way valve kit - main and secondary coil or accessory BV coil

	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
Main coil	VCYD1	VCYD1	VCYD1	VCYD2														
Main con	VCYD124	VCYD124	VCYD124	VCYD224														
Casandawysail		VCYD1																
Secondary coil	-	VCYD124	-															
Additional coil "BV"	VCYD1																	
Additional coll BV	VCYD124			VCYD124		-	VCYD124	-	-	VCYD124	-		VCYD124	-		VCYD124	-	

Valve support kit

Main coil VDP valve support kit.

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
KITVPI12 (1)	C,U	•	•	•															
VITVDI24 /2\	C						•	•	•	•	•		•	•	•	•	•	•	•
KITVPI34 (2)	U						•		•	•				·	·		·		

⁽¹⁾ Connections Ø 1/2" (2) Connections Ø 3/4"

Secondary coil VDP valve support kit.

	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650
Main coil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Secondary coil	-	KITVPI12H	-												
Additional coil "BV"	KITVPI12H	-	-												

	700	701	750
Main coil	-	-	-
Secondary coil	-	KITVPI12H	-
Additional coil "BV"	KITVPI12H	-	-

Connections ø 1/2"

Installation accessories

Plastic caps

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DDDDOO	C	•	•	•	•	•	•	•		•	•	•	•		•	•	•	•	•
BDP200 -	U	•	•			•	•	•	•				•						

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DDV210 (1)	(•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•
BRY210 (1) -	U	•	•	•		•	•	•	•	•									
DDV212 (2)	(•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
BRY212 (2) -	U		•	•	•	•	•	•	•			•	•						
DDV216 (2)	(•	•	•	•		•	•			•	•				•
BRY216 (3) -	U		•	•	•	•	•	•	•	•	•	•	•						
DDV220 (4)	(•	•	•	•	•	•	•	•	•	•	•	•			•	•
BRY220 (4) -	U	•	•		•	•	•	•	•			•	•						

(1) Ø 100 mm (2) Ø 125 mm (3) Ø 160 mm (4) Ø 200 mm

Flange for the installation of the delivery grille GM

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GMY200C (1)	(•	•	•															
GMY300C (1)	(•	•	•												
GMY400C (1)	(•	•	•	•	•							
GMY600C (1)	(•	•	•	•	•	•

(1) only for "C" version.

Flange for the installation of the grille GM17

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GMYU (1)	U	•	•	•	•	•	•	•	•	•	•	•	•						

(1) Only for "U" version with connections "G and D".

Coarse 25% class air filter kit according to ISO16890 (G2 according to EN779)

			9				9		-,										
Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
AFY100 (1)	U	•	•	•	•	•	•	•	•	•	•	•	•						

(1) To be used with fan coils supplied without a filter installed in unit "X" and in association with GM17 and GMYU.

Air deflector

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DAYKIT	U		•							•									

Brackets for ceiling mount.

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
AMPY (1)	U	•	•	•	•	•	•	•	•	•	•	•	•						

(1) Only for "U" version.

Condensate discharge device kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DCCC (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DSC6 (1)	U																		

(1) Only for "L and R" connections.

Condensate drip

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
BC8 (1) —	C	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•		•
DC8 (1)	U	•				•		•	•	•	•	•	•						

(1) For horizontal installation.

Delivery grille

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
GM17	U	•	•	•	•	•	•	•	•	•	•	•	•						
GM22	(•	•																
GM32	(•												
GM42	(•	•	•	•	•	•						
GM62	(•	•	•	•	•	•

Accessories in multiple packages

Hydraulic connection kit

,																			
Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
CHR12 (1)	C,U		•	•															
CUD24 (2)	C					•	•	•	•	•	•	•	•	•	•	•	•	•	•
CHR34 (2)	U																	-	

(1) Hydraulic connections Ø 1/2"(2) Hydraulic connections Ø 3/4"

Half-size filter kit

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
DFA2	C,U	•	•	•															
DFA3	C,U					•	•												
DFA5	C,U							•	•	•									

Model	Ver	200 2	01	250	300	3()1	350	400	401	450	500	501	550	60			550	700	701	750
DFA7	(•		•	•	•	•	•
Protection for 1	flange																				
Model	Ver	200 2	01	250	300	3()1	350	400	401	450	500	501	550	60) 6	01 (550	700	701	750
PPB -	(•	•	•	•			•	•	•	٠	•	•	•	•		•	•		•	•
	U	•	•	٠	•		•	•	•	•	٠	•	•	•							
PERFORMAN	ICE DATA -	FCY_C AI	ND F	CY_	U (C	ONF	IGU	RATI	ON O	FTHE	HN	OZZL	ES) - :	2 PIPI	ES						
2-pipe										,			1						1		
			+.		Y200C		_	FCY250		1	FCY3000	_		FCY350C			FCY4000		_	FCY4500	
			1	2 I	4 M	6 H	2 L	4 M	6 H	1 L	4 M	6 H	1 L	4 	6 H	1 L	3 M	6 H	1 L	3 	6 H
Heating performance 7	0°C / 60°C (1)				IVI	11	L	IVI	- 11	L	IVI	- 11		IVI	11	L	IVI	- 11	L	IVI	
Heating capacity	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	k¹	W 2,	11	3,00	3,32	2,29	3,24	3,60	3,50	5,03	5,45	3,80	5,59	6,10	4,49	6,02	6,74	4,79	6,62	7,40
Water flow rate system	side				258	285	197	179	310	301	433	469	327	481	524	386	517	580	412	569	637
Pressure drop system si	de	kl	Pa 7	7	12	15	9	16	19	8	15	18	9	18	21	11	18	22	7	12	15
Heating performance 4	5 °C / 40 °C (2)												1						1		
Heating capacity		k'			1,49	1,65	1,14	1,61	1,79	1,74	2,50	2,71	1,89	2,78	3,03	2,23	2,99	3,35	2,38	3,29	3,68
Water flow rate system			_		224	248	196	277	308	299	430	466	325	478	521	383	514	576	409	566	633
Pressure drop system si		kl	Pa 1	7	12	15	9	16	19	8	15	18	9	17	20	11	18	22	7	12	15
Cooling performance 7 Cooling capacity	C/ 12 C	L!	W 0,	.93	1,30	1,44	1,11	1,59	1,74	1,70	2,40	2,63	1,91	2,77	3,00	2,29	3,06	3,41	2,51	3,37	3,79
Sensible cooling capacit	tv				1,14	1,18	0,83	1,23	1,36	1,70	1,86	2,03	1,34	1,99	2,16	1,66	2,24	2,52	1,76	2,42	2,73
Water flow rate system	,				224	248	191	273	299	292	413	452	328	476	516	394	526	586	432	580	652
Pressure drop system si				8	13	15	10	18	21	9	16	18	11	21	25	11	18	22	11	16	20
Fan			Ţ,																		
Туре		ty	pe									Centr	ifugal								
Fan motor			pe										ronous								
Air flow rate					226	254	148	226	254	263	404	446	263	404	446	346	487	559	346	487	559
High static pressure	المحقدة المسادية			21	50	63	21	50	63	21	50	61	21	50	61	25	50	66	25	50	66
Sound power level (inle		dB dB	. ,		56,0 52,0	59,0 55,0	41,0 37,0	56,0 52,0		39,0 35,0	51,0 47,0	54,0 49,0	39,0 35,0	51,0 47,0	54,0 49,0	44,0	54,0 50,0	55,0 52,0	44,0	54,0 50,0	55,0 52,0
Input power	iet)			28	41	74	28	41	74	38	55	78	38	55	78	53	63	102	53	63	102
Finned pack heat excha	inger									30		70	- 50		70		- 03	102		- 03	102
Water content			I		0,5			0,7			0,8			1,0			1,0			1,4	
Diametre hydraulic fitti	ngs																				
Main heat exchanger			Ø		1/2″			1/2"			3/4"	-		3/4"			3/4"			3/4"	
Power supply												2221									
Power supply												230V	~50Hz								
			_		Y500C			FCY550			FCY6000			FCY650C	_		FCY700		_	FCY750	
				1	5 M	6	1	5	6	1	4	7 H	1	4 M	7 H	2	5 M	7	2	5	7 H
Heating performance 7	0 °C / 60 °C /1\			L	M	Н	L	M	Н	Į L	M	Н	L	М	Н	L	M	Н	L	М	Н
Heating capacity	U C/00 C(I)	k¹	W 5,	77	7,22	7,59	5,81	8,25	8,67	6,86	8,55	10,00	7,63	9,72	11,51	8,77	10,10	10,52	10,02	11,65	12,09
Water flow rate system	side		/h 45		621	652	500	709	746	590	735	860	656	836	990	754	868	905	862	1002	1040
Pressure drop system si		kl			21	23	10	19	21	13	20	26	15	23	31	19	25	27	12	15	16
Heating performance 4																					
Heating capacity		k'				3,77	2,89	4,10	4,31	3,41	4,25	4,97	3,79	4,83	5,72	4,36	5,02	5,23	4,98	5,79	6,01
Water flow rate system			/h 4:		617	648	497	705	741	586	731	855	652	831	984	750	863	899	856	996	1034
Pressure drop system si		kl	Pa 1	12	21	23	10	19	21	13	19	25	15	23	31	19	25	27	12	15	16
Cooling performance 7	°C / 12 °C	L.	w l a	C 0	2 (5	2 02	2.01	4.00	4 20	2 27	4.00	A (F	4.15	r 02	F (7	424	4.07	F 10	1.00	F F2	Γ 00
Cooling capacity Sensible cooling capacit	tu		W 2,			3,82	2,91	4,08	4,28	3,37 2,70	4,08 3,34	4,65	4,15 2,93	5,02	5,67	4,24	4,97	5,18 4,02	4,69 3,53	5,53	5,80
Water flow rate system					2,70 628	2,83 657	500	2,94 702	3,09 736	580	702	3,92 800	714	3,60 863	4,12 975	3,24 729	3,83 855	891	807	4,20 951	4,41 997
Pressure drop system si			_	13	22	24	12	21	23	15	21	26	16	23	28	20	26	28	12	16	17
Fan		- No					-														
Туре		ty	pe									Centr	ifugal								
Fan motor			pe										ronous								
Air flow rate					592	627	400	592	627	567	770	920	567	770	920	785	978	1050	785	978	1050
High static pressure	n			22	50	56	22	50	56	27	50	71	27	50	71	32	50	58	32	50	58
Sound power level (inle		dB			55,0	57,0	45,0	55,0		46,0	56,0	61,0	46,0	56,0	61,0	54,0	60,0	62,0	54,0	60,0	62,0
Sound power level (out	iet)			1,0 19	51,0 80	53,0 96	41,0	51,0 80	53,0 96	44,0	54,0 89	60,0	44,0	54,0 89	60,0	52,0 92	59,0 117	61,0 138	52,0 92	59,0 117	61,0 138
Finned pack heat excha	inger		14 4	τ 7	OU	70	47	00	70	00	07	110	UU	07	110	72	11/	130	72	11/	130
Water content			l		1,0			1,4			1,2			1,6			1,2			1,6	
Diametre hydraulic fitti	ngs							.,,.			,-			, ·			,-			,-	
Main heat exchanger			Ø									3,	/4"								_
Main neat exchanger																	_				

Power supply

	FCY500C	FCY550C	FCY600C	FCY650C	FCY700C	FCY750C
Power supply			230V-	~50Hz		

(1) Room air temperature $20\,^{\circ}\text{C.d.b.}$; Water (in/out) $70\,^{\circ}\text{C/60}\,^{\circ}\text{C}$ (2) Room air temperature $20\,^{\circ}\text{C.d.b.}$; Water (in/out) $45\,^{\circ}\text{C/40}\,^{\circ}\text{C}$; EUROVENT Refer to the selection software for performance data related to the different configurations.

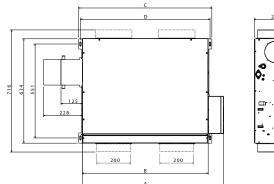
PERFORMANCE DATA FCY_C AND FCY_U (CONFIGURATION OF THE H NOZZLES) - 4 PIPES

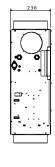
4-pipe

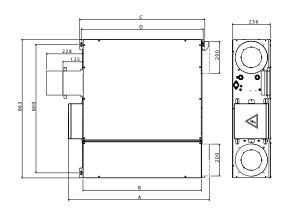
· Pripo		FCY2	01C		FCY301	C		FCY4010			FCY501C			FCY601C			FCY701C	
		2 4	6	1	4	6	1	3	6	1	5	6	1	4	7	2	5	7
		_ N	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 65 °C / 55 °C (1)				•														
Heating capacity k	W 1,	06 1,3	7 1,48	1,82	2,39	2,55	2,19	2,75	2,99	2,59	3,30	3,34	3,13	3,85	4,35	4,13	4,40	4,60
Water flow rate system side	'h 9	3 12	0 130	159	210	223	192	240	262	226	290	301	274	336	381	361	385	403
Pressure drop system side k	Pa :	5 8	9	8	12	14	5	7	8	6	9	9	9	13	16	16	15	17
Cooling performance 7 °C / 12 °C																		
Cooling capacity k	W 0,	93 1,3	0 1,44	1,70	2,40	2,63	2,29	3,06	3,41	2,68	3,65	3,82	3,37	4,08	4,65	4,24	4,97	5,18
Sensible cooling capacity k	W 0,	74 1,1	4 1,18	1,27	1,86	2,03	1,66	2,24	2,52	1,94	2,70	2,83	2,70	3,34	3,92	3,24	3,83	4,02
Water flow rate system side	h 1	50 22	4 248	292	413	452	394	526	586	461	628	657	580	702	800	729	855	891
Pressure drop system side k	Pa	3 1.	15	9	16	18	11	18	22	13	22	24	15	21	26	20	26	28
Fan																		
Type ty	pe								Centr	ifugal								
Fan motor ty	pe								Asynch	ronous								
Air flow rate m	3/h 1	48 22	6 254	263	404	446	346	487	559	400	592	627	567	770	920	785	978	1050
High static pressure	'a 2	1 5	63	21	50	61	25	50	66	22	50	56	27	50	71	32	50	58
Sound power level (inlet + radiated) dB	(A) 4°	1,0 56	0 59,0	39,0	51,0	54,0	44,0	54,0	55,0	45,0	55,0	57,0	46,0	56,0	61,0	54,0	60,0	62,0
Sound power level (outlet) dB	(A) 37	7,0 52	0 55,0	35,0	47,0	49,0	40,0	50,0	52,0	41,0	51,0	53,0	44,0	54,0	60,0	52,0	59,0	61,0
Input power	V 2	8 4	74	38	55	78	53	63	102	49	80	96	66	89	118	92	117	138
Diametre hydraulic fittings																		
Main heat exchanger	Ø	1/	2"		3/4"			3/4"			3/4"			3/4"			3/4"	
Secondary heat exchanger	ð								1,	/2"								
Power supply																		
Power supply									230V	~50Hz								

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT Refer to the selection software for performance data related to the different configurations.

DIMENSIONS







FCY - C

Size		200	201	250	300	301	350	400	401	450	500	501	550	600	601	650	700	701	750
Dimensions and weights																			
A	mm	598	598	598	829	829	829	1050	1050	1050	1050	1050	1050	1171	1171	1171	1171	1171	1171
В	mm	507	507	507	735	735	735	960	960	960	960	960	960	1080	1080	1080	1080	1080	1080
C	mm	550	550	550	781	781	781	1003	1003	1003	1003	1003	1003	1122	1122	1122	1122	1122	1122
D	mm	529	529	529	760	760	760	982	982	982	982	982	982	1100	1100	1100	1100	1100	1100
Empty weight	kg	19	20	21	23	24	26	31	32	33	31	32	33	41	43	46	41	43	46

FCY - U

Size		200	201	250	300	301	350	400	401	450	500	501	550
Dimensions and weights													
A	mm	647	647	647	878	878	878	1100	1100	1100	1100	1100	1100
В	mm	508	508	508	739	739	739	960	960	960	960	960	960
(mm	550	550	550	781	781	781	1003	1003	1003	1003	1003	1003
D	mm	529	529	529	760	760	760	982	982	982	982	982	982
Empty weight	kg	22	23	24	26	27	29	35	36	37	35	36	37

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FCYI

Fan coil unit for ducted installations



- Plug and play installation only in horizontal
- Reduced dimensions
- Inspectable ventilation group





DESCRIPTION

Monobloc duct type fan coils for heating and/or cooling small and medium-sized environments for civil and commercial use.

They were designed and built for flush horizontal installation in any type of 2/4 pipe system and in combination with any heat generator, also at low temperatures.

Thanks to the availability of various versions and configurations, with a standard or oversized coil, it is easy to select the optimal solution for any requirement.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans. They are statically and dynamically balanced and directly coupled to the motor shaft.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

The plastic augers are extractable for easy and efficient cleaning.

Heat exchanger coil

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.

Reversibility of the water connections during installation only for units with a main standard or oversized coil or standard with BV accessory. Not reversible in all other configurations.

Air filter

Where present, the Coarse 25% Class according to ISO16890 (G2 according to EN779) air filter, which is easy to remove and clean.

Condensate drip

In addition to the internal tray, all units are equipped with a **configurable external condensate collection tray** during installation.

The kit comprises a single element, which is made up of two pieces: the **tray** with a double drain to be installed on the right or left, and the **drip moulding**, which must be installed if mounting the valve kit and may not be used for installations without the valves with limited technical spaces.

Control

The unit's electrical box is reversible, with the option of mounting it also on the same side of the water connections.

The standard equipment includes a single 10-pin control board as an interface for the electrical connections, the preparation for the VMF series thermostat fastener and the included supply of a DIN guide for the installation of a third-party control.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	FCYI
5	Size
	2, 3, 4, 5, 7
6	main heat exchanger (1)
0	Standard
5	Oversized
7	Secondary heat exchanger
0	Without coil
1	Standard (2)
8	Version
С	Compact
U	Universal (3)
9	Connections
D	Water connections and electrical panel on the right
G	Water connections and electrical panel on the left
L	Hydraulic connections on the left and electric connections on the opposite side
R	Hydraulic connections on the right and electric connections on the opposite side
10	Options
Н	Electric heater (500W) (4)
Р	With the photocatalytic device (4)
Χ	No present
11	Filter
F	With air filter
Χ	No present

Reversibility of the water connections during installation only for units with a main standard or oversized coil. They are not reversible for units with a secondary coil.
 Only for the standard main coil

SIZE AVAILABLE FOR VERSION

Cversion

CVCISIOII															
Size	20	0 201	250	300	301	350	400	401	450	500	501	550	700	701	750
Versions produced (by size)	'														
Versions available (by size)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Version U															
Size		200	201	250	300	30	1	350	400	401	450	50	0	501	550
Versions produced (by size)															
Varcions available (by size)															

INSTALLATION VERSIONS AND EXAMPLES

C: Compact version.

Compact structure with opposed intake and delivery lines, for an "H"shaped configuration.

The unit is provided without openings and without flanges, which can be purchased separately as an accessory.

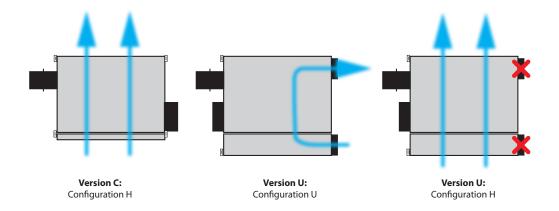
The delivery and intake part of the structure is designed to house flanges of Ø 200 mm (or Ø 160 mm) and one of the intake flanges can be replaced by a Ø 125 or 100 mm flange for the intake of outside air.

On the side, it can house \emptyset 125 or 100 mm flanges for the intake of outside air for delivery.

U: Universal version.

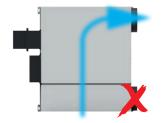
Structure for the "U" configuration with intake and delivery on the same side, opposite of the side with the water connections and the electrical box. The delivery and intake part of the structure is designed to house flanges of Ø 200 mm (or Ø 160 mm) and one of the intake or delivery flanges can be replaced by a Ø 125 or 100 mm flange for the intake of outside air.

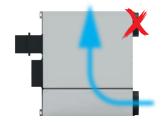
This version is called universal because it guarantees the possible installations permitted by the C version and adds additional possibilities.

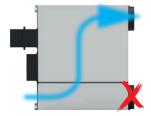


⁽³⁾ Only for sizes from 2 to 5(4) Options "P and H" are available only in units for 2-pipe systems.

POSSIBLE ALTERNATIVE CONFIGURATIONS OF THE U VERSION





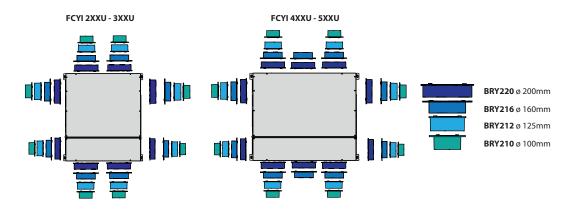


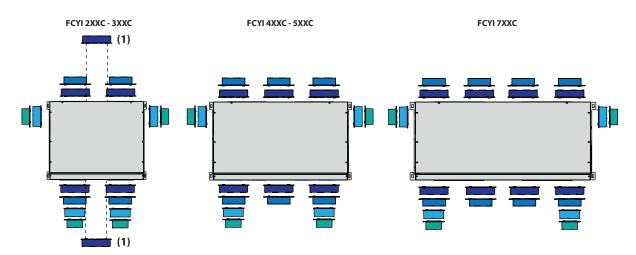
The performance data for the configurations shown here are equal to those for the U version in the U configuration.

POSSIBLE POSITIONS FOR THE INSTALLATION OF THE BRY ACCESSORIES

In every unit it is possible to use a maximum of one flange accessory for the intake of outside air (BRY210 or BRY212). The number and position of the preparations for the installation of the BRY accessories varies based on the unit size and version.

The standard **C version unit is supplied without flanges**, which can be purchased separately as an accessory.





1 There is a central preparation for the installation of an accessory BRY220 as an alternative to using the two more external preparations.

For the C version: it is necessary to use a number of recirculation air preparations at least equal to the maximum number possible for the size selected less 1.

Example: for FCY6xxC it is necessary to open at least 3 flange preparations for intake recirculation air and 3 flange preparations for delivery recirculation air (= maximum number - 1).

In both versions if the number of intake/delivery flanges used is less than the maximum possible for the considered size, their diameter must be 200 mm (BRY220).

Example: for FCYI7xxC it is necessary to open at least 3 flange preparations for intake recirculation air and 3 flange preparations for delivery recirculation air (= maximum number - 1).

For more information about the possible configurations for both versions, refer to the unit's selection software.

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19Y: Thermostat to be fixed to the side of the fan coil, and fitted as standard with an air probe and water probe. Depending on the option chosen (P - X - H), the VMF-E19 must be completed with the compulsory electric completion unit accessory (VMF-YCC or VMF-YCCH).

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (MFTAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L=2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMF-YICC: Electric inverter completion unit for the VMF-E19Y accessory (mandatory for the unit with options P and X).

VMF-YICCH: Electric inverter completion unit for the VMF-E19Y accessory (mandatory for the unit with option H).

Valves for main coil

VCY41 - 42 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left hydraulic connections.

VCYD for main and secondary coil: The 2-way motorised valve kit for the primary or secondary coil or an additional optional heat only coil. The kit consists of a valve, the actuator and the corresponding hydraulic fittings. It can be installed both on fan coils with right-hand and left-hand connections.

VDP15HF: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 230 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

VDP15HF24: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 24 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

VDP15HFM: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 24 V powered actuator with modulating function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

Valves for secondary coil

VCY44 - for secondary heat exchanger: 3-way motorized valve kit for hot only coil. The kit consists of a valve, actuator and relative hydraulic fittings, it is suitable for installation on both fan coils with hydraulic connections on the right and left

VCYD for main and secondary coil: The 2-way motorised valve kit for the primary or secondary coil or an additional optional heat only coil. The kit consists of a valve, the actuator and the corresponding hydraulic fittings. It can be installed both on fan coils with right-hand and left-hand connections.

Additional hot water coil.

BV: Hot water heat exchanger with 1 row.

Valve support kit

KITVPI: Main coil VDP valve support kit. The kit consists of a bracket for supporting the valve and the corresponding hydraulic fittings.

KITVP112H: VDP valve support kit for the secondary coil. The kit consists of a bracket for supporting the valve and the corresponding hydraulic fittings.

Installation accessories

BDP: 200 mm plug.

BRY: Flange with hydraulic "spigot" connection.

GMYC: Plate flange that makes it possible to install the accessory GM either in the intake section or in the delivery section. The accessory is comprised of a plate flange with gasket and 4 screws to fasten it to the unit.

AFY: the kit is comprised of a Coarse 25% class filter according to ISO16890 (G2 according to EN779) and four fastening brackets to insert in the grille GM17. To be used together with fan coils supplied without a filter installed in unit "X"

GMYU: Plate flange that makes it possible to install the accessory GM17 either in the intake section or in the delivery section. The accessory is comprised of a plate flange with gasket and 4 screws to fasten it to the unit.

DSC: Condensate drainage device.

BC: Condensate drip.

DAYKIT: Air deflector for U versions. To be installed in the delivery plenum, on the side opposite the air outlet, to facilitate the flow towards the delivery opening.

AMPY: Additional brackets for ceiling mount. Only for "U" version.

Accessories in multiple packages

DFA: Size of filter halved on the short side. The kit is comprised of two filters with a length equal to the standard filter and with half the height. This fa-

cilitates filter cleaning and/or replacement operations if there is a reduced space for vertical extraction. 20 piece package.

PPB: Protection for flanges to be used during installation to prevent dust from entering the unit before connecting the ducts. To be removed when making the connection. 100 piece package.

CHR12: Hydraulic connection kit for Ø 1/2" two-way valves, with soft coil side O-ring seal and with a flat plate and system side gasket, which can also be used for installing flat seal two-way valves. 50 piece package.

CHR34: Hydraulic connection kit for Ø 3/4" two-way valves, with soft coil side O-ring seal and with a flat plate and system side gasket, which can also be used for installing flat seal two-way valves. 30 piece package.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
AFDCOOLD (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AER503IR (1)	U	•						•								
CAT (2)	C				•											
SA5 (2)	U	•	•	•	•	•	•	•	•	•	•	•	•			
CW2 /2)	C															
SW3 (2)	U	•	•	•	•	•	•	•	•	•	•	•	•			
CML (3)	C				•											
SW5 (2)	U	•	•	•	•	•		•		•	•	•	•			
TV (2)	C	•	•		•			•		•		•			•	
TX (3)	U	•						•	•	•						

VMF system

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DI24	C		•	•	•	•	•	•	•	•	•	•	•	•	•	•
DI24	U	•		•			•	•	•		•		•			
VMF F10V	C		•					•	•			•	•	•		•
VMF-E19Y	U	•		•					•		•	•	•			
VME E2	C	•	•					•	•			•		•		•
VMF-E3	U	•							•							
VME FADV	C	•	•				•	•		•			•		•	•
VMF-E4DX	U	•	•					•		•		•				
VAAF FAV	C	•		•				•	•			•	•			
VMF-E4X	U	•	•							•						
VALE ID	C	•	•	•	•	•		•	•		•	•	•	•	•	•
VMF-IR	U	•			•	•				•	•					
VME CW	C	•			•											•
VMF-SW	U	•	•									•	•			
VMF-SW1	C	•	•		•		•			•				•		•
VIVIT-SVV I	U		•		•		•	•			•	•	•			
VMF-YICC	С	•	•	•	•		•	•	•	•	•	•	•	•	•	•
VIVIF-TICC	U				•	•				•	•	•				
VME VICCII	C	•		•	•	•		•	•	•	•	•		•	•	•
VMF-YICCH	U															

Additional heat only coil for only option "X" (without an electric heater and without a photocatalytic device)

Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
(BV122	-	-	BV132	-	-	BV142	-	-	BV142	-	-	BVZ800	-	-
U	BV122	-	-	BV132	-	-	BV142	-	-	BV142	-	-	-	-	-

Combined adjustment and balancing valve

200	201	250	300	301	350	400	401	450
VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF	VDP15HF
VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24	VDP15HF24
VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM	VDP15HFM
	VDP15HF			VDP15HF			VDP15HF	
-	VDP15HF24	-	-	VDP15HF24	-	-	VDP15HF24	-
	VDP15HFM			VDP15HFM			VDP15HFM	
VDP15HF			VDP15HF			VDP15HF		
VDP15HF24	-	-	VDP15HF24	-	-	VDP15HF24	-	-
VDP15HFM			VDP15HFM			VDP15HFM		
500		501	550		700	701		750
VDP15HF		VDP15HF	VDP15HF		VDP15HF	VDP15HF		VDP15HF
VDP15HF24		VDP15HF24	VDP15HF24		VDP15HF24	VDP15HF24		VDP15HF24
VDP15HFM		VDP15HFM	VDP15HFM		VDP15HFM	VDP15HFM		VDP15HFM
		VDP15HF				VDP15HF		
-		VDP15HF VDP15HF24	-		-	VDP15HF VDP15HF24		-
-			-		-			-
- VDP15HF		VDP15HF24	-		- VDP15HF	VDP15HF24		-
- VDP15HF VDP15HF24		VDP15HF24	-		- VDP15HF VDP15HF24	VDP15HF24		-
-	VDP15HF24 VDP15HFM - VDP15HF VDP15HF24 VDP15HFM 500 VDP15HF VDP15HF	VDP15HF VDP15HF VDP15HF24 VDP15HF24 VDP15HFM VDP15HFM VDP15HF - VDP15HF24 VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF24 VDP15HFM 500 VDP15HF VDP15HF	VDP15HF VDP15HF VDP15HF VDP15HF24 VDP15HF24 VDP15HF24 VDP15HFM VDP15HFM VDP15HFM VDP15HF VDP15HF24 - VDP15HF VDP15HFM - VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF24 VDP15HF VDP15HF	VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF24 VDP15HF24 VDP15HF24 VDP15HF24 VDP15HFM VDP15HFM VDP15HFM VDP15HF - VDP15HF24 - - VDP15HF VDP15HFM VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF24 VDP15HF24 VDP15HF24 VDP15HFM VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF24 VDP15HF24 VDP15HF24 VDP15HF24 VDP15HF24	VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF24 VDP15HF24 VDP15HF24 VDP15HFM VDP15HFM VDP15HFM VDP15HFM VDP15HFM VDP15HF VDP15HF VDP15HF24 - VDP15HF24 VDP15HF24 VDP15HF24 VDP15HFA VDP15H	VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF VDP15HF24 VDP15HF24 VDP15HF24 VDP15HF24 VDP15HF24 VDP15HFM VDP15HFM VDP15HFM VDP15HFM VDP15HFM VDP15HFM VDP15HFM VDP15HF - VDP15HF24 - - VDP15HF24 - - VDP15HF24 - - VDP15HF24 - - VDP15HFM - VDP15HFM - - VDP15HFM - </td <td>VDP15HF VDP15HF VDP15HFA VDP15H</td> <td> VDP15HF</td>	VDP15HF VDP15HFA VDP15H	VDP15HF

 ⁽¹⁾ Wall-mount installation.
 (2) Probe for AERSO3IR-TX thermostats, if fitted.
 (3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

Valves combinations for main and secondary coil

3-way valve kit - main and secondary coil or accessory BV coil

	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
Main sell	VCY41	VCY41	VCY41	VCY42											
Main coil	VCY4124	VCY4124	VCY4124	VCY4224											
Carandam, sail		VCY44													
Secondary coil	-	VCY4424	-												
Additional coil "BV"	VCY44														
Additional Coll BV	VCY4424			VCY4424			VCY4424	_		VCY4424	-		VCY4424		-

2-way valve kit - main and secondary coil or accessory BV coil

	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
Main coil	VCYD1	VCYD1	VCYD1	VCYD2	VCYD2	VCYD2									
Main Coll	VCYD124	VCYD124	VCYD124	VCY224	VCY224	VCY224									
Cocondany coil		VCYD1			VCYD1			VCYD1			VCYD1			VCYD1	
Secondary coil	-	VCYD124	-	-	VCYD124	-	-	VCYD124	-	-	VCYD124	-	-	VCYD124	-
Additional cail #DV//	VCYD1			VCYD1			VCYD1			VCYD1			VCYD1		
Additional coil "BV"	VCYD124	-	-	VCYD124	-	-	VCYD124	-	-	VCYD124	-	-	VCYD124	-	-

Valve support kit

Main coil VDP valve support kit.

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
KITVPI12 (1)	C,U	•	•	•												
KITVPI34 (2)	C								•		•		•			
KITVPI34 (2)	U															

⁽¹⁾ Connections Ø 1/2" (2) Connections Ø 3/4"

Secondary coil VDP valve support kit.

	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
Main coil															
Secondary coil	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-	-	KITVPI12H	-
Additional coil "BV"	KITVPI12F	1 -	-	KITVPI12	Н -	-									

Connections ø 1/2"

Installation accessories

Plastic caps

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DDDDOO	(•				•		•	•		•				•	
BDP200	U	•	•	•	•	•	•	•	•	•	•	•	•			

Flange

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DDV210 (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
BRY210 (1) -	U	•	•													
DDV212 (2)	(•														
BRY212 (2) -	U	•					•									
DDV216 (2)	(•	•													•
BRY216 (3) -	U	•					•			•		•				
DDV220 (4)	(•	•											•		•
BRY220 (4) -	U	•	•			•				•		•	•			

Flange for the installation of the delivery grille GM

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
GMY200C (1)	(•	•	•												
GMY300C (1)	(•	•	•									
GMY400C (1)	C								•		•		•			
GMY600C (1)	(•	

⁽¹⁾ only for "C" version.

Flange for the installation of the grille GM17

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
GMYU (1)	U	•	•	•	•	•	•	•	•	•	•	•	•			

⁽¹⁾ Only for "U" version with connections "G and D".

Coarse 25% class air filter kit

Course 25 /0 clu	33 an inter Ki															
Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
AFY100 (1)	U	•	•	•	•	•	•	•	•	•	•	•	•			

⁽¹⁾ To be used with fan coils supplied without a filter installed in unit "X" and in association with GM17 and GMYU.

⁽¹⁾ Ø 100 mm (2) Ø 125 mm (3) Ø 160 mm (4) Ø 200 mm

_							
Δ	ır	а	۵f	IΔ	ct	n	r

Model

PPB

Ver

(

U

Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DAYKIT	U	•	•	•	•	•	•	•	•	•	•	•	•			
Brackets for	ceiling mount.															
Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
AMPY (1)	U			•	•	•	•	•	•	•	•	•	•	700	701	730
(1) Only for "U" vers																
•	discharge devi	ce kit														
Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DCCC (4)	C		•	•	•		•		•							•
DSC6 (1)	U	•			•		•		•		•	•	•			
(1) Only for "L and I	R" connections.															
Condensate of	drip															
Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
BC8 (1)	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DCO (1)	U	•	•	•	•	•	•	•	•	•	•	•	•			
Accessories Hydraulic con	in multiple p nnection kit Ver	oackages 200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
CHR12 (1)	C,U		- 201	. 230	300	301	330	400	401	430	300	301	330	700	701	/30
	(•	-	•		•	•		•							
CHR34 (2)	U				•		•	•	•	•	•	•	•			
(1) Hydraulic conne (2) Hydraulic conne																
Half-size filte	r kit															
Model	Ver	200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
DFA2	C,U	•	•	•												
DFA3	C,U				•	•	•	_		_		_		_		
DFA5	C,U							•	•	•	•	•	•			
DFA7	C														•	
Protection fo	r flange									1		1				

PERFORMANCE DATA - FCYI_C AND FCYI_U (H NOZZLES CONFIGURATION) 2 PIPES 2-pipe

2-pipe		FC	Y12000			CYI250	(F	CYI300	(I	CY13500			CYI400			CY1450	:
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		i	M	H	i	M	H	Ĺ	M	H	Ĺ		Н	Ĺ	M	H	Ĺ	M	H
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	1,81	3,16	3,34	2,01	3,40	3,62	3,08	4,83	5,23	3,32	5,43	5,83	3,96	5,85	6,34	4,10	6,44	6,96
Water flow rate system side	I/h	156	272	287	173	292	311	265	415	450	285	467	502	341	503	545	353	554	599
Pressure drop system side	kPa	6	13	16	7	17	19	7	14	16	7	17	19	9	17	19	5	12	13
Heating performance 45 °C / 40 °C (2)											-			_					
Heating capacity	kW	0,90	1,57	1,66	1,00	1,69	1,80	1,53	2,40	2,60	1,65	2,70	2,90	1,97	2,91	3,15	2,04	3,20	3,46
Water flow rate system side	I/h	155	270	288	172	291	308	263	413	447	284	464	499	339	501	542	351	550	595
Pressure drop system side	kPa	6	13	16	7	17	19	7	14	16	7	17	19	9	17	19	5	12	13
Cooling performance 7 °C / 12 °C	III u		13	10	, ,		- 17	,		10	,	- 17	17			- 17		12	13
Cooling capacity	kW	0,80	1,37	1,45	0,95	1,67	1,76	1,40	2,38	2,53	1,66	2,70	2,88	2,03	2,98	3,21	2,22	3,28	3,55
Sensible cooling capacity	kW	0,63	1,13	1,20	0,70	1,29	1,37	1,10	1,82	1,94	1,15	1,94	2,07	1,45	2,18	2,36	1,54	2,35	2,56
Water flow rate system side	I/h	138	236	249	163	287	303	241	409	435	285	464	495	349	512	552	382	564	610
Pressure drop system side	kPa	5	14	16	8	19	21	7	15	17	9	21	23	9	13	20	8	16	18
Fan	NI'd	J	14	10	0	17	21	- /	13	- 17	7	21	23	7	13	20	0	10	10
	m ³ /h	122	240	257	122	240	257	225	200	121	225	200	12/	200	470	515	200	470	£1£
Air flow rate	m³/h	123 13	240	257 57	123	240	257 57	225	390	424	225 16	390	424 59	300	470 50	515	300	470 50	515
High static pressure	Pa		50		13	50		16	50	59		50		20		60	20		60
Sound power level (inlet + radiated)	dB(A)	37,0	57,0	59,0	37,0	57,0	59,0	36,0	50,0	53,0	36,0	50,0	53,0	43,0	53,0	55,0	43,0	53,0	55,0
Sound power level (outlet)	dB(A)	33,0	53,0	55,0	33,0	53,0	55,0	32,0	47,0	49,0	32,0	47,0	49,0	39,0	49,0	52,0	39,0	49,0	52,0
Input power	W	7	27	31	7	27	31	10	30	40	10	30	40	14	38	48	14	38	48
Diametre hydraulic fittings																			
Main heat exchanger	Ø		1/2"			1/2"			3/4"			3/4"			3/4"			3/4"	
Power supply																			
Power supply										230V	~50Hz								
			FC	Y1500C				FCY155	YI550C FCYI700C FCYI750C								OC		
		1		2	3		1	2		3	1		2	3		1	2		3
		L		М	Н		L	М		Н	L		М	Н		L	М		Н
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	5,39		7,28	7,63		5,92	8,37		8,71	5,33		8,34	8,88		6,17	9,52		10,15
Water flow rate system side	I/h	464		626	656		509	720		749	468		732	779	_	541	835		890
Pressure drop system side	kPa	12		22	23		11	20		21	8		17	20		5	11		12
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	2,68		3,26	3,79		2,94	4,16		4,33	2,67		4,15	4,40		2,46	4,69		5,00
Water flow rate system side										745			720	767		418	806		860
	I/h	461		623	652		506	715			I 460								
	l/h kPa	461 12		623 22	652		506 12	715			460 8								1)
Pressure drop system side	I/h kPa	461 12		623 22	652 23		12	715		23	8		18	20		3	11		12
Pressure drop system side Cooling performance 7 °C / 12 °C	kPa	12		22	23		12	22		23	8		18	20		3	11		
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity	kPa kW	12 2,73		22 3,68	23 3,84	_	12 2,97	4,15		23 4,31	2,20		18 4,00	4,30		3 2,60	11 4,41		4,70
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity	kPa kW kW	2,73 1,98		22 3,68 2,73	23 3,84 2,85	_	12 2,97 2,11	4,15 2,98		4,31 3,12	2,20 1,71		4,00 3,00	4,30 3,20		3 2,60 1,90	4,41 3,30		4,70 3,50
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side	kPa kW kW I/h	2,73 1,98 469		3,68 2,73 633	3,84 2,85 660	_	2,97 2,11 511	4,15 2,98 714		4,31 3,12 741	2,20 1,71 378		4,00 3,00 688	4,30 3,20 739		2,60 1,90 447	4,41 3,30 760		4,70 3,50 818
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side	kPa kW kW	2,73 1,98		22 3,68 2,73	23 3,84 2,85	_	12 2,97 2,11	4,15 2,98		4,31 3,12	2,20 1,71		4,00 3,00	4,30 3,20		3 2,60 1,90	4,41 3,30		4,70 3,50
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Fan	kPa kW kW I/h kPa	2,73 1,98 469 13		3,68 2,73 633 22	3,84 2,85 660 25	_	2,97 2,11 511 13	4,15 2,98 714 22		4,31 3,12 741 25	2,20 1,71 378 7		4,00 3,00 688 18	4,30 3,20 739 20		3 2,60 1,90 447 4	4,41 3,30 760 11		4,70 3,50 818 12
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Fan Air flow rate	kPa kW kW I/h kPa	2,73 1,98 469 13		22 3,68 2,73 633 22	23 3,84 2,85 660 25	_	2,97 2,11 511 13	22 4,15 2,98 714 22 600		23 4,31 3,12 741 25	2,20 1,71 378 7		4,00 3,00 688 18	20 4,30 3,20 739 20		3 2,60 1,90 447 4	4,41 3,30 760 11		4,70 3,50 818 12
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Fan Air flow rate High static pressure	kPa kW kW I/h kPa m ³ /h Pa	2,73 1,98 469 13 410 23		3,68 2,73 633 22 600 50	23 3,84 2,85 660 25 630 55		2,97 2,11 511 13 410 23	4,15 2,98 714 22 600 50		4,31 3,12 741 25 630 55	2,20 1,71 378 7 405		18 4,00 3,00 688 18 730 50	4,30 3,20 739 20 799 60		3 2,60 1,90 447 4 405 15	4,41 3,30 760 11 730 50		4,70 3,50 818 12 799 60
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Fan Air flow rate High static pressure Sound power level (inlet + radiated)	kW kW l/h kPa m³/h Pa dB(A)	2,73 1,98 469 13 410 23 45,0		3,68 2,73 633 22 600 50 56,0	23 3,84 2,85 660 25 630 55 57,0		2,97 2,11 511 13 410 23 45,0	22 4,15 2,98 714 22 600 50 56,0		23 4,31 3,12 741 25 630 55 57,0	2,20 1,71 378 7 405 15 38,0		4,00 3,00 688 18 730 50	20 4,30 3,20 739 20 799 60 58,0		3 2,60 1,90 447 4 405 15 41,0	11 4,41 3,30 760 11 730 50 55,0		4,70 3,50 818 12 799 60 58,0
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Fan Air flow rate High static pressure Sound power level (inlet + radiated) Sound power level (outlet)	kPa kW kW I/h kPa m³/h Pa dB(A) dB(A)	12 2,73 1,98 469 13 410 23 45,0 42,0		3,68 2,73 633 22 600 50 56,0 52,0	23 3,84 2,85 660 25 630 55 57,0 52,0		2,97 2,11 511 13 410 23 45,0 42,0	22 4,15 2,98 714 22 600 50 56,0 52,0		23 4,31 3,12 741 25 630 55 57,0 52,0	2,20 1,71 378 7 405 15 38,0 34,0		18 4,00 33,00 688 18 730 50 55,0 51,0	20 4,30 3,20 739 20 799 60 58,0 54,0		3 2,60 1,90 447 4 405 15 41,0 36,0	11 4,41 3,30 760 11 730 50 55,0 51,0		4,70 3,50 818 12 799 60 58,0 54,0
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Fan Air flow rate High static pressure Sound power level (inlet + radiated) Sound power level (outlet) Input power	kW kW I/h kPa m³/h Pa dB(A)	2,73 1,98 469 13 410 23 45,0		3,68 2,73 633 22 600 50 56,0	23 3,84 2,85 660 25 630 55 57,0		2,97 2,11 511 13 410 23 45,0	22 4,15 2,98 714 22 600 50 56,0		23 4,31 3,12 741 25 630 55 57,0	2,20 1,71 378 7 405 15 38,0		4,00 3,00 688 18 730 50	20 4,30 3,20 739 20 799 60 58,0		3 2,60 1,90 447 4 405 15 41,0	11 4,41 3,30 760 11 730 50 55,0		4,70 3,50 818 12 799 60 58,0
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Fan Air flow rate High static pressure Sound power level (inlet + radiated) Sound power level (outlet) Input power Diametre hydraulic fittings	kPa kW kW I/h kPa m³/h Pa dB(A)	12 2,73 1,98 469 13 410 23 45,0 42,0		3,68 2,73 633 22 600 50 56,0 52,0	23 3,84 2,85 660 25 630 55 57,0 52,0		2,97 2,11 511 13 410 23 45,0 42,0	22 4,15 2,98 714 22 600 50 56,0 52,0		4,31 3,12 741 25 630 55 57,0 52,0 60	2,20 1,71 378 7 405 15 38,0 34,0 21		18 4,00 33,00 688 18 730 50 55,0 51,0	20 4,30 3,20 739 20 799 60 58,0 54,0		3 2,60 1,90 447 4 405 15 41,0 36,0	11 4,41 3,30 760 11 730 50 55,0 51,0		4,70 3,50 818 12 799 60 58,0 54,0
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Fan Air flow rate High static pressure Sound power level (inlet + radiated) Sound power level (outlet) Input power Diametre hydraulic fittings Main heat exchanger	kPa kW kW I/h kPa m³/h Pa dB(A) dB(A)	12 2,73 1,98 469 13 410 23 45,0 42,0		3,68 2,73 633 22 600 50 56,0 52,0	23 3,84 2,85 660 25 630 55 57,0 52,0		2,97 2,11 511 13 410 23 45,0 42,0	22 4,15 2,98 714 22 600 50 56,0 52,0		4,31 3,12 741 25 630 55 57,0 52,0 60	2,20 1,71 378 7 405 15 38,0 34,0		18 4,00 33,00 688 18 730 50 55,0 51,0	20 4,30 3,20 739 20 799 60 58,0 54,0		3 2,60 1,90 447 4 405 15 41,0 36,0	11 4,41 3,30 760 11 730 50 55,0 51,0		4,70 3,50 818 12 799 60 58,0 54,0
Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Fan Air flow rate High static pressure Sound power level (inlet + radiated) Sound power level (outlet) Input power Diametre hydraulic fittings	kPa kW kW I/h kPa m³/h Pa dB(A)	12 2,73 1,98 469 13 410 23 45,0 42,0		3,68 2,73 633 22 600 50 56,0 52,0	23 3,84 2,85 660 25 630 55 57,0 52,0		2,97 2,11 511 13 410 23 45,0 42,0	22 4,15 2,98 714 22 600 50 56,0 52,0		4,31 3,12 741 25 630 55 57,0 60	2,20 1,71 378 7 405 15 38,0 34,0 21		18 4,00 33,00 688 18 730 50 55,0 51,0	20 4,30 3,20 739 20 799 60 58,0 54,0		3 2,60 1,90 447 4 405 15 41,0 36,0	11 4,41 3,30 760 11 730 50 55,0 51,0		4,70 3,50 818 12 799 60 58,0 54,0

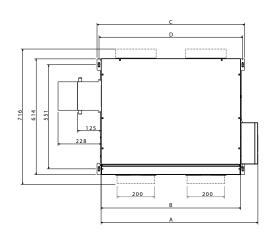
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
Refer to the selection software for performance data related to the different configurations.

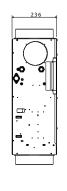
PERFORMANCE DATA FCYI_C AND FCYI_U (H NOZZLES CONFIGURATION) 4 PIPES

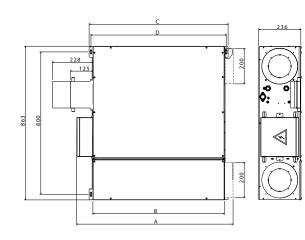
			FCYI201C			FCYI301C			FCYI401C			FCYI501C			FCYI701C	
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	ĺ	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 65 °C / 55 °C (1)																
Heating capacity	kW	0,94	1,42	1,49	1,60	2,34	2,47	1,99	2,69	2,85	2,62	3,59	3,45	2,99	3,70	3,92
Water flow rate system side	l/h	81	122	128	138	201	212	171	231	245	225	309	297	257	318	337
Pressure drop system side	kPa	4	9	9	6	12	13	4	7	8	6	9	9	8	12	13
Cooling performance 7 °C / 12 °C																
Cooling capacity	kW	0,80	1,37	1,45	1,40	2,38	2,53	2,03	2,98	3,21	2,73	3,68	3,84	2,20	4,00	4,30
Sensible cooling capacity	kW	0,63	1,13	1,20	1,10	1,82	1,94	1,45	2,18	2,36	1,98	2,73	2,85	1,71	3,00	3,20
Water flow rate system side	l/h	138	236	249	241	409	435	349	512	552	469	633	660	378	688	739
Pressure drop system side	kPa	5	14	16	7	15	17	9	13	20	13	22	25	7	18	20
Fan																
Air flow rate	m³/h	123	240	257	225	390	424	300	470	515	410	600	630	405	730	799
High static pressure	Pa	13	50	57	16	50	59	20	50	60	23	50	55	15	50	60
Sound power level (inlet + radiated)	dB(A)	37,0	57,0	59,0	36,0	50,0	53,0	43,0	53,0	55,0	45,0	56,0	57,0	38,0	55,0	58,0
Sound power level (outlet)	dB(A)	33,0	53,0	55,0	32,0	47,0	49,0	39,0	49,0	52,0	42,0	52,0	52,0	34,0	51,0	54,0
Input power	W	7	27	31	10	30	40	14	38	48	18	50	60	21	61	78
Diametre hydraulic fittings																
Main heat exchanger	Ø		1/2"			3/4"			3/4"			3/4"			3/4"	
Secondary heat exchanger	Ø								1/2"							
Power supply																
Power supply									230V~50H	7						

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT Refer to the selection software for performance data related to the different configurations.

DIMENSIONS







FCYI - C

Size		200	201	250	300	301	350	400	401	450	500	501	550	700	701	750
Dimensions and weights																
A	mm	598	598	598	829	829	829	1050	1050	1050	1050	1050	1050	1171	1171	1171
В	mm	507	507	507	735	735	735	960	960	960	960	960	960	1080	1080	1080
(mm	550	550	550	781	781	781	1003	1003	1003	1003	1003	1003	1122	1122	1122
D	mm	529	529	529	760	760	760	982	982	982	982	982	982	1100	1100	1100
Empty weight	kg	19	20	21	23	24	26	31	32	33	31	32	33	41	43	46

FCYI - U

Size		200	201	250	300	301	350	400	401	450	500	501	550
Dimensions and weights													
A	mm	647	647	647	878	878	878	1100	1100	1100	1100	1100	1100
В	mm	508	508	508	739	739	739	960	960	960	960	960	960
C	mm	550	550	550	781	781	781	1003	1003	1003	1003	1003	1003
D	mm	529	529	529	760	760	760	982	982	982	982	982	982
Empty weight	kg	22	23	24	26	27	29	35	36	37	35	36	37

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

Aermec S.p.A. Via Roma, 996 - 37040 Bevilacqua (VR) - Italia Tel. 0442633111 - Telefax 044293577 www.aermec.com



















Fan coil unit for ducted installations

Cooling capacity 0,65 ÷ 7,62 kW Heating capacity 1,45 ÷ 17,02 kW



- Very quiet
- Suitable for duct-type installations too
- Total comfort: reduced variations in temperature and relative humidity
- Vertical and horizontal installation





DESCRIPTION

fan coil can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

FEATURES

Ventilation group

Consisting of double suction centrifugal fans that are particularly silent, statically and dynamically balanced, and directly coupled with the motor shaft

The motor is wired for single phase and has three speeds, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.

Extractable shrouds for easy, effective cleaning

Heat exchanger coil

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Reversibility of the water connections during installation only for units with a standard or boosted main coil, or standard with BV accessory. Not reversible in all other configurations. In any case, units with the coil water connections on the right are available at the time of ordering.

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean. In the PPC version, air purification is guaranteed by the Cold Plasma

In the PPC version, air purification is guaranteed by the Cold Plasma purifier.

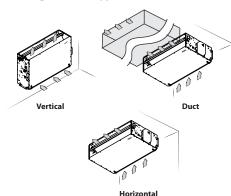
GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3	FCZ

The purifier is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours.

VERSIONS

Flush-mounting and duct-type versions



FCZ_P

Flush-mounting

FCZ_PPC

Flush-mounting with Cold Plasma purifier

FCZ_PO

- Flush-mounting, duct-type
- With useful head.

Field	Description
4	Size 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Field	Description
5	main heat exchanger
0	Standard
5	Oversized
6	Secondary heat exchanger
0	Without coil
1	Standard
2	Oversized

Field	d	Description
7		Version
	Р	Flush-mounting, without cabinet
	P0	Flush-mounting, with boosted motor
	POR	Flush-mounting, with boosted motor, with water connections on right-hand side
	PPC	Flush-mounting with Cold Plasma purifier
	PR	Flush-mounting, without cabinet, with water connections on right-hand side

SIZE AVAILABLE FOR VERSION

Size		100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
Versions produced	(by size)																				
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Versions available	PO,POR	-	-	-	-																
(bv size) —	PPC	•	-	-	•	•	-	_	•	•	-	-	•	•	-	-	•	•	-	-	•
			601	(02	(F0	700	701	702	750		001	003	050	000	001	050	1000	1001			
Size		600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001			
Versions produced	(by size)																				
Vanciona available	P,PR		•		•			•		•		•	•	•	•		•				
(hy size)	PO,POR	•	•	•	•	•	•	•	•	-	-	-	-	•	•	•	-	-			
	PPC		-	-			-	-	•		-	-	•		-			-			

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

PXAI: Thermostat on the machine for controlling the fan coils (both with asynchronous and brushless motors), complete with water and air probes to be positioned in the relative seats, and a plastic support to fix it on the side of the unit. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, purifier devices (Cold Plasma and germicidal lamp), or radiant plate.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

 $\textbf{WMT16:} \ Electronic \ thermostat \ with \ thermostated \ ventilation.$

WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

 $\overline{\text{VMF-SW1:}}$ Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

(Heating only) additional coil

BV: Hot water heat exchanger with 1 row.

RX: Armoured electric coil with safety thermostat.

PCR: Galvanised plate protection for the controls and the electrical element.

Installation accessories

AMP: Wall mounting kit

DSC: Condensate drainage device.

BC: Condensate drip.

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. **Ventilcassaforma:** Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.

MZA: Cabinet housing with fixed fins.

MZU: Cabinet housing with adjustable fins.

GA: Intake grid with fixed louvers

GAF: Intake grid with filter and fixed louvers

GM: Flow grid with adjustable louvers.

PA: Intake plenum in galvanised sheet metal, complete with suction couplings for circular-section ducts.

PAF: Intake plenum providing recovery and delivery on the same side, for all installations where the machine needs to be positioned outside the air conditioned rooms to minimise the noise levels and facilitate maintenance.

PM: Galvanised sheet steel flow plenum, externally insulated, equipped with plastic flow fittings for ducts and circular sections.

RD: Straight delivery coupling for canalisation.

RDA: Straight suction coupling for canalisation.

RP: 90° delivery coupling. **RPA:** 90° suction coupling.

Accessories for ducting

MZC: Plenum with motorised dampers.

RDA_V: Straight intake connection with rectangular flange.

RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

RDA_C: Straight intake connection with circular flanges.

PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out \emptyset 150mm that can be removed.

RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

RDM_V: Straight delivery coupling in galvanised sheet metal.

RDM_C: Straight discharge internally insulated, with circular flanges.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	P,PR		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AER503IR (1)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC				•	•			•	•			•	•			•	•			•
	P,PR		•	•	•	•		•			•		•	•	•	•	•	•	•	•	
PR0503	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC				•	•				•			•	•			•				
	P,PR	•	•				•	•		•		•								•	
PXAI	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•				•	•				•			•				
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SA5 (2)	PO,POR					•	•				•	•	•	•		•		•	•	•	•
	PPC	•			•	•			•				•	•			•	•			•
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW3 (2)	PO,POR					•	•		•		•		•	•	•	•	•	•	•	•	•
	PPC				•	•			•	•			•	•			•	•			•
	P,PR		•	•	•	•		•		•	•	•	•		•			•		•	
SW5 (2)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•																			
	P,PR	•	•		•		•		•			•		•	•		•		•	•	
TX (3)	PO,POR																				
	PPC	•																			•
	P,PR					•										•		•			
WMT10 (3)	PO,POR																				
	PPC					•								•				•			•
	P,PR		•			•		•			•										
WMT16 (3)	PO,POR					•		•	•	•			•	•	•	•	•	•	•	•	
	PPC					•												•			
	P,PR		•	•	•	•	•	•	•	•		•	•		•	•	•	•	•	•	
WMT16CV (3)	PO,POR																				
• •	PPC																				

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
	P,PR				•				•	•	•	•	•	•	•	•	•	•
AER503IR (1)	PO,POR	•	•	•	•	•	•		•						•	•		
	PPC	•			•	•			•	•			•	•		•	•	
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PR0503	PO,POR	•	•	•		•	•	•						•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
	P,PR	•	•	•	•	•	•	•	•	•		•	•	•	•	•		•
PXAI	PO,POR	•	•	•	•	•	•	•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
	P,PR	•		•		•		•		•	•	•	•	•	•	•	•	•
SA5 (2)	PO,POR	•	•	•	•	•		•	•					•	•	•		
	PPC	•			•	•			•	•			•	•		•	•	
	P,PR	•		•				•		•		•		•		•		•
SW3 (2)	PO,POR		•	•	•	•	•		•						•	•		
	PPC	•				•				•				•		•		
	P,PR		•	•	•	•	•		•				•		•	•		
SW5 (2)	PO,POR	•		•	•	•		•	•					•	•	•		
	PPC				•	•			•	•			•			•		
	P,PR	•	•		•			•	•							•		
TX (3)	PO,POR		•	•	•	•	•	•	•						•	•		
	PPC				•				•	•				•		•		
	P,PR			•	•	•		•	•	•	•	•	•		•	•	•	•
WMT10 (3)	PO,POR	•	•		•		•	•	•					•		•		
	PPC	•			•				•	•				•				
	P,PR	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
WMT16 (3)	PO,POR																	
	PPC				•	•			•	•			•	•		•		
	P,PR																	
WMT16CV (3)	PO,POR															•		
	PPC																	

For more information about VMF system, refer to the dedicated documentation.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DI24	PO,POR					•	•	•	•	•	•	•	•		•	•		•	•	•	•
	PPC	•				•			•	•			•				•	•			•
	P,PR		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E19 (1)	PO,POR					•	•	•	•	•	•	•	•		•	•	•	•	•	•	
	PPC	•								•			•				•				
	P,PR		•	•	•	•	•	•	•	•	•	•	•	•	•		•		•	•	•
VMF-E3	PO,POR							•		•	•	•	•	•	•	•	•		•	•	•
	PPC				•	•			•	•			•	•			•	•			•
	P,PR	•																			
VMF-E4DX	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	PPC				•	•			•				•	•			•	•			•
	P,PR	•		•		•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
VMF-E4X	PO,POR					•	•	•	•	•	•		•	•	•	•	•	•	•	•	•
	PPC				•	•							•	•			•	•			•
	P,PR		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IR	PO,POR					•		•		•	•	•	•	•	•	•	•	•	•	•	•
	PPC	•			•				•	•			•	•			•				
	P,PR																				
VMF-SW	PO,POR													•			•				
	PPC									•											
	P,PR					•															
VMF-SW1	PO,POR					•							•		•	•	•	•	•		•
	PPC					•															
	P,PR		•			•		•	•	•	•	•	•		•	•	•	•	•	•	
VMHI	PO,POR					•							•		•	•	•	•			
	PPC																				

Wall-mount installation.
 Probe for AERSO3IR-TX thermostats, if fitted.
 Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	950	1000	1001
	P,PR	•		•	•	•	•	•	•	•		•	•	•			•	•
DI24	PO,POR	•			•	•	•		•							•		
	PPC	•			•	•			•	•			•				•	
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•
VMF-E19 (1)	PO,POR	•	•	•	•	•	•	•	•					•	•			
	PPC	•			•	•			•	•			•	•		•	•	
	P,PR	•			•	•	•		•	•			•	•		•		•
VMF-E3	PO,POR	•		•	•	•	•	•						•		•		
	PPC	•			•	•			•	•			•	•		•		
	P,PR	•		•	•	•		•					•	•				•
VMF-E4DX	PO,POR	•			•	•	•		•					•		•		-
	PPC	•			•	•				•			•	•		•		
	P,PR	•			•	•	•		•	•				•		•		•
VMF-E4X	PO,POR	•				•		•						•		•		-
	PPC	•			•	•							•	•				
	P,PR	•			•	•	•		•	•				•		•		•
VMF-IR	PO,POR	•		•		•		•										
	PPC	•			•	•			•	•				•		•		
	P,PR	•																•
VMF-SW	PO,POR	•	•	•	•	•	•	•	•					•		•		
	PPC	•							•				•	•		•		
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•		•		•
VMF-SW1	PO,POR	•																
	PPC					•				•				•				
	P,PR				•	•	•	•	•	•		•	•	•	•	•	•	•
VMHI	PO,POR																	
	PPC												•					

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Water valves

3 wav valve kit

3 way valve kit																
	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450
Made and	VCZ41	VCZ42														
Main coil	VCZ4124	VCZ4224														
C		VCF44	VCF44													
Secondary coil	-	VCF4424	VCF4424	-												
A 1 1:-: 1 11 (P) (III	VCF44															
Additional coil "BV"	VCF4424	-	-	-												
	500	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850
Main coil	VCZ42															
Maiii Cuii	VCZ4224															
Cocondonucail		VCF44	VCF44													
Secondary coil	-	VCF4424	VCF4424	-												
Additional coil "BV"	VCF44															
Auditional Coll DV	VCF4424	-	-	-	VCF4424	-	_		VCF4424	-	-		VCF4424	_	_	
				4000	4004											
	900	901	950	1000	1001											
Main coil	VCZ43	VCZ43	VCZ43	VCZ43	VCZ43											
	VCZ4324	VCZ4324	VCZ4324	VCZ4324	VCZ4324											
Secondary coil		VCF45			VCF45											
Secondary con		VCF4524	-	-	VCF4524											
Additional coil "BV"	VCF45			VCF45												
AUUILIVIIdi CUII DV	VCF4524	-	_	VCF4524	-											

2 way valve kit

	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450
Main sail	VCZD1	VCZD1	VCZD1	VCZD1	VCZD1	VCZD1	VCZD1	VCZD1	VCZD2							
Main coil	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD124	VCZD224	VCZD22						
Carandam, sall		VCFD4	VCFD4			VCFD4	VCFD4			VCFD4	VCFD4			VCFD4	VCFD4	
Secondary coil	-	VCFD424	VCZD424	-	-	VCFD424	VCZD424	-	-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-
Additional coil "BV"	VCFD4				VCFD4				VCFD4				VCFD4			
AUUICIOIIAI COII DV	VCFD424		_		VCFD424	<u>-</u>			VCFD424				VCFD424			
	500	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850
Main coil	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2
Maii Coii	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224
Casandamisail		VCFD4	VCFD4			VCFD4	VCFD4			VCFD4	VCFD4			VCFD4	VCFD4	
Secondary coil		VCFD424	VCFD424			VCFD424	VCFD424			VCFD424	VCFD424			VCFD424	VCFD424	
Additional coil "BV"	VCFD4				VCFD4				VCFD4				VCFD4			
Auditional ton DV	VCFD424				VCFD424				VCFD424				VCFD424			
	900	901	950	1000	1001	-										
	VCZD3	VCZD3	VCZD3	VCZD3	1001 VCZD3											
Main coil	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324	VCZD3 VCZD324											
	VCZD324		VCZD3Z4	VCZD3Z4		-										
Secondary coil	-	VCFD4 VCFD424	-	-	VCFD4 VCFD424											
	VCEDA	VCFD424		VCEDA	VCFD424	-										
Additional coil "BV"	VCFD4	-	-	VCFD424	-											
	VCFD424			VCFD424												

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
VC71V4L (1)	P,PPC,PR	•			•	•			•												
VCZ1X4L (1)	PO,POR					•			•												
VC71V4D (1)	P,PPC,PR	•				•			•												
VCZ1X4R (1)	PO,POR					•			•												
VCZ2X4L (1)	P,PO,POR,PPC,PR									•			•	•			•	•			•
VCZ2X4R (1)	P,PO,POR,PPC,PR									•			•	•			•	•			•
Model	Ver	600	601	60	2 (650	700	701	702	750	80	00	801	802	850	900	90	1 9	50	1000	1001
VC72V4L (1)	P,PPC,PR									•					•						
VCZ2X4L (1)	PO,POR					•				•											
VC72V4D (1)	P,PPC,PR	•				•	•			•		•			•						
VCZ2X4R (1)	PO,POR	•				•	•			•											
V(C72)(41 (4)	P,PPC,PR																			•	
VCZ3X4L (1)	PO,POR		,							,									•		
VC72V4D (1)	P,PPC,PR																				
VCZ3X4R (1)	PO,POR																				

 $^{(1) \ \} The \ valves \ can \ be \ combined \ with \ the \ units \ if \ there \ is \ a \ control \ panel \ for \ managing \ them.$

Combined Adjustment and Balancing Valve Kit

Model	Ver	100	101	102	150 2	00 201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	P,PR	•		•					•	•		•								
VJP060 (1)	PO,POR						•	•	•	•		•								
	PPC	•			•	•		•	•			•								
	P,PR		•	•			•	•	•	•		•								
VJP060M (2)	PO,POR						•	•	•	•		•								
	PPC	•				•		•	•			•								
VID000 (1)	P,PO,POR,PR												•	•	•	•	•		•	•
VJP090 (1)	PPC												•			•	•			•
VID000M (2)	P,PO,POR,PR																			
VJP090M (2)	PPC												•			•	•			•
Model	Ver	600	601	602	650	700	701	702	750	8 (00	801	802	850	900	90	1 9	950	1000	1001
VID000 (1)	P,PO,POR,PR		•		•															
VJP090 (1)																				
, ,	PPC																			
	PPC P,PO,POR,PR	•			•															
VJP090M (2)			•	•																
	P,PO,POR,PR	•			•	•	•	•				•	•	•	•	•				•
	P,PO,POR,PR PPC	•			•	•	•	•	•		•	•	•	•	•	•		•	•	•
VJP090M (2)	P,PO,POR,PR PPC P,PR	•	•		•						•	•	•	•		-		-	•	•
VJP090M (2)	P,PO,POR,PR PPC P,PR PO,POR	•	•		•	•			•			•	•		•	-		•		•
VJP090M (2)	P,PO,POR,PR PPC P,PR PO,POR PPC	•	•	•	•	•	•	•	•		•				•	•			•	

^{(1) 230}V~50Hz (2) 24V

(Heating only) additional coil

Heating only additional coil

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
BV117 (1)	P,PR	•																			
BV122 (1)	P,PO,POR,PR																				
BV132 (1)	P,PO,POR,PPC,PR									•											
BV142 (1)	P,PO,POR,PPC,PR													•				•			
Model	Ver	600	C01																		
	ACI	000	601	60	2 (550	700	701	702	750	8	00	801	802	850	900	90	19	50	1000	1001
	P,PR	000	001	60.	2 (550	700	701	702	750	8	00	801	802	850	900	90	1 9	50	1000	1001
BV162 (1)		000	001	60.	2 (550	700	701	702	750	8	00	801	802	850	900	90	1 9	50	1000	1001
	P,PR	•	001	60.	2 (550	700	701	702	750	8		801	802	850	900	90	1 9	50	1000	1001

 $\begin{tabular}{ll} \begin{tabular}{ll} \beg$

Electric coil - Requires a thermostat with heater management. Not available for sizes with an oversized main coil.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500
RX17 (1)	P,PR																	
RX22 (1)	P,PO,POR,PR					•												
RX32 (1)	P,PO,POR,PPC,PR																	
RX42 (1)	P,PO,POR,PPC,PR																	
RX52 (1)	P,PO,POR,PPC,PR																	
Model	Ver	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850	900	901
RX62 (1)	P,PO,POR,PPC,PR																•	
DV7000 (1)	P,PPC,PR				•								•					
RXZ800 (1)	PO,POR				•				•									
Model	Ver			950)					1000						1001		
RX62 (1)	P,PR																	

(1) It requires a thermostat with heater management and the units without a housing also require the PCR1 or PCR2 accessory, depending on the unit. The heater is not available for sizes with a larger main battery.

$\label{lem:controls} \textbf{Galvanised plate protection for the controls and the electrical element.}$

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500
PCR1	P,PO,POR,PR	•				•				•				•				•
Model	Ver	501	502	550	600	601	602	650	700	701	702	750	800	801	802	850	900	901
PCR1	P,PO,POR,PR				•				•				•					
PCR2	P,PO,POR,PR																•	
Model	Ver			950						1000					1	1001		
PCR2	P,PO,POR,PR									•								

Installation accessories

Wall mounting kit

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AMP20	PO,POR					•	•	•	•	•	•		•	•	•	•	•	•		•	•
	PPC				•	•			•	•			•	•			•	•			•
Madal																					
Model	Ver	600	601	60	26	550	700	701	702	750	8	00	801	802	850	900	90	1 9	950	1000	1001
Model	P,PR	600	601	60	2 (550	700	701	702	750	8		801	802	850	900	90	1	950	1000	1001
AMPZ			601			•	700 •	701 •	702 •	750	8		801	802	850	900	90	1 !	950	1000	

Condensate drip

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
BCZ4 (1)	PO,POR					•		•	•		•		•		•	•	•	•		•	
	PPC	•							•	•								•			•
	Р		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DC7F (2)	PO,POR																				
BCZ5 (2)	PPC	•			•	•			•	•			•	•			•	•			•
	PR	•	•	•					•	•	•	•		•		•	•				•
Model	Ver	600	601	60	2 (550	700	701	702	750	80	00	801	802	850	900	901		50	1000	1001
	P,PR		•			•	•	•	•	•			•	•	•	•	•			•	.
BCZ4 (1)	PO,POR	•																			
	PPC	•								•					•					•	
	P,PR	•										,			•						
BCZ5 (2)	PO,POR	•																			
	PPC	•										,			•						
-	P,PR																				
BCZ6 (2)	PO,POR																				
	PPC																			•	

⁽¹⁾ For vertical installation.(2) For horizontal installation.

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
BC8 (1)	PO,POR					•		•					•		•	•	•	•		•	
	PPC				•	•			•	•			•					•			•
Model	Ver	600	601	602	2	650	700	701	702	750	8	00	801	802	850	900	901		950	1000	1001
	P,PR		•				•	•		•			•	•	•						
BC8 (1)	PO,POR	•	•			•		•		•											
	PPC	•				•				•		•			•						
	P,PR																•				•
BC9 (1)	PO,POR															•	•		•		
	PPC																			•	
(1) For horizontal in	nstallation.																				
Condensate	recirculation de	evice																			
Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DSCZ4 (1)	PO,POR					•	•	•	•	•	•	•	•	•	•	•	•	•		•	•
	PPC				•	•			•				•				•	•			
Model	Ver	600	601	602	2	650	700	701	702	750	8	00	801	802	850	900	901		950	1000	1001
	P,PR		•				•	•		•			•	•	•		•			•	
DCC74 (1)	PO,POR	•																			
DSCZ4 (1)																					

contact the head	office.																				
Ventilcassafo	rma																				
Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
CHF17	P,PR	•	•	•	•																
CHF1/	PPC	•																			
CHF22	P,PO,POR,PR					•	•	•	•												
CHF22	PPC					•			•												
CHF32	P,PO,POR,PR									•	•	•	•								
CHF32	PPC									•			•								
CHF42	P,PO,POR,PR													•	•		•		•	•	
CHF4Z	PPC													•			•	•			
Model	Ver	600	601	60	2 6	550	700	701	702	750) 8	00	801	802	850	900	90	9	50	1000	1001
	P,PR		•	•		•	•	•	•	•		•	•	•	•	•	•		•	•	•
CHF62	PO,POR																				
	PPC	•				•	•								•					•	

sing with fixed 1	fins.																			
Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
P,PPC,PR	•	•	•	•																
P,PPC,PR					•	•	•	•												
P,PPC,PR												•								
P,PPC,PR													•	•	•	•	٠		•	•
Ver	600	601	60	2 (550	700	701	702	750	8	00	801	802	850	900	90	1	950	1000	1001
P,PPC,PR	•	•			•	•	•		•		•	•	•	•						
P,PPC,PR																			•	•
	Ver P,PPC,PR P,PPC,PR P,PPC,PR P,PPC,PR Ver P,PPC,PR	P,PPC,PR P,PPC,PR P,PPC,PR P,PPC,PR Ver 600 P,PPC,PR	Ver 100 101 P,PPC,PR • • P,PPC,PR • • P,PPC,PR • • Ver 600 601 P,PPC,PR • •	Ver 100 101 102 P,PPC,PR • • • • • P,PPC,PR • • • • • P,PPC,PR • • • • • • • • • • • • • • • • • • •	Ver 100 101 102 150 P,PPC,PR • • • • • • • • • P,PPC,PR P,PPC,PR •	Ver 100 101 102 150 200 P,PPC,PR • • • • • • • • • P,PPC,PR • • • • • P,PPC,PR • <td>Ver 100 101 102 150 200 201 P,PPC,PR • • • • • • • • • • • • • • • • P,PPC,PR • • • • • • • • • • • • • • • • • • •</td> <td>Ver 100 101 102 150 200 201 202 P;PPC,PR • • • • • • • • • • • • • • • • • • •</td> <td>Ver 100 101 102 150 200 201 202 250 P;PPC,PR • • • • • • • • • • • • • • • • • • • • • • • • •</td> <td>Ver 100 101 102 150 200 201 202 250 300 P,PPC,PR • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •</td> <td>Ver 100 101 102 150 200 201 202 250 300 301 P,PPC,PR . <td< td=""><td>Ver 100 101 102 150 200 201 202 250 300 301 302 P,PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 P,PPC,PR .</td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 P;PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 P;PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 P,PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 P,PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 500 P,PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 500 501 P;PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 500 501 502 P,PPC,PR </td></td<></td>	Ver 100 101 102 150 200 201 P,PPC,PR • • • • • • • • • • • • • • • • P,PPC,PR • • • • • • • • • • • • • • • • • • •	Ver 100 101 102 150 200 201 202 P;PPC,PR • • • • • • • • • • • • • • • • • • •	Ver 100 101 102 150 200 201 202 250 P;PPC,PR • • • • • • • • • • • • • • • • • • • • • • • • •	Ver 100 101 102 150 200 201 202 250 300 P,PPC,PR • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •	Ver 100 101 102 150 200 201 202 250 300 301 P,PPC,PR . <td< td=""><td>Ver 100 101 102 150 200 201 202 250 300 301 302 P,PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 P,PPC,PR .</td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 P;PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 P;PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 P,PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 P,PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 500 P,PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 500 501 P;PPC,PR </td><td>Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 500 501 502 P,PPC,PR </td></td<>	Ver 100 101 102 150 200 201 202 250 300 301 302 P,PPC,PR	Ver 100 101 102 150 200 201 202 250 300 301 302 350 P,PPC,PR .	Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 P;PPC,PR	Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 P;PPC,PR	Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 P,PPC,PR	Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 P,PPC,PR	Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 500 P,PPC,PR	Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 500 501 P;PPC,PR	Ver 100 101 102 150 200 201 202 250 300 301 302 350 400 401 402 450 500 501 502 P,PPC,PR

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
MZU100	P,PPC,PR	•	•	•	•																
MZU200	P,PPC,PR					•	•	•	•												
MZU300	P,PPC,PR									•	•		•								
MZU500	P,PPC,PR													٠	•	٠	•	•	٠	•	•
Model	Ver	600	601	60	2	650	700	701	702	750) 8	00	801	802	850	900	90	1	950	1000	1001
MZU800	P,PPC,PR		•				•	•	•	•			•	•	•						
MZU900	P,PPC,PR																			•	

Wall mounting and duct type installation accessories

Lower	intake	arille

Lower intake	grille																				
Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
CA17	P,PR	•	•	•	•																
GA17	PPC																				
C122	P,PO,POR,PR						•	•	•												
GA22	PPC					•			•												
CARR	P,PO,POR,PR									•	•	•	•								
GA32	PPC												•								
CAAD	P,PO,POR,PR													•	•	•	•	•	•	•	•
GA42	PPC													•				•			•

Model	Ver	600	601	602	650	700	701	702	750	80	0	801	802	850	900	901		950	1000	1001
	P,PR	•	•	•	•	•	•	•	•			•	•	•	•	•		•	•	•
GA62	PO,POR	•	•	•	•	•	•	•	•						•	•		•		
	PPC	•			•	•			•	•				•	•			•	•	
	s with fixed louv																			
Model	Ver	100	101		50 200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
GAF17	P,PR	•	•		•															
	PPC P,PO,POR,PR	•			•	•	•	•												
GAF22	PPC				<u>:</u>	•	•	·												
	P,PO,POR,PR				•															
GAF32	PPC								•			•								
	P,PO,POR,PR													-						
GAF42	PPC				-								•							•
Model	Ver	600	601	602	650	700	701	702	750	80	n	801	802	850	900	901		950	1000	1001
Model	P,PR	•	•	•	•		•					•		•	•	,		•	•	
GAF62	PO,POR	•	•	•	•	•	•	•	•						•	•		•		
0.11.02	PPC				•									•						
	<u> </u>																			
Delivery gri	lles with adjusta	ble lou	vers																	
Model	Ver	100	101	102 1	50 200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
GM17	P,PR	•	•	•	•															
	PPC	•			•															
GM22	P,PO,POR,PR				•	•	•	•												
	PPC				•		-	•												
GM32	P,PO,POR,PR								•	•	•	•								
	PPC P,PO,POR,PR								•			•								
GM42	PPC													•	•	÷	÷	•	•	<u> </u>
																	Ė			<u> </u>
Model	Ver	600	601	602	650	700	701	702	750	80		801	802	850	900	901		950	1000	1001
CHC	P,PR	•	•	•	•	•	•	•	•	•		•	•	•	•	•		•	•	•
GM62	PO,POR PPC	•	•	•	•	•	•	•	•					•	•	•		•		
	rrc	<u> </u>			•	<u> </u>			•					•	•			<u> </u>	•	
	um in sheet meta																			
Intake plent Model	Ver	100	101	102 1	50 200		ular ch	annels 250	300	301	302	350	400	401	402	450	500	501	502	550
Model	Ver P,PR	100		102 1	50 200					301	302	350	400	401	402	450	500	501	502	550
Model	Ver P,PR PPC	100	101	102 1	50 200	201	202	250		301	302	350	400	401	402	450	500	501	502	550
Model	Ver P,PR PPC P,PO,POR,PR	100	101	102 1	50 200 • •			250		301	302	350	400	401	402	450	500	501	502	550
Model PA17	Ver P,PR PPC P,PO,POR,PR PPC	100	101	102 1	50 200	201	202	250	300		302		400	401	402	450	500	501	502	550
Model PA17	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR	100	101	102 1	50 200 • •	201	202	250	300	301	302	•	400	401	402	450	500	501	502	550
Model PA17 PA22	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC	100	101	102 1	50 200 • •	201	202	250	300		302									550
Model PA17 PA22	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR	100	101	102 1	50 200 • •	201	202	250	300		302	•	•	401	402	450	•	501	502	550
Model PA17 PA22 PA32 PA42	Ver P,PR PPC P,P0,P0R,PR PPC P,P0,P0R,PR PPC P,P0,P0R,PR PPC P,P0,P0R,PR PPC	100	101	102 1	50 200				300	•	•	•	•	•	•	•	•	•	•	•
Model PA17 PA22 PA32 PA42	Ver P,PR PPC P,P0,P0R,PR PPC P,P0,P0R,PR PPC P,P0,P0R,PR PPC P,P0,P0R,PR PPC Ver	100	101	602	50 200	201		250		. 800		801		. 850	. 900	901	•	950		
Model PA17 PA22 PA32 PA42 Model	Ver	100 ·	601	602	50 200 	700	701		750	•		•	•	•	900	901	•	950	•	•
Model PA17 PA22 PA32 PA42 Model	Ver	600	101	602	50 200 	700		250	750	800	0	801		850	900	901	•	950	1000	
Model PA17 PA22 PA32 PA42 Model	Ver	100 ·	601	602	50 200 	700	701		750	. 800	0	801		. 850	900	901	•	950		
Model PA17 PA22 PA32 PA42 Model PA62	Ver	600	601	602	50 200 · · · · · · · · · · · · · · · · · · ·	700	701		750	800	0	801		850	900	901	•	950	1000	
Model PA17 PA22 PA32 PA42 Model PA62	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC Ver P,PR PO,POR PPC	600	601	602	50 200 · · · · · · · · · · · · · · · · · · ·	700	701		750	800	0	801		850	900	901	•	950	1000	
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC Ver P,PR PO,POR PPC Um providing rec Ver P,PR	600 	601	602	650 200	700	701 •	702	750	800		801	802	850	900	901	•	950	1000	1001
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC Ver P,PR PO,POR PPC Ver P,PR PO,POR PPC Ver P,PR PPC PPC PPC PPC PPC PPC PPC PPC PPC P	600	601	602	650 200	700	701 •	702	750	800		801	802	850	900	901	•	950	1000	1001
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model PA17F	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC Ver P,PR PO,POR PPC Ver P,PR PO,POR PPC Ver P,PC P,PO,POR,PR PPC P,PC P,PO,POR,PR	600 	601	602	650 200	700	701 •	702	750	800		801	802	850	900	901	•	950	1000	1001
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model PA17F	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC Ver P,PR PO,POR PPC Ver P,PR PO,POR PPC Ver P,PR PO,POR PPC P,PR P,PR P,PR P,PR P,PR P,PR P,PR	600 	601	602	650	700	701	702	750	800		801	802	850	900	901	•	950	1000	1001
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model PA17F PA22F	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC Ver P,PR PO,POR PPC Ver P,PR PO,POR PPC P,PO,POR,PR PPC P,PR P,PR P,PR P,PR P,PR P,PR P	600 	601	602	650 200 650 n the sai	700	701	702	750	800		801	802	850	900	901	•	950	1000	1001
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model PA17F	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC Ver P,PR PO,POR PPC Um providing rec P,PR PPC P,PR PPC P,PR PPC P,PR PPC P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC	600 	601	602	650 200 650 n the sai	700	701	702	750	800	302	801		850	900	901	500	950	. 1000	1001
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model PA17F PA22F	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR PPC Ver P,PR PO,POR PPC Ver P,PR PO,POR PPC P,PO,POR,PR PPC P,PR PPC P,PO,POR,PR	600 	601	602	650 200 650 n the sai	700	701	702	750	800	302		400	850	900	901	500	950	1000	5550
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model PA17F PA22F PA32F PA42F	Ver PPR PPC PPO,POR,PR PPC PPO,POR,PR PPC PPO,POR,PR PPC PPO,POR,PR PPC Ver P,PR PO,POR PPC Um providing rec Ver P,PR PPC P,PR PPC P,PO,POR,PR PPC	600 	601	602	650 200 650 n the sai	700 	701 · · · · · · · · · · · · · · · · · · ·	702	750	800	302			850	900	901	500	950	. 1000	1001
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model PA17F PA22F PA32F	Ver PPR PPC PPO,POR,PR PPC PPO,POR,PR PPC PPO,POR,PR PPC PPO,POR,PR PPC Ver P,PR PO,POR PPC Um providing rec Ver P,PR PPC P,PO,POR,PR PPC Ver	600 	601	602	650 200 650 n the sai	700	701	702	750	800	302		400	850	900	901	500	950	. 1000	5550
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model PA17F PA22F PA32F PA42F Model	Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC Ver P,PR PO,POR PPC Um providing rec Ver P,PR P,PR PPC P,PO,POR,PR PPC	600 	601 	602 livery o	650 200 650 n the sai	700 	701 · · · · · · · · · · · · · · · · · · ·	702	300 	800	302	801	400	850	900	901	500	501	1000	550
Model PA17 PA22 PA32 PA42 Model PA62 Intake plent Model PA17F PA22F PA32F PA42F	Ver PPR PPC PPO,POR,PR PPC PPO,POR,PR PPC PPO,POR,PR PPC PPO,POR,PR PPC Ver P,PR PO,POR PPC Um providing rec Ver P,PR PPC P,PO,POR,PR PPC Ver	600 	601 	602	650 200 650 n the san 50 200 .	700 	701 · · · · · · · · · · · · · · · · · · ·	702 	300 	800	302	801	400	850 401	900	901	500		1000 502	550

Model	Ver	100	101	102 1	50 200	201	202	250	300	301 3	350	400	401	402	450	500	501	502	550
PM17	P,PR	•	•	•	•														
IM17	PPC	•			•														
PM22	P,PO,POR,PR				•	•	•	•					-						
	PPC P,PO,POR,PR				•			•		•									
PM32	PPC								•	•	•								
	P,PO,POR,PR													•		•		•	
PM42	PPC											•							
Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901		950	1000	100
	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
PM62	PO,POR	•	•	•	•	•	•		•					•	•				
	PPC	•			•	•			•	•			•	•				•	
Straight dali	very coupling																		
Model	Very coupling Ver	100	101	102 1	50 200	201	202	250	300	301 3	302 350	400	401	402	450	500	501	502	55
	P,PR				. 200	201	202	230	300	301 3	002 330	400	401	402	430	300	301	302	- 33
RD17	PPC	•			•														
0022	P,PO,POR,PR																		
RD22	PPC				•			•											
RD32	P,PO,POR,PR								•	•									
	PPC								•		•								
RD42	P,PO,POR,PR											•	•	•	•	•	•	•	•
	PPC											•				<u>.</u>			•
Model	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901	9	950	1000	100
DDC2	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
RD62	PO,POR PPC	•	•	•	•	•	•	•	•					•	•		•	•	
	- 110					·				·			<u> </u>				<u> </u>	<u> </u>	
Straight suct	ion coupling																		
Model	Ver	100	101	102 1	50 200	201	202	250	300	301 3	350	400	401	402	450	500	501	502	55
RDA22	P,PO,POR,PR				•	•	•	•											
HUNZE	PPC				•			•											
RDA32	P,PO,POR,PR								•	•	• •								
	PPC P,PO,POR,PR								•		•	•							
RDA42														•	•	•			
	PPC																		
	PPC	(00	(01	(02	(50	700	701	703	750	000	001	•	000		. 001		050	1000	
	Ver	600	601	602	650	700	701	702	750	800	801	802	850	900	901		950	1000	100
Model	Ver P,PR	•	•	•	•	•	•	•	•	800	801		850	•	901		950	1000	
Model	Ver											802			901		•		100
Model RDA62	Ver P,PR PO,POR PPC	•	•	•	•	•	•	•	:	•		802	•	:	901			•	100
Model RDA62 90° delivery (Ver P,PR P0,POR PPC	•	•	•	•	•	•	•	•	•	•	802	•	•	901	9	•	•	100
Model RDA62 90° delivery (Ver P,PR PO,POR PPC coupling. Ver		101	102 1	50 200	•	•	•	:	•		802	•	:	901			•	100
Model RDA62 90° delivery o Model	Ver P,PR PO,POR PPC coupling. Ver P,PR	100	•	102 1	50 200	•	•	•	•	•	•	802	•	•	901	9	•	•	100
Model RDA62 90° delivery of Model RP17	Ver P,PR PO,POR PPC coupling. Ver P,PR PPC		101	102 1	50 200	201	202	250	•	•	•	802	•	•	901	9	•	•	100
Model RDA62 90° delivery of Model RP17	Ver	100	101	102 1	50 200	•	•	•	•	•	•	802	•	•	901	9	•	•	100
Model RDA62 90° delivery of Model RP17 RP22	Ver	100	101	102 1	50 200	201	202	250	•	•	•	802	•	•	901	9	•	•	100
Model RDA62 90° delivery of Model RP17 RP22	Ver	100	101	102 1	50 200	201	202	250	300	301 3		802	•	•	901	9	•	•	100
Model RDA62 90° delivery of Model RP17 RP22 RP32	Ver	100	101	102 1	50 200	201	202	250	300	301 3		802	•	•	901	9	•	•	100
Model RDA62 90° delivery of Model RP17 RP22 RP32	Ver	100	101	102 1	50 200	201	202	250	300	301 3		802 • 400	401	402	901	500	501	502	550
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model	Ver	100	101	102 1	50 200	201	202	250	300	301 3		400	401	402	901 	500	501	502	550
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model	Ver P,PR PO,POR PPC coupling. Ver P,PR PPC P,PO,POR,PR	100	101	102 1	50 200	201	202	250	300	301	350	400	401	402	450	500	501	502	555
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model	Ver	100	101	102 1	50 200	·	202	250	300	301 3		802 400	401		901 	500	501	502	555
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model	Ver P,PR PO,POR PPC coupling. Ver P,PR PPC P,PO,POR,PR	100	101	102 1	50 200	201	202		300	301 :		802 400	401	402	450	500	501	502	555
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model	Ver	100	101	102 1	50 200	·	202		300	301 3		802 400	401		450	500	501	502	555
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model RP62	Ver P,PR PO,POR PPC coupling. Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC Oupling.	100	101	602	50 200 	700	202	250 		301 3	801	400 	401	402	901	500	501	502	555
Model PO° delivery of Model RP17 RP22 RP32 RP42 Model RP62 90° suction commodel	Ver	100	101	602	50 200	·	202		300	301 3		802 400	401		450	500	501	502	555
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model RP62 90° suction commodel	Ver P,PR PO,POR PPC coupling. Ver P,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PO,POR,PR PPC P,PC P,PC P,PC P,PC P,PC P,PC P	100	101	602	50 200 	700 -	202 	250 		301 3	801	400 	401	402	901	500	501	502	555
Model RDA62 90° delivery of Model RP17 RP22 RP32 Model RP62 90° suction commodel RPA22	Ver	100	101	602	50 200 	700 -	202 	702 		301 3	801	400 	401	402	901	500	501	502	555
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model RP62 90° suction commodel RPA22	Ver	100	101	602	50 200 	700 -	202 	702 	750 	800 .	802 350	802 - 400 400 400	401 850		901	500	501	502	
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42	Ver P,PR PO,POR PPC coupling. Ver P,PR PPC P,PO,POR,PR	100	101	602	50 200 	700 -	202 	702 	750 	800 .	802 350	802 - 400 400 400	401	402	901	500	501	502	100°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model RP62 90° suction commodel RPA22 RPA32 RPA42	Ver P,PR PO,POR PPC coupling. Ver P,PR PPC P,PO,POR,PR PPC	100 	601	602	50 200 	700	701	702 	750 	800 .	802 350	802 . 400 802	401 850		901	500	501	502	1000
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model RP62 90° suction commodel RPA22 RPA32	Ver P,PR PO,POR PPC coupling. Ver P,PR PPC P,PO,POR,PR PPC Ver	100	101	602	50 200 	700 -	202 	702 	750 	800 .	802 350	802 - 400 400 400	401 850		901	500	501	502	1000 · · · · · · · · · · · · · · · · · ·
Model RDA62 90° delivery of Model RP17 RP22 RP32 RP42 Model RP62 90° suction commodel RPA22 RPA32 RPA32	Ver P,PR PO,POR PPC coupling. Ver P,PR PPC P,PO,POR,PR PPC	100 	601	602	50 200 	700	701	702 	750 	800	802 350	802 . 400 802		900	901	500	501		1000

Accessories for ducting

Plenum v	with	motorised	dampers.
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Pienum with	motorised dan	ipcis.																		
Model	Ver	100	101	102 1	50 200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
MZC220	PO,POR				•	•	•	•												
MZC320	PO,POR								•	•	•	•								
MZC530	PO,POR												•	•	•	•	•	•	•	•
Model	Ver	600	601	602	650	700	701	702	750	80	0	801	802	850	900	901		950	1000	1001
MZC830	PO,POR	•	•	•	•	•	•	•	•			•	•	•	•	•				
Straight intal	ke connection v	with rec	tangul	ar flang	ge.															
Model	Ver	100	101		50 200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RDA000V	PO,POR						•	•												
RDA100V	PO,POR								•		•	•								
RDA200V	PO,POR												•	•	•		•	•		
Model	Ver	600	601	602	650	700	701	702	750	80	0	801	802	850	900	901		950	1000	1001
RDA300V	PO,POR	•	•	•	•	•	•	•	•						•	•		•		
Intake plenu	m with rectang	ular fla	nge.																	
Model	Ver	100	101	102 1	50 200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
RPA000V	PO,POR				•	•	•	•												
RPA100V	PO,POR																			
RPA200V	PO,POR												•	•	•		•	•		
Model	Ver	600	601	602	650	700	701	702	750	80	0	801	802	850	900	901		950	1000	1001
RPA300V	PO,POR	•	•	•	•	•	•	•	•					050	•	•		•	1000	1001
Suction plan	um with plastic	circula	r fland	A S																
Model Model	Ver	100	101		50 200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
PA000V	PO,POR	100	101	102		201	. 202			301	302	330	400	401	402	430	300	301	302	330
PA100V	PO,POR								•	•		•								
PA200V	PO,POR																			
																	_	_		
Model	Ver	600	601	602	650	700	701	702	750	80	0	801	802	850	900	901		950	1000	1001
PA300V	PO,POR	•	•	•	•	•	•	<u>·</u>	•						•	•		•		
Internally ins	ulated delivery	y plenu	m with	circula	r flanges															
Model	Ver	100	101	102 1	50 200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
PM000V	PO,POR				•	•	•	•												
PM100V	PO,POR								•	•	•	•								
PM200V	PO,POR												•	•	<u>·</u>	•	<u>·</u>	<u>·</u>	•	•
Model	Ver	600	601	602	650	700	701	702	750	80	0	801	802	850	900	901	9	950	1000	1001
PM300V	PO,POR	•	•	•	•	•	•	•	•						•	•				
Internally ins																		<u> </u>		
	ulated delivery	, plenu	m with	rectan	gular fla	nge.												<u> </u>		
Model		•					202	250	300	301	302	350	400	401	402	450	500		502	550
	Ver PO,POR	y plenui 100	m with		gular fla 50 200	nge. 201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	Ver	•			50 200	201			300	301	302	350	400	401	402	450	500		502	550
RPM000V RPM100V	Ver PO,POR	•			50 200	201			300	301	302	350	400	401	402	450	500		502	550
RPM000V RPM100V RPM200V	Ver PO,POR PO,POR PO,POR	100	101	102 1	50 200	201	•	•	•	•	•	•	•	•	•	•		501	•	•
RPM000V RPM100V RPM200V Model	Ver PO,POR PO,POR PO,POR Ver	•			50 200	201			300	•	•	350					•	501		
RPM000V RPM100V RPM200V Model RPM300V	Ver PO,POR PO,POR PO,POR Ver PO,POR	600	601	602	650	201	701	702	750	•	•	•	•	•	900	901	•	501	•	•
RPM000V RPM100V RPM200V Model RPM300V Straight deliv	Ver PO,POR PO,POR PO,POR Ver PO,POR	600 •	601 •	602 •	650 •	700	701	702	750	. 80		801	802	850	900	901	. 9		1000	1001
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model	Ver PO,POR PO,POR PO,POR Ver PO,POR Very coupling in	600	601	602 •	650 etal.	700 -	701	702	750	•	•	•	•	•	900	901	•	501	•	•
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V	Ver PO,POR PO,POR PO,POR Ver PO,POR Very coupling in Ver PO,POR	600 •	601 •	602 •	650 •	700	701	702	750	80	302	801 350	802	850	900	901	. 9		1000	1001
RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V	Ver PO,POR PO,POR PO,POR Ver PO,POR Very coupling in Ver PO,POR PO,POR	600 •	601 •	602 •	650 etal.	700 -	701	702	750	. 80		801	802	850 401	900	901	. 9		1000	1001
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V RDM100V RDM200V	Ver PO,POR PO,POR PO,POR Ver PO,POR Very coupling in Ver PO,POR PO,POR PO,POR	600 • n galvar	601 • nised s	602 • heet mo	650 	700 •	701	702	750	301	302	801 350	802 400	850 401	900	901 •	500	501 • 950 •	1000 502	1001 550
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V RDM200V Model	Ver PO,POR PO,POR PO,POR Ver PO,POR Very coupling in Ver PO,POR PO,POR PO,POR Ver	600 • n galvar 100	601 601 601	602 • heet me 102 1	650 200 650 cetal. 650 650 650	700 - 201 - 201 -	701	702 • 250 •	750	301	302	801 350	802	850 401	900 402	901 450	500	501	1000	1001
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V RDM200V Model	Ver PO,POR PO,POR PO,POR Ver PO,POR Very coupling in Ver PO,POR PO,POR PO,POR	600 • n galvar	601 • nised s	602 • heet mo	650 	700 •	701	702	750	301	302	801 350	802 400	850 401	900	901 •	500	501 • 950 •	1000 502	1001 550
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V RDM200V Model RDM300V Straight disciplination	Ver PO,POR PO,POR PO,POR Ver PO,POR Very coupling in Ver PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR	600 · n galvai 100 600 · v	601 · · · · · · · · · · · · · · · · · · ·	602 · heet me 102 1	650etal	201 	701	702 · 250 · 702 ·	750 300	301	302	801 350	802 400 802	850 401 850	900 402 900	901	500	501	1000 502	1001 550
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V RDM200V Model RDM300V Straight discl Model Model	Ver PO,POR PO,POR PO,POR PO,POR Ver PO,POR Very coupling ir Ver PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR	600 · · · · · · · · · · · · · · · · · ·	601 101 601 	602 · heet me 102 1	650etal	700 · · · · · · · · · · · · · · · · · ·	701	702 · 250 702 .	750	301	302	801 350	802 400	850 401	900 402	901 450	500	501	1000 502	1001 550
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V RDM200V Model RDM300V Straight discl Model RDM300V	Ver PO,POR PO,POR PO,POR Ver PO,POR Very coupling in Ver PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR	600 · n galvai 100 600 · v	601 · · · · · · · · · · · · · · · · · · ·	602 · heet me 102 1	650etal	201 	701	702 · 250 · 702 ·	750 300	301	302	801 350	802 400 802	850 401 850	900 402 900	901	500	501	1000 502	1001 550
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V RDM200V Model RDM300V Straight discl Model RDM300V Straight discl Model RDM000V RDM100V RDM100V RDM200V	Ver PO,POR PO,POR PO,POR PO,POR Ver PO,POR	600 · n galvai 100 600 · v	601 · · · · · · · · · · · · · · · · · · ·	602 · heet me 102 1	650etal	700 · · · · · · · · · · · · · · · · · ·	701	702 · 250 702 .	750 300	301	302	801 350	802 400 802	850 401 850	900 402 900 	901	500	501 	1000 502	1001 550
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V RDM200V Model RDM300V	Ver PO,POR PO,POR PO,POR Ver PO,POR Very coupling in Ver PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR PO,POR	600 · n galvai 100 600 · v	601 · · · · · · · · · · · · · · · · · · ·	602 · heet me 102 1	650etal	700 · · · · · · · · · · · · · · · · · ·	701	702 · 250 702 .	750 300 750	301	302	801 350 801	802 400 802	850 401 850	900 402 900	901	500	501	1000 502	1001 550
RPM000V RPM100V RPM200V Model RPM300V Straight deliv Model RDM000V RDM100V RDM200V Model RDM300V Straight discl Model RDM300V Straight discl Model RDM000V RDM100V RDM100V RDM200V Model RDM200V Model RDM300V	Ver PO,POR PO,POR PO,POR PO,POR Ver PO,POR	600 · n galvai 100 600 · v	601 · · · · · · · · · · · · · · · · · · ·	602 · heet me 102 1	650etal	700 · · · · · · · · · · · · · · · · · ·	701	702 · 250 702 .	750 300 750	80 301	302	801 350 801	802 400 802	850 401 850	900 402 900 	901	. 500 . 9	501 	1000 502	1001 550

PERFORMANCE DATA FOR UNITS WITHOUT HEAD (EUROVENT CERTIFICATE FC-H)

2-pipe

2-pipe		_						_			_		_			_			_			_			_			_		
		_	CZ100	-		CZ150			CZ20		-	CZ250	$\overline{}$		Z300P	$\overline{}$		Z350P		_	00P	_	CZ450		_	CZ500	_	_	CZ550	
-		1	2	3	1	2	3	1	2	3	1	2	3	1		3	1		3 '		2 3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	H I	. 1	И Н	L	М	Н	L	М	Н	L	М	_H_
Heating performance 70 °C / 60		1									1																			
Heating capacity	kW	, .		2,40	1,55	, .		-			_					_		4,92 6				+ -						-	8,34	
Water flow rate system side	I/h	_		206	136		232	177			_	278	355	304		_			39 37			400	551	685	462	641	745	-		855
Pressure drop system side	kPa	4	7	9	5	9	12	6	12	18	7	15	23	7	12	18	8	14 2	20 9	1	6 24	6	11	16	12	21	28	10	20	26
Heating performance 45 °C / 40	°C (2)																													
Heating capacity	kW	0,72	0,99	1,19	0,77	1,09	1,31	1,00	1,46	1,84	1,09		2,01	1,72		_		2,44 3,		14 2,			3,12		-	3,63	4,22	2,89	4,14	4,85
Water flow rate system side	l/h	126	173	207	134	189	229	174	254	319	190	274	350	299	385 4	475	325	425 5	31 37	3 49	5 617	394	543	675	455	631	734	502	720	842
Pressure drop system side	kPa	4	7	10	5	9	12	6	12	18	8	15	22	8	12	18	8	14 2	20 1	1	6 24	6	11	16	12	21	28	10	20	26
Cooling performance 7 °C / 12 °	C																													
Cooling capacity	kW	0,65	0,84	1,00	0,65	0,84	1,00	0,89	1,28	1,60	1,06	1,55	1,94	1,68	2,17 2	2,65	1,89	2,46 3,	,02 2,2	20 2,	3,60	2,41	3,21	4,03	2,68	3,69	4,25	2,91	4,13	4,79
Sensible cooling capacity	kW	0,51	0,69	0,83	0,51	0,69	0,83	0,71	1,05	1,33	0,79	1,20	1,52	1,26	1,65 2	,04	1,33	1,76 2,	,18 1,5	9 2,	14 2,67	1,69	2,30	2,90	1,94	2,73	3,18	2,07	2,98	3,49
Water flow rate system side	l/h	112	144	172	112	144	172	153	221	275	182	267	334	288	374 4	156	350	460 5	60 37	9 50	3 619	414	552	694	460	634	731	501	711	824
Pressure drop system side	kPa	4	6	8	4	6	8	6	12	18	8	17	25	8	13	18	11	18 2	25 1) 1	5 24	9	15	22	13	22	29	12	22	28
Fan																														
Туре	type														(entrif	fugal													
Fan motor	type																onous													
Number	no.		1			1			1			1			2	Ť		2)		2			2			2	
Air flow rate	m³/h	110		200	110	160	200	140	220	290	140	220	290	260		450	260		50 33			330	460	600	400	600	720	400		720
Input power	W	19	29	35	19	29	35	25	29	33	25	29	33	25		_	25		44 3			30	43	57	38	52	76	38	52	76
Electrical wiring		V1	V2	V3	۷1	V2	V3	V1	V2	V3	V1	V2	V3			_			/3 V			V1	V2	V3	V1	V2	V3	V1	V2	-70 V3
Fan coil sound data (3)		1 11	14	1.7	*1	14	13	V I	14	13	1 11	14	,,,	* 1	**	۱۰,	• •	\		. v	٧೨	1 *1	14	٧.,	1 *1	14	٧.,	1 *1	14	
Sound power level	dB(A)	31,0	38 N	45 N	31 N	38 N	45 N	35 N	46 N	51 N	35 N	46 N	51 በ	34 0	41 0 4	18 0	340	410 4	80 37	0 4/	,0 51,0	37 N	44 N	51 N	42 N	51 N	56.0	42,0	51.0	56.0
Sound pressure	dB(A)																				,0 43,0									
Finned pack heat exchanger	uD(A)	23,0	30,0	31,0	23,0	30,0	31,0	21,0	30,0	тЈ,0	21,0	30,0	יי,כד	20,0 .	ר טינני	10,0	20,0	יד ט,ככ	0,0 27	,0 30	,0 73,0	27,0	30,0	טינד	ט,דע	טינד	70,0	י,דכן י	73,0	70,0
Water content main heat				\neg																							-	1		
	- 1		0,4			0,5			0,5			0,7			0,8			1,0		1,	0		1,4			1,0			1,4	
exchanger													!														_			
Diametre hydraulic fittings	Ø		1/2"			1/2"			1/2"		Г	1/2"			3/4"			3/4"		3/	A"	_	3/4"			3/4"		1	3/4"	
Main heat exchanger	V		1/2			I/Z			1/2	_		1/2			0/4			3/4		3/	4	<u></u>	3/4			3/4	_	<u> </u>	3/4	_
		_			_																							F C		D
			FCZ60		I		650P	\perp		CZ700		_	CZ75		_	FCZ80			FCZ8	_	\rightarrow	FCZ90				950P	_	FC.	Z1000	
		1	2	3	1		2	3	1	2	3	1	2	3	1	2	3	_	2	3	1	2	3	_		2	3	1	2	3
					_		2	3 H		_		_			_		3	_		_	1			_			3 H			
Heating performance 70 °C/60)°C (1)	1 L	2 M	3 H	L	. 1	2 M	Н	1 L	2 M	3 H	1 L	2 M	3 H	1 L	2 M	3 H	l L	2 M	ŀ	1 L	2 M	3 H	l	. 1	2 M	Н	1 L	2 M	3 H
Heating capacity	kW	1 L	2 M 8,10	3 H	0 7,1	19 9,	2 M .15 11	H ,50	1 L 8,10	2 M 9,80	3 H 11,00	1 L 9,10	2 M	3 H	1 L 9,80	2 M	3 H 30 12,	00 11,3	2 M 30 12,3	5 14,	1 L	2 M	3 H 5 15,1	14 11,	20 14	2 M -,42 1	H 7,10	1 L	2 M	3 H 17,02
	kW I/h	1 L 6,50 570	2 M 8,10 710	3 H 10,0 877	0 7,1	19 9,	2 M .15 11 02 10	,50 a	1 L 8,10 710	2 M 9,80 860	3 H 11,00 964	9,10 798	2 M 11,30 991	3 H 12,50 1096	9,80 859	2 M 10,8 947	30 H 30 12, 7 10	00 11,3 52 99	2 M 30 12,3 1 108	F 14,	1 L L 00 10,77 945	2 M 7 13,3 117	3 H 5 15,1 1 132	14 11, 28 98	20 14	2 M +,42 1:	7,10 1500	1 L 12,53	2 M 15,24 1337	3 H 17,02
Heating capacity Water flow rate system side Pressure drop system side	kW I/h kPa	1 L	2 M 8,10	3 H	0 7,1	19 9,	2 M .15 11 02 10	H ,50	1 L 8,10	2 M 9,80	3 H 11,00	1 L 9,10	2 M	3 H	1 L 9,80	2 M	30 H 30 12, 7 10	00 11,3 52 99	2 M 30 12,3 1 108	F 14,	1 L L 00 10,77 945	2 M	3 H 5 15,1 1 132	14 11, 28 98	20 14	2 M +,42 1:	H 7,10	1 L	2 M	3 H 17,02
Heating capacity Water flow rate system side	kW I/h kPa	1 L 6,50 570	2 M 8,10 710	3 H 10,0 877	0 7,1	. I 19 9, 1 8 1 2	2 M .15 11 02 10 21 3	H ,50 8	1 L 8,10 710	2 M 9,80 860	3 H 11,00 964	9,10 798	2 M 11,30 991 15	3 H 12,50 1096 18	9,80 859	2 M 10,8 947	30 H 30 12, 7 10	00 11,3 52 99 2 17	2 M 30 12,3 1 108	5 14, 3 12	1 L L 00 10,77 945	2 M 7 13,3 117	3 H 5 15,1 1 132	14 11, 28 98	20 14	2 M +,42 1:	7,10 1500	1 L 12,53	2 M 15,24 1337	3 H 17,02 1493
Heating capacity Water flow rate system side Pressure drop system side	kW I/h kPa	1 L 6,50 570	2 M 8,10 710 18	3 H 10,0 877 26	0 7,1 7 63	. I 19 9, 1 8 1 2	2 M .15 11 02 10	H ,50 8	1 L 8,10 710	2 M 9,80 860	3 H 11,00 964	9,10 798	2 M 11,30 991 15	3 H 12,50 1096 18	9,80 859	2 M 10,8 947 27	30 12, 7 1027 7 32	00 11, <u>3</u> 52 99 2 17 97 5,6	2 M 30 12,3 1 108 ' 20 2 6,1	5 14, 3 12	1 L L 000 10,77, 945 12	2 M 7 13,3 117 17	3 H 5 15,1 1 132	14 11, 28 98	20 14 32 12 6 2	2 M -,42 11 264 1 24	7,10 500 33 8,50	1 L 12,53 1101 22 6,24	2 M 15,24 1337 32 7,58	3 H 17,02 1493 38 8,46
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40	kW I/h kPa O°C (2)	1 L 6,50 570	2 M 8,10 710 18	3 H 10,0 877 26	0 7,1 7 63 14	19 9, 1 8, 14 2	2 M .15 11 02 10 21 3	H ,50 8	1 L 8,10 710 17	2 M 9,80 860 24	3 H 11,00 964 29	9,10 798 10	2 M 11,30 991 15	3 H 12,50 1096 18	9,80 859 22	2 M 10,8 947 27	30 12, 7 102 7 5,9	00 11, <u>2</u> 52 99 2 17	2 M 30 12,3 1 108 ' 20 2 6,1	3 H 5 14, 3 12 2 2	1 L L 1 L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 M 7 13,3 117 17	3 H 5 15,1 1 132 22	14 11, 28 98 2 1	20 14 32 12 6 2	2 M -,42 11 264 1 24	7,10 500 33 8,50	1 L 12,53 1101 22	2 M 15,24 1337 32 7,58	3 H 17,02 1493 38 8,46
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C/40 Heating capacity	kW I/h kPa O°C (2) kW	1 L 6,50 570 12	2 M 8,10 710 18	3 H 10,0 877 26	0 7,1 7 63 14 7 3,5 8 62	19 9, 1 8, 14 2, 57 4, 1 7,	2 M .15 11 02 10 21 3 .55 5,	H ,50 ; 008 ; 31 ; 72 ; 4	1 L 8,10 710 17	2 M 9,80 860 24	3 H 11,00 964 29 5,47	9,10 798 10	2 M 11,30 991 15	3 H 12,50 1096 18	9,80 859 22	2 M 10,8 947 27	30 12, 7 109 7 5,9 2 103	00 11,3 52 99 2 17 97 5,6 36 97	2 M 30 12,3 1 108 7 20 2 6,1 5 106	5 14, 3 12 2 4 6,9	1 L L 1 L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 M 7 13,3 117 17	3 H 5 15,1 1 132 22 4 7,5 2 130	14 11, 28 98 2 1 3 5,5	20 14 32 12 6 2 57 7,	2 M 4,42 1: 264 1 24 .17 8 245 1	7,10 500 33 8,50	1 L 12,53 1101 22 6,24	2 M 15,24 1337 32 7,58	3 H 17,02 1493 38 8,46
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side	kW I/h kPa 1°C (2) kW I/h kPa	1 L 6,50 570 12 3,32 561	2 M 8,10 710 18 4,03 699	3 H 10,0 877 26 4,97 863	0 7,1 7 63 14 7 3,5 8 62	19 9, 1 8, 14 2, 57 4, 1 7,	2 M .15 11 02 10 21 3 .55 5,	H ,50 ; 008 ; 31 ; 72 ; 4	1 L 8,10 710 17 4,03	2 M 9,80 860 24 4,87 846	3 H 11,00 964 29 5,47 950	9,10 798 10 4,52 786	2 M 11,30 991 15 5,62 975	3 H 12,50 1096 18 6,21 1079	9,80 859 22 4,87 846	2 M 10,8 947 27 5,3 932	30 12, 7 109 7 5,9 2 103	00 11,3 52 99 2 17 97 5,6 36 97	2 M 30 12,3 1 108 7 20 2 6,1 5 106	5 14, 3 12 2 4 6,9	1 L L 1 L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 M 7 13,3 117 17 6,6 115	3 H 5 15,1 1 132 22 4 7,5 2 130	14 11, 28 98 2 1 3 5,5	20 14 32 12 6 2 57 7,	2 M 4,42 1: 264 1 24 .17 8 245 1	7,10 500 33 3,50 476	1 L 12,53 1101 22 6,24 1084	2 M 15,24 1337 32 7,58 1316	3 H 17,02 1493 38 8,46 1469
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C/40 Heating capacity Water flow rate system side Pressure drop system side	kW I/h kPa 1°C (2) kW I/h kPa	1 L 6,50 570 12 3,32 561 12	2 M 8,10 710 18 4,03 699	3 H 10,00 877 26 4,97 863 26	0 7,1 7 63 14 7 3,5 8 62 14	. I 19 9, 1 84 2 57 4, 1 79	2 M .15 11 02 10 21 3 .55 5, 90 9	H ,50 ; 008 ; 31 ; 72 ; 4 ; 93 ; 31	1 L 8,10 710 17 4,03 699 16	2 M 9,80 860 24 4,87 846 24	3 H 11,00 964 29 5,47 950	9,10 798 10 4,52 786 10	2 M 11,30 991 15 5,62 975	3 H 12,50 1096 18 6,21 1079	9,80 859 22 4,87 846 22	2 M 10,8 947 27 5,3 932 26	30 12, 7 10: 7 5,9 2 10: 5 32	00 11,3 52 99 2 17 97 5,6 36 97	2 M 30 12,3 1 108 1 108 2 6,1 5 106 7 20	3 H 5 14, 3 12 2 2 4 6,0 6 12 2	1 L 000 10,77 27 945 5 12 96 5,35 99 930 5 12	2 M 7 13,3 117 17 6,6 115	3 H 5 15,1 1 132 22 4 7,5 2 130 22	14 11, 28 98 2 1 3 5, 07 96	20 144 32 12 6 2 57 7,	2 M 4,42 1: 264 1 24 .17 8 245 1	7,10 500 33 8,50 476 33	1 L 12,53 1101 22 6,24 1084 22	2 M 15,24 1337 32 7,58 1316 31	3 H 17,02 1493 38 8,46 1469
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C/40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C/12 °	kW I/h kPa O°C (2) kW I/h kPa	1 L 6,50 570 12 3,32 561 12	2 M 8,10 710 18 4,03 699 18	3 H 10,00 877 26 4,97 863 26	1 L 0 7,11 63 14 7 3,5 62 14 5 3,9	1 8 9 9, 1 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 M .15 11 02 10 21 3 .55 5, 90 9	H ,50 ; 6008 331	1 L 8,10 710 17 4,03 699 16	2 M 9,80 860 24 4,87 846 24	3 H 11,00 964 29 5,47 950 29	9,10 798 10 4,52 786 10	2 M 11,30 991 15 5,62 975 14	3 H 12,50 1096 18 6,21 1079 18	9,80 859 22 4,87 846 22	2 M 10,8 947 27 5,3 932 26	33 H H H H H H H H H H H H H H H H H H	00 11,2 52 99 2 17 97 5,6 36 97 2 17	2 MM M30 12,3 1 1 1088 12 2 6,1 1 1088 2 6,1 1 1 208 2 6,1 1 200 2 6 6 6,2 2 0 4,8 8	2 14,655 14,655 14,655 12 2 2 2 3 6,555 14,65 12 2 3 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1 L 00 10,77 27 945 5 12 06 5,35 09 930 5 12 01 4,29 06 2,97	2 MM 1177 13,3,3,3 1177 177 177 177 177 177 177 177 177 1	3 H 5 15,1 1 132 22 4 7,5 2 130 22	14 11, 28 98 2 1 3 5, 7 96 2 1	1	2 M 4,42 1: 264 1 24 .17 8 245 1	7,10 1500 33 33,50 1476 33	1 L 12,53 1101 22 6,24 1084 22	2 M 15,24 1337 32 7,58 1316 31	3 H 17,02 1493 38 8,46 1469 38
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C/40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C/12 °C Cooling capacity	kW I/h kPa 1°C (2) kW I/h kPa C kW	1 L 6,50 570 12 3,32 561 12	2 M 8,100 710 18 4,033 699 18 3,90 3,17	3 H 10,00 8777 26 863 26 4,979 3,925	LL L L L L L L L L L L L L L L L L L L	11 89 9, 11 81 22 13 14 22 14 24 25 15 4, 17 18 18 18 18 18 18 18 18 18 18 18 18 18	2 M .15 11 .02 10 .21 3 .55 5, .90 9 .20 3	H ,50	1 L 8,10 710 17 4,03 699 16	2 M 9,80 860 24 4,87 846 24	3 H 11,00 964 29 5,47 950 29	9,10 798 10 4,52 786 10	2 M 11,30 991 15 5,62 975 14 5,34 4,05	3 H 12,50 1096 18 6,21 1079 18	9,80 859 22 4,87 846 22 4,84 3,72	2 M 10,88 947 27 5,33 932 26 5,60 4,4.	33 H H H H H H H H H H H H H H H H H H	00 11,2 52 99 2 17 97 5,6 36 97 2 17	2 M 30 12,3 1 108 7 20 2 6,1 5 106 7 20 6 6,2	2 14,655 14,655 14,655 12 2 2 2 3 6,555 14,65 12 2 3 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1 L 00 10,77 27 945 5 12 06 5,35 09 930 5 12 01 4,29 06 2,97	2 M 117 17 17 17 17 17 17 17 17 17 17 17	3 H 5 15,15,11 1322 2222222222222222222222222222222222	114 11, 14 11, 128 98 98 98 12 11 15,77 96 13 14 15,77 96 15 17 18 18 18 18 18 18 18 18 18 18 18 18 18	1	2 MM	H 77,10 1500 333 33 33 33,50 4476 333 33 33 33 33 33 33 33 33 33 34 35 35 5,78	1 L 12,53 1101 22 6,24 1084 22 5,69 4,42	2 M 15,24 1337 32 7,58 1316 31	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C/40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C/12 °C Cooling capacity Sensible cooling capacity	kW I/h kPa O'C (2) kW I/h kPa C kW	6,50 570 12 3,32 561 12 3,22 2,56	2 M 8,100 710 18 4,033 699 18 3,90 3,17	3 H 10,00 8777 26 863 26 4,979 3,925	L L L L L L L L L L L L L L L L L L L	1 1 8 1 1 8 1 1 8 1 1 1 1 1 1 1 1 1 1 1	2 MM	H	1 L 8,10 7710 17 4,03 6699 16	9,80 860 24 4,87 846 24 4,89 3,76	3 H 11,00 964 29 5,47 950 29 5,50 4,30	9,10 798 10 4,52 786 10 4,27 3,20	2 M 11,30 991 15 5,62 975 14 5,34 4,05	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72	9,80 859 22 4,87 846 22 4,84 3,72	2 M 10,88 947 27 5,33 932 26 5,60 4,4.	33 H H H H H H H H H H H H H H H H H H	1 L 00 11,3 52 99 2 17 07 5,6 36 97 2 17 10 5,2 33 4,0 49 90	2 MM M80 12,2,3 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 12 2 2 2 4 6,5 6 12 2 2 11 1 5 5 5 14,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 L 00 10,77 27 945 5 12 06 5,35 09 930 5 12 01 4,29 36 2,97 389 738	2 M 117 17 17 17 17 17 17 17 17 17 17 17	3 H H 132 222 130 222 130 6,99 D 6,99 D 118	114 11, 128 98 98 98 99 99 99 99 99 114 11, 115, 116 116 116 116 116 116 116 116 116 11	1	2 MM 24,42 11,264 1 17 8 18 14 14 14 14 14 14 14 14 14 14 14 14 14	H 77,10 1500 333 33 33 33,50 4476 333 33 33 33 33 33 33 33 33 33 34 35 35 5,78	1 L 12,53 1101 22 6,24 1084 22 5,69 4,42	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side	kW I/h kPa I°C (2) kW I/h kPa C kW kW I/h	3,32 561 12 3,22 2,56 554	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671	3 H 10,00 10,00 8777 266 4,977 266 4,977 3,92 863 3,92 8000 8000 8000 8000 8000 8000 8000 80	L L L L L L L L L L L L L L L L L L L	1 1 8 1 1 8 1 1 8 1 1 1 1 1 1 1 1 1 1 1	2 MM	H	1 L 8,10 7710 17 4,03 699 16 33,92 22,99 675	9,80 860 24 4,87 846 24 4,89 3,76 841	3 H 11,00 964 29 5,47 950 29 5,50 4,30 946	9,10 798 10 4,52 786 10 4,27 3,20 734	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056	9,80 859 22 4,87 846 22 4,84 3,72 833	2 M 10,8 947 27 5,3 932 26 5,6 4,4 97	33 H H H H H H H H H H H H H H H H H H	1 L 00 11,3 52 99 2 17 07 5,6 36 97 2 17 10 5,2 33 4,0 49 90	2 MM M80 12,2,3 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 12 2 2 2 4 6,5 6 12 2 2 11 1 5 5 5 14,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 L 00 10,77 27 945 5 12 06 5,35 09 930 5 12 01 4,29 36 2,97 389 738	2 M 7 13,3 117 17 17 15 15 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3 H H 132 222 130 222 130 6,99 D 6,99 D 118	114 11, 128 98 98 98 99 99 99 99 99 114 11, 115, 116 116 116 116 116 116 116 116 116 11	1	2 MM	H 77,10 1500 333 33,50 4476 333 4479	1 L 112,53 11101 22 6,24 1084 22 5,69 4,42 979	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side	kW I/h kPa I°C (2) kW I/h kPa C kW kW I/h	3,32 561 12 3,22 2,56 554	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671	3 H 10,00 10,00 8777 266 4,977 266 4,977 3,92 863 3,92 8000 8000 8000 8000 8000 8000 8000 80	L L L L L L L L L L L L L L L L L L L	1 1 8 1 1 8 1 1 8 1 1 1 1 1 1 1 1 1 1 1	2 MM	H	1 L 8,10 7710 17 4,03 699 16 33,92 22,99 675	9,80 860 24 4,87 846 24 4,89 3,76 841	3 H 11,00 964 29 5,47 950 29 5,50 4,30 946	9,10 798 10 4,52 786 10 4,27 3,20 734	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056	9,80 859 22 4,87 846 22 4,84 3,72 833 20	2 M 10,8 947 27 5,3 932 26 5,6 4,4 97	33 H H H H H H H H H H H H H H H H H H	1 L 00 11,3 52 99 2 17 07 5,6 36 97 2 17 10 5,2 33 4,0 49 90	2 MM M80 12,2,3 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 12 2 2 2 4 6,5 6 12 2 2 11 1 5 5 5 14,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 L 00 10,77 27 945 5 12 06 5,35 09 930 5 12 01 4,29 36 2,97 389 738	2 M 7 13,3 117 17 17 17 15 15 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3 H H 132 222 130 222 130 6,99 D 6,99 D 118	114 11, 128 98 98 98 99 99 99 99 99 114 11, 115, 116 116 116 116 116 116 116 116 116 11	1	2 MM	H 77,10 1500 333 33,50 4476 333 4479	1 L 112,53 11101 22 6,24 1084 22 5,69 4,42 979	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan	kW I/h kPa O'C(2) kW I/h kPa C kW kW I/h kPa type	3,32 561 12 3,22 2,56 554	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671	3 H 10,00 10,00 8777 266 4,977 266 4,977 3,92 863 3,92 8000 8000 8000 8000 8000 8000 8000 80	L L L L L L L L L L L L L L L L L L L	1 1 8 1 1 8 1 1 8 1 1 1 1 1 1 1 1 1 1 1	2 MM	H	1 L 8,10 7710 17 4,03 699 16 33,92 22,99 675	9,80 860 24 4,87 846 24 4,89 3,76 841	3 H 11,00 964 29 5,47 950 29 5,50 4,30 946	9,10 798 10 4,52 786 10 4,27 3,20 734	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056	9,80 859 22 4,87 846 22 4,84 3,72 833 20	2 M 10,8 947 27 5,3 932 26 5,66 4,44 26 26	33 H H H H H H H H H H H H H H H H H H	H L 11, 12, 12, 13, 14, 14, 14, 14, 14, 14, 14, 14, 14, 14	2 MM M80 12,2,3 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 12 2 2 2 4 6,5 6 12 2 2 11 1 5 5 5 14,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 L 00 10,77 27 945 5 12 06 5,35 09 930 5 12 01 4,29 36 2,97 389 738	2 M 7 13,3 117 17 17 17 15 15 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3 H H 132 222 130 222 130 6,99 D 6,99 D 118	114 11, 128 98 98 98 99 99 99 99 99 114 11, 115, 116 116 116 116 116 116 116 116 116 11	1	2 MM	H 77,10 1500 333 33,50 4476 333 4479	1 L 112,53 11101 22 6,24 1084 22 5,69 4,42 979	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type	kW I/h kPa O'C (2) kW I/h kPa C kW kW I/h kPa	3,32 561 12 3,22 2,56 554	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671	3 H 10,00 10,00 8777 266 4,977 266 4,977 3,92 863 3,92 8000 8000 8000 8000 8000 8000 8000 80	L L L L L L L L L L L L L L L L L L L	19 9, 11 81 2 11 77 4, 11 77 4 11 77 4 12 2 13 3, 14 8 3, 16 18 18 18 18 18 18 18 18 18 18 18 18 18	2 MM	H	1 L 8,10 7710 17 4,03 699 16 33,92 22,99 675	9,80 860 24 4,87 846 24 4,89 3,76 841	3 H 11,00 964 29 5,47 950 29 5,50 4,30 946	9,10 798 10 4,52 786 10 4,27 3,20 734	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056	9,80 859 22 4,87 846 22 4,84 3,72 833 20	2 M 10,8 947 27 5,3 932 26 5,66 4,44 26 26	33 H 30 12,7 10:0 77 10:0 77 10:0 77 5,5 70	H L 11, 12, 12, 13, 14, 14, 14, 14, 14, 14, 14, 14, 14, 14	2 MM M80 12,2,3 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1088 12 2 6,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 12 2 2 2 4 6,5 6 12 2 2 11 1 5 5 5 14,1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 L 00 10,77 27 945 5 12 06 5,35 09 930 5 12 01 4,29 36 2,97 389 738	2 M 7 13,3 117 17 17 17 15 15 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3 H H 132 222 130 222 130 6,99 D 6,99 D 118	114 11, 128 98 98 98 99 99 99 99 99 114 11, 115, 116 116 116 116 116 116 116 116 116 11	1	2 MM	H 77,10 1500 333 33,50 4476 333 4479	1 L 112,53 11101 22 6,24 1084 22 5,69 4,42 979	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number	kW I/h kPa C kW I/h kPa C type type no.	3,32 561 12 3,22 2,56 554 14	2 M 8,100 7100 18 4,033 699 18 3,900 3,17 671 19	3 H 10,00 877 26 4,97 863 26 1 4,65 3,92 800 26	L 0 7,1 1 63 14 7 3,5 8 62 14 5 3,9 7 16 16	1 8 1 1 8 1 1 8 1 1 8 1 1 1 8 1 1 1 8 1	2 MM	H	1 L 8,10 17 17 4,03 4,03 16 3,92 22,99 675 16	2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24	3 H 11,00 964 29 5,47 950 29 5,50 4,30 946 30	9,10 798 10 4,52 786 10 4,27 3,20 734	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20	2 M 10,88 947 27 5,33 932 26 5,66 4,44 26 26 26 26 27 27 27 27 28 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	33 H H 12	11, 12, 13, 14, 15, 16, 16, 16, 16, 16, 16, 16, 16, 16, 16	2 MM 80 12,2 11 1088 12 2 6,1 12 2 6,1 13 1088 14 1088 14 1088 15 1066 16 16 16 16 16 16 16 16 16 16 16 16 16 1	55 14, 55 14, 33 122 2 4 6,5, 6 122 2 2 9 6,5, 33 5,5, 2 111 2	1 L	2 M 1177 13,33 1177 177 179 6,66 115 179 179 179 179 179 179 179 179 179 179	3 H H 132 22 22 22 130 22 130 22 22 130 22 22 22 22 22 22 22 22 22 22 22 22 22	14 11, 28 98 2 1 3 5, 77 96 2 1 1 5, 3 8 3, 4 8 3, 9 99 99 99	1	22 MM	H 17,10 1500 1333 13,50 1476 1333 13,50 1476 1333 13,50 1479 130 1479 1479 1479 1479 1479 1479 1479 1479	1 L 12,53 11101 22 6,24 1084 22 5,69 4,42 979 22	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183 31	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate	kW I/h kPa °C(2) kW I/h kPa C kW kW I/h kPa type type no. m³/h	1 L 6,50 570 12 3,32 561 12 3,22 2,56 554 14	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671 19	3 H 10,000 8777 266 4,979 8633 26 4,652 8000 920	L 0 7,1 1 63 14 7 3,5 62 14 14 16 17 16 16 17 17 18 18 18 18 18 18 18 18	1 8 9 9, 1 8 1 7 1 8 1 7 1 7 1 1 7 1 7 1 1 7 1 1 1 1	2 MM .15 11 .15 11 .02 10 .21 .3 .55 5, 990 990 990 .3 .880 5, 43 4, 44 4, 43 4, 44	H	8,10 710 17 4,03 6699 16 33,92 2,99 675 16	9,80 860 24 4,87 846 24 4,89 3,76 841 24	3 H 11,00 964 29 5,47 950 29 5,50 4,30 946 30	9,10 798 10 4,52 786 10 4,27 3,20 734 10	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20	2 M 10,88 947 27 5,33 932 26 5,60 4,4 972 26 Centriffra 3 112	33 H H 102 H	H L L L L L L L L L L L L L L L L L L L	2 MM 30 12,7 11 1088 30 12,7 20 2 6,1 11 20 2 6,1 12 2 6,1 13 10 2 2 6,1 14 2 2 6 6 6,2 15 10 6 6 6,2 16 6 6,2 17 2 2 6 6 6 6,2 18 2 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1	1 1 L L L L L L L L L L L L L L L L L L	2 M 7 13,3 117 17 17 17 17 17 17 17 17 17 17 17 17	3 H 5 15,7 1 1322 222 224 4 7,5 22 1300 222 3 5,6 3 1188 5 5,6 5 1188	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	2 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	H 7,10 1500 333 33,50 476 333 33 33,60 479 330 1140	1 L 12,53 11101 22 6,24 11084 22 5,69 4,42 979 22	2 M 15,24 1337 32 7,58 1316 6,88 5,34 1183 3 1120	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power	kW I/h kPa C kW I/h kPa C type type no.	1 L 6,50 570 12 3,32 561 12 3,22 2,56 554 14 520 38	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671 19	3 H 10,000 8777 266 4,972 8633 26 4,625 8000 920 91	L L L L L L L L L L L L L L L L L L L	1 8 9 9, 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1	2 MM .15 11 .15 11 .02 10 .15 55 5, .990 990 99 .10 .10 .10 .10 .10 .10 .10 .10 .10 .10	H	1 L 8,10 710 17 17 4,03 6699 16 16 700 59	9,80 860 24 4,87 846 24 4,89 3,76 841 24	3 H 11,00 964 29 5,47 950 29 5,50 4,30 946 30	9,10 798 10 4,52 786 10 4,27 3,20 734 10	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20 (C As	2 M 10,8 947 27 5,3 93,2 26 5,60 4,44 26 Eentriff 3 112	30 12, 77 10! 77 5,59 75 5,59 66 6,7 66 6,7 67 30 67 3	H L L L L L L L L L L L L L L L L L L L	2 MM M80 12,3 1 1 1088 10 12 1 1 1088 20 6,1 1 1 1088 20 6 6,2 2 6,1 1 1088 3 3 3 3 3 112 3 1 10 1 10 10 10 10 10 10 10 10 10 10 10	1	1 1 L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 M 7 13,3 117 17 17 15 6,6 115 17 17 18 86 12 3 93 80	3 H H 132 222 130 222 130 222 130 222 130 222 130 222 130 118 118 129 129 130 149 150 160 160 160 160 160 160 160 160 160 16	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	2 1 2 2 3 3 3 3 3 3 3 1 1 3 5 5 5 1 1 1 1 1 1 1	H 7,10 1500 33 33,50 4476 33 33 3,60 4479 30 1140 1106	1 L 12,53 1101 22 6,24 1084 22 5,69 4,42 979 22	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 11183 31	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring	kW I/h kPa °C(2) kW I/h kPa C kW kW I/h kPa type type no. m³/h	1 L 6,50 570 12 3,32 561 12 3,22 2,56 554 14	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671 19	3 H 10,000 8777 266 4,972 8633 26 4,625 8000 920 91	L L L L L L L L L L L L L L L L L L L	1 8 9 9, 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1	2 MM .15 11 .15 11 .02 10 .15 55 5, .990 990 99 .10 .10 .10 .10 .10 .10 .10 .10 .10 .10	H	8,10 710 17 4,03 6699 16 33,92 2,99 675 16	9,80 860 24 4,87 846 24 4,89 3,76 841 24	3 H 11,00 964 29 5,47 950 29 5,50 4,30 946 30	9,10 798 10 4,52 786 10 4,27 3,20 734 10	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20	2 M 10,88 947 27 5,33 932 26 5,60 4,4 972 26 Centriffra 3 112	30 12, 77 10! 77 5,59 75 5,59 66 6,7 66 6,7 67 30 67 3	H L L L L L L L L L L L L L L L L L L L	2 MM M80 12,7,20 11 108880 12,7,20 20 6,11 1 108881 12,7,20 20 6,11 1 108881 12,7,20 3 3 3 3 3 112	1	1 1 L 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 M 7 13,3 117 17 17 17 17 17 17 17 17 17 17 17 17	3 H H 132 222 130 222 130 222 130 222 130 222 130 222 130 118 118 129 129 130 149 150 160 160 160 160 160 160 160 160 160 16	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2	H 7,10 1500 333 33,50 476 333 33 33,60 479 330 1140	1 L 12,53 11101 22 6,24 11084 22 5,69 4,42 979 22	2 M 15,24 1337 32 7,58 1316 6,88 5,34 1183 3 1120	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Fan coil sound data (3)	kW I/h kPa °C (2) kW I/h kPa C KW I/h kPa type type no. m³/h W	6,50 570 12 3,32 561 12 3,22 2,56 554 14 520 38 V1	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671 19	3 H H 10,00 877 26 4,97 26 4,97 26 3,92 8000 26 920 91 V3	L 0 7,17 63 14 7 3,5 62 14 5 3,9 2 2,7 7 116 16 17 18 19 19 19 19 19 19 19 19 19 19	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 MM 1.15 11 1.15 11 2.1	H	1 L 8,10 7710 17 4,03 6699 16 33,92 22,99 675 16	9,80 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 80 V2	3 H 11,000 964 29 5,47 950 29 5,50 4,30 946 30 1140 V3	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700 59 V1	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14 3 930 80 V2	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20 (C As	2 M 10,88 947 27 5,33 932 26 5,66 4,4 972 26 Eentrif 3 112 100 V2	30 12, 77 10:0 77 10:0 77 5,9 77 5,9 77 5,9 8 3:0 8 3:0 8 3:0 9 13:0 9 1	H L L L L L L L L L L L L L L L L L L L	2 MM 800 12,2 1 1 1088 800 12,2 2 6,1 1 1088 9 10 10 10 10 10 10 10 10 10 10 10 10 10	1	1 1 L 1 1 L 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 M M 7 13,33 117 17 17 15 17 15 17 15 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	3 H H 132 22 22 130 22 22 130 22 22 130 118 22 22 130 1 118 22 22 130 118 22 22 130 130 130 130 130 130 130 130 130 130	14 11, 28 98 2 1 3 5, 77 96 2 1 1 5, 8 3, 9 99 2 1	1	2 MM	H 7,10 1500 33 33 33,50 4476 33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 L 12,53 11101 22 6,24 1084 22 5,69 4,42 979 22 900 80 V1	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183 31 1120 100 V2	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level	kW I/h kPa °C(2) kW I/h kPa C kW kW I/h kPa type type no. m³/h W	1 L 6,500 570 12 3,32 561 12 3,22 2,56 554 14 42,0 42,0	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671 19 3 720 60 V2	3 H 10,00 R 10	L L L L L L L L L L L L L L L L L L L	19 9, 11 80 11 12 12 12 12 12 12 12 12 12 12 12 12	2 MM 1.15 111 1.17 111 1.18 111 1.19 111	H	1 L 8,10 7710 17 4,03 6699 16 33,92 22,99 675 16 700 59 V1	2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 80 V2	3 H 11,000 964 29 5,47 950 29 5,50 4,30 946 30 1140 V3	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700 59 V1	2 M 11,300 991 15 5,62 975 14 5,34 4,05 918 14 3 930 80 V2	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20 (C As 900 80 V1	2 M 10,8 947 27 5,3 932 26 5,60 4,4 97 26 Eentriff 100 V2	30 12, 77 10: 73 10: 73 5,5 75 5,5 76 6,6 77 5,5 78 3: 78 3: 79 3: 70	L L L L L L L L L L	2 MM 800 12,3 11 1088 12 20 6,1 1 1088 12 20 6,1 1 1088 13 10 1081 14 1088 15 10 1081 16 10 1081 17 1081 18 1081 18 108	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 L C C C C C C C C C C C C C C C C C	2 MM 7 13,3,3 117 17 17 17 15 15 17 15 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3 H H 1322 22 22 130 22 22 130 22 22 130 118 22 22 130 118 22 22 130 118 22 22 130 130 130 130 130 130 130 130 130 130	14 11, 28 98 2 1 33 5, 77 96 2 1 1 5, 38 3, 39 99 2 1	1	22 11. 14. 14. 14. 14. 14. 14. 14. 14. 14.	H 7,10 1500 333 38,50 1476 333 1476 1140 1106 V3	1 L L 12,53 11101 22 6,24 1084 22 5,69 4,42 979 22 900 80 V1	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183 31 1120 100 V2	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level Sound pressure	kW I/h kPa ° C(2) kW I/h kPa C kW kW I/h kPa type type no. m³/h W	1 L 6,500 570 12 3,32 561 12 3,22 2,56 554 14 42,0 42,0	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671 19 3 720 60 V2	3 H 10,00 R 10	L L L L L L L L L L L L L L L L L L L	19 9, 11 80 11 12 12 12 12 12 12 12 12 12 12 12 12	2 MM 1.15 111 1.17 111 1.18 111 1.19 111	H	1 L 8,10 7710 17 4,03 6699 16 33,92 22,99 675 16 700 59 V1	2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 80 V2	3 H 11,000 964 29 5,47 950 29 5,50 4,30 946 30 1140 V3	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700 59 V1	2 M 11,300 991 15 5,62 975 14 5,34 4,05 918 14 3 930 80 V2	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20 (C As 900 80 V1	2 M 10,8 947 27 5,3 932 26 5,60 4,4 97 26 Eentriff 100 V2	30 12, 77 10: 73 10: 73 5,5 75 5,5 76 6,6 77 5,5 78 3: 78 3: 79 3: 70	L L L L L L L L L L	2 MM 800 12,3 11 1088 12 20 6,1 1 1088 12 20 6,1 1 1088 13 10 1081 14 1088 15 10 1081 16 10 1081 17 1081 18 1081 18 108	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 L 1 1 L 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 MM 7 13,33,117 17 17 17 15 15 17 15 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3 H H 1322 22 22 130 22 22 130 22 22 130 118 22 22 130 118 22 22 130 118 22 22 130 130 130 130 130 130 130 130 130 130	14 11, 28 98 2 1 33 5, 77 96 2 1 1 5, 38 3, 39 99 2 1	1	22 11. 14. 14. 14. 14. 14. 14. 14. 14. 14.	H 7,10 1500 333 38,50 1476 333 1476 1140 1106 V3	1 L L 12,53 11101 22 6,24 1084 22 5,69 4,42 979 22 900 80 V1	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183 31 1120 100 V2	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level Sound pressure Finned pack heat exchanger	kW I/h kPa ° C(2) kW I/h kPa C kW kW I/h kPa type type no. m³/h W	1 L 6,500 570 12 3,32 561 12 3,22 2,56 554 14 42,0 42,0	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671 19 3 720 60 V2	3 H 10,00 R 10	L L L L L L L L L L L L L L L L L L L	19 9, 11 80 11 12 12 12 12 12 12 12 12 12 12 12 12	2 MM 1.15 111 1.17 111 1.18 111 1.19 111	H	1 L 8,10 7710 17 4,03 6699 16 33,92 22,99 675 16 700 59 V1	2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 80 V2	3 H 11,000 964 29 5,47 950 29 5,50 4,30 946 30 1140 V3	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700 59 V1	2 M 11,300 991 15 5,62 975 14 5,34 4,05 918 14 3 930 80 V2	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20 (C As 900 80 V1	2 M 10,8 947 27 5,3 932 26 5,60 4,4 97 26 Eentriff 100 V2	30 12, 77 10: 73 10: 73 5,5 75 5,5 76 6,6 77 5,5 78 3: 78 3: 79 3: 70	L L L L L L L L L L	2 MM 800 12,3 11 1088 12 20 6,1 1 1088 12 20 6,1 1 1088 13 10 1081 14 1088 15 10 1081 16 10 1081 17 1081 18 1081 18 108	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 L C C C C C C C C C C C C C C C C C	2 MM 7 13,33,117 17 17 17 15 15 17 15 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3 H H 1322 22 22 130 22 22 130 22 22 130 118 22 22 130 118 22 22 130 118 22 22 130 130 130 130 130 130 130 130 130 130	14 11, 28 98 2 1 33 5, 77 96 2 1 1 5, 38 3, 39 99 2 1	1	22 11. 14. 14. 14. 14. 14. 14. 14. 14. 14.	H 7,10 1500 333 38,50 1476 333 1476 1140 1106 V3	1 L L 12,53 11101 22 6,24 1084 22 5,69 4,42 979 22 900 80 V1	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183 31 1120 100 V2	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level Sound pressure Finned pack heat exchanger Water content main heat	kW I/h kPa ° C(2) kW I/h kPa C kW kW I/h kPa type type no. m³/h W	1 L 6,500 570 12 3,32 561 12 3,22 2,56 554 14 42,0 42,0	2 M 8,100 710 18 4,03 699 18 3,90 3,17 671 19 3 720 60 V2	3 H 10,00 877 26 877 26 4,97 863 26 14,65 800 26 91 V3 157,00 49,0	L L L L L L L L L L L L L L L L L L L	19 9, 11 80 11 80 11 80 12 44 2 13 44 2 14 2 15 4, 16 7 4, 17 4 18 3, 18 3, 18 6 5 18 6 7 18 6 7 18 6 7 18 6 7 18 7	2 MM 1.15 111 1.17 111 1.18 111 1.19 111	H	1 L 8,10 7710 17 4,03 6699 16 33,92 22,99 675 16 700 59 V1	2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 80 V2	3 H 11,000 964 29 5,47 950 29 5,50 4,30 946 30 1140 V3	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700 59 V1	2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14 3 930 80 V2	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20 (C As 900 80 V1	2 M 10,8 947 27 5,3 932 26 5,60 4,4 97 26 Eentriff 100 V2	30 12, 7 10: 7 10: 3. 7 5,9 2 10: 3. 7 5,9 2 10: 3. 6 6,7 10: 10: 10: 10: 10: 10: 10: 10: 10: 10:	L L L L L L L L L L	2 MM 800 12,3 11 1088 12 20 6,1 1 1088 12 20 6,1 1 1088 13 10 1081 14 1088 15 10 1081 16 10 1081 17 1081 18 1081 18 108	H	1 1 L C C C C C C C C C C C C C C C C C	2 MM 7 13,33,117 17 17 17 15 15 17 15 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	3 H H 132 22 22 130 22 130 22 130 22 130 14 100 22 14 100 23 14 100 23 14 100 24 100 25 100 100 25 100 100 100 100 100 100 100 100 100 10	14 11, 28 98 2 1 33 5, 77 96 2 1 1 5, 38 3, 39 99 2 1	1	22 11. 14. 14. 14. 14. 14. 14. 14. 14. 14.	H 7,10 1500 333 38,50 1476 333 1476 1140 1106 V3	1 L 12,53 1101 22 6,24 1084 22 5,69 4,42 979 22 900 80 V1 56,0 48,0	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183 31 1120 100 V2	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level Sound pressure Finned pack heat exchanger Water content main heat exchanger	kW I/h kPa °C(2) kW I/h kPa C kW I/h kPa type type no. m³/h W	1 L 6,500 570 12 3,32 561 12 3,22 2,56 554 14 42,0 42,0	2 M 8,100 710 18 4,03 699 18 3,90 671 19 3 720 60 V2 51,0 43,0	3 H 10,00 877 26 877 26 4,97 863 26 14,65 800 26 91 V3 157,00 49,0	L L L L L L L L L L L L L L L L L L L	19 9, 11 80 11 80 11 80 12 44 2 13 44 2 14 2 15 4, 16 7 4, 17 4 18 3, 18 3, 18 6 5 18 6 7 18 6 7 18 6 7 18 6 7 18 7	2 MM 1.15 11 1.02 11 1.55 5 5 1.55 5 5 1.59 90 9 1.50 12 1.	H	1 L 8,10 7710 17 4,03 6699 16 33,92 22,99 675 16 700 59 V1	2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 V2 57,0 49,0	3 H 11,000 964 29 5,47 950 29 5,50 4,30 946 30 1140 V3	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700 59 V1	2 M 11,30 991 15 5,62 975 14 4,05 918 14 3 930 80 V2 57,0 49,0	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20 (C As 900 80 V1	2 MM 10,8 947 27 5,3 932 26 5,66 4,4. 97 26 Centriff ynchro 3 112 100 V2	30 12, 7 10: 7 10: 3. 7 5,9 2 10: 3. 7 5,9 2 10: 3. 6 6,7 10: 10: 10: 10: 10: 10: 10: 10: 10: 10:	L L L L L L L L L L	2 MM M M M 12,3 1 10880 12,3 1 10880 12,3 1 20810 12,3 1 10880 12,3 1	H	1 1 L C C C C C C C C C C C C C C C C C	2 MM 1177 13,3 1177 177 178 6,66 115 179 179 179 179 179 179 179 179 179 179	3 H H 132 22 22 130 22 130 22 130 22 130 14 100 22 14 100 23 14 100 23 14 100 24 100 25 100 100 25 100 100 100 100 100 100 100 100 100 10	14 11, 28 98 2 1 33 5, 77 96 2 1 1 5, 38 3, 39 99 2 1	1	2	H 7,10 1500 333 38,50 1476 333 1476 1140 1106 V3	1 L 12,53 1101 22 6,24 1084 22 5,69 4,42 979 22 900 80 V1 56,0 48,0	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183 31 1120 100 V2	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level Sound pressure Finned pack heat exchanger Water content main heat exchanger Diametre hydraulic fittings	kW I/h kPa °C(2) kW I/h kPa C kW I/h kPa type no. m³/h W dB(A)	1 L 6,500 570 12 3,32 561 12 3,22 2,56 554 14 42,0 42,0	2 M 8,100 710 18 4,03 699 18 3,90 671 19 3 720 60 V2 51,0 43,0	3 H 10,00 877 26 877 26 4,97 863 26 14,65 800 26 91 V3 157,00 49,0	L L L L L L L L L L L L L L L L L L L	19 9, 11 80 11 80 11 80 12 44 2 13 44 2 14 2 15 4, 16 7 4, 17 4 18 3, 18 3, 18 6 5 18 6 7 18 6 7 18 6 7 18 6 7 18 7	2 MM 1.15 11 1.02 11 1.55 5 5 1.55 5 5 1.59 90 9 1.50 12 1.	H	1 L 8,10 7710 17 4,03 6699 16 33,92 22,99 675 16 700 59 V1	2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 V2 57,0 49,0	3 H 11,000 964 29 5,47 950 29 5,50 4,30 946 30 1140 V3	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700 59 V1	2 M 11,30 991 15 5,62 975 14 4,05 918 14 3 930 80 V2 57,0 49,0	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20 (C As 900 80 V1	2 M 10,8 947 27 5,3 932 26 5,66 4,4 972 26 Centriff 100 V2 61,7 53,7	33 H H H H H H H H H H H H H H H H H H	L L L L L L L L L L	2 MM M M M 12,3 1 10880 12,3 1 10880 12,3 1 20810 12,3 1 10880 12,3 1	H	1 1 L C C C C C C C C C C C C C C C C C	2 MM 1177 13,3 1177 177 178 6,66 115 179 179 179 179 179 179 179 179 179 179	3 H H 132 22 22 130 22 130 22 130 22 130 14 100 22 14 100 23 14 100 23 14 100 24 100 25 100 100 25 100 100 100 100 100 100 100 100 100 10	14 11, 28 98 2 1 33 5, 77 96 2 1 1 5, 38 3, 39 99 2 1	1	2	H 7,10 1500 333 38,50 1476 333 1476 1140 1106 V3	1 L 12,53 1101 22 6,24 1084 22 5,69 4,42 979 22 900 80 V1 56,0 48,0	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183 31 1120 100 V2	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Electrical wiring Fan coil sound data (3) Sound power level Sound pressure Finned pack heat exchanger Water content main heat exchanger	kW I/h kPa °C(2) kW I/h kPa C kW I/h kPa type type no. m³/h W	1 L 6,500 570 12 3,32 561 12 3,22 2,56 554 14 42,0 42,0	2 M 8,100 710 18 4,03 699 18 3,90 671 19 3 720 60 V2 51,0 43,0	3 H 10,00 877 26 877 26 4,97 863 26 14,65 800 26 91 V3 157,00 49,0	L L L L L L L L L L L L L L L L L L L	19 9, 11 80 11 80 11 80 12 44 2 13 44 2 14 2 15 4, 16 7 4, 17 4 18 3, 18 3, 18 6 5 18 6 7 18 6 7 18 6 7 18 6 7 18 7	2 MM 1.15 11 1.02 11 1.55 5 5 1.55 5 5 1.59 90 9 1.50 12 1.	H	1 L 8,10 7710 17 4,03 6699 16 33,92 22,99 675 16 700 59 V1	2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 V2 57,0 49,0	3 H 11,000 964 29 5,47 950 29 5,50 4,30 946 30 1140 V3	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700 59 V1	2 M 11,30 991 15 5,62 975 14 4,05 918 14 3 930 80 V2 57,0 49,0	3 H 12,500 1096 18 6,21 1079 18 6,14 4,72 1056 18	9,80 859 22 4,87 846 22 4,84 3,72 833 20 (C As 900 80 V1	2 MM 10,8 947 27 5,3 932 26 5,66 4,4. 97 26 Centriff ynchro 3 112 100 V2	33 H H H H H H H H H H H H H H H H H H	L L L L L L L L L L	2 MM M M M 12,3 1 10880 12,3 1 10880 12,3 1 20810 12,3 1 10880 12,3 1	H	1 1 L C C C C C C C C C C C C C C C C C	2 MM 1177 13,3 1177 177 178 6,66 115 179 179 179 179 179 179 179 179 179 179	3 H H 132 22 22 130 22 130 22 130 22 130 14 100 22 14 100 23 14 100 23 14 100 24 100 25 100 100 25 100 100 100 100 100 100 100 100 100 10	14 11, 28 98 2 1 33 5, 77 96 2 1 1 5, 38 3, 39 99 2 1	1	2	H 7,10 1500 333 38,50 1476 333 1476 1140 1106 V3	1 L 12,53 1101 22 6,24 1084 22 5,69 4,42 979 22 900 80 V1 56,0 48,0	2 M 15,24 1337 32 7,58 1316 31 6,88 5,34 1183 31 1120 100 V2	3 H 17,02 1493 38 8,46 1469 38 7,62 5,53 1311 36

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

PERFORMANCE DATA FOR UNITS WITH HEAD (EUROVENT CERTIFICATE FCP-H)

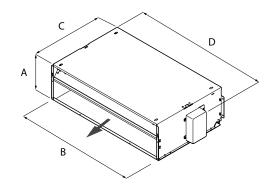
		F	CZ2001	P0	F	CZ250F	0	FC	Z300F	0	FC	CZ350	PO	FC	Z400	P0	FC	Z450F	0	F	CZ500	P0	F	CZ550	P0
		2	4	6	2	4	6	1	4	6	1	4	6	1	3	6	1	3	6	1	5	6	1	5	6
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	2,11	3,00	3,32	2,29		3,60	3,50	5,03	5,45	3,80	5,59	6,10	4,49	6,02	6,74	4,79	6,62	7,40	5,27		7,59	5,81	8,25	
Water flow rate system side	I/h	182	258	285	197	279	310	301	433	469	327	481	524	386	517	580	412	569	637	453	621	652	500	709	746
Pressure drop system side	kPa	7	12	15	9	16	19	8	15	18	9	18	21	11	18	22	7	12	15	12	21	23	10	19	21
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	1,05	1,49	1,65	1,14	1,61	1,79	1,74	2,50	2,71	_	2,78	3,03	2,23	2,99	3,35	_		3,68	2,62		3,77	2,89	4,10	
Water flow rate system side	l/h	160	224	248	196	277	308	299	430	466	325	478	521	383	514	576	409	566	633	451	617	648	497	705	741
Pressure drop system side	kPa	7	12	15	9	16	19	8	15	18	9	18	21	11	18	22	7	12	15	12	21	23	10	19	21
Cooling performance 7 °C / 12 °C																				1					
Cooling capacity	kW	0,93	1,30	1,44	1,11	1,59	1,74			2,63		2,77	3,00	2,29	3,06	3,41	2,51		3,79	2,68		3,82	2,91	4,08	4,28
Sensible cooling capacity	kW	0,74	1,14	1,18	0,83	1,23	1,36	1,27	1,86	2,03	1,34	1,99	2,16	1,66	2,24	2,52	1,76		2,73	1,94	2,70	2,83	2,07	2,94	3,09
Water flow rate system side	I/h	160	224	248	191	273	299	292	413	452	328	476	516	394	526	586	432	580	652	461	628	657	500	702	736
Pressure drop system side	kPa	8	13	15	9	18	21	8	16	18	11	22	25	11	18	22	11	16	20	13	22	24	12	21	23
Fan																									
Туре	type												Centri												
Fan motor	type												Asynch	ronous											
Number	no.		1			1			2			2			2			2			2			2	
Air flow rate	m³/h	148	226	254	148	226	254	263	404	446	263	404	446	346	487	559	346	487	559	400	592	627	400	592	627
High static pressure	Pa	21	50	63	21	50	63	21	50	61	21	50	61	25	50	66	25	50	66	22	50	56	22	50	56
Input power	W	28	41	74	28	41	74	38	55	78	38	55	78	53	63	102	53	63	102	49	80	627	49	80	627
Electrical wiring		V2	٧4	V6	V2	V4	V6	V1	V4	V6	V1	٧4	V6	V1	V3	V6	V1	V3	V6	V1	V5	V6	V1	V5	V6
Duct type fan coil sound data (3)																									
Sound power level (inlet + radiated)	dB(A)	41,0	56,0	59,0	41,0	56,0	59,0	39,0	51,0	54,0	39,0	51,0	54,0	44,0	54,0	55,0	44,0	54,0	55,0	45,0	55,0	57,0	45,0	55,0	57,0
Sound power level (outlet)	dB(A)	37,0	52,0	55,0	37,0	52,0	55,0	35,0	47,0	49,0	35,0	47,0	49,0	40,0	50,0	52,0	40,0	50,0	52,0	41,0	51,0	53,0	41,0	51,0	53,0
Finned pack heat exchanger																									
Water content main heat exchanger			0,5			0,7			0,8			1,0			1,0			1,4			1,0			1,4	
Diametre hydraulic fittings																									
Main heat exchanger	Ø		1/2"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"	
			FCZ6	00P0			FCZ6	50P0			FCZ7	00P0			FCZ7	50P0			FCZ9	00P0			FCZ9	50P0	
		1		4	7	1		1	7	2		5	7	2		5	7	2		5	7	2		5	7
													- 11												Н
		Ĺ	-	М	Н	L	٨	Λ	Н	L	Ν	N	Н	L	- 1	M	Н	L	- 1	M	Н	L		VI	11
Heating performance 70 °C/60 °C(1)		_	ı	М	Н	L		Л	Н	L		M	Н	l L		М	Н	L		M	Н	L		VI	"
Heating performance 70 °C / 60 °C (1) Heating capacity	kW	_			H 10,00	7,63	9,		H 11,51	8,77			H 10,52	10,02			H 12,09	11,81			H 14,45	12,4			16,00
	kW I/h	L	8,					72 1		8,77 754		,10		_	2 11	,65		_	13			_	3 15	,07	
Heating capacity		6,86	8,	,55	10,00	7,63	9,7	72 1 36	11,51	,	10	,10	10,52	10,02	2 11	,65	12,09	11,81	13	,80	14,45	12,4	3 15 9 12	,07	16,00
Heating capacity Water flow rate system side	l/h	6,86 590	8,	.55 35	10,00	7,63 656	9,7	72 1 36	11,51 990	754	10	,10 68	10,52	10,02	2 11	,65 102	12,09 1040	11,81	13	,80 187	14,45 1242	12,4	3 15 9 12	,07 !96	16,00 1375
Heating capacity Water flow rate system side Pressure drop system side	l/h	6,86 590	8, 7.	.55 35 20	10,00	7,63 656	9,7	72 1 36 3	11,51 990	754	10, 86 2	,10 68	10,52	10,02	? 11 10	,65)02	12,09 1040	11,81	13 11	,80 187	14,45 1242	12,4	3 15 9 12 2	,07 !96	16,00 1375
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2)	I/h kPa	6,86 590	8, 7, 2	.55 35 20	10,00 860 26	7,63 656 15	9,3 83 2	72 1 36 3	11,51 990 31	754 19	10, 86 2	,10 68 55	10,52 905 27	10,02 862 12	2 11 10 1 5,	,65 002 15	12,09 1040 16	11,81 1016 14	13 11 1	,80 87 8	14,45 1242 20	12,4 1069 19	3 15 9 12 2	,07 196	16,00 1375 29
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity	I/h kPa kW	6,86 590 12	8, 7, 2 4, 7,	.55 35 20	10,00 860 26 4,97	7,63 656 15	9,7 83 2	72 1 36 3 3	11,51 990 31 5,72	754 19 4,36	10, 86 2 5,,	,10 68 55	10,52 905 27 5,23	10,02 862 12	2 11 10 1 5,	,65 002 15	12,09 1040 16 6,01	11,81 1016 14 5,87	13 11 1 6,	,80 187 18	14,45 1242 20 7,18	12,4 1069 19	3 15 9 12 2 2 3 7,	,07 196 16	16,00 1375 29 7,95
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side	I/h kPa kW I/h	6,86 590 12 3,41 586	8, 7, 2 4, 7,	.55 35 20 25 31	10,00 860 26 4,97 855	7,63 656 15 3,79 652	9,7 83 2 4,8 83	72 1 36 3 3	990 31 5,72 984	754 19 4,36 750	10, 86 2 5,,	,10 68 55 02	10,52 905 27 5,23 899	10,02 862 12 4,98 856	2 11 10 1 5,	,65 002 15 79	12,09 1040 16 6,01 1034	11,81 1016 14 5,87 1009	13 11 1 6,	,80 87 8 86 80	14,45 1242 20 7,18 1235	12,4 1069 19 6,18	3 15 9 12 2 2 3 7,	,07 196 16 49	16,00 1375 29 7,95 1367
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side	I/h kPa kW I/h	6,86 590 12 3,41 586	8, 7, 2 2 4, 7, 2	25 31 20	10,00 860 26 4,97 855	7,63 656 15 3,79 652	9,7 83 2 4,8 83	72 1 36 3 3 83 3 31 3	990 31 5,72 984	754 19 4,36 750	10, 86 2 5,,	02 63 65 63	10,52 905 27 5,23 899	10,02 862 12 4,98 856	2 11 10 1 5, 9	,65 002 15 79 96	12,09 1040 16 6,01 1034	11,81 1016 14 5,87 1009	13 11 1 6,	,80 87 8 86 80	14,45 1242 20 7,18 1235	12,4 1069 19 6,18	3 15 2 2 3 7, 3 12	,07 296 26 49 288	16,00 1375 29 7,95 1367
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C	I/h kPa kW I/h kPa	6,86 590 12 3,41 586	3 8, 7. 2 4, 7. 2	25 20 25 31 20	10,00 860 26 4,97 855 26	7,63 656 15 3,79 652 15	9,7 83 2 4,8 83 2	772 1 366 3 383 3 31 3	990 31 5,72 984 31	754 19 4,36 750	10, 86 2 5,, 86 2	,10 68 55 02 63 55	10,52 905 27 5,23 899 27	10,02 862 12 4,98 856 12	2 111 10 1 5, 9	,65 002 15 79 96 5	12,09 1040 16 6,01 1034 16	11,81 1016 14 5,87 1009	13 11 1 6,	,80 87 8 86 80 8	14,45 1242 20 7,18 1235 20	12,4 1069 19 6,18 1063	3 15 9 12 2 2 8 7, 8 12 2 2	,07 196 16 49 188 16	16,00 1375 29 7,95 1367 29
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity	I/h kPa kW I/h kPa kW	6,86 590 12 3,41 586 13	3, 8, 7, 2 4, 7, 2 4, 7, 2	25 31 20 25 31 20 08 34	10,00 860 26 4,97 855 26	7,63 656 15 3,79 652 15	9,; 83 2 4,8 83 2	772 1 366 3 883 3 31 3 3 202 4 660 4	11,51 990 31 5,72 984 31	754 19 4,36 750 19	10, 86 2, 5,, 86 2, 4,,	,10 68 25 02 63 5 97	10,52 905 27 5,23 899 27	10,02 862 12 4,98 856 12	2 111 10 1 5, 9 1	,65 002 15 79 96 15	12,09 1040 16 6,01 1034 16	11,81 1016 14 5,87 1009 14	6, 11 1 1 5, 4,	,80 87 8 86 80 8	14,45 1242 20 7,18 1235 20 5,95	12,4 1069 19 6,18 1063 19	3 15 2 2 2 3 3 7, 3 12 2 2 5 7, 6 7,	,07 196 16 49 188 16 6 62	16,00 1375 29 7,95 1367 29 8,07 5,40
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity	I/h kPa kW I/h kPa	6,86 590 12 3,41 586 13	8, 7, 7, 2 4, 7, 2 4, 7, 2	25 20 25 31 20	10,00 860 26 4,97 855 26 4,65 3,92	7,63 656 15 3,79 652 15 4,15 2,93	9,7 83 2 4,8 83 2 5,6 3,6	72 1 36 3 83 3 31 3 30 4 60 4	990 31 5,72 984 31 5,67 4,12	754 19 4,36 750 19 4,24 3,24	10, 86 2 5,, 86 2 4,, 3,,	,10 68 25 02 63 5 97	10,52 905 27 5,23 899 27 5,18 4,02	10,02 862 12 4,98 856 12 4,69 3,53	2 1111 100 100 11 1 1 1 1 1 1 1 1 1 1 1	,65 002 15 79 96 15	12,09 1040 16 6,01 1034 16 5,80 4,41	11,81 1016 14 5,87 1009 14 4,38 3,11	6, 6, 111 1 1 5, 4, 9	,80 87 8 86 80 8	14,45 1242 20 7,18 1235 20 5,95 4,73	12,4 1069 19 6,18 1063 19 6,35 4,20	3 15 9 12 2 2 3 7, 3 12 2 7, 1 5,	,07 196 16 49 188 16 62	16,00 1375 29 7,95 1367 29 8,07 5,40 1388
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side	I/h kPa kW I/h kPa kW I/h	6,86 590 12 3,41 586 13 3,37 2,70 580	8, 7, 7, 2 4, 7, 2 4, 3, 3, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	25 31 20 25 31 20 08 34 02	10,00 860 26 4,97 855 26 4,65 3,92 800	7,63 656 15 3,79 652 15 4,15 2,93 715	9,7 83 2 4,8 83 2 5,6 3,6	72 1 36 3 83 3 31 3 30 4 60 4	11,51 990 31 5,72 984 31 5,67 4,12	754 19 4,36 750 19 4,24 3,24 731	10, 86 2 5,, 86 2 4,, 3,,	,10 68 25 02 63 25 97 83	10,52 905 27 5,23 899 27 5,18 4,02 892	10,02 862 12 4,98 856 12 4,69 3,53 807	2 1111 100 100 11 1 1 1 1 1 1 1 1 1 1 1	,65 1002 15 79 196 15 53 20	12,09 1040 16 6,01 1034 16 5,80 4,41 997	11,81 1016 14 5,87 1009 14 4,38 3,11 753	6, 6, 111 1 1 5, 4, 9	86 80 88 33 11	14,45 1242 20 7,18 1235 20 5,95 4,73 1023	12,4 1069 19 6,18 1063 19 6,35 4,20	3 15 9 12 2 2 3 7, 3 12 2 7, 1 5,	,07 1996 166 49 888 166 62 08	16,00 1375 29 7,95 1367 29 8,07 5,40 1388
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan	I/h kPa kW I/h kPa kW L/h kPa kW kW I/h kPa	6,86 590 12 3,41 586 13 3,37 2,70 580	8, 7, 7, 2 4, 7, 2 4, 3, 3, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	25 31 20 25 31 20 08 34 02	10,00 860 26 4,97 855 26 4,65 3,92 800	7,63 656 15 3,79 652 15 4,15 2,93 715	9,7 83 2 4,8 83 2 5,6 3,6	72 1 36 3 83 3 31 3 30 4 60 4	11,51 990 31 5,72 984 31 5,67 4,12	754 19 4,36 750 19 4,24 3,24 731	10, 86 2 5,, 86 2 4,, 3,,	,10 68 25 02 63 25 97 83	10,52 905 27 5,23 899 27 5,18 4,02 892 28	10,02 862 12 4,98 856 12 4,69 3,53 807	2 1111 100 100 11 1 1 1 1 1 1 1 1 1 1 1	,65 1002 15 79 196 15 53 20	12,09 1040 16 6,01 1034 16 5,80 4,41 997	11,81 1016 14 5,87 1009 14 4,38 3,11 753	6, 6, 111 1 1 5, 4, 9	86 80 88 33 11	14,45 1242 20 7,18 1235 20 5,95 4,73 1023	12,4 1069 19 6,18 1063 19 6,35 4,20	3 15 9 12 2 2 3 7, 3 12 2 7, 1 5,	,07 1996 166 49 888 166 62 08	16,00 1375 29 7,95 1367 29 8,07 5,40 1388
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type	kW I/h kPa kW L/h kPa kW L/h kPa type	6,86 590 12 3,41 586 13 3,37 2,70 580	8, 7, 7, 2 4, 7, 2 4, 3, 3, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	25 31 20 25 31 20 08 34 02	10,00 860 26 4,97 855 26 4,65 3,92 800	7,63 656 15 3,79 652 15 4,15 2,93 715	9,7 83 2 4,8 83 2 5,6 3,6	72 1 36 3 83 3 31 3 30 4 60 4	11,51 990 31 5,72 984 31 5,67 4,12	754 19 4,36 750 19 4,24 3,24 731	10, 86 2 5,, 86 2 4,, 3,,	02 02 03 05 05 05 05 05 05 05 05 05 05 05 05 05	10,52 905 27 5,23 899 27 5,18 4,02 892 28	10,02 862 12 4,98 856 12 4,69 3,53 807 12	2 111 10 10 5, 9 1 1 5, 4,, 4, 1	,65 1002 15 79 196 15 53 20	12,09 1040 16 6,01 1034 16 5,80 4,41 997	11,81 1016 14 5,87 1009 14 4,38 3,11 753	6, 6, 111 1 1 5, 4, 9	86 80 88 33 11	14,45 1242 20 7,18 1235 20 5,95 4,73 1023	12,4 1069 19 6,18 1063 19 6,35 4,20	3 15 9 12 2 2 3 7, 3 12 2 7, 1 5,	,07 1996 166 49 888 166 62 08	16,00 1375 29 7,95 1367 29 8,07 5,40 1388
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor	kW I/h kPa kW L/h kPa type type	6,86 590 12 3,41 586 13 3,37 2,70 580	8, 7, 7, 2 4, 7, 7, 2 2 4, 3, 3, 7, 7, 2	25 31 20 25 31 20 08 34 02	10,00 860 26 4,97 855 26 4,65 3,92 800	7,63 656 15 3,79 652 15 4,15 2,93 715	9,7 83 2 4,8 83 2 5,6 3,6	772 1 366 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	11,51 990 31 5,72 984 31 5,67 4,12	754 19 4,36 750 19 4,24 3,24 731	10, 86 2 5,, 86 2 4,, 3,,	02 02 03 05 05 05 05 05 05 05 05 05 05 05 05 05	10,52 905 27 5,23 899 27 5,18 4,02 892 28	10,02 862 12 4,98 856 12 4,69 3,53 807	2 111 10 5,,9 1 5,4,4,9 1	,65 1002 15 79 196 15 53 20	12,09 1040 16 6,01 1034 16 5,80 4,41 997	11,81 1016 14 5,87 1009 14 4,38 3,11 753	1 13 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	86 80 88 33 11	14,45 1242 20 7,18 1235 20 5,95 4,73 1023	12,4 1069 19 6,18 1063 19 6,35 4,20	33 159 122 2 2 2 3 3 7, 3 3 122 13 2 2 13 2 2	,07 1996 166 49 888 166 62 08	16,00 1375 29 7,95 1367 29 8,07 5,40 1388
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number	kW I/h kPa kW kW I/h kPa type type no.	6,86 590 12 3,41 586 13 3,37 2,70 580	8, 7, 7, 2 4, 4, 7, 2 4, 4, 1, 3, 7, 7, 2		10,00 860 26 4,97 855 26 4,65 3,92 800	7,63 656 15 3,79 652 15 4,15 2,93 715	9,, 833 2 4,, 83 3 2 5,, 86 2	1772 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11,51 990 31 5,72 984 31 5,67 4,12	754 19 4,36 750 19 4,24 3,24 731	10, 86 2 5, 86 2 4, 3, 4, 85 2	0,10 68 55 002 63 63 55 55 66	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centrr Asynch	10,00,862 12 4,98 856 12 4,69 3,53 807 12 ifugal	2. 111 10 10 11 11 11 11 11 11 11 11 11 11	79 79 65 55 79 66 55 66	12,09 1040 16 6,01 1034 16 5,80 4,41 997	11,81 1016 14 5,87 1009 14 4,38 3,11 753 10	1 13 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	886 880 88 881 111 117 4	14,45 1242 20 7,18 1235 20 5,95 4,73 1023	12,4 1069 19 6,18 1063 19 6,35 4,20 1092 18	33 159 122 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	,07 1996 166 149 1888 10 10 14	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate	kW I/h kPa kW I/h kPa type type no. m³/h	6,866,590 12 3,41 586 13 3,377 2,70 580	8, 7, 7, 2 4, 4, 7, 2 4, 1, 3, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,		10,00 860 26 4,97 855 26 4,65 3,92 800 26	7,63 656 15 3,79 652 15 4,15 2,93 715 16	9,9,9,83 2 2 4,4,4 83 2 2 5,7 3,6 86 2 2 3 3 77	772 1 366 3 3 3 3 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	111,51 990 31 55,72 9984 31 31 55,67 44,12 9975 28	754 19 4,366 7500 19 4,24 3,24 731 20	10.86 22 5,7 88 22 4,7 3,7 2 2	02 02 03 03 05 05 05 05 05 05 05 05 05 05 05 05 05	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centrr Asynch	10,00 862 12 4,98 856 12 4,69 3,53 807 12 ifugal 785	2. 111 10 10 11 11 11 11 15 15 15 15 15 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	79 79 996 55 53 220 55 6	112,09 1040 16 6,01 1034 16 5,80 4,41 997 17	11,81 1016 14 5,87 1009 14 4,38 3,11 753 10	6,0 6,1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	886 880 88 881 111 117 4	14,45 1242 20 7,18 1235 20 5,95 4,73 1023 17	12,4 1069 19 6,18 1063 19 6,359 4,20 1092 18	33 159 127 22 22 33 7,7,3 122 22 133 122 22 133 22 22 23 22 23 23 23 23 23 23 23 23 2	,07 ,996 ,66 ,49 ,888 ,66 ,60 ,10 ,44	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate High static pressure	kW I/h kPa kW kW I/h kPa type type no.	6,866 5900 12 3,41 586 13 3,37 2,70 580 15	8, 8, 7, 2 4, 4, 4, 7, 2 2 4, 1 3, 7, 7, 7, 7, 7, 7, 5	.555 .335 .20 .225 .331 .20 .08 .334 .002 .111	10,00 860 26 4,97 855 26 4,65 3,92 800 26	7,63 656 15 3,79 652 15 4,15 2,93 715 16	9,,, 833 2 4,4,4, 833 3,6, 866 2 2	772 1 866 83 83 83 83 83 83 83 83 83 83	990 31 55,72 9984 31 31 55,67 4,12 9975 28	754 19 4,36 750 19 4,24 3,24 731 20	10,0 86 2 5,0 86 2 4,0 3,0 85 2	02 02 03 55 00 02 03 03 05 05 05 05 05 05 05 05 05 05 05 05 05	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centrr Asynch	10,00 862 12 4,98 856 12 4,69 3,53 807 12 ifugal 785 32	2 111 100 5, 99 11 5, 4,, 4, 99 11	,,65 79 996 5 5 5 5 6 6	12,09 1040 16 6,01 1034 16 5,80 4,41 1997 17	11,81 101661 14 5,87 10099 14 4,38 3,11 753 10	1 13 11 13 11 1 1 1 1 1 1 1 1 1 1 1 1 1	86 86 80 8 8 8 11 11 17 4	14,45 1242 20 7,18 1235 20 5,95 4,73 1023 17	12,4 1069 19 6,18 1063 19 6,359 4,20 1092 18 785 32	33 159 12 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	66 49 888 66 62 08 110 44	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate High static pressure Input power	kW I/h kPa kW kW I/h kPa type type no. m³/h Pa	6,866 590 12 3,41 586 13 3,377 2,700 580 15	8, 7, 7, 2 4, 7, 7, 2 2 4, 1 3, 7, 7, 2 2 5 8	08 34 002 111 33 3 3 770 60 60 69 9	10,00 860 26 4,97 855 26 4,65 3,92 800 26	7,63 656 15 3,79 652 15 4,15 2,93 715 16	9,0,0 83 2 4,4,4 83 3,6 86 2 2 3,6 4,6 2 2 3,7 5,7 5,6 8,6 6 7,7 5,7 5,7 5,7 5,7 5,7 5,7 5,7 5,7 5,7	772 1 883 3 83 3 83 3 83 3 83 3 83 3 84 3 87 0 8 0 9 9	990 31 55,72 984 31 31 31 31 31 31 31 31 31 31 31 31 31	754 19 4,36 750 19 4,24 3,24 731 20 785 32 92	100 86 5,1 88 2 2 4,4 3,4 85 2 2	02 02 03 55 55 097 883 66 6	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centr Asynch	10,00 862 12 4,98 856 12 4,69 3,53 807 12 ifugal ronous 785 32 92	2. 111 10 5,5,9 9. 11 5,4,4,9 9. 9. 9. 11	79 996 5 5 53 220 551 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	12,09 1040 16 6,01 1034 16 5,80 4,41 997 17	11,81 101661 14 5,87 1009 14 4,38 3,11 753 10 785 32 92	1 13 11 13 11 1 1 1 1 1 1 1 1 1 1 1 1 1	86 88 88 88 88 88 11 117 4 4	7,18 1235 20 5,95 4,73 1023 17	12,4 1069 19 6,18 1063 19 6,35 4,20 1092 18 785 32 92	33 159 122 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0,07 1996 166 49 1888 10 10 4 4 3 3 78 0	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate High static pressure Input power Electrical wiring	kW I/h kPa kW kW I/h kPa type type no. m³/h Pa	6,866 590 12 3,41 586 13 3,377 2,700 580 15	8, 7, 7, 2 4, 7, 7, 2 2 4, 1 3, 7, 7, 2 2 5 8	.555 .335 .20 .225 .331 .20 .08 .334 .002 .111	10,00 860 26 855 26 4,65 3,92 800 26	7,63 656 15 3,79 652 15 4,15 2,93 715 16	9,,, 833 2 4,4,4, 833 3,6, 866 2 2	772 1 883 3 83 3 83 3 83 3 83 3 83 3 84 3 87 0 8 0 9 9	990 31 55,72 9984 31 31 55,67 4,12 9975 28	754 19 4,36 750 19 4,24 3,24 731 20	10,0 86 2 5,0 86 2 4,0 3,0 85 2	02 02 03 55 55 097 883 66 6	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centrr Asynch	10,00 862 12 4,98 856 12 4,69 3,53 807 12 ifugal 785 32	2. 111 10 5,5,9 9. 11 5,4,4,9 9. 9. 9. 11	,,65 79 996 5 5 5 5 6 6	12,09 1040 16 6,01 1034 16 5,80 4,41 997 17	11,81 101661 14 5,87 10099 14 4,38 3,11 753 10	1 13 11 13 11 1 1 1 1 1 1 1 1 1 1 1 1 1	86 86 80 8 8 8 11 11 17 4	14,45 1242 20 7,18 1235 20 5,95 4,73 1023 17	12,4 1069 19 6,18 1063 19 6,359 4,20 1092 18 785 32	33 159 122 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	66 49 888 66 62 008 110 44	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate High static pressure Input power Electrical wiring Duct type fan coil sound data (3)	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h Pa	6,866 5900 12 3,41 586 13 3,37 2,70 580 15	8, 8, 7, 7, 2 4, 4, 7, 2 2 4, 3, 3, 7, 7, 7, 7, 5, 8, 8, V	.555 .335 .200 .25 .25 .331 .200 .08 .334 .002 .211 .33 .3770 .60 .60 .60 .60 .60 .60 .60 .60 .60 .6	10,00 860 26 4,97 855 26 4,65 3,92 800 26 920 71 118 V7	7,63 656 15 3,79 652 15 4,15 2,93 715 16	9,7,83 22 4,4,83 22 5,6,0 3,6,6 22 2	772 1 366 33 3 33 3 33 3 3 3 3 3 3 3 70 0 0 0 9 9	990 31 55,72 984 31 55,67 44,12 975 28	754 19 4,366 750 19 4,24 3,24 731 20 785 32 92 V2	10,0 866 22 5,7 866 22 4,4,4 3,7 2 2 2 977 5 5 111 V	02 63 63 65 97 883 55 66	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centr Asynch 1050 58 138 V7	10,02 862 12 4,98 856 12 4,69 3,53 807 12 ifugal 785 32 92	2 111 100 5, 99 11 11 12 13 14 14 15 15 15 15 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	,65 79 79 96 5 53 220 51 6 6 17 78 10 11 17	12,09 1040 16 6,01 1034 16 5,80 4,41 997 17	11,81 1016 14 5,87 1009 14 4,38 3,11 753 10 785 32 92 V2	1 13 11 13 11 1 1 1 1 1 1 1 1 1 1 1 1 1	886 880 881 111 117 44 117 117 117	14,45 1242 20 7,18 1235 20 5,95 4,73 1023 17 1050 58 138 V7	12,4 1069 19 6,18 1063 19 6,355 4,20 1092 18 785 32 92 V2	33 159 122 2 2 2 2 3 3 122 1 3 3 1 3 1 3 1 3 1 3 1	2007 2006 2006 2008 2008 2008 2008 2008 2008	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27 1050 58 138 V7
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate High static pressure Input power Electrical wiring Duct type fan coil sound data (3) Sound power level (inlet + radiated)	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h Pa W	6,86,865 5900 12 3,41 5866 13 3,377 2,700 580 15 567 27 66 V1	3 8,77 2 4,4,77 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.555 .335 .200 .225 .331 .000 .008 .334 .002 .11 .337 .700 .600 .600 .600 .600 .600 .600 .60	10,00 860 26 4,97 855 26 4,65 3,92 800 26 920 71 118 V7	7,63 656 15 3,79 652 15 4,15 2,93 715 16 567 27 66 V1	9,7,83 22 4,4,83 83 22 5,6 3,6 86 86 22 2	772 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11,51 9990 31 31 55,72 984 31 55,67 44,12 9975 28	754 19 4,366 750 19 4,24 3,24 731 20 785 32 92 V2	10,0 86 2 2 3,0 4,1,1 8,5 2 2 2 2 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1	1,10 1,10	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centrr Asynch 1050 58 138 V7	10,02 862 12 4,988 856 12 4,69 3,53 807 12 ifugal ronous 785 32 92 V2	2 111 100 5, 99 11 11 11 12 13 14 14 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	,65 79 996 55 53 220 55 66 33 778 80 10 17 17 17 15 15 10 10 10 10 10 10 10 10 10 10	12,09 1040 16 6,01 1034 16 55,80 4,41 997 17 1050 58 138 V7	11,81 1016 14 5,87 1009 14 4,38 3,11 753 10 785 32 92 V2	1 13 111 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,80 87 88 88 88 88 88 88 83 111 117 4	14,45 1242 20 7,18 1235 20 5,95 4,73 1023 17 1050 58 138 V7	12,4 1069 19 6,18 1063 19 6,35 4,20 1092 18 785 32 92 V2	33 159 122 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	07 1996 49 49 88 88 66 62 008 110 14 4	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27 1050 58 138 V7
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate High static pressure Input power Electrical wiring Duct type fan coil sound data (3) Sound power level (inlet + radiated) Sound power level (outlet)	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h Pa	6,866 5900 12 3,41 586 13 3,37 2,70 580 15	3 8,77 2 4,4,77 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.555 .335 .200 .225 .331 .000 .008 .334 .002 .11 .337 .700 .600 .600 .600 .600 .600 .600 .60	10,00 860 26 4,97 855 26 4,65 3,92 800 26 920 71 118 V7	7,63 656 15 3,79 652 15 4,15 2,93 715 16	9,7,83 22 4,4,83 22 5,6,0 3,6,6 22 2	772 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	990 31 55,72 984 31 55,67 44,12 975 28	754 19 4,366 750 19 4,24 3,24 731 20 785 32 92 V2	10,0 86 2 2 3,0 4,1,1 8,5 2 2 2 2 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1	1,10 1,10	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centr Asynch 1050 58 138 V7	10,02 862 12 4,98 856 12 4,69 3,53 807 12 ifugal 785 32 92	2 111 100 5, 99 11 11 11 12 13 14 14 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	,65 79 996 55 53 220 55 66 33 778 80 10 17 17 17 15 15 10 10 10 10 10 10 10 10 10 10	12,09 1040 16 6,01 1034 16 5,80 4,41 997 17	11,81 1016 14 5,87 1009 14 4,38 3,11 753 10 785 32 92 V2	1 13 111 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	886 880 881 111 117 44 117 117 117	14,45 1242 20 7,18 1235 20 5,95 4,73 1023 17 1050 58 138 V7	12,4 1069 19 6,18 1063 19 6,355 4,20 1092 18 785 32 92 V2	33 159 122 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	007 1996 166 149 188 188 100 110 144 175 175 175	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27 1050 58 138 V7
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate High static pressure Input power Electrical wiring Duct type fan coil sound data (3) Sound power level (inlet + radiated) Sound power level (outlet) Finned pack heat exchanger	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h Pa W	6,86,865 5900 12 3,41 5866 13 3,377 2,700 580 15 567 27 66 V1	3 8,7 7. 2 4,4 7. 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	10,00 860 26 4,97 855 26 4,65 3,92 800 26 920 71 118 V7	7,63 656 15 3,79 652 15 4,15 2,93 715 16 567 27 66 V1	9,7,833 2 2 4,4,4,833 2 2 5,6,6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	772 1 366 33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	11,51 9990 31 31 55,72 984 31 55,67 44,12 9975 28	754 19 4,366 750 19 4,24 3,24 731 20 785 32 92 V2	10, 86 2 2 5, 86 2 2 4, 4, 4, 4, 5 5, 6 6, 6 7, 6 7, 7 8, 7 8, 8 8, 8 8, 8 8	02 02 03 05 05 05 05 05 05 05 05 05 05 05 05 05	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centrr Asynch 1050 58 138 V7	10,02 862 12 4,988 856 12 4,69 3,53 807 12 ifugal ronous 785 32 92 V2	2 111 100 11 11 11 11 11 11 11 11 11 11 11	79 79 65 55 79 66 55 53 220 66 6 78 8 90 6 17 75 90 90 90 90 90 90 90 90 90 90 90 90 90	12,09 1040 16 6,01 1034 16 55,80 4,41 997 17 1050 58 138 V7	11,81 1016 14 5,87 1009 14 4,38 3,11 753 10 785 32 92 V2	1 13 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,80 887 88 886 880 88 333 111 117 44 44 117 175 175 175 175 175 175 175 175 175	14,45 1242 20 7,18 1235 20 5,95 4,73 1023 17 1050 58 138 V7	12,4 1069 19 6,18 1063 19 6,35 4,20 1092 18 785 32 92 V2	3 159 12 2 2 2 2 3 3 7, 3 7, 5 7, 1 5, 1 5, 2 2 13 2 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3 3 77 8 8 8 8 8 6 6 6 6 2 0 8 10 4 4 4 7 7 8 8 0 0 17 7 5 5 7 8 9 17 9 17 9 17 9 17 9 17 9 17 9 17	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27 1050 58 138 V7
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate High static pressure Input power Electrical wiring Duct type fan coil sound data (3) Sound power level (inlet + radiated) Sound power level (outlet) Finned pack heat exchanger Water content main heat exchanger	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h Pa W	6,86,865 5900 12 3,41 5866 13 3,377 2,700 580 15 567 27 66 V1	3 8,7 7. 2 4,4 7. 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	.555 .335 .200 .225 .331 .000 .008 .334 .002 .11 .337 .700 .600 .600 .600 .600 .600 .600 .60	10,00 860 26 4,97 855 26 4,65 3,92 800 26 920 71 118 V7	7,63 656 15 3,79 652 15 4,15 2,93 715 16 567 27 66 V1	9,7,83 22 4,4,83 83 22 5,6 3,6 86 86 22 2	772 1 366 33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	11,51 9990 31 31 55,72 984 31 55,67 44,12 9975 28	754 19 4,366 750 19 4,24 3,24 731 20 785 32 92 V2	10,0 86 2 2 3,0 4,1,1 8,5 2 2 2 2 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1	02 02 03 05 05 05 05 05 05 05 05 05 05 05 05 05	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centrr Asynch 1050 58 138 V7	10,02 862 12 4,988 856 12 4,69 3,53 807 12 ifugal ronous 785 32 92 V2	2 111 100 11 11 11 11 11 11 11 11 11 11 11	,65 79 996 55 53 220 55 66 33 778 80 10 17 17 17 15 15 10 10 10 10 10 10 10 10 10 10	12,09 1040 16 6,01 1034 16 55,80 4,41 997 17 1050 58 138 V7	11,81 1016 14 5,87 1009 14 4,38 3,11 753 10 785 32 92 V2	1 13 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,80 87 88 88 88 88 88 88 83 111 117 4	14,45 1242 20 7,18 1235 20 5,95 4,73 1023 17 1050 58 138 V7	12,4 1069 19 6,18 1063 19 6,35 4,20 1092 18 785 32 92 V2	3 159 12 2 2 2 2 3 3 7, 3 7, 5 7, 1 5, 1 5, 2 2 13 2 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	07 1996 49 49 88 88 66 62 008 110 14 4	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27
Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 40 °C (2) Heating capacity Water flow rate system side Pressure drop system side Pressure drop system side Cooling performance 7 °C / 12 °C Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate High static pressure Input power Electrical wiring Duct type fan coil sound data (3) Sound power level (inlet + radiated) Sound power level (outlet) Finned pack heat exchanger	kW I/h kPa kW I/h kPa kW I/h kPa type type no. m³/h Pa W	6,86,865 5900 12 3,41 5866 13 3,377 2,700 580 15 567 27 66 V1	3 8,7 7. 2 4,4 7. 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	10,00 860 26 4,97 855 26 4,65 3,92 800 26 920 71 118 V7	7,63 656 15 3,79 652 15 4,15 2,93 715 16 567 27 66 V1	9,7,833 2 2 4,4,4,833 2 2 5,6,6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	772 1 366 33 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	11,51 9990 31 31 55,72 984 31 55,67 44,12 9975 28	754 19 4,366 750 19 4,24 3,24 731 20 785 32 92 V2	10, 86 2 2 5, 86 2 2 4, 4, 4, 4, 5 5, 6 6, 6 7, 6 7, 7 8, 7 8, 8 8, 8 8, 8 8	02 02 03 05 05 05 05 05 05 05 05 05 05 05 05 05	10,52 905 27 5,23 899 27 5,18 4,02 892 28 Centrr Asynch 1050 58 138 V7 62,0 61,0	10,02 862 12 4,988 856 12 4,69 3,53 807 12 ifugal ronous 785 32 92 V2	2 111 100 11 11 11 11 11 11 11 11 11 11 11	79 79 65 55 79 66 55 53 220 66 6 78 8 90 6 17 75 90 90 90 90 90 90 90 90 90 90 90 90 90	12,09 1040 16 6,01 1034 16 55,80 4,41 997 17 1050 58 138 V7	11,81 1016 14 5,87 1009 14 4,38 3,11 753 10 785 32 92 V2	1 13 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,80 887 88 886 880 88 333 111 117 44 44 117 175 175 175 175 175 175 175 175 175	14,45 1242 20 7,18 1235 20 5,95 4,73 1023 17 1050 58 138 V7	12,4 1069 19 6,18 1063 19 6,35 4,20 1092 18 785 32 92 V2	3 159 12 2 2 2 2 3 3 7, 3 7, 5 7, 1 5, 1 5, 2 2 13 2 2 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3 3 77 8 8 8 8 8 6 6 6 6 2 0 8 10 4 4 4 7 7 8 8 0 0 17 7 5 5 7 8 9 17 9 17 9 17 9 17 9 17 9 17 9 17	16,00 1375 29 7,95 1367 29 8,07 5,40 1388 27 1050 58 138 V7

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

трис		F	CZ201P	0	F	CZ301P	0	F	CZ401P	0	F	CZ501P	0	F	CZ601P	0	F	CZ701P	0	F	CZ901P	0
		2	4	6	1	4	6	1	3	6	1	5	6	1	4	7	2	5	7	2	5	7
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 65 °C / 55 °C (1)																						
Heating capacity	kW	1,06	1,37	1,48	1,82	2,39	2,55	2,19	2,75	2,99	2,59	3,30	3,34	3,13	3,85	4,35	4,13	4,40	4,60	5,16	5,71	5,77
Water flow rate system side	l/h	93	120	130	159	210	223	192	240	262	226	290	301	274	336	381	361	385	403	452	500	504
Pressure drop system side	kPa	5	8	9	8	12	14	5	7	8	6	9	9	9	13	16	16	15	17	10	12	12
Cooling performance 7 °C / 12 °C																						
Cooling capacity	kW	0,93	1,30	1,44	1,70	2,40	2,63	2,29	3,06	3,41	2,68	3,65	3,82	3,37	4,08	4,65	4,24	4,97	5,18	4,38	5,33	5,95
Sensible cooling capacity	kW	0,74	1,14	1,18	1,27	1,86	2,03	1,66	2,24	2,52	1,94	2,70	2,83	2,70	3,34	3,92	3,24	3,83	4,02	3,11	4,11	4,73
Water flow rate system side	l/h	160	224	248	292	413	452	394	526	586	461	628	657	580	702	800	729	855	28	753	917	1023
Pressure drop system side	kPa	8	13	15	8	16	18	11	18	22	13	22	24	15	21	26	20	26	28	10	14	17
Fan																						
Туре	type										0	entrifug	al									
Fan motor	type										Asy	/nchron	ous									
Number	no.		1			2			2			2			3			3			3	
Air flow rate	m³/h	148	226	254	263	404	446	346	487	559	400	592	627	567	770	920	785	978	1050	785	978	1050
High static pressure	Pa	21	50	63	21	50	61	25	50	66	22	50	56	27	50	71	32	50	58	32	50	58
Input power	W	28	41	74	38	55	78	53	63	102	49	80	627	66	89	118	92	117	138	92	117	138
Electrical wiring		V2	V4	V6	V1	V4	V6	V1	V3	V6	V1	V5	V6	V1	V4	V 7	V2	V5	V7	V2	V5	V7
Duct type fan coil sound data (2)																						
Sound power level (inlet + radiated)	dB(A)	41,0	56,0	59,0	39,0	51,0	54,0	44,0	54,0	55,0	45,0	55,0	57,0	46,0	56,0	61,0	54,0	60,0	62,0	54,0	60,0	62,0
Sound power level (outlet)	dB(A)	37,0	52,0	55,0	35,0	47,0	49,0	40,0	50,0	52,0	41,0	51,0	53,0	44,0	54,0	60,0	52,0	59,0	61,0	52,0	59,0	61,0
Finned pack heat exchanger																						
Water content main heat exchanger	-		0,5			0,8			1,0			1,0			1,2			1,2			1,8	
Water content secondary heat exchanger	1		0,2			0,3			0,3			0,3			0,4			0,4			0,7	
Diametre hydraulic fittings																						
Main heat exchanger	Ø		1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"	
Secondary heat exchanger	Ø											1/2"										

⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT (2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCZ100P	FCZ150P	FCZ200P	FCZ250P	FCZ300P	FCZ350F	FCZ400P	FCZ450P	FCZ500P	FCZ550P
Dimensions and weights											
A	mm	216	216	216	216	216	216	216	216	216	216
В	mm	412	412	522	522	753	753	973	973	973	973
C	mm	453	453	453	453	453	453	453	453	453	453
D	mm	452	452	562	562	793	793	1013	1013	1013	1013
Net weight	kg	12,0	13,0	12,0	14,0	14,0	16,0	20,0	22,0	23,0	24,0
		FCZ600P	FCZ650P	FCZ700P	FCZ750F	FCZ	800P	FCZ850P	FCZ900P	FCZ950P	FCZ1000P
Dimensions and weights											
A	mm	216	216	216	216	2	116	216	216	216	216
В	mm	1122	1122	1122	1122	1	122	1122	1122	1122	1122

Dimensions and weights	mm	216	716	216	216	216	216	216	216	216	216
		FCZ101P	FCZ102P	FCZ201P	FCZ202P	FCZ301P	FCZ302P	FCZ401P	FCZ402P	FCZ501P	FCZ502P
Net weight	kg	29,0	31,0	29,0	31,0	29,	0	31,0	32,0	32,0	32,0
D	mm	1147	1147	1147	1147	114	7	1147	1147	1147	1147
(mm	453	453	453	453	453	3	453	558	558	558
В	mm	1122	1122	1122	1122	112	2	1122	1122	1122	1122
A	mm	216	216	216	216	216	5	216	216	216	216

		FCZ601P	FCZ602P		FCZ701P	FCZ702P	FCZ801P	FCZ80	2P	FCZ901P	FCZ1001P
Net weight	kg	12,0	13,0	13,0	14,0	15,0	16,0	21,0	22,0	23,0	24,0
D	mm	452	452	562	562	793	793	1013	1013	1013	1013
C	mm	453	453	453	453	453	453	453	453	453	453
В	mm	412	412	522	522	753	753	973	973	973	973
A	mm	216	216	216	216	216	216	216	216	216	216

		1 (2001)	1 (2002)	1 (2/011	1 (2/02)	1 (20011	1 (2002)	1 (27011	10210011
Dimensions and weights									
A	mm	216	216	216	216	216	216	216	216
В	mm	1122	1122	1122	1122	1122	1122	1122	1122
C	mm	453	453	453	453	453	453	558	558
D	mm	1147	1147	1147	1147	1147	1147	1147	1147
Net weight	kg	30,0	31,0	30,0	31,0	30,0	31,0	32,0	32,0















FCZI P

Fan coil unit for ducted installations

Cooling capacity 0,89 ÷ 8,60 kW Heating capacity 2,02 ÷ 17,02 kW



- Electric saving equal to 50% with respect to a fan coil with 3-speed motor
- Suitable for duct-type installations too
- Total comfort: reduced variations in temperature and relative humidity
- Vertical and horizontal installation
- Very quiet





DESCRIPTION

fan coil can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans. They are statically and dynamically balanced and directly coupled to the motor shaft.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the standard or oversized heat exchanger and the possible secondary heat exchanger have female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Reversibility of the water connections during installation only for units with a standard or boosted main heat exchanger, or standard with BV accessory. Not reversible in all other configurations. In any case, units with the coil water connections on the right are available at the time of ordering.

Condensate drip

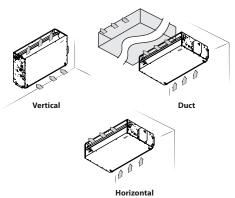
Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

Air filter class Coarse 25% for all versions easy to pull out and clean.

VERSIONS

Flush-mounting and duct-type versions



In the standard configuration there is no useful static pressure available. If necessary for canaled installations, you must act on the engine dip switches, for more details refer to the technical documentation.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	FCZI
5	Size
	2, 3, 4, 5, 7, 9
6	main heat exchanger
0	Standard
5	Oversized
7	Secondary heat exchanger

Field	Description
0	Without coil
1	Standard
2	Oversized
8	Version
Р	Flush-mounting, without cabinet
PR	Flush-mounting, without cabinet, with water connections on right-hand side

SIZE AVAILABLE FOR VERSION

Size		200	201	202	250	300	301	302	350	400	401	402	450
Versions produced (by size)													
Versions available (by size)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•
		500	501	502	550	700	701	702	750	900	901	950	
Versions produced (by size)													
Versions available (by size)	P,PR	•	•	•	•	•	•		•	•	•	•	

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

PXAI: Thermostat on the machine for controlling the fan coils (both with asynchronous and brushless motors), complete with water and air probes to be positioned in the relative seats, and a plastic support to fix it on the side of the unit. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, purifier devices (Cold Plasma and

germicidal lamp), or radiant plate. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

 $\dot{\text{VMF-SW1:}}$ Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.

VCZ41: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZ4124: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZ42: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZ4224: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZ43: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZ4324: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell. actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

(Heating only) additional coil

BV: Hot water heat exchanger with 1 row.

Installation accessories

AMP: Wall mounting kit

DSC: Condensate drainage device.

BC: Condensate drip.

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.

MZA: Cabinet housing with fixed fins. MZU: Cabinet housing with adjustable fins.

GA: Intake grid with fixed louvers

GAF: Intake grid with filter and fixed louvers

GM: Flow grid with adjustable louvers.

PA: Intake plenum in galvanised sheet metal, complete with suction couplings for circular-section ducts.

PAF: Intake plenum providing recovery and delivery on the same side, for all installations where the machine needs to be positioned outside the air conditioned rooms to minimise the noise levels and facilitate maintenance.

PM: Galvanised sheet steel flow plenum, externally insulated, equipped with plastic flow fittings for ducts and circular sections.

RD: Straight delivery coupling for canalisation.

RDA: Straight suction coupling for canalisation.

RP: 90° delivery coupling. RPA: 90° suction coupling.

Accessories for ducting

MZC: Plenum with motorised dampers.

RDA V: Straight intake connection with rectangular flange.

RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

RDA_C: Straight intake connection with circular flanges.

PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.

RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

RDM_V: Straight delivery coupling in galvanised sheet metal.

RDM_C: Straight discharge internally insulated, with circular flanges.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
AER503IR (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PR0503	P,PR	•			•				•			•			•	•		•						•
PXAI	P,PR	•						•	•	•	•	•					•				•			•
SA5 (2)	P,PR	•	•	•	•	•		•	•	•	•	•	•		•	•	•	•	•	•		•		•
SW3 (2)	P,PR										•				•									•
SW5 (2)	P,PR	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TX (3)	P,PR	•	•	•	•	•	•	•			•	•	•	•	•			•		•	•	•	•	

⁽¹⁾ Wall-mount installation.

For more information about VMF system, refer to the dedicated documentation.

VMF system

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
DI24	P,PR	•	•	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E19I (1)	P,PR	•		•	•				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E3	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4DX	P,PR	•		•	•			•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
VMF-E4X	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	
VMF-IR	P,PR			•	•			•	•		•	•	•		•	•		•	•	•		•	•	•

⁽¹⁾ Wair-Hould insolation:
(2) Probe for AERSO3IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
VMF-SW	P,PR	•			•	•	•		•	•	•		•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW1	P,PR	•													•			•	•		•			
VMHI	P.PR				•						•				•				•			•	•	•

⁽¹⁾ Mandatory accessory.

Water valves

Valve Kit for 4 pipe systems

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
VCZ1X4L (1)	P,PR	•			•																			
VCZ1X4R (1)	P,PR				•																			
VCZ2X4L (1)	P,PR					•			•	•			•	•			•	•			•			
VCZ2X4R (1)	P,PR					•			•	•			•	•			•				•			
VCZ3X4L (1)	P,PR																							•
VCZ3X4R (1)	P,PR																					•		•

 $^{(1) \ \} The \ valves \ can \ be \ combined \ with \ the \ units \ if \ there \ is \ a \ control \ panel \ for \ managing \ them.$

3 way valve kit

200	201	202	250	300	301	302	350	400	401	402	450
VCZ41	VCZ41	VCZ41	VCZ41	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42
VCZ4124	VCZ4124	VCZ4124	VCZ4124	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224
	VCF44	VCF44			VCF44	VCF44			VCF44	VCF44	
-	VCF4424	VCF4424	-	-	VCF4424	VCF4424	-	-	VCF4424	VCF4424	-
VCF44				VCF44				VCF44			
VCF4424	-	-	-	VCF4424	-	-	-	VCF4424	-	-	-
500	501	502	550	700	701	702	750	900	901	950	
VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ42	VCZ43	VCZ43	VCZ43	
VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4224	VCZ4324	VCZ4324	VCZ4324	
	VCF44	VCF44			VCF44	VCF44			VCF45		
-	VCF4424	VCF4424	-	-	VCF4424	VCF4424	-	-	VCF4524	-	
VCF44				VCF44				VCF45			
VCF4424	-	-	-	VCF4424	-	-	-	VCF4524	-	-	
	VCZ41 VCZ4124 - VCF44 VCF4424 - S00 VCZ42 VCZ4224 - VCF44	VCZ41 VCZ4124 VCZ4124 VCZ4124 VCF44 VCF4424 VCF4424 VCF4424 S00 S01 VCZ42 VCZ42 VCZ42 VCZ424 VCF44 VCF4424	VCZ41 VCZ41 VCZ4124 VCZ4124 VCZ4124 VCZ4124 VCF4424 VCF4424 VCF4424 VCF4424 VCF4424 VCF4424 VCF4424 - - 500 501 502 VCZ42 VCZ42 VCZ42 VCZ4224 VCZ4224 VCZ4224 VCF44 VCF44 VCF4424 VCF442 VCF4424 VCF4424	VCZ41 VCZ41 VCZ41 VCZ4124 VCZ4224 VCZ4	VCZ41 VCZ41 VCZ41 VCZ42 VCZ4124 VCZ4124 VCZ4124 VCZ4224 VCF44 VCF44 VCF4424 VCF4424 VCF44 VCF4424 VCF4424 VCF4424 VCF44 VCF4424 VCF4424 VCF4424 VCF4424 VCF4424 VCF4424 VCF4424 S00 501 502 550 700 VCZ42 VCZ42 VCZ42 VCZ42 VCZ42 VCZ4224 VCZ4224 VCZ4224 VCZ4224 VCZ4224 VCF44 VCF442 VCF4424 VCF4424 VCF442	VCZ41 VCZ41 VCZ41 VCZ41 VCZ42 VCZ42 VCZ4224 VCZ422 VCZ422 VCZ422 VCZ4224 VCZ4224	VCZ41 VCZ41 VCZ41 VCZ41 VCZ42 VCZ42 VCZ42 VCZ42 VCZ4224 VCF4424 VCZ4224 VCZ4224	VCZ41 VCZ41 VCZ41 VCZ42 VCZ42 VCZ42 VCZ42 VCZ42 VCZ4224 VCZ422 VCZ422 VCZ422 VCZ422 VCZ4224 VCZ4224	VCZ41 VCZ41 VCZ41 VCZ41 VCZ42 VCZ42 VCZ42 VCZ42 VCZ42 VCZ42 VCZ424 VCZ4224 VCZ422 VCZ422 VCZ422 VCZ422 VCZ422 VCZ4224 VCZ4224 <th< td=""><td>VCZ41 VCZ41 VCZ41 VCZ41 VCZ42 VCZ4224 V</td><td>VCZ41 VCZ41 VCZ41 VCZ42 VCZ424 VCZ424 VCZ424 VCZ4224 VCZ422 VCZ4224 VCZ4224</td></th<>	VCZ41 VCZ41 VCZ41 VCZ41 VCZ42 VCZ4224 V	VCZ41 VCZ41 VCZ41 VCZ42 VCZ424 VCZ424 VCZ424 VCZ4224 VCZ422 VCZ4224 VCZ4224

VCF41 - 42 - 43; VCF44 - 45 (230V~50Hz) VCF4124 - 4224 - 4324; VCF4424 - 4524 (24V)

2 way valve kit

200	201	202	250	300	301	302	350	400	401	402	450
VCZD1	VCZD1	VCZD1	VCZD1	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2
VCZD124	VCZD124	VCZD124	VCZD124	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224
	VCFD4	VCFD4			VCFD4	VCFD4			VCFD4	VCFD4	
-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-
VCFD4				VCFD4				VCFD4			
VCFD424	-	-	-	VCFD424	-	-	-	VCFD424	-	-	-
500	501	502	550	700	701	702	750	900	901	950	
VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD2	VCZD3	VCZD3	VCZD3	
VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD224	VCZD324	VCZD324	VCZD324	
	VCFD4	VCFD4			VCFD4	VCFD4			VCFD4		
-	VCFD424	VCFD424	-	-	VCFD424	VCFD424	-	-	VCFD424	-	
VCFD4				VCFD4				VCFD4			
VCFD424	-	-	-	VCFD424	-	-	-	VCFD424	-	-	
	VCZD1 VCZD124 - VCFD4 VCFD424 500 VCZD2 VCZD224 - VCFD4	VCZD1 VCZD1 VCZD124 VCZD124 VCFD4 VCFD424 VCFD4 - VCFD424 - S00 S01 VCZD2 VCZD2 VCZD224 VCZD224 VCFD424 VCFD424	VCZD1 VCZD1 VCZD1 VCZD124 VCZD124 VCZD124 VCFD4 VCFD4 VCFD4 VCFD4 VCFD424 VCFD424 VCFD4 - - VCFD424 - - S00 501 502 VCZD2 VCZD2 VCZD2 VCZD224 VCZD224 VCZD224 VCFD4 VCFD424 VCFD424 VCFD4 VCFD424 VCFD424	VCZD1 VCZD1 VCZD1 VCZD1 VCZD124 VCZD124 VCZD124 VCZD124 VCFD4 VCFD4 VCFD4 - VCFD4 VCFD424 - - VCFD4 VCFD424 - - VCFD424 - - - VCFD424 - - - VCFD424 - - - VCFD2 VCZD2 VCZD2 VCZD2 VCZD224 VCZD224 VCZD224 VCZD224 VCFD4 VCFD4 - - VCFD4 VCFD424 VCFD424 -	VCZD1 VCZD1 VCZD1 VCZD2 VCZD124 VCZD124 VCZD124 VCZD124 VCZD124 VCFD4 VCFD4 VCFD4 - - VCFD4 VCFD424 VCFD424 - - VCFD4 VCFD424 VCFD424 VCFD424 - VCFD4 VCFD424 VCFD424 VCFD424 VCFD424 VCFD424 VCFD424 VCFD424 VCFD424 VCZD224 VCZD224 </td <td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD24 VCZD224 VCZD24 VCFD424 VCZD22 VCZD2 VCZD2 VCZD2 VCZD2 VCZD2 VCZD224 VCZD224 VCZD224 VCZD224 VCZD224 VCZD224 VCZD224 VCFD424 <t< td=""><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD24 VCZD224 VCZD24 VCFD424 VCZD224 VCZD224</td><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD2 VCZD24 VCZD224 VCZD22 VCZD2 VCZD2 VCZD2 VCZD22 VCZD224 <t< td=""><td>VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD2 VCZD2 VCZD24 VCZD24 VCZD24 VCZD224 VCZD244 VCFD424 VCFD424</td><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD224 VCZD24 VCFD424 VCFD</td><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD24 VCZD24 VCZD24 VCZD24 VCZD224 VCZD24 VCFD424 VCFD42</td></t<></td></t<></td>	VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD24 VCZD224 VCZD24 VCFD424 VCZD22 VCZD2 VCZD2 VCZD2 VCZD2 VCZD2 VCZD224 VCZD224 VCZD224 VCZD224 VCZD224 VCZD224 VCZD224 VCFD424 VCFD424 <t< td=""><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD24 VCZD224 VCZD24 VCFD424 VCZD224 VCZD224</td><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD2 VCZD24 VCZD224 VCZD22 VCZD2 VCZD2 VCZD2 VCZD22 VCZD224 <t< td=""><td>VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD2 VCZD2 VCZD24 VCZD24 VCZD24 VCZD224 VCZD244 VCFD424 VCFD424</td><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD224 VCZD24 VCFD424 VCFD</td><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD24 VCZD24 VCZD24 VCZD24 VCZD224 VCZD24 VCFD424 VCFD42</td></t<></td></t<>	VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD24 VCZD224 VCZD24 VCFD424 VCZD224 VCZD224	VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD2 VCZD24 VCZD224 VCZD22 VCZD2 VCZD2 VCZD2 VCZD22 VCZD224 VCZD224 <t< td=""><td>VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD2 VCZD2 VCZD24 VCZD24 VCZD24 VCZD224 VCZD244 VCFD424 VCFD424</td><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD224 VCZD24 VCFD424 VCFD</td><td>VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD24 VCZD24 VCZD24 VCZD24 VCZD224 VCZD24 VCFD424 VCFD42</td></t<>	VCZD1 VCZD1 VCZD1 VCZD2 VCZD2 VCZD2 VCZD2 VCZD2 VCZD24 VCZD24 VCZD24 VCZD224 VCZD244 VCFD424 VCFD424	VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD224 VCZD24 VCFD424 VCFD	VCZD1 VCZD1 VCZD1 VCZD1 VCZD2 VCZD24 VCZD24 VCZD24 VCZD24 VCZD224 VCZD24 VCFD424 VCFD42

VCZD1 - 2 - 3; VCFD4 (230V~50Hz) VCZD124 - 224 - 324; VCF424 (24V)

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
VJP060 (1)	P,PR	•	•	•	•	•	•	•	•															
VJP060M (2)	P,PR			•				•	•															
VJP090 (1)	P,PR														•									
VJP090M (2)	P,PR										•			•	•									
VJP150 (1)	P,PR																							•
VJP150M (2)	P,PR																							•

^{(1) 230}V~50Hz (2) 24V

(Heating only) additional coil

Heating only additional coil

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
BV122 (1)	P,PR	•																						
BV132 (1)	P,PR					•																		
BV142 (1)	P,PR									•				•										
BV162 (1)	P,PR																					•		

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
3VZ800 (1)	P,PR	200	<u> 401</u>	202	23U	300	JVI	302	330	400	4V I	402	430	JUU	JU I	302	220	/00	/01	/02	/30	900	30 l	73
1) Not available for sizes		nain coil																•						_
		iain coii.																						
Installation acc																								
Wall mounting k	it																							
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
AMP20	P,PR	•	•	•	٠	•	•	•	٠	•	•	٠	٠	•	•	•	•							
AMPZ	P,PR																	٠	<u>·</u>	•	•	•	•	_ •
Condensate drip																								
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
BCZ4 (1)	P,PR	- 200	- 201			- 300			•	•	+01	•	***	•			•		-/01			•	701	•
BCZ5 (2)	P,PR	•		•							•			•		•			•		•			
BCZ6 (2)	P,PR																					•		
(1) For vertical installatio																								
(2) For horizontal installa																								
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
BC8 (1)	P,PR	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
BC9 (1)	P,PR																					•	•	•
(1) For horizontal installa	tion.																							
Condensate recii	culation de	evice																						
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
DSCZ4 (1)	P,PR	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
(1) DSCZ4 due to space p	roblems inside th	e unit, the	VCZ1-7	2-3-4 X4I	L/R valv	es cann	ot be mo	unted t	ogether	with th	e amn/	MPZ ac	essorie	s, with a	ıll the c	ondensa	te collec	tion tra	ys. With	the VM	IF-E19/F	19l ther	rmostati	s, ple
contact the head office		,			_, ruiv	_5 camil			- getilel	ai di	- ap//	2 00		.,	0				,	1111	17/1	uici		-, Pic
Ventilcassaform	a																							
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
CHF22	P,PR	•	•	•	•																			
CHF32	P,PR					•		•																
CHF42	P,PR										•			•										
CHF62	P,PR																	•		•	•	•		•
Cabinet housing	with fixed	fins.																						
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
MZA200	P,PR	•	•	•	•																			
MZA300	P,PR					•	•	•	•															
MZA500	P,PR									•	•	•	•	•	•	•	•							
MZA800	P,PR																	•	•	•	•			
MZA900	P,PR																					<u>·</u>	•	•
Cabinet housing	with adius	tahle fi	ıns																					
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701					950
	P,PR	200	201	202	230		301	302	330		701	702	770		JU 1	J02_				702	750	ann	anı	
W(/11100					-													700		702	750	900	901	
MZU100 MZU300		•	•	•	•													700	70.	702	750	900	901	
MZU300	P,PR	•	<u>·</u>	•	•	•	•	•	•	•	•	•		_	•	•		700		702	750	900	901	-
MZU300 MZU500	P,PR P,PR	•	<u>·</u>	•	•		•	•	•	•	•	•	•	•		•		•	-	702	750	900	901	
MZU300 MZU500 MZU800	P,PR P,PR P,PR	•	<u>•</u>	•	•		•	•	•	•	•	•	•	•		•						900	901	
MZU300 MZU500	P,PR P,PR			-	•		•	•	•	•	•	•	•	•		•								•
MZU300 MZU500 MZU800 MZU900	P,PR P,PR P,PR P,PR		nsta	•		•		•	•	•	•	•	•	•		•								•
MZU300 MZU500 MZU800 MZU900 Wall mounting	P,PR P,PR P,PR P,PR P,PR		nsta	•		•		•	•	•	•	•	•	•		•								•
MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gri	P,PR P,PR P,PR P,PR P,PR duct	type i		llatio	on ac	cesse	ories								•		•	•	•	•	•	•	•	
MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model	P,PR P,PR P,PR P,PR P,PR P,PR and duct Ile Ver		nsta 201	•	on ac	•		302	350	400	401	402	450	500		502								95
MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA22	P,PR P,PR P,PR P,PR P,PR P,PR	type i		llatio	on ac	cesse	ories 301	302	350						•		•	•	•	•	•	•	•	95
MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA32	P,PR P,PR P,PR P,PR P,PR Mand duct Me Ver P,PR P,PR P,PR	type i		llatio	on ac	cesse	ories								•		•	•	•	•	•	•	•	95
MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA32 GA42	P,PR P,PR P,PR P,PR P,PR P,PR	type i		llatio	on ac	cesse	ories 301	302	350	400	401	402	450	500	501	502	550	•	•	•	•	•	•	95
MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA32 GA42 GA62	P,PR P,PR P,PR P,PR P,PR and duct lle Ver P,PR P,PR P,PR P,PR P,PR P,PR P,PR	200 ·	201	llatio	on ac	cesse	ories 301	302	350	400	401	402	450	500	501	502	550	700	•	•	•	900	•	95
MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA32 GA42 GA62	P,PR P,PR P,PR P,PR P,PR and duct lle Ver P,PR P,PR P,PR P,PR P,PR P,PR P,PR	200 ·	201	llatio	on ac	cesse	ories 301	302	350	400	401	402	450	500	501	502	550	700	•	•	•	900	•	95
MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA32 GA42 GA62 Intake grilles wit	P,PR P,PR P,PR P,PR P,PR and duct lle Ver P,PR P,PR P,PR P,PR P,PR P,PR P,PR	200 ·	201	llatio	on ac	cesse	ories 301	302	350	400	401	402	450	500	501	502	550	700	•	•	•	900	•	•
MZU300 MZU300 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA32 GA42 GA62 Intake grilles wit Model	P,PR P,PR P,PR P,PR P,PR And duct Ile Ver P,PR P,PR P,PR P,PR P,PR P,PR P,PR P,P	200	201	llatio	250	300 ·	301 •	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	•
MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA32 GA42 GA62 Intake grilles wit Model GAF22	P,PR P,PR P,PR P,PR P,PR and duct Ile Ver P,PR P,PR P,PR P,PR P,PR P,PR P,PR P,P	200 .	201	llatio	250	300 ·	301 •	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	•
MZU300 MZU300 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA32 GA42 GA62 Intake grilles wit Model GAF22 GAF32	P,PR P,PR P,PR P,PR P,PR P,PR P,PR P,PR	200 .	201	llatio	250	300 ·	301 •	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	•
MZU300 MZU300 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA32 GA42 GA62 Intake grilles wit Model GAF22 GAF32 GAF32 GAF42	P,PR P,PR P,PR P,PR P,PR Wer P,PR P,PR P,PR P,PR P,PR P,PR P,PR P,P	200 .	201	llatio	250	300 ·	301 •	302	350	400	401	· 402	450	500	501	. 502	550	700	701	702	750	900	901	•
MZU300 MZU300 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA42 GA42 GA62 Intake grilles wit Model GAF22 GAF32 GAF42 GAF62	P,PR P,PR P,PR P,PR P,PR R,PR P,PR P,P	200	201 • ad filt 201	202 ·	250	300 ·	301 •	302	350	400	401	· 402	450	500	501	. 502	550	700	701	702	750	900	901	•
MZU300 MZU300 MZU800 MZU900 Wall mounting Lower intake gril Model GA22 GA62 Intake grilles wit Model GAF22 GAF32 GAF42 GAF62 Delivery grilles v	P,PR P,PR P,PR P,PR P,PR P,PR P,PR P,PR	vers an	201 ·	202 · · · · · · · · · · · · · · · · · ·	250 ·	300 ·	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
MZU300 MZU300 MZU500 MZU900 Wall mounting Lower intake gril Model GA22 GA42 GA62 Intake grilles wit Model GAF22 GAF32 GAF42 GAF62 Delivery grilles v Model	P,PR P,PR P,PR P,PR P,PR P,PR P,PR P,PR	200	201 • ad filt 201	202 ·	250	300 ·	301 •	302	350	400	401	· 402	450	500	501	. 502	550	700	701	702	750	900	901	95
MZU300 MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA62 GA62 Intake grilles wit Model GAF22 GAF42 GAF62 GAF62 Delivery grilles v Model GM22	P,PR P,PR P,PR P,PR P,PR P,PR P,PR P,PR	vers an	201 ·	202 · · · · · · · · · · · · · · · · · ·	250 ·	300 ·	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
MZU300 MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA62 GA62 Intake grilles wit Model GAF22 GAF42 GAF42 GAF62 Delivery grilles v Model GM22 GM32	P,PR P,PR P,PR P,PR P,PR P,PR P,PR P,PR	vers an 200 .	201 · · · · · · · · · · · · · · · · · · ·	202	250 · · · · · · · · · · · · · · · · · · ·	300 ·	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
MZU300 MZU300 MZU500 MZU800 MZU900 Wall mounting Lower intake gril Model GA62 GA62 Intake grilles wit Model GAF22 GAF42 GAF62 GAF62 Delivery grilles v Model GM22	P,PR P,PR P,PR P,PR P,PR P,PR P,PR P,PR	vers an 200 .	201 · · · · · · · · · · · · · · · · · · ·	202	250 · · · · · · · · · · · · · · · · · · ·	300 300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950

PA22 PA32 PA42 PA62 Intake plenum provi Model PA22F PA32F PA42F PA62F Delivery plenum wit Model PM22 PM32 PM62 Straight delivery cou Model RD22 RD32 RD32 RD42	Ver 20 P.P.R P.P.R P.P.R P.P.R P.P.R Ver 20 P.P.R P.P.R P.P.R P.P.R P.P.R P.P.R P.P.R	ry and 0 201	202 . deliv 202 	250 eery or 250	300 n the 300	301 same 301	302 • side 302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
PA32 PA42 PA62 Intake plenum provi Model PA22F PA32F PA42F PA42F PA62F Delivery plenum wit Model PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD32 RD32 RD42	P.PR P.PR P.PR P.PR Ver 20 P.PR P.PR P.PR P.PR P.PR P.PR P.PR P.P	ry and 0 201	deliv 202 •	ery oi 250	n the 300	301	side 302			•	•	•	•	<u>.</u>	•	•							
PA42 PA62 PA62 PA62 PA62 PA62 PA62 PA62 PA6	P.PR P.PR ding recove Ver 20 P.PR P.PR P.PR P.PR P.PR P.PR P.PR P.P	0 201 · · · · · · · · · · · · · · · · · · ·	202	250	n the 300	301	side 302			•	•	•	•	•	•	•	•		•		•	•	
PA42 PA62 Intake plenum provi Model PA22F PA32F PA42F PA62F Delivery plenum wit Model PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD32 RD32 RD32 RD32 RD32	P.PR P.PR ding recove Ver 20 P.PR P.PR P.PR P.PR P.PR P.PR P.PR P.P	0 201 · · · · · · · · · · · · · · · · · · ·	202	250	300	301	302	350		•	•	•	•	•	•	•	•		_•	•			
PA62 Intake plenum provi Model PA22F PA32F PA44F PA62F Delivery plenum wit Model PM22 PM32 PM42 PM62 PM62 Straight delivery cou Model RD22 RD32 RD32 RD32 RD32 RD32 RD42	eppr ding recove Ver 20 ppr ppr ppr ppr Ver 20 ppr ppr ppr ppr	0 201 · · · · · · · · · · · · · · · · · · ·	202	250	300	301	302	350	400								•		•	•	•	<u>.</u>	
Intake plenum provi Model PPA22F PPA32F PPA42F PPA62F Delivery plenum wit Model PPM22 PPM32 PPM32 PPM42 PPM62 Straight delivery cou Model RD22 RD32 RD32 RD32	ding recove Ver 20 P.PR P.PR P.PR P.PR Ver 20 P.PR P.PR P.PR P.PR P.PR P.PR P.PR P.P	0 201 · · · · · · · · · · · · · · · · · · ·	202	250	300	301	302	350	400														
Model PA22F PA32F PA42F PA62F Delivery plenum wit Model PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD32 RD32 RD32	Ver 20 P.P.R P.P.R P.P.R P.P.R P.P.R Ver 20 P.P.R P.P.R P.P.R P.P.R P.P.R P.P.R	0 201 · · · · · · · · · · · · · · · · · · ·	202	250	300	301	302	350	400														
PAZZE PAZZE PAZZE PAZZE PAZZE PMODEI PMZZ PMZZ PMZZ PMZZ PMZZ PMZZ PMZZ PMZ	P.PR P.PR P.PR P.PR P.PR Ver 20 P.PR P.PR P.PR P.PR P.PR	nges. 0 201	202					350	400														
PA32F PA42F PA62F Delivery plenum wit Model PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD32 RD32	P.PR P.PR P.PR P.PR Ver 20 P.PR P.PR P.PR P.PR P.PR	inges. 0 201	202	•	•	•	•			401	402	450	500	501	502	550	700	701	702	750	900	901	950
PA42F PA62F Delivery plenum wit Model PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD32 RD42	P.PR P.PR h circular fl: Ver 20 P.PR P.PR P.PR P.PR P.PR	0 201			•	•	•																
PA42F PA62F Delivery plenum wit Model PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD32 RD42	P.PR P.PR h circular fl: Ver 20 P.PR P.PR P.PR P.PR P.PR	0 201																					
PA62F Delivery plenum wit Model PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD32	P.PR h circular fla Ver 20 P.PR P.PR P.PR P.PR	0 201											•	•									
Delivery plenum wit Model PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD42	h circular fla Ver 20 P,PR P,PR P,PR P,PR P,PR	0 201															•	•	•	•	•	•	
Model PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD42	Ver 20 P,PR P,PR P,PR P,PR P,PR P,PR	0 201																					
PM22 PM32 PM42 PM62 Straight delivery cou Model RD22 RD32	P,PR P,PR P,PR P,PR P,PR																						
PM32 PM42 PM62 Straight delivery cou Model RD22 RD32 RD42	P,PR P,PR P,PR P,PR	•		250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
PM42 PM62 Straight delivery cou Model RD22 RD32 RD42	P,PR P,PR I pling		•	•																			
PM62 Straight delivery cou Model RD22 RD32 RD42	P,PR Ipling				•	•	•	•															
Straight delivery cou Model RD22 RD32 RD42	pling									•	•		•	•	•								
Model RD22 RD32 RD42																	•	•	•	•			•
Model RD22 RD32 RD42																							
RD22 RD32 RD42	Ver 20																						
RD32 RD42		0 201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RD42	P,PR ·	•	•	•																			
	P,PR					•		•															
	P,PR													•									
	P,PR																•		•			•	
'																							
Straight suction cou	oling																						
Model	Ver 20	0 201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RDA22	P,PR		•	•																			
RDA32	P,PR					•	•																
	P,PR																						
	P,PR																•	-				-	-
	.,																						
90° delivery coupling	j.																						
Model	Ver 20	0 201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RP22	P,PR ·	•	•	•																			
RP32	P,PR					•	•																
	P,PR																						
	P,PR																						
	.,																						
90° suction coupling																							
Model	Ver 20	0 201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RPA22	P,PR ·	•	•	•																			
RPA32	P,PR					•																	
	P,PR													•									
	P,PR												<u> </u>	<u> </u>	<u> </u>								
MINUZ	1,1 N																<u> </u>	·	·				
Accessories for du	ctina																						
Plenum with motoris	_	ς.																					
			202	250	200	201	202	350	400	401	403	450	F00	F04	F63		700	704	703	750		001	050
	Ver 20		202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
	P,PR	•	•	•																			
	P,PR				•	•	•	•															
	P,PR								•	•	٠	•	•	•	•	•							
MZC830	P,PR																	•		•	•	•	•
Causialat inteles	ostica calsi	uo -4 -	- ا-رس	A																			
Straight intake conn												,											
	Ver 20	0 201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
	P,PR	•	•	•																			
	P,PR				•	•	•	•															
	P,PR								•	•	•	•	•	•	•								
KDAZUUV	P,PR																						•
RDA300V	rectangular	flange	٠.																				
RDA300V	Ver 20	0 201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
RDA300V Intake plenum with I Model		•	•																				
RDA300V Intake plenum with i Model	P,PR																						
RDA300V Intake plenum with I Model RPA000V						•																	
RDA300V Intake plenum with I Model RPA000V RPA100V	P,PR ·				•	•	•	•		•				•		•							

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
PA000V	P,PR																							
PA100V	P,PR																							
PA200V	P,PR										•	•		•	•	•								
PA300V	P,PR																	•	•	•	•	•	•	•
Internally ins	ulated delive	y pleni	ım w	ith ciı	rculai	r flan	ges.																	
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
PM000V	P,PR																							
PM100V	P,PR																							
PM200V	P,PR									•	•	•		•	•	•	•							
PM300V	P,PR																							
RPM100V	P,PR	•	•	•	•	•	•	•	•	_		•	•	•										_
RPM000V	P,PR	•	•	•	•																			
RPM200V	P,PR									•	•	•	•	•	•	•	•							
RPM300V	P,PR																	•	•	•	<u> </u>	•	•	•
Straight deliv	ery coupling	in galva	nise	d she	et me	tal.																		
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
RDM000V	P,PR	•	•	•	•																			
RDM100V	P,PR					•	•	•	•															
RDM200V	P,PR									•	•	•	•	•	•	•								
RDM300V	P,PR																	•	•	<u>.</u>	•	•	•	•
Straight disch	narge internal	ly insul	ated,	with	circu	lar fl	ange	s.																
Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	95
RDMC000V	P,PR	•	•	•																				
RDMC100V	P,PR					•	•	•	•															
RDMC100V RDMC200V	P,PR P,PR		-			•	•	•	•					•								-		

RDMC300V

P,PR

PERFORMANCE DATA FOR UNITS WITHOUT HEAD (EUROVENT CERTIFICATE FC-H)

2-pipe																			
		1	FCZI200P		1	FCZI250P		1	FCZI300P	٦	1	FCZI350P		1	FCZI400P		1	FCZI450P	
-		1 L	2 M	3 H	L	2 M	3 H	L	2 M	3 H	L	2 M	3 H	L	2 M	3 H	<u> </u>	2 M	3
Heating performance 70 °C / 6	i0°C (1)	L	IVI	п	<u> </u>	IVI	п	<u> </u>	IVI	п	L	IVI	п	<u> </u>	IVI	п	L	IVI	
Heating capacity	kW	2,02	2,95	3,70	2,20	3,18	4,05	3,47	4,46	5,50	3,77	4,92	6,15	4,32	5,74	7,15	4,57	6,29	7,82
Water flow rate system side	I/h	177	258	324	193	278	355	304	391	482	330	431	539	379	503	627	400	551	685
Pressure drop system side	kPa	6	12	18	7	15	23	7	12	18	8	14	20	9	16	24	6	11	16
Heating performance 45 °C/4	_	_ •			,												_ •		
Heating capacity	kW	1,00	1,46	1,84	1,09	1,58	2,01	1,72	2,21	2,73	1,87	2,44	3,06	2,14	2,85	3,55	2,27	3,12	3,88
Water flow rate system side	I/h	174	254	319	190	274	350	299	385	475	325	425	531	373	495	617	394	543	675
Pressure drop system side	kPa	6	12	18	8	15	22	8	12	18	8	14	20	10	16	24	6	11	16
Cooling performance 7 °C / 12	°C																		
Cooling capacity	kW	0,89	1,28	1,60	1,06	1,55	1,94	1,68	2,17	2,65	1,89	2,46	3,02	2,20	2,92	3,60	2,41	3,21	4,03
Sensible cooling capacity	kW	0,71	1,05	1,33	0,79	1,20	1,52	1,26	1,65	2,04	1,33	1,76	2,18	1,59	2,14	2,67	1,69	2,30	2,90
Water flow rate system side	I/h	153	221	275	182	267	334	288	374	456	350	460	560	379	503	619	414	552	694
Pressure drop system side	kPa	6	12	18	8	17	25	8	13	18	11	18	25	10	16	24	9	15	22
Fan																			
Туре	type									Centr	ifugal								
Fan motor	type				1					Inve	rter			1					
Number	no.		1			1			2			2			2			2	
Air flow rate	m³/h	140	220	290	140	220	290	260	350	450	260	350	450	330	460	600	330	460	600
Input power	W	7	8	14	7	8	14	5	7	13	5	7	13	5	10	18	5	10	18
Signal 0-10V	%	44	68	90	44	68	90	52	70	90	52	70	90	49	68	90	49	68	90
Fan coil sound data (3)	1D/V/	25.0	46.0	F1.0	25.0	46.0	F1 0	240	41.0	40.0	240	41.0	40.0	27.0	44.0	F1 0	27.0	44.0	
Sound power level	dB(A)	35,0 27,0	46,0 38,0	51,0 43,0	35,0 27,0	46,0 38,0	51,0 43,0	34,0 26,0	41,0 33,0	48,0	34,0 26,0	41,0 33,0	48,0	37,0 29,0	44,0 36,0	51,0 43,0	37,0 29,0	44,0 36,0	51,0
Sound pressure Finned pack heat exchanger	UD(A)	27,0	30,0	43,0	27,0	30,0	43,0	20,0	33,0	40,0	20,0	33,0	40,0	29,0	30,0	43,0	29,0	30,0	43,0
Water content main heat						-													
exchanger	- 1		0,5			0,7			0,8			1,0			1,0			1,4	
Diametre hydraulic fittings																			
	Ø		1 / 2 //			1/2"			3/4"			3/4"			3/4"			3/4"	
Main heat exchanger	V		1/2"			1/2		1	3/ 1			3/1			3/1				
maiii ileat excilaliyei	V			,															
Maiii Heat exchanger	V	1	FCZI500P	3	1	FCZI550P	3	1	FCZI700P	3	1	FCZI750P	3	1	FCZI900P	3	1	FCZI950P	3
Maiii neat exchangei	, v	1 L	FCZI500P		1 L	FCZI550P		1 L	FCZI700P	3 H	1 L	FCZI750P		1 L	FCZI900P			FCZI950P	
Heating performance 70 °C/6		-	FCZI500P	3		FCZI550P	3	_	FCZI700P			FCZI750P	3		FCZI900P	3	1	FCZI950P	3
		-	FCZI500P	3		FCZI550P	3	_	FCZI700P			FCZI750P	3		FCZI900P	3	1	FCZI950P	3
Heating performance 70 °C / 6	60°C (1)	L	FCZI500P 2 M	3 H	L	FCZI550P 2 M	3 H	L	FCZI700P 2 M	Н	L	FCZI750P 2 M	3 H	L	FCZI900P 2 M	3 H	1 L	FCZI950P 2 M	3 H
Heating performance 70 °C / 6	50°C (1)	L 5,27	FCZI500P 2 M	3 H 8,50	5,82	FCZI550P 2 M 8,34	3 H 9,75	8,10	FCZI700P 2 M	H 11,00	L 9,10	FCZI750P 2 M	3 H	L 10,77	FCZI900P 2 M	3 H	1 L	FCZI950P 2 M	3 H
Heating performance 70 °C / 6 Heating capacity Water flow rate system side	60 °C (1) kW I/h kPa	5,27 462 12	7,31 641 21	3 H 8,50 745	5,82 510	FCZI550P 2 M 8,34 731	3 H 9,75 855	8,10 710	FCZI700P 2 M 9,80 860	H 11,00 964	9,10 798	FCZI750P 2 M 11,30 991	3 H 12,50 1096	10,77 945	FCZI900P 2 M 13,35 1171	3 H 15,14 1328 22	1 L 11,20 982	FCZI950P 2 M 14,42 1264 24	3 H 17,10 1500
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity	60 °C (1) kW l/h kPa 60 °C (2) kW	5,27 462 12	7,31 641 21	3 H 8,50 745 28	5,82 510 10	ECZI550P 2 M 8,34 731 20 4,14	3 H 9,75 855 26	8,10 710 17	9,80 860 24	H 11,00 964 29 5,47	9,10 798 10 4,52	ECZI750P 2 M 11,30 991 15 5,62	3 H 12,50 1096 18	10,77 945 12 5,35	FCZI900P 2 M 13,35 1171 17	3 H 15,14 1328 22 7,53	1 L 11,20 982 16	FCZI950P 2 M 14,42 1264 24 7,17	3 H 17,10 1500 33
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side	50 °C (1) kW I/h kPa 10 °C (2) kW I/h	5,27 462 12 2,62 455	7,31 641 21 3,63 631	3 H 8,50 745 28 4,22 734	5,82 510 10 2,89 502	FCZI550P 2 M 8,34 731 20 4,14 720	3 H 9,75 855 26 4,85 842	8,10 710 17 4,03 699	FCZI700P 2 M 9,80 860 24 4,87 846	H 11,00 964 29 5,47 950	9,10 798 10 4,52 786	FCZI750P 2 M 11,30 991 15 5,62 975	3 H 12,50 1096 18 6,21 1079	10,77 945 12 5,35 930	FCZI900P 2 M 13,35 1171 17 6,64 1152	3 H 15,14 1328 22 7,53 1307	1 L 11,20 982 16 5,57 967	FCZI950P 2 M 14,42 1264 24 7,17 1245	3 H 17,10 1500 33 8,50 1476
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side	50 °C (1) kW I/h kPa 10 °C (2) kW I/h kPa	5,27 462 12	7,31 641 21	3 H 8,50 745 28	5,82 510 10	ECZI550P 2 M 8,34 731 20 4,14	3 H 9,75 855 26	8,10 710 17	9,80 860 24	H 11,00 964 29 5,47	9,10 798 10 4,52	ECZI750P 2 M 11,30 991 15 5,62	3 H 12,50 1096 18	10,77 945 12 5,35	FCZI900P 2 M 13,35 1171 17	3 H 15,14 1328 22 7,53	1 L 11,20 982 16	FCZI950P 2 M 14,42 1264 24 7,17	3 H 17,10 1500 33
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12	50 °C (1) kW I/h kPa 10 °C (2) kW I/h kPa °C	5,27 462 12 2,62 455 12	7,31 641 21 3,63 631 21	3 H 8,50 745 28 4,22 734 28	5,82 510 10 2,89 502	FCZI550P 2 M 8,34 731 20 4,14 720 20	3 H 9,75 855 26 4,85 842 26	8,10 710 17 4,03 699 16	FCZI700P 2 M 9,80 860 24 4,87 846 24	H 11,00 964 29 5,47 950 29	9,10 798 10 4,52 786 10	FCZI750P 2 M 11,30 991 15 5,62 975 14	3 H 12,50 1096 18 6,21 1079 18	10,77 945 12 5,35 930	FCZI900P 2 M 13,35 1171 17 6,64 1152 17	3 H 15,14 1328 22 7,53 1307 22	1 L 11,20 982 16 5,57 967 15	FCZI950P 2 M 14,42 1264 24 7,17 1245 24	3 H 17,10 1500 33 8,50 1476 33
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity	50°C(1) kW I/h kPa 10°C(2) kW I/h kPa °C kW	5,27 462 12 2,62 455 12	7,31 641 21 3,63 631 21	3 H 8,50 745 28 4,22 734 28	5,82 510 10 2,89 502 10	FCZI550P 2 M 8,34 731 20 4,14 720 20	3 H 9,75 855 26 4,85 842 26	8,10 710 17 4,03 699 16	9,80 860 24 4,87 846 24	H 11,00 964 29 5,47 950 29	9,10 798 10 4,52 786 10	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34	3 H 12,50 1096 18 6,21 1079 18	10,77 945 12 5,35 930 12	FCZI900P 2 M 13,35 1171 17 6,64 1152 17	3 H 15,14 1328 22 7,53 1307 22	1 L 11,20 982 16 5,57 967 15	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32	3 H 17,10 1500 33 8,50 1476 33
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Sensible cooling capacity	60°C(1) kW l/h kPa 60°C(2) kW l/h kPa °C kW kW	5,27 462 12 2,62 455 12 2,68 1,94	7,31 641 21 3,63 631 21 3,69 2,73	3 H 8,50 745 28 4,22 734 28 4,25 3,18	5,82 510 10 2,89 502 10 2,91 2,07	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98	3 H 9,75 855 26 4,85 842 26 4,79 3,49	8,10 710 17 4,03 699 16 3,92 2,99	9,80 860 24 4,87 846 24 4,89 3,76	H 11,00 964 29 5,47 950 29 5,50 4,30	9,10 798 10 4,52 786 10 4,27 3,20	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72	10,77 945 12 5,35 930 12 4,29 2,97	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68	1 L 11,20 982 16 5,57 967 15 5,77 3,80	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Sensible cooling capacity Water flow rate system side	60 °C (1) kW l/h kPa 60 °C (2) kW l/h kPa °C kW kW l/h	5,27 462 12 2,62 455 12 2,68 1,94 460	7,31 641 21 3,63 631 21 3,69 2,73 634	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731	5,82 510 10 2,89 502 10 2,91 2,07 501	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824	8,10 710 17 4,03 699 16 3,92 2,99 675	9,80 860 24 4,87 846 24 4,89 3,76 841	H 11,00 964 29 5,47 950 29 5,50 4,30 946	9,10 798 10 4,52 786 10 4,27 3,20 734	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056	10,77 945 12 5,35 930 12 4,29 2,97 738	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side	60°C(1) kW l/h kPa 60°C(2) kW l/h kPa °C kW kW	5,27 462 12 2,62 455 12 2,68 1,94	7,31 641 21 3,63 631 21 3,69 2,73	3 H 8,50 745 28 4,22 734 28 4,25 3,18	5,82 510 10 2,89 502 10 2,91 2,07	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98	3 H 9,75 855 26 4,85 842 26 4,79 3,49	8,10 710 17 4,03 699 16 3,92 2,99	9,80 860 24 4,87 846 24 4,89 3,76	H 11,00 964 29 5,47 950 29 5,50 4,30	9,10 798 10 4,52 786 10 4,27 3,20	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72	10,77 945 12 5,35 930 12 4,29 2,97	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68	1 L 11,20 982 16 5,57 967 15 5,77 3,80	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan	60°C (1) kW I/h kPa 10°C (2) kW I/h kPa °C kW kW I/h kPa	5,27 462 12 2,62 455 12 2,68 1,94 460	7,31 641 21 3,63 631 21 3,69 2,73 634	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731	5,82 510 10 2,89 502 10 2,91 2,07 501	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824	8,10 710 17 4,03 699 16 3,92 2,99 675	9,80 860 24 4,87 846 24 4,89 3,76 841	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30	9,10 798 10 4,52 786 10 4,27 3,20 734	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056	10,77 945 12 5,35 930 12 4,29 2,97 738	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type	60 °C(1) kW I/h kPa 60 °C(2) kW I/h kPa °C kW kW I/h kPa	5,27 462 12 2,62 455 12 2,68 1,94 460	7,31 641 21 3,63 631 21 3,69 2,73 634	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731	5,82 510 10 2,89 502 10 2,91 2,07 501	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824	8,10 710 17 4,03 699 16 3,92 2,99 675	9,80 860 24 4,87 846 24 4,89 3,76 841	11,00 964 29 5,47 950 29 5,50 4,30 946 30	9,10 798 10 4,52 786 10 4,27 3,20 734 10	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056	10,77 945 12 5,35 930 12 4,29 2,97 738	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor	60 °C (1) kW I/h kPa 60 °C (2) kW I/h kPa °C kW kW I/h kPa type type	5,27 462 12 2,62 455 12 2,68 1,94 460	7,31 641 21 3,63 631 21 3,69 2,73 634 22	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731	5,82 510 10 2,89 502 10 2,91 2,07 501	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824	8,10 710 17 4,03 699 16 3,92 2,99 675	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30	9,10 798 10 4,52 786 10 4,27 3,20 734 10	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056	10,77 945 12 5,35 930 12 4,29 2,97 738	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number	60 °C (1) kW I/h kPa 10 °C (2) kW I/h kPa *C kW kW I/h kPa type type no.	5,27 462 12 2,62 455 12 2,68 1,94 460	7,31 641 21 3,63 631 21 3,69 2,73 634	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731	5,82 510 10 2,89 502 10 2,91 2,07 501	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824	8,10 710 17 4,03 699 16 3,92 2,99 675	9,80 860 24 4,87 846 24 4,89 3,76 841	11,00 964 29 5,47 950 29 5,50 4,30 946 30	9,10 798 10 4,52 786 10 4,27 3,20 734 10	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056	10,77 945 12 5,35 930 12 4,29 2,97 738	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Sensible cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Fan Type Fan motor	60 °C (1) kW I/h kPa 60 °C (2) kW I/h kPa °C kW kW I/h kPa type type	5,27 462 12 2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 22	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	8,10 710 17 4,03 699 16 3,92 2,99 675 16	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30 Centr	9,10 798 10 4,52 786 10 4,27 3,20 734 10 rtfugal	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	10,77 945 12 5,35 930 12 4,29 2,97 738	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate	60 °C(1) kW I/h kPa 10 °C(2) kW I/h kPa °C kW kW I/h kPa type no. m³/h	5,27 462 12 12 2,62 455 12 2,68 1,94 460 13	7,31 641 21 3,63 631 21 3,69 2,73 634 22	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22 600	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	8,10 710 17 4,03 699 16 3,92 2,99 675 16	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30 Centr Inve	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	10,77 945 12 5,35 930 12 4,29 2,97 738 10	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992 15	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22 3 930	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Pressure drop system side Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Water flow rate system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power	60°C(1) kW l/h kPa 10°C(2) kW l/h kPa °C kW kW l/h kPa type type no. m³/h W	5,27 462 12 12 2,62 455 12 2,68 1,94 460 13	FCZI500P 2 M 7,31 641 21 3,63 631 21 3,69 2,73 634 22 2 600 18	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22 600 10	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	8,10 710 17 4,03 699 16 3,92 2,99 675 16	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 40	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30 Centr Inve	9,10 798 10 4,52 786 10 4,27 3,20 734 10 10 ifugal vrter	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14 3 930 40	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	10,777 945 12 5,35 930 12 4,29 2,97 738 10 700 30	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12 3 930 40	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992 15	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22 3 930 40	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating apacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Water flow rate system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level	60°C(1) kW l/h kPa 10°C(2) kW l/h kPa °C kW kW l/h kPa type type no. m³/h W	5,27 462 12 12 2,62 455 12 2,68 1,94 460 13	FCZI500P 2 M 7,31 641 21 3,63 631 21 3,69 2,73 634 22 2 600 18	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22 600 10	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	8,10 710 17 4,03 699 16 3,92 2,99 675 16	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 40	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30 Centr Inve	9,10 798 10 4,52 786 10 4,27 3,20 734 10 10 10 10 10 734 10	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14 3 930 40	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	10,777 945 12 5,35 930 12 4,29 2,97 738 10 700 30	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12 3 930 40	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992 15	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22 3 930 40	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Water flow rate system side Pressure drop system side Iype Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3)	60 °C(1) kW l/h kPa 10 °C(2) kW l/h kPa °C kW kW l/h kPa type type no. m³/h W	5,27 462 12 2,62 455 12 2,68 1,94 460 13	FCZI500P 2 M 7,31 641 21 3,63 631 21 3,69 2,73 634 22 2 600 18 74	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22 600 10 74	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	8,10 710 17 4,03 699 16 3,92 2,99 675 16	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 40 72	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30 Centr Inve	9,10 798 10 4,52 786 10 4,27 3,20 734 10 700 30 56	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14 3 930 40 72	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	10,777 945 12 5,35 930 12 4,29 2,97 738 10 700 30 56	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12 3 930 40 72	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992 15 700 30 56	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22 3 930 40 72	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating apacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Water flow rate system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level	60 °C(1) kW I/h kPa 10 °C(2) kW I/h kPa °C kW kW I/h kPa type type no. m³/h W % dB(A)	2,62 455 12 2,62 455 12 2,68 1,94 460 13	FCZI500P 2 M 7,31 641 21 3,63 631 21 3,69 2,73 634 22 2 600 18 74	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 4 400 4 50	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22 600 10 74	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	8,10 710 17 4,03 699 16 3,92 2,99 675 16	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 40 72 57,0	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30 Centr Inve	9,10 798 10 4,52 786 10 4,27 3,20 734 10 sifugal erter 700 30 56	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14 3 930 40 72 57,0	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	10,777 945 12 5,35 930 12 4,29 2,97 738 10 700 30 56	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12 3 930 40 72 57,0	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992 15 700 30 56	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22 3 930 40 72 57,0	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30 1140 80 90
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Water flow rate system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level Sound pressure Finned pack heat exchanger Water content main heat	60 °C(1) kW I/h kPa 10 °C(2) kW I/h kPa °C kW kW I/h kPa type type no. m³/h W % dB(A)	2,62 455 12 2,62 455 12 2,68 1,94 460 13	FCZI500P 2 M 7,31 641 21 3,63 631 21 3,69 2,73 634 22 600 18 74 51,0 43,0	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 4 400 4 50	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22 600 10 74 51,0 43,0	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	8,10 710 17 4,03 699 16 3,92 2,99 675 16	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 40 72 57,0 49,0	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30 Centr Inve	9,10 798 10 4,52 786 10 4,27 3,20 734 10 sifugal erter 700 30 56	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14 3 930 40 72 57,0 49,0	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	10,777 945 12 5,35 930 12 4,29 2,97 738 10 700 30 56	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12 3 930 40 72 57,0 49,0	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992 15 700 30 56	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22 3 930 40 72 57,0 49,0	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30 1140 80 90
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level Sound pressure Finned pack heat exchanger Water content main heat exchanger	SO °C(1) kW I/h kPa FO °C(2) kW I/h kPa °C kW kW I/h kPa type type no. m³/h W % dB(A) dB(A)	2,62 455 12 2,62 455 12 2,68 1,94 460 13	FCZI500P 2 M 7,31 641 21 3,63 631 21 3,69 2,73 634 22 2 600 18 74	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 4 400 4 50	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22 600 10 74	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	8,10 710 17 4,03 699 16 3,92 2,99 675 16	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 40 72 57,0	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30 Centr Inve	9,10 798 10 4,52 786 10 4,27 3,20 734 10 sifugal erter 700 30 56	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14 3 930 40 72 57,0	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	10,777 945 12 5,35 930 12 4,29 2,97 738 10 700 30 56	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12 3 930 40 72 57,0	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992 15 700 30 56	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22 3 930 40 72 57,0	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30 1140 80 90
Heating performance 70 °C / 6 Heating capacity Water flow rate system side Heating performance 45 °C / 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 °C / 12 Cooling capacity Water flow rate system side Pressure drop system side Fan Type Fan motor Number Air flow rate Input power Signal 0-10V Fan coil sound data (3) Sound power level Sound pressure Finned pack heat exchanger Water content main heat	SO °C(1) kW I/h kPa FO °C(2) kW I/h kPa °C kW kW I/h kPa type type no. m³/h W % dB(A) dB(A)	2,62 455 12 2,62 455 12 2,68 1,94 460 13	FCZI500P 2 M 7,31 641 21 3,63 631 21 3,69 2,73 634 22 600 18 74 51,0 43,0	3 H 8,50 745 28 4,22 734 28 4,25 3,18 731 29	5,82 510 10 2,89 502 10 2,91 2,07 501 12 400 4 400 4 50	FCZI550P 2 M 8,34 731 20 4,14 720 20 4,13 2,98 711 22 600 10 74 51,0 43,0	3 H 9,75 855 26 4,85 842 26 4,79 3,49 824 28	8,10 710 17 4,03 699 16 3,92 2,99 675 16	FCZI700P 2 M 9,80 860 24 4,87 846 24 4,89 3,76 841 24 3 930 40 72 57,0 49,0	H 11,00 964 29 5,47 950 29 5,50 4,30 946 30 Centr Inve 80 90 62,0 54,0	9,10 798 10 4,52 786 10 4,27 3,20 734 10 sifugal erter 700 30 56	FCZI750P 2 M 11,30 991 15 5,62 975 14 5,34 4,05 918 14 3 930 40 72 57,0 49,0	3 H 12,50 1096 18 6,21 1079 18 6,14 4,72 1056 18	10,777 945 12 5,35 930 12 4,29 2,97 738 10 700 30 56	FCZI900P 2 M 13,35 1171 17 6,64 1152 17 5,00 3,78 860 12 3 930 40 72 57,0 49,0	3 H 15,14 1328 22 7,53 1307 22 6,91 5,68 1189 22	1 L 11,20 982 16 5,57 967 15 5,77 3,80 992 15 700 30 56	FCZI950P 2 M 14,42 1264 24 7,17 1245 24 7,32 4,87 1259 22 3 930 40 72 57,0 49,0	3 H 17,10 1500 33 8,50 1476 33 8,60 5,78 1479 30 1140 80 90

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

. p.p.			FCZI201F)		FCZI301P			FCZI401P			FCZI501P			FCZI701P)		FCZI901P	
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 65 °C/5	55 °C (1)																		
Heating capacity	kW	1,02	1,35	1,60	1,80	2,18	2,56	2,21	2,65	3,12	2,59	3,34	3,73	3,66	4,29	4,94	4,73	5,63	5,72
Water flow rate system side	l/h	89	118	140	158	191	224	186	232	273	227	293	327	320	375	437	414	492	501
Pressure drop system side	kPa	4	8	10	16	23	30	4	6	8	6	8	10	11	14	18	8	12	12
Cooling performance 7 °C / 12	2°€																		
Cooling capacity	kW	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25	3,92	4,89	5,50	4,29	5,00	6,91
Sensible cooling capacity	kW	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18	2,99	3,76	4,30	2,97	3,78	5,68
Water flow rate system side	l/h	153	221	275	288	374	456	379	503	619	460	634	731	675	841	946	738	860	1189
Pressure drop system side	kPa	6	12	18	8	13	18	10	16	24	13	22	29	16	24	30	10	12	22
Fan																			
Туре	type									Centr	ifugal								
Fan motor	type									Inve	rter								
Number	no.		1			2			2			2			3			3	
Air flow rate	m³/h	140	220	290	260	350	450	330	460	600	400	600	720	700	930	1140	700	930	1140
Input power	W	7	8	14	5	7	13	5	10	18	7	16	31	30	40	80	30	40	80
Signal 0-10V	%	44	68	90	52	70	90	49	68	90	50	74	90	56	72	90	56	72	90
Fan coil sound data (2)																			
Sound power level	dB(A)	35,0	46,0	51,0	34,0	41,0	48,0	37,0	44,0	51,0	42,0	51,0	56,0	50,0	57,0	62,0	51,0	57,0	62,0
Sound pressure	dB(A)	27,0	38,0	43,0	26,0	33,0	40,0	29,0	36,0	43,0	34,0	43,0	48,0	42,0	49,0	54,0	43,0	49,0	54,0
Finned pack heat exchanger																			
Water content main heat			0,5			0,8			1,0			1,0			1,2			1,8	
exchanger	'		0,3			U,0			1,0			1,0			1,2			1,0	
Water content secondary heat			0,2			0,3			0,3			0,3			0,4			0,7	
exchanger	'		U,L			0,5			0,5			درن			υ,τ			0,1	
Diametre hydraulic fittings																			
Main heat exchanger	Ø		1/2"			3/4"			3/4"			3/4"			3/4"			3/4"	
Secondary heat exchanger	Ø									1/	2"								

⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT (2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

PERFORMANCE DATA FOR UNITS WITH HEAD (EUROVENT CERTIFICATE FCP-H)

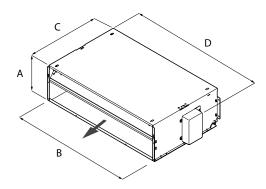
Reacting performance 79 C / 60 °C (1)	FCZI450P			50P	
New Processing Septembary 1,00			3 1 2	3	
Heating capacity Wil 1,81 3,16 3,34 2,01 3,40 3,62 3,02 3,03 3,03 3,08 5,06 3,64 4,01 Heating performance 45 (7,40 °C)2 Heating performance 57 (7,40 °C)2 Heating performance 57 (7,40 °C)2 Heating performance 77 (7,12 °C) Heatin	L M H	H L M	H L M	Н	
Mater from recystems side	110 (11 (0)	(0(500 700)	7 (2 5 02 0 23	7 07	
Preserum drop systems idie New 0,90 1,57 1,66 1,00 1,59 1,00 1,50 1,50 2,00 2,00 1,57 2,70 2,00 1,97 2,91 3,15 2,00 Water flow rate system side Wh 0,50 2,70 2,70 3,10 1,70 1,70 1,70 1,70 3,10 1,70			7,63 5,92 8,37		
Heating performance 45 "C / 40 " (C)			656 509 720		
Heating capacity WW 0.98 1.57 1.66 1.09 1.69 1.69 1.69 1.69 1.69 1.69 1.69 1.69 1.69 1.69 1.69 1.53 2.09 2.09 1.57 2.91 3.15 2.04 Wisher flow rate system side WP 6 13 16 7 77 79 7 74 76 77 79 9 70 79 9 70 79 9 Sensible confining capacity WW 0.68 1.37 1.45 0.95 1.67 1.76 1.40 2.38 2.31 1.66 2.70 2.88 2.03 2.08 2.21 2.22 Sensible confining capacity WW 0.68 1.37 1.45 0.95 1.67 1.76 1.40 2.38 2.31 1.66 2.70 2.88 2.03 2.08 2.21 2.22 Sensible confining capacity WW 0.68 1.31 1.00 0.70 1.29 1.37 1.0 1.82 1.94 1.51 1.94 2.07 1.45 1.82 1.94 We 0.68 1.31 1.00 0.70 1.29 1.37 1.0 1.82 1.94 1.51 1.94 2.07 1.45 1.82 1.94 We 0.68 1.31 1.00 0.70 1.29 1.37 1.0 1.82 1.94 1.0 1.00 1.00 1.00 We 0.70 We 0.70 0.7	5 12 13	13 12 22	23 11 20	21	
Water flow are system side	2,04 3,20 3,46	3,46 2,68 3,62	3,79 2,94 4,16	6 12	
Pressure drop system side	· · · · · · · · · · · · · · · · · · ·				
Godling performance 7*C/12*C Godling pergebry					
Cooling capacity W 0.80 1.37 1.45 0.95 1.67 1.76 1.40 2.38 2.51 1.65 2.07 2.88 2.01 2.25 2.05	5 12 13	13 12 22	23 11 20	21	
Sensible couling capacity NW 0,63 1,31 1,20 0,70 1,25 1,35 1,34 1,35 1,94 2,07 1,45 2,18 2,36 1,54	122 220 255	255 272 260 3	0.04 2.07 4.15	r 42	
Water flow rate system side Vih 138 236 249 163 287 303 241 409 435 285 464 465 349 512 522 328	 		3,84 2,97 4,15 2,85 2,11 2,98		
Pressure drop systemside					
Framework			660 511 714 23 12 20		
Symmotion Symm	8 12 13	13 13 22	23 12 20	21	
Teach monitor Type					
Number 10.0 1 1 2 2 2 2 2 2 3 1 1 1 2 2 2 2 2 3 1 1 1 3 3 4 1 1 3 3 4 3 5 5 3 3 3 4 3 3 5 3 3 3 4 3 3 5 3 3 3 3 3 4 3 3 3 4 3 3					
Air flow rate m²/h 123 240 257 123 240 257 125 390 424 253 390 424 300 470 515 300 301 301 4	1	1	١ ٦		
High static pressure	2 300 470 515	2 515 410 600 (2 630 410 600		
Imput power W					
Signal 0-10V 9k 43 84 90 43 84 90 48 83 90 48 83 90 52 82 90 52 50 50 50 50 50 50 5					
Dick type fan coil sound data (3) Sound power level (inliet + radiated) Sound po			60 18 50 90 58 85		
Sound power level (inlet + radiated) dB(A) 37,0 57,0 59,0 37,0 57,0 59,0 36,0 50,0 33,0 36,0 50,0 53,0 43,0 53,0 53,0 33,0 53,0 33	52 82 90	90 38 83	90 38 83	9(
Sound power level (outlet) MB(A) 33,0 53,0 55,0 33,0 55,0 32,0 47,0 49,0 32,0 47,0 49,0 39,0 49,0 52,0 39,0 57,0	43,0 53,0 55,0	55,0 45,0 56,0	57,0 45,0 56,0	0 57	
Finned pack heat exchanger Water content main heat exchanger 1 0,5 0,7 0,8 1,0 1,0 1,0	<u> </u>		52,0 42,0 52,0		
Main heat exchanger 1 0,5 0,7 0,8 1,0 1,0	39,0 49,0 52,0	52,0 42,0 52,0	52,0 42,0 52,0	0 32,	
Diametre hydraulic fittings Main heat exchanger Ø 1/2" 1/2" 3/4" 4 4 4 1 1 4 4 1 1 4 4 1 1 4 4 1 1 4 4 2 3 1 2 5 13 1 2 5 13 1 2 5 13 </td <td>1.4</td> <td>1.0</td> <td>1.4</td> <td></td>	1.4	1.0	1.4		
Main heat exchanger	1,4	1,0	1,4	+	
FCZI700P	3/4"	3/4"	3/4′	ı"	
1				-	
L M H L M M H L M M M L M L			FCZI950P		
Heating performance 70 °C / 60 °C (1)	3		2	3	
Heating capacity	Н	L	M	Н	
Water flow rate system side I/h 468 732 779 541 835 890 566 958 Pressure drop system side kPa 8 17 20 5 11 12 5 13 Heating performance 45 °C/40 °C(2) Heating capacity kW 2,67 4,15 4,40 2,46 4,69 5,00 3,27 5,54 Water flow rate system side l/h 460 720 767 418 806 860 562 953 Pressure drop system side kPa 8 18 20 3 11 12 5 13 Cooling performance 7 °C / 12 °C Cooling capacity kW 2,20 4,00 4,30 2,60 4,41 4,70 2,81 4,80 Sensible cooling capacity kW 1,71 3,00 3,20 1,90 3,30 3,50 2,10 3,60 Water flow rate system side l/h 378 688	5 44.07	7 (60	44.63	12.66	
Pressure drop system side kPa 8 17 20 5 11 12 5 13 Heating performance 45 °C / 40 °C (2) Heating capacity kW 2,67 4,15 4,40 2,46 4,69 5,00 3,27 5,54 Water flow rate system side l/h 460 720 767 418 806 860 562 953 Pressure drop system side kPa 8 18 20 3 11 12 5 13 Cooling performance 7 °C / 12 °C Cooling capacity kW 2,20 4,00 4,30 2,60 4,41 4,70 2,81 4,80 Sensible cooling capacity kW 1,71 3,00 3,20 1,90 3,30 3,50 2,10 3,60 Water flow rate system side I/h 378 688 739 447 760 818 483 825 Pressure drop system side kPa 7 18 20 4 11 12				12,66	
Heating performance 45 °C / 40 °C (2) kW 2,67 4,15 4,40 2,46 4,69 5,00 3,27 5,54 Water flow rate system side I/h 460 720 767 418 806 860 562 953 Pressure drop system side kPa 8 18 20 3 11 12 5 13 kW 2,20 4,00 4,30 2,60 4,41 4,70 2,81 4,80 Sensible cooling capacity kW 1,71 3,00 3,20 1,90 3,30 3,50 2,10 3,60 Water flow rate system side l/h 378 688 739 447 760 818 483 825 Pressure drop system side kPa 7 18 20 4 11 12 5 13 Fan motor type Centrifugal Lan motor type <td cols<="" td=""><td></td><td>_</td><td></td><td>1088</td></td>	<td></td> <td>_</td> <td></td> <td>1088</td>		_		1088
Heating capacity	14	6	17	19	
Water flow rate system side I/h 460 720 767 418 806 860 562 953 Pressure drop system side kPa 8 18 20 3 11 12 5 13 Cooling performance 7 °C/12 °C Cooling capacity kW 2,20 4,00 4,30 2,60 4,41 4,70 2,81 4,80 Sensible cooling capacity kW 1,71 3,00 3,20 1,90 3,30 3,50 2,10 3,60 Water flow rate system side I/h 378 688 739 447 760 818 483 825 Pressure drop system side kPa 7 18 20 4 11 12 5 13 Fan Type Centrifugal Fan motor type Centrifugal Fan motor type Centrifugal Fan motor type Centrifugal Fan motor	5.00	2 22	F 70	<i>(</i> 20	
Pressure drop system side kPa 8 18 20 3 11 12 5 13 Cooling performance 7 °C/12 °C Cooling capacity kW 2,20 4,00 4,30 2,60 4,41 4,70 2,81 4,80 Sensible cooling capacity kW 1,71 3,00 3,20 1,90 3,30 3,50 2,10 3,60 Water flow rate system side l/h 378 688 739 447 760 818 483 825 Pressure drop system side kPa 7 18 20 4 11 12 5 13 Fan Type Centrifugal Fan Centrifugal Fan motor type Centrifugal Fan motor type Centrifugal Fan motor no. 3 3 3 3 3 3 3 3 3 3 3 <td></td> <td></td> <td></td> <td>6,29</td>				6,29	
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Cooling capacity kW 2,20 4,00 4,30 2,60 4,41 4,70 2,81 4,80 Sensible cooling capacity kW 1,71 3,00 3,20 1,90 3,30 3,50 2,10 3,60 Water flow rate system side l/h 378 688 739 447 760 818 483 825 Pressure drop system side kPa 7 18 20 4 11 12 5 13 Fan Type Centrifugal Fan motor type Inverter Number no. 3 4 5 0 60 </td <td>14</td> <td>6</td> <td>17</td> <td>19</td>	14	6	17	19	
Sensible cooling capacity kW 1,71 3,00 3,20 1,90 3,30 3,50 2,10 3,60 Water flow rate system side I/h 378 688 739 447 760 818 483 825 Pressure drop system side kPa 7 18 20 4 11 12 5 13 Fan Type Centrifugal Fan motor type Inverter Number no. 3 3 3 3 3 Air flow rate m²/h 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 80		2.50	(00	C 1C	
Water flow rate system side I/h 378 688 739 447 760 818 483 825 Pressure drop system side kPa 7 18 20 4 11 12 5 13 Fan Type type Centrifugal Fan motor type Inverter Number no. 3 40 9 9 40 5 70 60 15 50 60 15 50 <t< td=""><td></td><td></td><td></td><td>6,46</td></t<>				6,46	
Pressure drop system side kPa 7 18 20 4 11 12 5 13 Fan Type Centrifugal Fan motor type Centrifugal Number no. 3 3 Inverter Number m³/h 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 799 405 730 60 15 50 60 15 50 60 15 50 60 15 50 60 15 40 40 82 90 46 82 <td></td> <td></td> <td></td> <td>4,27</td>				4,27	
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Fan motor type					
Number no. 3 3 3 Air flow rate m³/h 405 730 799 405 730 799 405 730 High static pressure Pa 15 50 60 15 50 60 15 50 Input power W 21 61 78 21 61 78 21 61 Signal 0-10V % 46 82 90 46 82 90 45 84 Duct type fan coil sound data (3) Sound power level (inlet + radiated) dB(A) 41,0 55,0 58,0 41,0 55,0 58,0 44,0 55,0 Sound power level (outlet) dB(A) 36,0 51,0 54,0 36,0 51,0 54,0 40,0 51,0 Finned pack heat exchanger Water content main heat exchanger I 1,2 1,6 1,8 1,8					
Air flow rate m³/h 405 730 799 405 730 799 405 730 High static pressure Pa 15 50 60 15 50 60 15 50 Input power W 21 61 78 21 61 78 21 61 Signal 0-10V % 46 82 90 46 82 90 45 84 Duct type fan coil sound data (3) Sound power level (inlet + radiated) dB(A) 41,0 55,0 58,0 41,0 55,0 58,0 44,0 55,0 50,0 50,0 51,0 54,0 40,0 51,0 51,0 54,0 40,0 51,0 51,0 54,0 40,0 51,0 51,0 54,0 40,0 51,0 51,0 54,0 40,0 51,0 51,0 54,0 40,0 51,0 51,0 54,0 40,0 51,0 51,0 54,0 40,0 51,0 51,0 <td></td> <td></td> <td>2</td> <td></td>			2		
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Input power W 21 61 78 21 61 78 21 61 Signal 0-10V % 46 82 90 46 82 90 45 84 Duct type fan coil sound data (3) Sound power level (inlet + radiated) dB(A) 41,0 55,0 58,0 41,0 55,0 58,0 44,0 55,0 Sound power level (outlet) dB(A) 36,0 51,0 54,0 36,0 51,0 54,0 40,0 51,0 Finned pack heat exchanger Water content main heat exchanger I 1,2 1,6 1,8				799	
Signal 0-10V % 46 82 90 46 82 90 45 84 Duct type fan coil sound data (3) Sound power level (inlet + radiated) dB(A) 41,0 55,0 58,0 41,0 55,0 58,0 44,0 55,0 Sound power level (outlet) dB(A) 36,0 51,0 54,0 36,0 51,0 54,0 40,0 51,0 Finned pack heat exchanger Water content main heat exchanger I 1,2 1,6 1,8	60			60	
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Sound power level (outlet) dB(A) 36,0 51,0 54,0 36,0 51,0 54,0 40,0 51,0 Finned pack heat exchanger Water content main heat exchanger I 1,2 1,6 1,8			55.0	FO ^	
Finned pack heat exchanger Water content main heat exchanger I 1,2 1,6 1,8		_		58,0	
Water content main heat exchanger I 1,2 1,6 1,8	54,0	0 40,0	51,0	54,0	
Diametre hydraulie fittinge			2,3		
Diametre nydraulic rittings Main heat exchanger Ø 3/4"					

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

			FCZI201	P		FCZI301I	P		FCZI401I	P		FCZI501I			FCZI701	P		FCZI901	,
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 65 °C / 55 °C (1)																			
Heating capacity	kW	0,94	1,42	1,49	1,60	2,34	2,47	1,99	2,69	2,85	2,62	3,59	3,45	2,99	3,70	3,92	3,17	5,09	5,47
Water flow rate system side	I/h	81	122	128	138	201	212	171	231	245	225	309	297	257	318	337	273	438	470
Pressure drop system side	kPa	4	9	9	6	12	13	4	7	8	6	9	9	8	12	13	4	10	11
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	0,80	1,37	1,45	1,40	2,38	2,53	2,03	2,98	3,21	2,73	3,68	3,84	2,20	4,00	4,30	2,80	4,80	5,24
Sensible cooling capacity	kW	0,63	1,13	1,20	1,10	1,82	1,94	1,45	2,18	2,36	1,98	2,73	2,85	1,71	3,00	3,20	2,10	3,60	3,90
Water flow rate system side	I/h	138	236	249	241	409	435	349	512	552	469	633	660	378	688	739	482	825	901
Pressure drop system side	kPa	5	14	16	7	15	17	9	13	20	13	23	25	6	18	20	5	12	13
Fan																			
Туре	type									Centr	ifugal								
Fan motor	type									Inve	rter								
Number	no.		1			2			2			2			3			3	
Air flow rate	m³/h	123	240	257	225	390	424	300	470	515	410	600	630	405	730	799	405	730	799
High static pressure	Pa	13	50	57	16	50	59	20	50	60	23	50	55	15	50	60	15	50	60
Input power	W	7	27	31	10	31	40	14	38	58	18	50	60	21	61	78	21	61	78
Signal 0-10V	%	43	84	90	48	83	90	52	82	90	58	85	90	46	82	90	45	84	90
Duct type fan coil sound data (2)																			
Sound power level (inlet + radiated)	dB(A)	37,0	57,0	59,0	36,0	50,0	53,0	43,0	53,0	55,0	45,0	56,0	57,0	41,0	55,0	58,0	41,0	55,0	58,0
Sound power level (outlet)	dB(A)	33,0	53,0	55,0	32,0	47,0	49,0	39,0	49,0	52,0	42,0	52,0	52,0	36,0	51,0	54,0	36,0	51,0	54,0
Finned pack heat exchanger																			
Water content main heat exchanger			0,5			0,8			1,0			1,0			1,2			1,8	
Water content secondary heat exchanger			0,2			0,3			0,3			0,3			0,4			0,7	
Diametre hydraulic fittings																			
Main heat exchanger	Ø		1/2"			3/4"			3/4"			3/4"			3/4"			3/4"	
Secondary heat exchanger	Ø									1/	2"								

⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT (2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCZI200P	FCZI250P	FCZI300P	FCZI350P	FCZI400P	FCZI450P
Dimensions and weights		FCZIZUUP	FCZIZOUP	FCZI300P	FCZISSUP	FCZI4UUP	FCZ145UP
		216	21/	21/	216	316	21/
A	mm	216	216	216	216	216	216
<u>B</u>	mm	522	522	753	753	973	973
(mm	453	453	453	453	453	453
D	mm	562	562	793	793	1013	1013
Net weight	kg	12,0	14,0	14,0	16,0	20,0	22,0
		FCZI500P	FCZI550P	FCZI700P	FCZI750P	FCZI900P	FCZ1950P
Dimensions and weights							
A	mm	216	216	216	216	216	216
В	mm	973	973	1122	1122	1122	1122
C	mm	453	453	453	453	558	558
D	mm	1013	1013	1147	1147	1147	1147
Net weight	kg	23,0	24,0	29,0	31,0	32,0	32,0
		FCZI201P	FCZI202P	FCZI301P	FCZI302P	FCZI401P	FCZI402P
Dimensions and weights		,					
A	mm	216	216	216	216	216	216
В	mm	522	522	753	753	973	973
(mm	453	453	453	453	453	453
D	mm	562	562	793	793	1013	1013
Net weight	kg	13,0	14,0	15,0	16,0	21,0	22,0
		FCZI501P	FCZI502P	ı	FCZI701P	FCZI702P	FCZI901P
Dimensions and weights			,	1			
A	mm	216	216		216	216	216
В	mm	973	973		1122	1122	1122
C	mm	453	453		453	453	558
		1013	1012		1147	1147	11.47
D	mm	1013	1013		1147	1147	1147















UL-P

Fan coil unit for ducted installations



- Very quiet
- Ideal for residential or office solutions
- · Version with Coldplasma Air purifier





DESCRIPTION

Monobloc duct type fan coils for heating and/or cooling small and medium-sized environments for civil and commercial use.

It can be installed on 2-pipe systems and combined with any heat generator even at low temperatures. Choosing the optimal solution for any requirement is easy thanks to the various versions available and to the possibility of horizontal or vertical installation, depending on the version.

VERSIONS

P Without shell, vertical and horizontal installation, lower intake, without commands

PAF Without shell, vertical and horizontal installation, front intake, without commands

FEATURES

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.

The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air years.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

The fan coils have, as standard, precharged electrostatic filters. These filters, thanks to their special execution, attracts and retains all suspended dust particles, thus garanteeing pure breathable air to the whole family.

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW5: water probe kit (L=15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualist)

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

WMT16: Electronic thermostat with thermostated ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

123

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, DI24 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

DSC: Condensate drainage device.

VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.

BC: Condensate drip.

Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Omnia ULP

Field	Description
1,2,3	ULP
4,5	Size 11, 16, 26, 36
6	Version
Р	Without shell, vertical and horizontal installation, lower intake, without commands
PAF	Without shell, vertical and horizontal installation, front intake, without commands

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories - Omnia ULP

Model	Ver	11	16	26	36
AER503IR (1)	P,PAF	•	•	•	•
PR0503	P,PAF	•	•	•	
SA5 (2)	P,PAF	•	•	•	•
SIT3 (3)	P,PAF	•	•	•	
SIT5 (4)	P,PAF	•	•	•	•
SW5 (2)	P,PAF	•	•	•	•
TX (5)	P,PAF	•	•	•	•
WMT10 (5)	P,PAF	•	•	•	•
WMT16 (5)	P,PAF	•	•	•	•

- (1) Wall-mount installation.
- (2) Probe for AER503IR-TX thermostats, if fitted.

- (3) Cards for AERSO3IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
 (4) Probe for AERSO3IR-TX thermostats, if fitted.
 (5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system - Omnia UI P

viiii system omma e	/LI				
Model	Ver	11	16	26	36
DI24	P,PAF	•	•	•	•
VMF-E19 (1)	P,PAF	•	•	•	•
VMF-E3	P,PAF	•	•	•	•
VMF-E4DX	P,PAF	•	•	•	•
VMF-E4X	P,PAF	•	•	•	•
VMF-IO	P,PAF	•	•	•	•
VMF-IR	P,PAF	•	•	•	•
VMF-LON	P,PAF	•	•	•	•
VMF-SW	P,PAF	•	•	•	•
VMF-SW1	P,PAF	•	•	•	•
VMHI	P,PAF	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Co				

Model	Ver	11	16	26	36
BC10 (1)	P,PAF	•	•	•	•
BC20 (2)	P,PAF	•	•	•	•
(1) For vertical installation. (2) For horizontal installation.	·				
Condensate drainage					
Model	Ver	11	16	26	36
DSC5 (1)	P,PAF	•	•	•	•
(1) The accessory cannot be fit if th	ne accessory BC10 or BC20 is installed.		,		
Model	Ver	11	16	26	36
VCH	P,PAF	•	•	•	•
2 way valve kit					
Model	Ver	11	16	26	36
VCHD	P,PAF	•	•	•	

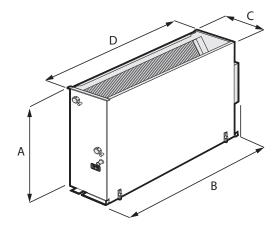
PERFORMANCE SPECIFICATIONS

7_	ni	n	e

			UL11P			UL16P			UL26P			UL36P	
		1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)											•		
Heating capacity	kW	1,06	1,46	2,01	1,54	2,12	2,91	2,89	3,83	4,62	3,63	4,87	5,94
Water flow rate system side	l/h	93	128	176	135	186	255	254	336	405	310	427	521
Pressure drop system side	kPa	1	1	2	1	2	4	5	8	11	3	5	7
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	0,52	0,73	1,00	0,76	1,05	1,44	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side	l/h	92	126	174	133	183	251	249	331	399	305	420	513
Pressure drop system side	kPa	1	1	2	2	3	3	5	8	11	7	13	18
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	0,53	0,67	0,82	0,69	0,87	1,17	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity	kW	0,38	0,52	0,68	0,52	0,69	0,96	0,97	1,30	1,61	1,13	1,59	2,00
Water flow rate system side	l/h	94	117	145	122	153	206	220	289	349	286	394	487
Pressure drop system side	kPa	1	2	2	2	3	5	5	8	11	7	13	19
Fan													
Туре	type						Centr	ifugal					
Fan motor	type						Asynch	ronous					
Number	no.		1			1			2			2	
Air flow rate	m³/h	80	120	180	110	160	240	190	270	350	240	350	460
Input power	W	8	12	18	23	25	32	24	27	35	30	35	42
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Diametre hydraulic fittings													
Main heat exchanger	Ø						1/	/2"					
Finned pack heat exchanger													
Water content main heat exchanger	1		0,3			0,4			0,6			0,8	
Power supply													
Power supply							230V	~50Hz					

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C (2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT

DIMENSIONS



		UL11P	UL16P	UL26P	UL36P
Dimensions and weights	•				
A	mm	465	465	465	465
В	mm	420	530	761	981
(mm	171	171	171	171
D	mm	360	470	701	921
Net weight	kg	10,0	12,0	15,0	18,0















Fan coil unit for ducted installations



- Very quiet
- Ideal for residential or office solutions





DESCRIPTION

Monobloc duct type fan coils for heating and/or cooling small and medium-sized environments for civil and commercial use.

It can be installed on 2-pipe systems and combined with any heat generator even at low temperatures. Choosing the optimal solution for any requirement is easy thanks to the various versions available and to the possibility of horizontal or vertical installation, depending on the version.

VERSIONS

P Without the shell, floor installation, ceiling mount, intake at base, without controls

PAF Without the shell, floor installation, ceiling mount, front suction, without controls

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans. They are statically and dynamically balanced and directly coupled to the motor shaft.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors). The plastic augers are extractable for easy and efficient cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Condensate drip

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

Air filter

The fan coils have, as standard, precharged electrostatic filters. These filters, thanks to their special execution, attracts and retains all suspended dust particles, thus garanteeing pure breathable air to the whole family.

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

PRO503: Wall box for AER503IR and VMF-E4 thermostats. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, DI24 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

DSC: Condensate drainage device.

VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.

BC: Condensate drip.

Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Omnia ULP

Field	Description
1,2,3	ULP
4,5	Size 11, 16, 26, 36
6	Version
Р	Without shell, vertical and horizontal installation, lower intake, without commands
PA	Without shell, vertical and horizontal installation, front intake, without commands

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories - Omnia ULP

Model	Ver	16	26	36
AER503IR (1)	P,PAF	•	•	
PR0503	P,PAF	•	•	•
SA5 (2)	P,PAF	•	•	•
SW5 (2)	P,PAF	•	•	•
TX (3)	P,PAF	•	•	

- (1) Wall-mount installation.
- (2) Probe for AERSO3IR-TX thermostats, if fitted.
 (3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system - Omnia ULP

Model	Ver	16	26	36
DI24	P,PAF	•	•	•
VMF-E19I (1)	P,PAF	•	•	•
VMF-E3	P,PAF	•	•	•
VMF-E4DX	P,PAF	•	•	•
VMF-E4X	P,PAF	•	•	•
VMF-IO	P,PAF	•	•	•
VMF-IR	P,PAF	•	•	•
VMF-LON	P,PAF	•	•	•
VMF-SW	P,PAF	•	•	•
VMHI	P,PAF	•	•	•

(1) Mandatory accessory.

Condensate drip

Model	Ver	16	26	36
BC10 (1)	P,PAF	•	•	•
BC20 (2)	P,PAF	•		•

- (1) For vertical installation.
- (2) For horizontal installation.

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Con	der	rsate	dra	ına	ae

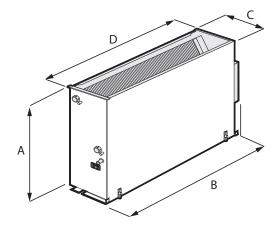
Model	Ver	16	26	36
DSC5 (1)	P,PAF	•	•	•
(1) The accessory cannot be fit	if the accessory BC10 or BC20 is installed.			
2 way valve kit				
Model	Ver	16	26	36
VCHD	P,PAF	•	•	•
3 way valve kit				
Model	Ver	16	26	36
VCH	P.PAF	•	•	•

PERFORMANCE SPECIFICATIONS

		ULI16P			ULI26P			ULI36P	
	1	2	3	1	2	3	1	2	3
	L	М	Н	L	М	Н	L	М	H
Heating performance 70 °C / 60 °C (1)									
Heating capacity kW	1,54	2,12	2,91	2,89	3,83	4,62	3,53	4,87	5,94
Water flow rate system side I/h	135	186	255	254	336	405	310	427	521
Pressure drop system side kPa	1	2	4	5	8	11	3	5	7
Heating performance 45 °C / 40 °C (2)									
Heating capacity kW	0,76	1,05	1,44	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side I/h	133	183	251	249	331	399	305	420	513
Pressure drop system side kPa	2	2	2	5	8	11	7	12	18
Cooling performance 7 °C / 12 °C									
Cooling capacity kW	0,69	0,87	1,17	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity kW	0,52	0,69	0,96	0,97	1,30	1,61	1,13	1,59	2,00
Water flow rate system side I/h	122	153	206	220	289	349	286	394	487
Pressure drop system side kPa	2	3	5	6	8	11	7	13	19
Fan									
Type type	!				Centrifugal				
Fan motor type	<u> </u>				Inverter				
Number no.		1			2			2	
Air flow rate m ³ /	n 110	160	240	190	270	350	240	350	460
Input power W	6	8	12	7	10	15	8	12	18
Diametre hydraulic fittings									
Main heat exchanger Ø					1/2"				
Finned pack heat exchanger									
Water content main heat exchanger		0,4			0,6			0,8	
Power supply									
Power supply					230V~50Hz				

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C (2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT

DIMENSIONS



		ULI16P	ULI26P	ULI36P
Dimensions and weight	ts			
A	mm	465	465	465
В	mm	530	761	981
C	mm	171	171	171
D	mm	470	701	921
Net weight	kg	12,0	15,0	18,0















VED 030-340

Fan coil unit for ducted installations



- Horizontal and vertical installation
- Large range of available static pressure
- Inspectable ventilation group





DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying.

Designed to maintain the set temperature over time, ensuring very low sound levels.

Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures.

Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

FEATURES

Case

Unit for internal installation.

Internally insulated structure with class 1 fire resistance and IP20 protection.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans.

They are statically and dynamically balanced and directly coupled to the motor shaft.

The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.

Fan housing in plastic material removable for easy and effective cleaning.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Air filter

Coarse 25% Class air filter, easy to remove and clean.

Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement.

The unit is supplied with the delivery connection supplied.

ACCESSORIES



Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L=2.5~m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

 $\textbf{WMT16:} \ Electronic \ thermostat \ with \ thermostated \ ventilation.$

WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF Components

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (MFTAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SIT3V: Relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

 $\dot{\text{VMF-SW1:}}$ Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Valves and additional water coil

BV: Hot water heat exchanger with 1 row.

VCF_X: 3-way valve kit for fan coils with single heat exchanger and hydraulic connections on the left side, for installation in 4-pipe systems. The kit is composed by 2 insulated 3-way valves and 4 connections complete with electrothermal actuators, insulating shells for the valves and with hydraulic fittings. 230V power supply. Hydraulic connections: Valve body Ø G 3/4" Male; Valve side connection pipes Ø G 3/4" Female; Unit side connection pipes Ø G 3/4" Male.

VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Installation accessories

AMP: Wall mounting kit

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. DSC: Condensate drainage device.

Accessories for intake

GA: Intake grid with fixed louvers

GAF: Intake grid with filter and fixed louvers

SE X: External air shutter with manual control.

RDA_V: Straight intake connection with rectangular flange.

RDA_C: Straight intake connection with circular flanges.

RPA V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

Delivery accessories

MZC: Plenum with motorised dampers.

MZCAC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with an asynchronous motor.

MZCACV: Electrical system with relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse sup-

GM: Flow grid with adjustable louvers.

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.

RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

RDM_C: Straight discharge internally insulated, with circular flanges.

RDM_V: Straight delivery coupling in galvanised sheet metal.

KFV: Circular flanges kit for plenum.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	030	040	130	140	230	240	330	340
AER503IR (1)		•	•	•	•	•	•	•	•
PR0503	•	•	•	•	•	•	•	•	•
SA5 (2)		•	•	•	•	•	•	•	•
SIT3 (3)	•	•	•	•	•	•	•	•	•
SIT5 (4)		•	•	•	•	•	•	•	•
SW3 (2)		•	•	•	•	•	•	•	•
SW5 (2)	•	•	•	•	•	•	•	•	•
TX (5)		•	•	•	•	•	•	•	•
WMT10 (5)	•	•	•	•	•	•	•	•	•
WMT16 (5)		•	•	•	•	•	•	•	•
WMT16CV (5)		•	•	•	•	•	•	•	•

(1) Wall-mount installation.(2) Probe for AER503IR-TX thermostats, if fitted.

(3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere. (4) Probe for AER503IR-TX thermostats, if fitted.

(5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	030	040	130	140	230	240	330	340
DI24		•	•	•	•	•	•	•	•
VMF-E19 (1)		•	•	•	•	•	•	•	•
VMF-E3		•	•	•	•	•	•	•	•
VMF-E4DX		•	•	•	•	•	•	•	•
VMF-E4X		•	•	•	•	•	•	•	•
VMF-I0		•	•	•	•	•	•	•	•
VMF-IR		•	•	•	•	•	•	•	•
VMF-SIT3V (2)								•	•
VMF-SW		•	•	•	•	•	•	•	•
VMF-SW1		•	•	•	•	•	•	•	•
VMHI		•			•	•	•		

⁽¹⁾ Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

(2) For the selection, consult the documentation for the thermostat and the fan coil

(Heating only) additional coil

	Ver	030	040	130	140	230	240	330	340	
		BV030 (1)	-	BV130 (1)	-	BV230 (1)	-	BV162 (1)	-	_

⁽¹⁾ Not available for sizes with oversized main coil.

The accessory cannot be fitted on the configurations indicated with -

Water valves

Valve Kit for 4 pipe systems with main coil

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
VCF3X4L	•	•	•		•		•	•
VCF3X4LS				•		•		
VCF3X4R	•	•	•		•		•	•
VCF3X4RS				•				

3 way valve kit

	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
3 way valve kit								
Main heat exchanger	VCF43-VCF4324	VCF43-VCF4324	VCF43-VCF4324	VCF43S-VCF4324S	VCF43-VCF4324	VCF43S-VCF4324S	VCF43-VCF4324	VCF43-VCF4324
Additional coil "BV"	VCF45-VCF4524	-	VCF45-VFC4524	-	VCF45-VCF4524	-	VCF45-VCF4524	-

 $VCF43-45\ Power\ supply\ 230V, VCF4324-4524\ Power\ supply\ 24V-Hydraulic\ connections\ \emptyset\ 3/4"$

2 way valve kit

	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
2 way valve kit								
Main heat exchanger	VCFD3-VCFD324							
Additional coil "BV"	VCFD4-VCFD424	-	VCFD4-VCFD424	-	VCFD4-VCFD424	-	VCFD4-VCFD424	-

VCFD3 Power supply 230V, VCFD324 Power supply 24V - Hydraulic connections Ø 3/4" VCFD4 Power supply 230V, VCFD424 Power supply 24V - Hydraulic connections Ø 1/2"; For additional coil (heating only) BV.

Combined adjustment and balancing valve cold side

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
VJP060	•	•	•	•				
VJP060M	•	•	•	•				
VJP090					•	•	•	•
VJP090M					•	•	•	•
VJP150							•	•
VJP150M							•	•

Installation accessories

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
AMP	•	•	•	•	•	•	•	•

Condensate drip

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
BCZ4	•	•	•	•	•	•	•	•
BCZ6	•	•	•	•	•	•	•	•
Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
BC9	•	•	•	•	•	•	•	•

BCZ4 For vertical installation. BCZ6 For horizontal installation. BC9 For horizontal installation.

Condensate recirculation device

Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
DSC4	•	•	•	•	•	•	•	•
DSCZ4	•	•	•	•	•	•	•	

130

Accessories for intake

Ver

Intake grids

	GA22	GA22	GA32	GA32	GA42	GA42	GA62	GA62
Intake grid with filter and	l fixed louvers							
Ver	030	040	130	140	230	240	330	340
	GAF22	GAF22	GAF32	GAF32	GAF42	GAF42	GAF62	GAF62
External air shutter with	manual control							
Ver	030	040	130	140	230	240	330	340
	SE20X	SE20X	SE30X	SE30X	SE40X	SE40X	SE80X	SE80X

140

230

240

330

340

Intake straight with rectangular flanges

Ver	030	040	130	140	230	240	330	340
	RDA000V	RDA000V	RDA100V	RDA100V	RDA200V	RDA200V	RDA300V	RDA300V

Intake straight internally insulated, with circular flanges

030

040

intake straight internally h	iisuiateu, witii tii	culai ilaliyes						
Ver	030	040	130	140	230	240	330	340
	RDAC000V	RDAC000V	RDAC100V	RDAC100V	RDAC200V	RDAC200V	RDAC300V	RDAC300V

V	er	030	040	130	140	230	240	330	340
		RPA000V	RPA000V	RPA100V	RPA100V	RPA200V	RPA200V	RPA300V	RPA300V
ntake plenum	with circular fl	anges							
V	er	030	040	130	140	230	240	330	340
		PA000V	PA000V	PA100V	PA100V	PA200V	PA200V	PA300V	PA300V
elivery acce	essories								
lenum with n	notor-driven da	mpers							
V	er	030	040	130	140	230	240	330	340
		MZC220	MZC220	MZC320	MZC320	MZC530	MZC530	MZC830	MZC830
lectrical syste	em with relays								
Ver	030	040	130	140		230	240	330	340
	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1))	MZCACV (1)	MZCACV (1)	MZCACV (1)	MZCACV (1)
l) It is mandatory to	use MZCACV if the intak	e of the unit combined v	vith the MZC accessory e	xceeds 0.7 Ampere.					
lectric plant									
Ver	030	040	130	140		230	240	330	340
	MZCAC	MZCAC	MZCAC	MZCAC		MZCAC	MZCAC	MZCAC	MZCAC
low grid with	adjustable lou	vers							
V	er	030	040	130	140	230	240	330	340
		GM22	GM22	GM32	GM32	GM42	GM42	GM62	GM62
Delivery plenu	ım internally in:	sulated, with cir	cular flanges						
V	er	030	040	130	140	230	240	330	340
		PM000V	PM000V	PM100V	PM100V	PM200V	PM200V	PM300V	PM300V
elivery plenu	ım internally in:	sulated, with re	tangular flange	es					
V	er	030	040	130	140	230	240	330	340
		RPM000V	RPM000V	RPM100V	RPM100V	RPM200V	RPM200V	RPM300V	RPM300V
elivery straig	ht internally in	sulated, with cir	cular flanges						
V	er	030	040	130	140	230	240	330	340
		RDMC000V	RDMC000V	RDMC100V	RDMC100V	RDMC200V	RDMC200V	RDMC300V	RDMC300\
traight delive	ery coupling								
V	er	030	040	130	140	230	240	330	340
		RDM000V	RDM000V	RDM100V	RDM100V	RDM200V	RDM200V	RDM300V	RDM300V
ircular flange	s kit for plenun	า							
Circular flange	s kit for plenun	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340

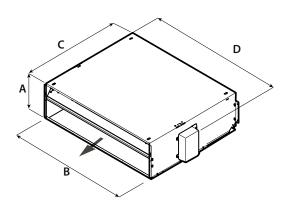
PERFORMANCE SPECIFICATIONS

2-pipe

		1	VED03	0		VED04	0	1	VED13	0	1	VED14	0	1	VED23	0	1	/ED24	0	1	VED33	0		VED34	0
		1	4	6	1	4	6	1	4	6	1	4	6	1	3	6	1	3	6	1	3	7	1	3	7
		L	M	Н	L	М	Н	L	М	Н	L	М	Н	L	M	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	1,82	3,37	3,69	2,37	3,57	3,92	4,40	5,83	6,29	4,52	6,09	6,58	5,35	6,50	7,16	5,80	7,14	7,91	7,81	9,34	10,51	8,31	10,02	10,95
Water flow rate system side	I/h	160	296	323	207	313	343	386	512	552	396	534	577	469	570	628	509	626	694	685	819	921	729	878	960
Pressure drop system side	kPa	3	7	9	4	10	12	13	22	26	9	16	18	27	30	37	18	26	32	9	13	16	22	28	32
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	0,90	1,67	1,83	1,18	1,77	1,94	2,18	2,90	3,12	2,24	3,02	3,27	2,66	3,23	3,56	2,88	3,55	3,93	3,88	4,64	5,22	3,98	4,98	5,44
Water flow rate system side	l/h	157	291	318	204	208	338	380	504	543	390	526	568	462	561	618	501	616	683	674	807	907	718	865	945
Pressure drop system side	kPa	3	8	9	5	11	13	15	24	28	10	16	19	26	29	36	18	27	32	10	14	17	13	20	23
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,97	1,41	1,56	1,10	1,68	1,84	2,05	2,74	2,91	2,24	3,00	3,22	2,55	3,07	3,33	2,86	3,57	3,93	3,62	4,35	4,90	3,92	4,72	5,26
Sensible cooling capacity	kW	0,73	1,07	1,18	0,79	1,19	1,29	1,41	1,89	2,01	1,58	2,14	2,30	1,96	2,38	2,61	2,16	2,65	2,92	2,74	3,26	3,63	2,89	3,50	3,89
Water flow rate system side	I/h	170	250	279	193	296	327	358	480	515	390	525	566	445	538	588	499	624	691	633	760	860	685	824	922
Pressure drop system side	kPa	3	7	9	5	12	14	15	27	31	11	20	23	25	36	44	16	31	37	10	14	18	16	21	26
Fan																									
Туре	type												Centri	ifugal											
Fan motor	type												Asynch	ronous	;										
Number	no.		1			1			2			2			2			2			3			3	
Air flow rate	m³/h	161	256	285	160	249	277	287	397	433	280	386	420	417	524	590	406	509	570	572	704	805	563	685	775
High static pressure	Pa	21	50	61	21	50	61	26	50	60	26	50	60	32	50	64	32	50	63	33	50	66	34	50	64
Input power	W	23	38	59	23	38	58	34	53	76	34	52	75	43	57	93	43	57	92	63	75	104	63	74	107
Electrical wiring		V1	V4	۷6	V1	V4	۷6	V1	V4	V6	٧1	٧4	V6	٧1	V3	V6	V1	V3	٧6	٧1	V3	٧7	V1	V3	V7
Duct type fan coil sound data (3)																									
Sound power level (inlet + radiated)	dB(A)	44,0	52,0	54,0	44,0	52,0	54,0	47,0	53,0	55,0	47,0	53,0			54,0	57,0	49,0	54,0	57,0	49,0	55,0	58,0	49,0	55,0	58,0
Sound power level (outlet)	dB(A)	40,0	48,0	50,0	40,0	48,0	50,0	42,0	48,0	50,0	42,0	48,0	50,0	44,0	49,0	52,0	44,0	49,0	52,0	45,0	51,0	54,0	45,0	51,0	54,0
Finned pack heat exchanger																									
Water content main heat exchanger			0,7			1,0			1,1			1,5			1,5			2,1			1,8			2,3	
Diametre hydraulic fittings																									
Main heat exchanger	Ø												3/	'4"											
Power supply																									
Power supply													230V	~50Hz							_		_		

- (1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
 (2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
 (3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
Dimensions and weights									
A	mm	217	217	217	217	217	217	217	217
В	mm	550	550	781	781	1001	1001	1122	1122
C	mm	560	560	560	560	560	560	560	560
D	mm	576	576	807	807	1027	1027	1148	1148

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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VED 030I-340I

Fan coil unit for ducted installations



- Horizontal and vertical installation
- Large range of available static pressure
- Inspectable ventilation group
- Total comfort: reduced temperature and humidity oscillations
- Electricity savings of 50% compared with a fan coil with multi-speed motor





DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying.

Designed to maintain the set temperature over time, ensuring very low sound levels.

Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures.

Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

FEATURES

Case

Unit for internal installation.

Internally insulated structure with class 1 fire resistance and IP20 protection.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Brushless motor with continuous speed variation 0-100%.

Inverter motor allows precise adaptation to the real indoor environment requirements without temperature oscillations.

The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Air filte

Air filter Class G3, for easy removal and cleaning.

Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement.

The unit is supplied with the delivery connection supplied.

ACCESSORIES



Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

SWAI: External air or water temperature probe.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

WMT21: Electronic thermostat for inverter fancoils.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF Components

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with

plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E191: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

 $\overline{\text{VMF-SW1:}}$ Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Valves and additional water coil

BV: Hot water heat exchanger with 1 row.

VCF_X: 3-way valve kit for fan coils with single heat exchanger and hydraulic connections on the left side, for installation in 4-pipe systems. The kit is composed by 2 insulated 3-way valves and 4 connections complete with electrothermal actuators, insulating shells for the valves and with hydraulic fittings. 230V power supply. Hydraulic connections: Valve body Ø G 3/4" Male; Valve side connection pipes Ø G 3/4" Female; Unit side connection pipes Ø G 3/4" Male.

VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

Installation accessories

AMP: Wall mounting kit

BC: Condensate drip.

DSC: Condensate drainage device.

Accessories for intake

GA: Intake grid with fixed louvers

GAF: Intake grid with filter and fixed louvers

SE_X: External air shutter with manual control.

RDA_V: Straight intake connection with rectangular flange.

RDA_C: Straight intake connection with circular flanges.

RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

Delivery accessories

GM: Flow grid with adjustable louvers.

MZC: Plenum with motorised dampers.

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.

RPM_V: Internally insulated delivery plenum with rectangular flange; both

sides have a circular push-out Ø 150mm that can be removed. **RDM_C:** Straight discharge internally insulated, with circular flanges.

RDM_V: Straight delivery coupling in galvanised sheet metal.

KFV: Circular flanges kit for plenum.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
AER503IR	•	•	•	•	•	•	•	•
PR0503	•		•	•	•	•	•	•
SA5	•	•	•	•	•	•	•	•
SW3	•	•	•	•	•	•	•	•
SW5	•	•	•	•	•	•	•	•
SWAI	•	•	•	•	•	•	•	•
TX	•	•	•	•	•	•	•	•
WMT21	•							•

VMF system

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
DI24	•	•	•	•	•	•	•	•
VMF-E19I	•	•	•	•	•	•	•	•
VMF-E3	•	•	•	•	•	•	•	•
VMF-E4DX	•	•	•	•	•	•	•	•
VMF-E4X	•	•	•	•	•	•	•	•
VMF-IO	•	•	•	•	•	•	•	•
VMF-IR	•		•		•	•	•	•
VMF-LON	•	•	•	•	•	•	•	•
VMF-SW	•	•	•	•	•	•	•	•
VMF-SW1	•	•	•		•	•	•	•
VMHI	•		•					

(Heating only) additional coil

(incuting only) additiona	1 4011								_
Ver	030	040	130	140	230	240	330	340	
I	BV030	-	BV130	-	BV230	-	BV162	-	

Water valves

Valve Kit for 4 pipe systems with main coil

Accessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
VCF3X4L	•	•	•		•		•	•
VCF3X4LS				•		•		
VCF3X4R	•	•	•		•		•	•
VCF3X4RS				•		•		

3 way valve kit

	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
3 way valve kit								
Main heat exchanger	VCF43-VCF4324	VCF43-VCF4324	VCF43-VCF4324	VCF43S-VCF4324S	VCF43-VCF4324	VCF43S-VCF4324S	VCF43-VCF4324	VCF43-VCF4324
Additional coil "BV"	VCF45-VCF4524	-	VCF45-VFC4524	-	VCF45-VCF4524	-	VCF45-VCF4524	-

VCF43 - 45 Power supply 230V, VCF4324-4524 Power supply 24V - Hydraulic connections Ø 3/4"

2 way valve kit

	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
2 way valve kit								
Main heat exchanger	VCFD3-VCFD324							
Additional coil "BV"	VCFD4-VCFD424	-	VCFD4-VCFD424	-	VCFD4-VCFD424	-	VCFD4-VCFD424	-

VCFD3 Power supply 230V, VCFD324 Power supply 24V - Hydraulic connections Ø 3/4" VCFD4 Power supply 230V, VCFD424 Power supply 24V - Hydraulic connections Ø 1/2"; For additional coil (heating only) BV.

Combined adjustment and balancing valve cold side

Model	Ver	030	040	130	140	230	240	330	340
VJP060 (1)	I	•	•	•	•				
VJP060M (2)		•	•	•	•				
VJP090 (1)	1					•	•	•	•
VJP090M (2)								•	

Model	Ver	030	040	130	140	230 240	330	340
VJP150 (1)	1						•	•
JP150M (2)	I						•	•
) 230V~50Hz								
) 24V P060 - 090 - 150 (230V~50Hz); VJP060	M-090M-150M (24V)							
nstallation accessories								
Vall mounting accessories								
ccessory	VED030I	VED040I	VED130I		/ED140I	VED230I	VED240I	VED340I
MP	• •	VLD0401	VLD I SOI		•	•	• • •	• • • • • • • • • • • • • • • • • • •
Condensate drip								
ccessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
CZ4	•	•	•	•	•	•	•	•
SCZ6	•	•	•	•	•	•	•	•
ccessory	VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
C9	•	•	•	•	•	•	•	•
CZ4 For vertical installation.								
CZ6 For horizontal installation. C9 For horizontal installation.								
ondensate drainage								
Ver	030	040	130	140	230	240	330	340
	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4	DSC4
·	200.						-541	
Accessories for intake								
ntake grids								
Ver	030	040	130	140	230	240	330	340
1	GA22	GA22	GA32	GA32	GA42	GA42	GA62	GA62
ntake grid with filter and f	ixed louvers							
Ver	030	040	130	140	230	240	330	340
	GAF22	GAF22	GAF32	GAF32	GAF42	GAF42	GAF62	GAF62
xternal air shutter with m	anual control							
Ver	030	040	130	140	230	240	330	340
vei	SE20X (1)	SE20X (1)	SE30X (1)	SE30X (1)	SE40X (1)	SE40X (1)	SE80X (1)	SE80X (1)
1) The CCi			3230X (1)	JEJON (1)	32 10/(1)	32107(1)	3200A (1)	3200A (1)
1) The SE accessories must be combined	-	uiai ieet.						
ntake straight with rectan								
<u>Ver</u>	030 RDA000V	RDA000V	130 RDA100V	140 RDA100V	230 RDA200V	240 RDA200V	330 RDA300V	340 RDA300V
ı	KDAUUUV	KDAUUUV	KDATOUV	KDA 100V	KDAZUUV	KDAZUUV	KDASUUV	KDA300V
ntake straight internally ir	nsulated, with circ	ular flanges						
Ver	030	040	130	140	230	240	330	340
1	RDAC000V	RDAC000V	RDAC100V	RDAC100V	RDAC200V	RDAC200V	RDAC300V	RDAC300V
	_							
ntake plenum with rectan								
Ver	030	040	130	140	230	240	330	340
	RPA000V	RPA000V	RPA100V	RPA100V	RPA200V	RPA200V	RPA300V	RPA300V
ntake plenum with circula	r flanges							
Ver	030	040	130	140	230	240	330	340
vei	PA000V	PA000V	PA100V	PA100V	PA200V	PA200V	PA300V	PA300V
ı .	170004	170001	TATOUY	TATOUY	172001	TAZOOV	17,000	17,000
Delivery accessories								
Outlet grille with adjustabl	e louvers							
Ver	030	040	130	140	230	240	330	340
	GM22	GM22	GM32	GM32	GM42	GM42	GM62	GM62
		w44	5J£	5/11/2	GIII IZ	GITTE	5.1102	dilloz
lenum with motor-driven	dampers							
Ver	030	040	130	140	230	240	330	340
l	MZC220	MZC220	MZC320	MZC320	MZC530	MZC530	MZC830	MZC830
				·				
Delivery plenum internally								
Ver	030	040	130	140	230	240	330	340
<u> </u>	PM000V	PM000V	PM100V	PM100V	PM200V	PM200V	PM300V	PM300V
elivery plenum internally	insulated, with re	ectangular fian	aes					
				140	230	240	330	340
Delivery plenum internally Ver I	030 RPM000V	040 RPM000V	130 RPM100V	140 RPM100V	230 RPM200V	240 RPM200V	330 RPM300V	340 RPM300V

Delivery straight internally insulated, with circular flanges

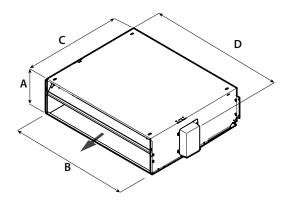
Ver	030	040	130	140	230	240	330	340
I	RDMC000V	RDMC000V	RDMC100V	RDMC100V	RDMC200V	RDMC200V	RDMC300V	RDMC300V
itraight delivery couplir	ng							
Ver	030	040	130	140	230	240	330	340
l	RDM000V	RDM000V	RDM100V	RDM100V	RDM200V	RDM200V	RDM300V	RDM300V
ircular flanges kit for pl	lenum							
ccessory	VED030I	VED040I	VED130I	VED	1401	VED230I	VED240I	VED340I
FV10	•	•	•			•	•	

PERFORMANCE SPECIFICATIONS

		-	/ED03)I	1	VED04	Ol	١	/ED13()l	١	/ED14	01	١	/ED23)l	١	/ED240	Ol	1	VED33	Ol	1	VED340)
		1	5	7	1	5	7	1	5	7	1	5	7	1	5	7	1	5	7	1	5	7	1	5	7
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	1,82	3,37	3,69	2,37	3,57	3,92	4,40	5,83	6,29	4,52	6,09	6,58	5,35	6,50	7,16	5,80	7,14	7,91	7,81	9,34	10,51	8,31	10,08	10,95
Water flow rate system side	l/h	160	296	323	207	313	343	386	512	552	396	534	577	469	570	628	509	626	694	685	819	921	729	878	960
Pressure drop system side	kPa	3	7	9	4	10	12	13	22	26	9	16	18	27	30	37	18	26	32	9	13	16	22	28	32
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	0,90	1,67	1,83	1,17	1,77	1,94	2,18	2,90	3,12	2,24	3,02	3,27	2,66	3,23	3,56	2,88	3,55	3,93	3,88	4,64	5,22	3,98	4,98	5,44
Water flow rate system side	l/h	157	291	318	204	308	338	380	504	543	390	526	568	462	561	618	501	616	683	674	807	907	718	865	945
Pressure drop system side	kPa	3	8	9	5	11	13	15	24	28	10	16	19	26	29	36	18	27	32	10	14	17	13	20	23
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,98	1,42	1,58	1,11	1,69	1,86	2,06	2,76	2,95	2,25	3,02	3,25	2,57	3,09	3,37	2,88	3,59	3,97	3,62	4,36	4,91	3,95	4,72	5,27
Sensible cooling capacity	kW	0,74	1,08	1,20	0,80	1,20	1,31	1,42	1,91	2,05	1,59	2,16	2,32	1,98	2,40	2,65	2,18	2,67	2,96	2,77	3,27	3,64	2,92	3,51	3,90
Water flow rate system side	I/h	170	250	279	193	296	327	358	480	515	390	525	566	445	538	588	499	624	691	633	760	860	680	811	906
Pressure drop system side	kPa	3	7	9	5	12	14	15	27	41	11	20	23	25	36	44	16	31	37	10	14	18	16	21	26
Fan																									
Туре	type												Centr	ifugal											
Fan motor	type												Inve	rter											
Number	no.		1			1			2			2			2			2			3			3	
Air flow rate	m³/h	161	256	285	160	249	277	287	397	434	280	386	420	417	524	590	406	509	570	572	704	805	563	685	775
High static pressure	Pa	21	50	61	21	50	61	26	50	60	26	50	60	32	50	64	32	50	63	33	50	66	34	50	64
Input power	W	12	29	36	12	29	36	17	33	45	17	33	45	24	40	53	24	40	53	35	60	86	35	60	86
Signal 0-10V	%	54	80	90	54	80	90	58	82	90	58	82	90	66	80	90	62	80	90	62	78	90	66	84	90
Duct type fan coil sound data (3)																									
Sound power level (inlet + radiated)	dB(A)	44,0	52,0	54,0	44,0	52,0	54,0	47,0	53,0	55,0	47,0	53,0	55,0	49,0	54,0	57,0	49,0	54,0	57,0	49,0	55,0	58,0	49,0	55,0	58,0
Sound power level (outlet)	dB(A)	40,0	48,0	50,0	40,0	48,0	50,0	42,0	48,0	50,0	42,0	48,0	50,0	44,0	49,0	52,0	44,0	49,0	52,0	45,0	51,0	54,0	45,0	51,0	54,0
Diametre hydraulic fittings																									
Туре	type												Gas	5 - F											
Main heat exchanger	Ø												3/	4"											
Power supply																									
Power supply													230V	~50Hz											

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45°C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
Dimensions and weights	·								
A	mm	217	217	217	217	217	217	217	217
В	mm	550	550	781	781	1001	1001	1122	1122
C	mm	584	584	584	584	584	584	584	584
D	mm	576	576	807	807	1027	1027	1148	1148















VED 430-741

Fan coil unit for ducted installations



- Horizontal and vertical installation
- Ventilation group to 5 speed
- Large range of available static pressure
- Inspectable ventilation group





DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying.

Designed to maintain the set temperature over time, ensuring very low sound levels.

Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures.

Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

FEATURES

Case

Unit for internal installation.

Internally insulated structure with class 1 fire resistance and IP20 protection.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans. They are statically and dynamically balanced and directly coupled to the motor shaft.

The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.

Fan housing in plastic material removable for easy and effective cleaning.

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Air filter

Air filter Class G3, for easy removal and cleaning.

Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement.

The unit is supplied with the delivery connection supplied.

ACCESSORIES



Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan

speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

 $\textbf{WMT16:} \ Electronic \ thermostat \ with \ thermostated \ ventilation.$

WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, DI24 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-MOD: Expansion board for the management of modulating valves.

VMF-SIT3V: Relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.

VMF-SW: Water probe (L=2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

VCT: These are 3-way ball valves made of bronze, with female/female connections \emptyset 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCT: These are 3-way ball valves made of bronze, with female/female connections \emptyset 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adjustment provided.

VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/ adjustment provided.

VCF45C - 47C - 47CS - for main heat exchanger: 3-way motorised valve kit for the main heat exchanger. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCF45H - 47H - for heating only heat exchanger: Motorized 3-way valve kit for hot only coil. The kit consists of a 3-way 4-way valve, the actuator and its hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.

VCF25C - 25CS - for main coil: 2-way motorized valve kit for main coil. The kit consists of a valve with its insulating shell, the actuator and the relative hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.

VCF25H - for heating only coil: 2-way motorized valve kit for hot only coil. The kit consists of a valve, actuator and relative hydraulic fittings, it is suitable for installation on both fan coils with hydraulic connections on the right and left.

BCV: Condensate drip.

Installation accessories

MZC: Plenum with motorised dampers.

RDA_V: Straight intake connection with rectangular flange.

RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.

RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

KFV: Circular flanges kit for plenum.

MZCACV: Electrical system with relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.

MZCAC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with an asynchronous motor.

Configurator

Field	Description
1,2,3,4	VED4
5	Size 4, 5, 6, 7
6	main heat exchanger
3	3-row coil
4	4-row coil
7	Secondary heat exchanger
0	Without coil
1	1-row coil for heating only
2	2-row coil for heating only

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
AER503IR (1)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PR0503		•	•	•	•	•	•	•	•		•	•	•	•	•	•	•
SA5 (2)		•	•	•	•		•	•	•		•	•	•	•	•	•	•
SIT3 (3)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIT5 (4)				•	•			•	•			•	•	•	•	•	•
SW3 (2)		•		•	•	•		•	•	•	•	•	•	•	•	•	•
SW5 (2)		•		•	•	•			•	•	•		•	•	•	•	•
TX (5)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WMT10 (5)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WMT16 (5)		•		•		•		•		•		•		•		•	
WMT16CV (5)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

- (1) Wall-mount installation.
 (2) Probe for AERSO3IR-TX thermostats, if fitted.
 (3) Cards for AERSO3IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
 (4) Probe for AERSO3IR-TX thermostats, if fitted.
 (5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

Model	Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
D124		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
VMF-E19 (1)		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E3		•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
VMF-E4DX		•	•	•	•	•	•	•	•	•		•	•	•	•	•	•
VMF-E4X		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-IO				•	•	•			•	•		•	•				•
VMF-IR				•		•			•	•	•			•	•		•
VMF-MOD		•	•	•	•	•	•		•	•	•	•		•	•	•	•
VMF-SIT3V (2)		•	•		•	•	•		•	•	•	•		•	•	•	•
VMF-SW			•			•	•	•			•	•			•	•	
VMF-SW1		•	•	•				•				•				•	•
VMHI		•	•	•	•	•	•	•	•	•	•	•	•		•	•	•

Water valves

3 way valve kit

	VED430	VED440	VED530	VED540	VED630	VED640	VED730	VED740
3 way valve kit								
Main heat exchanger	VCF45C	VCF45C	VCF45C	VCF45C	VCF47C	VCF47CS	VCF47C	VCF47CS
	VED432	VED441	VED532	VED541	VED632	VED641	VED732	VED741
3 way valve kit								
Main heat exchanger	VCF45C	VCF45C	VCF45C	VCF45C	VCF47C	VCF47CS	VCF47C	VCF47CS
Secondary heat exchanger for four pipes	VCF45H	VCF45H	VCF45H	VCF45H	VCF47H	VCF47H	VCF47H	VCF47H

²³⁰V power supply - Hydraulic connection Ø 3/4"

2 way valve kit

	VED430	VED440	VED530	VED540	VED630	VED640	VED730	VED740
2 way valve kit								
Main heat exchanger	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25CS	VCF25C	VCF25CS
	VED432	VED441	VED532	VED541	VED632	VED641	VED732	VED741
2 way valve kit								
Main heat exchanger	VCF25C	VCF25C	VCF25C	VCF25C	VCF25C	VCF25CS	VCF25C	VCF25CS
Secondary heat exchanger for four pipes	VCF25H	VCF25H	VCF25H	VCF25H	VCF25H	VCF25H	VCF25H	VCF25H

²³⁰V power supply - Hydraulic connection Ø 3/4"

⁽¹⁾ Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.
(2) For the selection, consult the documentation for the thermostat and the fan coil.

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Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
ver	VCT102	VCT102	VCT102	VCT102	VCT102	VCT102	VCT102	VCT102	VCT202	VCT202	VCT202	VCT202	VCT202		VCT202	VCT20
•	VCTTUZ	VCTTUZ	VCTTUZ	VCTTUZ	VC1102	VCTTUZ	VCTTUZ	VCTTUZ	VC1ZUZ	VC1ZUZ	VCIZUZ	VC1ZUZ	VC1ZUZ	. VC1202	VC1ZUZ	VCIZ
-way globe valves act	uator exclude	ed														
Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
	VCT103	VCT103	VCT103	VCT103	VCT103	VCT103	VCT103	VCT103	VCT203	VCT203	VCT203	VCT203	VCT203	VCT203	VCT403	VCT4
Actuator 230V																
	420	422	440	441	F30			F.41		(33		C 4 1	720	722	740	741
Ver	430 VCTK	VCTK	VCTK	VCTK	VCTK	532 VCTK	540 VCTK	VCTK	OCTK	VCTK	VCTK	641 VCTK	730 VCTK	732 VCTK	740 VCTK	741 VCTI
•	VCIII	VCIN	VCIN	VCIN	YCIK	YCIK	VCIN	VCIN	YCIK	VCIN	VCIN	VCIN	VCIK	VCIK	VCIR	VCII
Actuator 24V																
Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTK
	مراء مراء مراء مراء		امناما منام	1.												
Combined adjustment					110						422	440			2 740	
Model (1)		/er	430	432	440	441 53		540	541	630	632	640	641	730 73	2 740	74
'JP150 (1) 'JP150M (2)		•	<u> </u>	·	•		•	<u> </u>								
JP270M (2)		•			<u> </u>			•		•		•			•	
1) 230V~50Hz		•														
2) 24V																
/JP/VJP_M the compa	atibility of th	e hot v	vater v	alves w	ith the	de-										
igned air flow in a fou	r-pipe installa	ation is	to be ve	erified.												
Accessories for intak	ce															
ntake straight with re	ctangular flar	naes														
Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
	RDA450V						RDA450V	RDA450V	RDA670V	RDA670V	RDA670V	RDA670V				
<u> </u>																
ntake plenum with red	ctangular flan	iges														
Ver	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
	RPA450V	RPA450V	RPA450V	RPA450V	RPA450V	RPA450V	RPA450V	RPA450V	RPA670V	RPA670V	RPA670V	RPA670V	RPA670	V RPA670V	RPA670V	RPA67
	la Aa															
ntake plenum with cir																
	420						F40					/ / 1	720	722	740	741
Ver	430 PA/50V	432 PA450V	440 PA450V	441 PA450V	530 PA450V	532 PA450V	540 PA450V	541	630 PA670V	632 PA670V	640 PA670V	641 PA670V	730 PA670V	732 PA670V	740 PA670V	
	430 PA450V	432 PA450V	PA450V	441 PA450V	530 PA450V	532 PA450V	540 PA450V	541 PA450V	630 PA670V	PA670V	640 PA670V	641 PA670V	730 PA670V		740 PA670V	
	PA450V															
Delivery accessories	PA450V	PA450V	PA450V	PA450V	PA450V											
Delivery accessories Delivery plenum interr	PA450V nally insulated	PA450V d, with 1	PA450V rectang	PA450V ular fla	PA450V nges	PA450V	PA450V	PA450V	PA670V	PA670V	PA670V	PA670V	PA670V	PA670V	PA670V	PA670
Delivery accessories	PA450V nally insulated 430	PA450V d, with 1 432	PA450V rectang 440	PA450V ular fla 441	PA450V nges 530	PA450V 532	PA450V 540	PA450V 541	PA670V 630	PA670V 632	PA670V 640	PA670V 641	PA670V	732	PA670V 740	PA670
Delivery accessories Delivery plenum interr	PA450V nally insulated	PA450V d, with 1 432	PA450V rectang	PA450V ular fla 441	PA450V nges 530	PA450V 532	PA450V 540	PA450V 541	PA670V 630	PA670V	PA670V	PA670V 641	PA670V	732	PA670V 740	741 PA670 741 RPM67
Delivery accessories Delivery plenum interr Ver	PA450V nally insulated 430 RPM450V	PA450V d, with 1 432 7 RPM450V	PA450V rectang 440 RPM450V	PA450V ular fla 441 RPM450V	PA450V nges 530 RPM450V	PA450V 532	PA450V 540	PA450V 541	PA670V 630	PA670V 632	PA670V 640	PA670V 641	PA670V	732	PA670V 740	PA670
Delivery accessories Delivery plenum interr Ver	PA450V nally insulated 430 RPM450V	PA450V d, with 1 432 7 RPM450V d, with 6 432	PA450V rectang 440 RPM450V circular 440	PA450V ular fla 441 RPM450V flanges	PA450V nges 530 RPM450V	532 7 RPM450V	PA450V 540	FA450V 541 RPM450V	PA670V 630	PA670V 632	PA670V 640 RPM670V	PA670V 641 RPM670V	730 730 730	732 V RPM670\	740 / RPM670V	741 RPM67
Delivery accessories Delivery plenum interr Ver Delivery plenum interr	PA450V nally insulated 430 RPM450V nally insulated	PA450V d, with 1 432 7 RPM450V d, with 0	PA450V rectang 440 RPM450V	PA450V ular fla 441 RPM450V flanges	PA450V nges 530 RPM450V	PA450V 532 7 RPM450V	PA450V 540 RPM450V	PA450V 541 RPM450V	630 RPM670V	PA670V 632 RPM670V	PA670V 640 RPM670V	PA670V 641 RPM670V	730 78PM670	732 V RPM670\	740 / RPM670V	741 RPM67
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V	PA450V d, with 1 432 7 RPM450V d, with 6 432	PA450V rectang 440 RPM450V circular 440	PA450V ular fla 441 RPM450V flanges	PA450V nges 530 RPM450V	532 7 RPM450V	540 RPM450V	FA450V 541 RPM450V	630 RPM670V	632 RPM670V	PA670V 640 RPM670V	PA670V 641 RPM670V	730 730 730	732 V RPM670\	740 / RPM670V	741 RPM67
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V	PA450V d, with 1 432 RPM450V d, with 6 432 PM450V	PA450V rectang 440 RPM450V circular 440 PM450V	PA450V ular fla 441 RPM450V flanges 441 PM450V	PA450V nges 530 RPM450V 530 PM450V	532 ' RPM450V 532 PM450V	540 RPM450V 540 RPM450V	541 RPM450V 541 PM450V	630 RPM670V 630 PM670V	632 RPM670V 632 PM670V	640 RPM670V 640 PM670V	641 RPM670V	730 730 730 730 730 PM670\	732 V RPM670V 732 / PM670V	740 / RPM670V 740 PM670V	741 RPM67
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver Circular flanges kit for	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430	PA450V d, with 1 432 ' RPM450V d, with 6 432 PM450V	PA450V rectang	PA450V ular fla 441 RPM450V flanges 441 PM450V	PA450V nges 530 RPM450V 530 PM450V	532 7 RPM450V 532 PM450V 532	540 RPM450V 540 PM450V 540	541 RPM450V 541 PM450V	630 RPM670V 630 PM670V	632 RPM670V 632 PM670V	640 RPM670V 640 PM670V	641 RPM670V 641 PM670V	730 730 78PM670 730 PM670\	732 V RPM670V 732 732 7 PM670V	740 740 7 RPM670V 740 PM670V	741 RPM67
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V	PA450V d, with 1 432 RPM450V d, with 6 432 PM450V	PA450V rectang 440 RPM450V circular 440 PM450V	PA450V ular fla 441 RPM450V flanges 441 PM450V	PA450V nges 530 RPM450V 530 PM450V	532 ' RPM450V 532 PM450V	540 RPM450V 540 RPM450V	541 RPM450V 541 PM450V	630 RPM670V 630 PM670V	632 RPM670V 632 PM670V	640 RPM670V 640 PM670V	641 RPM670V	730 730 730 730 730 PM670\	732 V RPM670V 732 / PM670V	740 / RPM670V 740 PM670V	PA670
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver Circular flanges kit for	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430	PA450V d, with 1 432 ' RPM450V d, with 6 432 PM450V	PA450V rectang	PA450V ular fla 441 RPM450V flanges 441 PM450V	PA450V nges 530 RPM450V 530 PM450V	532 7 RPM450V 532 PM450V 532	540 RPM450V 540 PM450V 540	541 RPM450V 541 PM450V	630 RPM670V 630 PM670V	632 RPM670V 632 PM670V	640 RPM670V 640 PM670V	641 RPM670V 641 PM670V	730 730 78PM670 730 PM670\	732 V RPM670V 732 732 7 PM670V	740 740 7 RPM670V 740 PM670V	741 RPM67
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver Circular flanges kit for	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430	PA450V d, with 1 432 ' RPM450V d, with 6 432 PM450V	PA450V rectang	PA450V ular fla 441 RPM450V flanges 441 PM450V	PA450V nges 530 RPM450V 530 PM450V	532 7 RPM450V 532 PM450V 532	540 RPM450V 540 PM450V 540	541 RPM450V 541 PM450V	630 RPM670V 630 PM670V	632 RPM670V 632 PM670V	640 RPM670V 640 PM670V	641 RPM670V 641 PM670V	730 730 78PM670 730 PM670\	732 V RPM670V 732 732 7 PM670V	740 740 7 RPM670V 740 PM670V	741 RPM67 741 PM67
Delivery accessories Delivery plenum interr Ver Ver Circular flanges kit for Ver Condensate drip	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV	PA450V d, with 1 432 RPM450V d, with 6 432 PM450V 432 KFV	PA450V rectang 440 RPM450V circular 440 PM450V 440 KFV	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV	PA450V nges 530 RPM450V 530 PM450V 530 KFV	532 RPM450V 532 PM450V 532 FM450V	540 RPM450V 540 PM450V 540 KFV	541 RPM450V 541 PM450V 541 KFV	630 RPM670V 630 PM670V 630 PM670V	632 RPM670V 632 PM670V 632 KFV	640 RPM670V 640 PM670V 640 KFV	641 RPM670V 641 PM670V 641 KFV	730 730 730 730 730 730 730 KFV	732 V RPM670V 732 / PM670V 732 KFV	740 740 740 740 740 PM670V 740 KFV	741 RPM67 741 PM67 741
Delivery accessories Delivery plenum interr Ver Circular flanges kit for Ver Condensate drip Ver	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV	PA450V d, with 1 432 RPM450V d, with 6 432 PM450V 432 KFV	PA450V rectang 440 RPM450V circular 440 PM450V 440 KFV	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV	PA450V nges 530 RPM450V 530 PM450V 530 KFV	532 RPM450V 532 PM450V 532 KFV	540 RPM450V 540 PM450V 540 KFV	541 RPM450V 541 PM450V 541 KFV	630 RPM670V 630 PM670V 630 KFV	632 RPM670V 632 PM670V 632 KFV	640 RPM670V 640 PM670V 640 KFV	641 RPM670V 641 PM670V 641 KFV	730 730 730 730 730 730 730 KFV	732 V RPM670V 732 / PM670V 732 KFV	740 740 740 740 PM670V 740 KFV	741 RPM67 741 PM67 741
Delivery accessories Delivery plenum interr Ver Circular flanges kit for Ver Condensate drip Ver	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV	PA450V d, with 1 432 RPM450V d, with 6 432 PM450V 432 KFV	PA450V rectang 440 RPM450V circular 440 PM450V 440 KFV	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV	PA450V nges 530 RPM450V 530 PM450V 530 KFV	532 RPM450V 532 PM450V 532 KFV	540 RPM450V 540 PM450V 540 KFV	541 RPM450V 541 PM450V 541 KFV	630 RPM670V 630 PM670V 630 KFV	632 RPM670V 632 PM670V 632 KFV	640 RPM670V 640 PM670V 640 KFV	641 RPM670V 641 PM670V 641 KFV	730 730 730 730 730 730 730 KFV	732 V RPM670V 732 / PM670V 732 KFV	740 740 740 740 PM670V 740 KFV	741 RPM67 741 PM67 741
Delivery accessories Delivery plenum interr Ver Ver Circular flanges kit for Ver Condensate drip Ver Ver	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV 430 BCV45	PA450V d, with 1 432 RPM450V d, with 6 432 PM450V 432 KFV 432 BCV45	PA450V rectang 440 RPM450V circular 440 PM450V 440 KFV	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV	PA450V nges 530 RPM450V 530 PM450V 530 KFV	532 RPM450V 532 PM450V 532 KFV	540 RPM450V 540 PM450V 540 KFV	541 RPM450V 541 PM450V 541 KFV	630 RPM670V 630 PM670V 630 KFV	632 RPM670V 632 PM670V 632 KFV	640 RPM670V 640 PM670V 640 KFV	641 RPM670V 641 PM670V 641 KFV	730 730 730 730 730 730 730 KFV	732 V RPM670V 732 / PM670V 732 KFV	740 740 740 740 PM670V 740 KFV	741 RPM67 741 PM67 741
Delivery accessories Delivery plenum interr Ver Ver Circular flanges kit for Ver Condensate drip Ver Ver	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV 430 BCV45	PA450V d, with 1 432 ' RPM450V d, with 6 432 PM450V 432 KFV 432 KFV	PA450V rectang	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV	PA450V nges 530 RPM450V 530 PM450V 530 KFV	532 RPM450V 532 PM450V 532 KFV	540 RPM450V 540 PM450V 540 KFV	541 RPM450V 541 PM450V 541 KFV	630 RPM670V 630 PM670V 630 KFV	632 RPM670V 632 PM670V 632 KFV	640 RPM670V 640 PM670V 640 KFV 640 BCV67	641 RPM670V 641 PM670V 641 KFV 641 BCV67	730 730 730 730 730 730 730 KFV	732 V RPM670V 732 / PM670V 732 KFV	740 740 740 740 PM670V 740 KFV	741 RPM67 741 PM67 741 KFV
Delivery accessories Delivery plenum interr Ver Ver Circular flanges kit for Ver Condensate drip Ver Condensate drip Ver Condensate drip	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV 430 BCV45	PA450V d, with 1 432 ' RPM450V d, with 6 432 PM450V 432 KFV 432 KFV 6 0 4 4 4 4 4 4 4 4 4 4 4 4	PA450V rectang	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV 441 BCV45	PA450V nges 530 RPM450V 530 PM450V 530 KFV 530 BCV45	532 FM450V 532 PM450V 532 FM50V 532 KFV 532 KFV	540 RPM450V 540 PM450V 540 FM450V 540 KFV 540 BCV45	541 RPM450V 541 PM450V 541 KFV 541 BCV45	630 RPM670V 630 PM670V 630 KFV 630 BCV67	632 RPM670V 632 PM670V 632 KFV 632 BCV67	640 RPM670V 640 PM670V 640 KFV 640 BCV67	641 RPM670V 641 PM670V 641 KFV 641 BCV67	730 730 730 730 730 730 730 8CV67	732 V RPM670V 732 / PM670V 732 KFV 732 BCV67	740 740 740 740 PM670V 740 KFV 740 BCV67	741 RPM67 741 PM67 741 BCV6
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver Circular flanges kit for Ver Condensate drip Ver MZC Plenum with motor-dri Ver 430 MZCS040	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV 430 BCV45	PA450V d, with 1 432 ' RPM450V d, with 6 432 PM450V 432 KFV 432 KFV 6 0 4 4 4 4 4 4 4 4 4 4 4 4	PA450V rectang	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV 441 BCV45	PA450V nges 530 RPM450V 530 PM450V 530 KFV 530 BCV45	532 RPM450V 532 PM450V 532 KFV 532 BCV45	540 RPM450V 540 RPM450V 540 PM450V 540 KFV 541	541 RPM450V 541 PM450V 541 KFV 541 BCV45	630 RPM670V 630 PM670V 630 KFV 630 BCV67	632 RPM670V 632 PM670V 632 KFV 632 BCV67	640 RPM670V 640 PM670V 640 KFV 640 BCV67	641 RPM670V 641 PM670V 641 KFV 641 BCV67	730 730 730 730 730 730 730 8CV67	732 V RPM670V 732 / PM670V 732 KFV 732 BCV67	740 740 740 740 PM670V 740 KFV 740 BCV67	741 RPM67 741 PM67
Delivery accessories Delivery plenum interr Ver Circular flanges kit for Ver Condensate drip Ver MZC Plenum with motor-dri Ver 430 MZC5040	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV 430 BCV45 iven dampers 432 444 MZCS040 MZCS	### PA450V d, with 432	PA450V rectang 440 RPM450V circular 440 PM450V 440 KFV 440 BCV45 41 5040 MZ	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV 441 BCV45	PA450V nges 530 RPM450V 530 PM450V 530 KFV 530 BCV45	532 PM450V 532 PM450V 532 KFV 532 BCV45	540 RPM450V 540 PM450V 540 KFV 540 BCV45	541 RPM450V 541 PM450V 541 KFV 541 BCV45	630 RPM670V 630 PM670V 630 KFV 630 BCV67	632 RPM670V 632 PM670V 632 KFV 632 BCV67	640 RPM670V 640 PM670V 640 KFV 640 BCV67	641 RPM670V 641 PM670V 641 KFV 641 BCV67	730 730 730 730 730 730 8CV67	732 V RPM670V 732 / PM670V 732 KFV 732 BCV67	740 740 740 PM670V 740 PM670V 740 KFV 740 BCV67 740 MZC7050	741 RPM67 741 PM67 741 BCV6
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver Circular flanges kit for Ver Condensate drip Ver VIZC Plenum with motor-dri Ver 430 MZCS040 Electric plant Ver 430	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV 430 BCV45 iven dampers 432 444 MZC5040 MZC5	### PA450V d, with a 432 RPM450V d, with a 432 PM450V 432 KFV 432 KFV 60 40 40 40 40 40 40 40 40 40	PA450V rectang 440 RPM450V circular 440 PM450V 440 KFV 440 BCV45 41	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV 441 BCV45	PA450V nges 530 RPM450V 530 PM450V 530 KFV 530 BCV45 532 IZC5040	532 PM450V 532 PM450V 532 KFV 532 KFV 540 MZC5040	540 RPM450V 540 PM450V 540 KFV 540 BCV45 541 MZC5040	541 RPM450V 541 PM450V 541 KFV 541 BCV45 630 MZC7050	630 RPM670V 630 PM670V 630 KFV 630 BCV67	632 RPM670V 632 PM670V 632 KFV 632 BCV67	640 RPM670V 640 PM670V 640 KFV 640 BCV67	641 RPM670V 641 PM670V 641 KFV 641 BCV67	730 PM670V 730 PM670V 730 KFV 730 BCV67	732 V RPM670V 732 / PM670V 732 KFV 732 BCV67	740 740 740 PM670V 740 PM670V 740 KFV 740 BCV67 740 MZC7050	741 RPM67 741 PM67 741 BCV6
Delivery accessories Delivery plenum interr Ver Circular flanges kit for Ver Condensate drip Ver MZC Plenum with motor-dri Ver 430 MZC5040	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV 430 BCV45 iven dampers 432 444 MZCS040 MZCS	### PA450V d, with a 432 RPM450V d, with a 432 PM450V 432 KFV 432 KFV 60 40 40 40 40 40 40 40 40 40	PA450V rectang 440 RPM450V circular 440 PM450V 440 KFV 440 BCV45 41	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV 441 BCV45	PA450V nges 530 RPM450V 530 PM450V 530 KFV 530 BCV45	532 PM450V 532 PM450V 532 KFV 532 BCV45	540 RPM450V 540 PM450V 540 KFV 540 BCV45	541 RPM450V 541 PM450V 541 KFV 541 BCV45	630 RPM670V 630 PM670V 630 KFV 630 BCV67	632 RPM670V 632 PM670V 632 KFV 632 BCV67	640 RPM670V 640 PM670V 640 KFV 640 BCV67	641 RPM670V 641 PM670V 641 KFV 641 BCV67	730 730 730 730 730 730 8CV67	732 V RPM670V 732 / PM670V 732 KFV 732 BCV67	740 740 740 PM670V 740 PM670V 740 KFV 740 BCV67 740 MZC7050	741 RPM67 741 PM67 741 KFV 741 BCV6
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver Circular flanges kit for Ver Condensate drip Ver VIZC Plenum with motor-dri Ver 430 MZC5040 Electric plant Ver 430	PA450V nally insulated	### PA450V d, with a 432 ### PM450V d, with a 432 PM450V 432 ### FV ### PM450V 432 ### BCV45 6 0 44 040 MZC 0 44 AC MZ	PA450V rectang 440 'RPM450V circular 440 PM450V 440 KFV 440 BCV45 41	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV 441 BCV45	PA450V nges 530 RPM450V 530 PM450V 530 KFV 530 BCV45 532 IZC5040	532 PM450V 532 PM450V 532 KFV 532 KFV 540 MZC5040	540 RPM450V 540 PM450V 540 KFV 540 BCV45 541 MZC5040	541 RPM450V 541 PM450V 541 KFV 541 BCV45 630 MZC7050	630 RPM670V 630 PM670V 630 KFV 630 BCV67	632 RPM670V 632 PM670V 632 KFV 632 BCV67	640 RPM670V 640 PM670V 640 KFV 640 BCV67	641 RPM670V 641 PM670V 641 KFV 641 BCV67	730 PM670V 730 PM670V 730 KFV 730 BCV67	732 V RPM670V 732 / PM670V 732 KFV 732 BCV67	740 740 740 PM670V 740 PM670V 740 KFV 740 BCV67 740 MZC7050	741 RPM67 741 PM67 741 BCV6
Delivery accessories Delivery plenum interr Ver Delivery plenum interr Ver Circular flanges kit for Ver Condensate drip Ver Ver MZC Plenum with motor-dri Ver 430 MZC5040 Electric plant Ver 430 MZCAC	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV 430 BCV45 iven dampers 432 444 MZC5040 MZC5 he configurations income	### PA450V d, with a 432 ### PM450V d, with a 432 PM450V 432 ### FV ### PM450V 432 ### BCV45 6 0 44 040 MZC 0 44 AC MZ	PA450V rectang 440 'RPM450V circular 440 PM450V 440 KFV 440 BCV45 41	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV 441 BCV45	PA450V nges 530 RPM450V 530 PM450V 530 KFV 530 BCV45 532 IZC5040	532 PM450V 532 PM450V 532 KFV 532 KFV 540 MZC5040	540 RPM450V 540 PM450V 540 KFV 540 BCV45 541 MZC5040	541 RPM450V 541 PM450V 541 KFV 541 BCV45 630 MZC7050	630 RPM670V 630 PM670V 630 KFV 630 BCV67	632 RPM670V 632 PM670V 632 KFV 632 BCV67	640 RPM670V 640 PM670V 640 KFV 640 BCV67	641 RPM670V 641 PM670V 641 KFV 641 BCV67	730 PM670V 730 PM670V 730 KFV 730 BCV67	732 V RPM670V 732 / PM670V 732 KFV 732 BCV67	740 740 740 PM670V 740 PM670V 740 KFV 740 BCV67 740 MZC7050	741 RPM67 741 PM67 741 BCV6
Delivery accessories Delivery plenum interr Ver Ver Ver Ver Ver Ver Ver Ver Ver	PA450V nally insulated 430 RPM450V nally insulated 430 PM450V plenum 430 KFV 430 BCV45 iven dampers 432 444 MZC5040 MZC5 he configurations income	### PA450V d, with 432	PA450V rectang	PA450V ular fla 441 RPM450V flanges 441 PM450V 441 KFV 441 BCV45	PA450V nges 530 RPM450V 530 PM450V 530 KFV 530 BCV45 532 IZC5040	532 PM450V 532 PM450V 532 KFV 532 KFV 540 MZC5040	540 RPM450V 540 PM450V 540 KFV 540 BCV45 541 MZC5040	541 RPM450V 541 PM450V 541 KFV 541 BCV45 630 MZC7050	630 RPM670V 630 PM670V 630 KFV 630 BCV67	632 RPM670V 632 PM670V 632 KFV 632 BCV67	640 RPM670V 640 PM670V 640 KFV 640 BCV67	641 RPM670V 641 PM670V 641 KFV 641 BCV67	730 PM670V 730 PM670V 730 KFV 730 BCV67	732 V RPM670V 732 / PM670V 732 KFV 732 BCV67	740 740 740 PM670V 740 PM670V 740 KFV 740 BCV67 740 MZC7050	741 RPM67 741 PM67 741 BCV6

⁽¹⁾ It is mandatory to use MZCACV if the intake of the unit combined with the MZC accessory exceeds 0.7 Ampere. The accessory cannot be fitted on the configurations indicated with -

[■] For more information, please refer to the MZC plenum sheet.

PERFORMANCE SPECIFICATIONS

2-pipe

Pressure drop system side Na 9	VED740		0	VED73	1	0	VED64	1	0	VED63	1	0	/ED54	1	0	VED53	1	0	VED44	1	0	VED43			
Heating performance 70 °C /60 °C (1)	1 3 5	1	5	3	1	5	3	1	5	3	1	5	4	2	5	4	2	5	3	1	5	3	1		
Mater flow rate system side MW 10,47 13,85 15,97 11,45 15,96 13,11 14,01 14,01 13,11 14,01 14,01 14,01 14,01 13,11 14,01 1	L M H	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L	Н	М	L		
Mater flow rate system side I/h 918 1214 140 100 137 158 1210 1414 1511 1319 130 1746 1349 130 130 1346 1389 130 1346 1389 130 1346 1389 130 1349 1389 130 1349 1389 130 1349 1389 130 1349 1389 130 1349 1389 130 1349 1389 1349 1389 1349 1																									Heating performance 70 °C / 60 °C (1)
Pressure drop system side kPa 9 14 19 11 18 24 13 158 21 18 25 29 30 43 58 19 29 38 38 55 67 26 Heating performance 45 °C / 40 °C (2) Heating pagadry kW 5,08 5,88 7,94 5,99 7,64 9,01 6,86 8,19 8,74 7,59 9,24 9,00 9,26 1,20 13,40 9,81 1,40 1,40 1,50 1,50 1,20 1,40 1,20 1,20 1,40 1,20 1,20 1,40 1,20 1,20 1,40 1,2	2,88 27,65 31,7	22,88	29,00	25,36	21,18	32,69	27,74	22,45	27,02	22,67	18,63	19,91	18,59	15,38	17,57	16,47	13,80	18,11	15,36	11,45	15,97	13,85	10,47	kW	Heating capacity
Heating performance 45 °C / 40 °C (2)	007 2425 278	2007	2543	2224	1857	2867	2433	1969	2369	1988	1634	1746	1630	1349	1541	1444	1210	1588	1347	1004	1401	1214	918	I/h	Water flow rate system side
Heating capacity kW 5,2 8,8 8,794 5,69 7,64 9,01 6,8 8,19 8,74 7,45 9,24 9,90 9,26 11,20 13,40 9,88 12,40 14,80 10,50 12,60 14,20 13,20 Mater flow rate system side l/h 894 1183 1366 979 1314 150 118 18 24 14 19 12 12 12 25 30 10 12 15 20 15 169 2133 2546 180 2167 2442 1944 Pressure drop system side kPa 9 14 19 11 18 24 14 19 17 18 18 24 14 19 12 12 12 12 12 12 12 12 12 12 12 12 12	26 36 46	26	67	55	38	38	29	19	58	43	30	29	25	18	21	158	13	24	18	11	19	14	9	kPa	Pressure drop system side
Water flow rate system side I/h 894 1183 1366 979 1314 1550 1180 1099 1503 1281 1389 1703 1593 126 2305 1699 2133 2546 1806 2167 2442 1944 1949																									Heating performance 45 °C / 40 °C (2)
Pressure drop system side	1,30 13,70 15,7	11,30	14,20	12,60	10,50	14,80	12,40	9,88	13,40	11,20	9,26	9,90	9,24	7,45	8,74	8,19	6,86	9,01	7,64	5,69	7,94	5,88	5,20	kW	Heating capacity
Cooling capacity	944 2356 270	1944	2442	2167	1806	2546	2133	1699	2305	1926	1593	1703	1589	1281	1503	1409	1180	1550	1314	979	1366	1183	894	I/h	Water flow rate system side
Colling capacity kW 4,54 5,98 6,72 5,1 6,88 7,79 5,99 7,16 7,49 7,26 8,31 8,70 10,43 12,19 10,02 12,0 14,80 10,17 11,92 13,48 11,73 5 13,65 4,86 5,51 4,55 4,87 5,90 4,87 5,90 4,87 5,90 4,87 5,90 4,88 9,96 7,02 8,62 10,30 8,25 9,71 11,07 8,11 Water flow rate system side l/h 781 1029 1156 896 1133 130 17 10 10 17 12,0 12,0 12,0 12,0 12,0 12,0 12,0 12,0	26 36 35	26	66	52	38	32	24	16	58	42	30	30	25	21	21	19	14	24	18	11	19	14	9	kPa	Pressure drop system side
Sensible cooling capacity kW 3,40 4,54 5,13 3,65 4,65 5,51 4,55 5,46 4,87 5,90 6,18 7,00 8,48 9,06 7,02 8,62 1,030 8,25 9,71 11,07 8,11 Water flow rate system side l/h 781 1029 1156 896 1183 1340 1030 1232 1288 1249 1249 1249 1249 1249 1249 1249 1249																									Cooling performance 7 °C / 12 °C
Water flow rate system side	,73 13,95 15,7	11,73	13,48	11,92	10,17	14,80	12,50	10,20	12,19	10,43	8,67	8,70	8,31	7,26	7,49	7,16	5,99	7,79	6,88	5,21	6,72	5,98	4,54	kW	Cooling capacity
Pressure drop system side	,11 9,69 10,9	8,11	11,07	9,71	8,25	10,30	8,62	7,02	9,96	8,48	7,00	6,18	5,90	4,87	5,75	5,48	4,55	5,51	4,86	3,65	5,13	4,54	3,40	kW	Sensible cooling capacity
Fan Otty Pan	018 2399 2702	2018	2319	2050	1749	2546	2150	1754	2097	1794	1491	1496	1429	1249	1288	1232	1030	1340	1183	896	1156	1029	781	I/h	Water flow rate system side
Type	27 37 45	27	58	46	35	47	34	24	48	36	26	28	25	19	21	19	12	22	17	10	17	13	8	kPa	Pressure drop system side
Fan motor type																									Fan
Number no. 2											ifugal	Centri												type	Туре
Air flow rate m³/h 790 1130 1350 780 1100 1340 120 1400 1520 1100 1340 1520 100 1380 1300 210 1507 204 2440 1640 2440 2440 1640 2440 1640 2440 1640 2440 2440 2440 2440 2440 2440 2440 2										;	ronous	Asynch												type	Fan motor
High static pressure Pa 24 50 72 - 80 63 32 50 70 32 50 56 30 50 75 30 50 75 32 50 69 32	3			3			3			3			2			2			2			2			Number
Find power W 137 175 228 135 178 222 175 232 270 172 230 267 220 271 340 220 293 340 234 285 371 234 245	600 2000 2350	1600	2410	2040	1640	2440	2004	1567	2210	1800	1380	1500	1380	1100	1520	1400	1120	1340	1100	780	1350	1130	790	m³/h	Air flow rate
Electrical wirring	32 50 64	32	69	50	32	75	50	30	75	50	30	56	50	32	70	50	32	63	50	-	72	50	24	Pa	High static pressure
Duck type fan coil sound data (3) Sound power level (inlet + radiated)	234 285 371	234	371	285	234	340	293	220	340	271	220	267	230	172	270	232	175	222	178	135	228	175	137	W	Input power
Sound power level (inlet + radiated) dB(A) 51,0 57,0 61,0 51,0 57,0 61,0 51,0 57,0 61,0 51,0 57,0 61,0 51,0 57,0 61,0 51,0 57,0 61,0 51,0 57,0 61,0 51,0 57,0 61,0 51,0 57,0 61,0 51,0 51,0 51,0 51,0 51,0 51,0 51,0 5	V1 V3 V5	V1	V5	V3	V1	V5	V3	V1	V5	V3	V1	V5	٧4	V2	V5	٧4	V2	V5	V3	٧1	V5	V3	V1		Electrical wiring
Sound power level (outlet) dB(A) 47,0 53,0 57,0 47,0 53,0 57,0 49,0 55,0 58,0 49,0 55,0 58,0 57,0 60,0 64,0 57,0 60,0 64,0 58,0 62,0 64,0 58,0 58,0 58,0 58,0 58,0 58,0 58,0 58																									Duct type fan coil sound data (3)
Diametre hydraulic fittings Type type - Main heat exchanger Ø 3/4" Finned pack heat exchanger	2,0 66,0 68,0	62,0	68,0	66,0	62,0	68,0	64,0	61,0	68,0	64,0	61,0	62,0	59,0	53,0	62,0	59,0	53,0	61,0	57,0	51,0	61,0	57,0	51,0	dB(A)	Sound power level (inlet + radiated)
Type type - Main heat exchanger Ø 3/4" Finned pack heat exchanger	8,0 62,0 64,0	58,0	64,0	62,0	58,0	64,0	60,0	57,0	64,0	60,0	57,0	58,0	55,0	49,0	58,0	55,0	49,0	57,0	53,0	47,0	57,0	53,0	47,0	dB(A)	Sound power level (outlet)
Main heat exchanger Ø 3/4" Finned pack heat exchanger																									Diametre hydraulic fittings
Finned pack heat exchanger											-													type	Туре
											4″	3/												Ø	Main heat exchanger
Water content main heat exchanger 2.9 3.9 4.7 6.3 4.7																									Finned pack heat exchanger
	6,3			4,7			6,3			4,7			3,9			2,9			3,9			2,9		1	Water content main heat exchanger
Power supply																									Power supply
Power supply 230V~50Hz											~50Hz	230V													Power supply

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

4-pipe

			VED441			VED541			VED641			VED741	
		1	3	5	2	4	5	1	3	5	1	3	5
		L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 65 °C / 55 °C (1)													
Heating capacity	kW	5,53	6,68	7,30	6,70	7,62	7,89	9,65	11,00	12,30	10,50	11,80	12,90
Water flow rate system side	l/h	475	574	627	576	655	678	829	946	1057	903	1014	1109
Pressure drop system side	kPa	14	20	23	20	25	26	15	19	24	18	22	25
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	5,35	7,05	8,00	7,46	8,56	8,94	10,40	12,70	15,20	11,90	14,20	16,10
Sensible cooling capacity	kW	3,79	5,03	5,74	5,07	6,14	6,42	7,26	8,92	10,70	8,37	9,96	11,30
Water flow rate system side	l/h	920	1212	1376	1283	1472	1537	1788	2184	2614	2046	2442	2769
Pressure drop system side	kPa	12	19	24	21	27	29	24	35	48	27	37	46
Fan													
Туре	type						Centr	rifugal					
Fan motor	type						Asynch	ronous					
Number	no.		2			2			3			3	
Air flow rate	m³/h	750	1060	1253	1060	1360	1453	1340	1730	2120	1600	2000	2358
High static pressure	Pa	25	50	70	32	50	57	30	50	75	32	50	69
Input power	W	121	175	215	170	229	265	224	264	341	224	288	373
Electrical wiring		V1	V3	V5	V2	V4	V5	V1	V3	V5	V1	V3	V5
Duct type fan coil sound data (2)													
Sound power level (inlet + radiated)	dB(A)	51,0	57,0	61,0	53,0	59,0	62,0	61,0	64,0	68,0	62,0	66,0	68,0
Sound power level (outlet)	dB(A)	47,0	53,0	57,0	49,0	55,0	58,0	57,0	60,0	64,0	58,0	62,0	64,0
Diametre hydraulic fittings													
Туре	type							-					
Main heat exchanger	Ø						3/	/4"					
Secondary heat exchanger	Ø						1,	/2"					
Finned pack heat exchanger													
Water content main heat exchanger			3,9			3,9			6,3			6,3	
Water content secondary heat exchanger	1		1,0			1,0			1,6			1,6	
Power supply													

	VED441	VED541	VED641	VED741
Power supply		230V-	~50Hz	

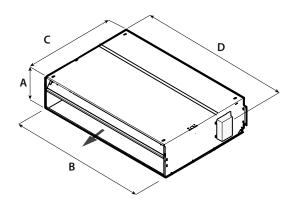
(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

VED		,	From VED 4	30 to 741		
Fan speed	V1	V2	V3	V4	V5	
Motor connection	L5	L4	L3	L2	L1	

The speed of associates may differ from the standard factory configuration.

For more information refer to the selection program and to to the dedicated documentation.

DIMENSIONS



		VED430	VED440	VED530	VED540	VED630	VED640	VED730	VED740
Dimensions and weights									
A	mm	300	300	300	300	351	351	351	351
В	mm	1133	1133	1133	1133	1533	1533	1533	1533
C	mm	737	737	737	737	789	789	789	789
D	mm	1158	1158	1158	1158	1558	1558	1558	1558
Net weight	kg	41,0	43,0	42,0	47,0	57,0	60,0	58,0	61,0
		VED432	VED441	VED532	VED541	VED632	VED641	VED732	VED741
Dimensions and weights	'								
Dilliciisions and weights									
A	mm	300	300	300	300	351	351	351	351
A B	mm mm	300 1133	300 1133	300 1133	300 1133	351 1533	351 1533	351 1533	351 1533
A B C									
A B C D	mm	1133	1133	1133	1133	1533	1533	1533	1533

www.aermec.com















VED 530I-741I

Fan coil unit for ducted installations



- Horizontal and vertical installation
- Ventilation group to 5 speed
- Large range of available static pressure
- Inspectable ventilation group





DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying.

Designed to maintain the set temperature over time, ensuring very low sound levels.

Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures.

Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

FEATURES

Case

Unit for internal installation.

Internally insulated structure with class 1 fire resistance and IP20 protection.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Brushless motor with continuous speed variation 0-100%.

Inverter motor allows precise adaptation to the real indoor environment requirements without temperature oscillations.

The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air years.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Air filte

Air filter Class G3, for easy removal and cleaning.

Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement.

The unit is supplied with the delivery connection supplied.

ACCESSORIES



Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **PRO503:** Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

WMT21: Electronic thermostat for inverter fancoils.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L=2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

VCF45C - 47C - 47CS - for main heat exchanger: 3-way motorised valve kit for the main heat exchanger. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCF45H - 47H - for heating only heat exchanger: Motorized 3-way valve kit for hot only coil. The kit consists of a 3-way 4-way valve, the actuator and its hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.

VCF25C - 25CS - for main coil: 2-way motorized valve kit for main coil. The kit consists of a valve with its insulating shell, the actuator and the relative hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.

VCF25H - for heating only coil: 2-way motorized valve kit for hot only coil. The kit consists of a valve, actuator and relative hydraulic fittings, it is suitable for installation on both fan coils with hydraulic connections on the right and left.

BCV: Condensate drip.

Installation accessories

MZC: Plenum with motorised dampers.

RDA_V: Straight intake connection with rectangular flange.

RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.

RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

KFV: Circular flanges kit for plenum.

Configurator

Field	Description
1,2,3	VED
4	Size 5, 7
5	main heat exchanger
3	3-row coil
4	4-row coil

MZCBC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with a brushless motor.

Field		Description
6		Secondary heat exchanger
	0	Without coil
	1	1-row coil for heating only
	2	2-row coil for heating only
7		Fans

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	VED530I	VED540I	VED730I	VED740I
AER503IR	•	•	•	
PR0503	•	•	•	•
SA5	•	•	•	•
SW5	•	•	•	•
TX	•	•	•	•
WMT21		•	•	•
Accessory	VED532I	VED541I	VED732I	VED741I
AER503IR	•	•	•	•
PR0503	•	•	•	•
SA5	•	•	•	•
SA5 SW5	•	•	•	•

VMF system

Accessory	VED530I	VED540I	VED730I	VED740I
DI24	•	•	•	•
VMF-E19I	•	•	•	•
VMF-E3	•	•	•	•
VMF-E4DX	•	•	•	•
VMF-E4X	•	•	•	•
VMF-IO	•	•	•	•
VMF-IR	•	•	•	•
VMF-SW	•	•	•	•
VMF-SW1	•	•	•	•
VMHI	•	•	•	•

Accessory	VED532I	VED541I	VED732I	VED741I
DI24	•	•	•	•
VMF-E19I	•	•	•	•
VMF-E3	•	•	•	•
VMF-E4DX	•	•	•	•
VMF-E4X	•	•	•	•
VMF-I0	•	•		•
VMF-IR	•	•	•	•
VMF-LON	•	•	•	•
VMF-SW	•	•	•	•
VMF-SW1	•	•	•	•
VMHI	•	•	•	•

Water valves

3 way valve kit

	VED530I	VED540I	VED730I	VED740I
3 way valve kit				
Main heat exchanger	VCF45C	VCF45C	VCF47C	VCF47CS
Secondary heat exchanger for four pipes	-	-	-	-
	VED532I	VED541I	VED732I	VED741I
3 way valve kit	VED532I	VED541I	VED732I	VED741I
3 way valve kit Main heat exchanger	VED532I VCF45C	VED541I VCF45C	VED732I VCF47C	VED741I VCF47CS

230V power supply - Hydraulic connection Ø 3/4"

2 way valve kit

	VED530I	VED540I	VED730I	VED740I
2 way valve kit				
Main heat exchanger	VCF25C	VCF25C	VCF25C	VCF25CS
Secondary heat exchanger for four pipes	-	-	-	-

	VED532I	VED541I	VED732I	VED741I	
way valve kit					
ain heat exchanger	VCF25C	VCF25C	VCF25C	VCF25CS	
condary heat exchanger for four pipes	VCF25H	VCF25H	VCF25H	VCF25H	
30V power supply - Hydraulic co -way globe valves actuator ex					
cessory	VED530I	VED540I	VED730I	VED740I	
T102	• INCCORD	VED340I •	VEU/30I	VED/40I	
T202	·	•	•	•	
	VEDERAL	VEDERAL			
ccessory	VED532I	VED541I	VED732I	VED741I	
T102	•	•			
T202			•	•	
ctuator 230V	VEDEADI	VEDZON		VED7401	
ccessory CTK	VED540I	VED730I	,	VED740I	
LIK					
ccessory	VED532I	VED541I	VED732I	VED741I	
TK .	•	•	•	•	
ctuator 24V					
ccessory	VED540I	VED730I		VED740I	
TKM	•	•		•	
ccessory	VED532I	VED541I	VED732I	VED741I	
CTKM	•	•	•	•	
ombined adjustment and bal	ancing valve cold side				
ccessory	VED530I	VED540I	VED730I	VED740I	
P150	•	•	120,001	. 207 101	
P150M	•	•			
P270M			•	•	
ccessory	VED532I	VED541I	VED732I	VED741I	
IP150	•	•	YLUI JZI	YLV/TII	
JP150M	•	•			
JP270M			•	•	
JP/VJP_M the compatibility	of the hot water valves with the	he de-			
igned air flow in a four-pipe in ondensate drip			Manage	Venna	
igned air flow in a four-pipe in ondensate drip ccessory	vEDS30I	VED540I	VED730I	VED740I	
igned air flow in a four-pipe ii ondensate drip ccessory CV45	nstallation is to be verified.				
igned air flow in a four-pipe ii ondensate drip ccessory CV45	vEDS30I	VED540I	VED730I	VED740I	
gned air flow in a four-pipe in ondensate drip ccessory CV45 CV67 ccessory	vEDS30I	VED540I			
igned air flow in a four-pipe in ondensate drip ccessory CV45 CV67 ccessory CV45	VED530I	VED540I	• VED732I	• VED741I	
igned air flow in a four-pipe in condensate drip ccessory CV45 CV67 ccessory CV45 CV67	VED532I	VED540I • VED541I	•	•	
igned air flow in a four-pipe in ondensate drip ccessory CV45 CV67 ccessory CV45 CV67	VED532I VED532I VED532I	VED540I • VED541I	• VED732I	• VED741I	
igned air flow in a four-pipe in ondensate drip ccessory CV45 CV67 ccessory CV45 CV67 cccessories for intake ntake straight with rectangula	VED530I VED532I ventorial transport of the second of the	VED540I • VED541I •	• VED732I •	vED741I	
igned air flow in a four-pipe in ondensate drip ccessory CV45 CV67 ccessory CV67 ccessories for intake ntake straight with rectangulaccessory	VED530I VED532I VED532I VED532I VED530I	VED540I VED541I VED540I	• VED732I	• VED741I	
igned air flow in a four-pipe in ondensate drip ccessory CV45 CV67 ccessory CV45 cv67 cccessories for intake ntake straight with rectangulaccessory	VED530I VED532I ventorial transport of the second of the	VED540I • VED541I •	• VED732I •	vED741I	
igned air flow in a four-pipe in ondensate drip ccessory CV45 CV67 ccessory CV45 cv67 cccessories for intake ontake straight with rectangula ccessory OA450V	VED530I VED532I VED532I VED530I VED530I VED530I VED530I VED530I VED530I VED530I	VED540I VED541I VED540I VED540I	• VED732I • VED730I	• VED7411 • • VED7401	
igned air flow in a four-pipe in condensate drip cccessory (V45 (CV67 cccessory (CV45 (CV67 cccessories for intake ntake straight with rectangula cccessory DA450V DA670V cccessory	VED532I VED532I VED532I VED532I VED5330I VED532I	VED540I VED541I VED540I VED541I	• VED732I • VED730I	• VED741I • VED740I	
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Accessory	VED532I	VED541I	VED732I	VED741I
PA450V	•	•		
PA670V			•	•
Delivery accessories				
Delivery plenum internally	insulated, with rectangular flang	es		
Accessory	VED530I	VED540I	VED730I	VED740I
RPM450V	•	•		
RPM670V			•	•
Accessory	VED532I	VED541I	VED732I	VED741I
RPM450V	•	•		
RPM670V			•	•
Delivery plenum internally	insulated, with circular flanges			
Accessory	VED530I	VED540I	VED730I	VED740I
PM450V	•	•		
PM670V			•	•
Accessory	VED532I	VED541I	VED732I	VED741I
PM450V	•	•		
PM670V			•	•
Circular flanges kit for pler	num			
Accessory	VED530I	VED540I	VED730I	VED740I
KFV	•	•	•	•
Accessory	VED532I	VED541I	VED732I	VED741I
KFV	•	•	•	•
MZC				
MEC Plenum with motor-driven	dampers			
Accessory	VED530I	VED540I	VED730I	VED740I
MZC5040	•	•		
MZC7050			•	•
Accessory	VED532I	VED541I	VED732I	VED741I
MZC5040	•	•	120,021	1207111
MZC7050			•	•
Electric plant				
Accessory	VED540I	VFN		VED740I
MZCBC	•		•	•
			1	
Accessory	VED532I	VED541I	VED732I	VED741I

PERFORMANCE SPECIFICATIONS

2-pipe

			VED530I			VED540I			VED730I			VED740I	
		1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	13,80	16,47	17,57	15,38	18,59	19,91	21,18	25,36	29,00	22,88	27,65	31,71
Water flow rate system side	l/h	1210	1444	1541	1349	1630	1746	1857	2224	2543	2007	2425	2781
Pressure drop system side	kPa	13	18	21	18	25	29	38	55	67	26	36	46
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	6,86	8,19	8,74	7,65	9,24	9,90	10,53	12,61	14,22	11,34	27,65	15,81
Water flow rate system side	l/h	1180	1409	1503	1316	1589	1703	1811	2169	2446	1950	2425	2719
Pressure drop system side	kPa	14	19	21	21	25	30	38	52	66	26	36	46
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	6,05	7,25	7,39	7,31	8,40	8,70	10,25	11,96	13,48	11,81	13,99	15,71
Sensible cooling capacity	kW	4,61	5,57	6,02	4,93	5,99	6,18	8,33	9,75	11,07	8,19	9,73	10,95
Water flow rate system side	l/h	1041	1247	1271	1257	1445	1496	1763	2057	2319	2031	2406	2702
Pressure drop system side	kPa	12	19	21	19	25	28	35	46	58	27	37	45
Fan													
Туре	type						Centr	ifugal					
Fan motor	type						Inve	erter					
Number	no.		2			2			3			3	
Air flow rate	m³/h	1120	1400	1520	1100	1380	1500	1640	2040	2410	1600	2000	2358
High static pressure	Pa	32	50	58	32	50	56	32	50	69	32	50	69
Input power	W	115	160	205	115	160	205	147	241	370	147	241	370
Signal 0-10V	%	66	76	62	62	76	90	62	76	90	62	76	90
Duct type fan coil sound data (3)													
Sound power level (inlet + radiated)	dB(A)	53,0	59,0	62,0	53,0	59,0	62,0	62,0	66,0	68,0	62,0	66,0	68,0
Sound power level (outlet)	dB(A)	49,0	55,0	58,0	49,0	55,0	58,0	58,0	62,0	64,0	58,0	62,0	64,0
Diametre hydraulic fittings													
Main heat exchanger	Ø						3/	/4"					
Power supply													
Power supply							230V	~50Hz					

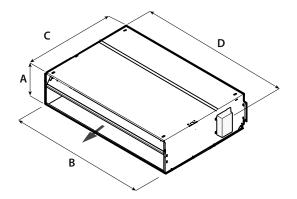
4-pipe

			VED541I			VED741I	
		1	2	3	1	2	3
		L	М	Н	L	М	Н
Heating performance 65 °C / 55 °C (1)							
Heating capacity	kW	6,70	7,62	7,90	10,57	11,88	12,96
Water flow rate system side	l/h	584	666	692	925	1040	1133
Pressure drop system side	kPa	19	24	26	17	21	25
Cooling performance 7 °C / 12 °C							
Cooling capacity	kW	7,43	8,54	8,97	11,96	14,23	16,08
Sensible cooling capacity	kW	5,04	6,13	6,45	8,34	9,97	11,32
Water flow rate system side	l/h	1278	1469	1543	2057	2448	2766
Pressure drop system side	kPa	21	27	29	27	37	46
Fan							
Туре	type			Centr	ifugal		
Fan motor	type			Inve	rter		
Number	no.		2			3	
Air flow rate	m³/h	1060	1360	1460	1600	2000	2350
High static pressure	Pa	32	50	56	32	50	69
Input power	W	106	163	185	138	240	363
Signal 0-10V	%	66	84	90	64	78	90
Duct type fan coil sound data (2)							
Sound power level (inlet + radiated)	dB(A)	53,0	59,0	62,0	62,0	66,0	68,0
Sound power level (outlet)	dB(A)	49,0	55,0	58,0	58,0	62,0	64,0
Diametre hydraulic fittings							
Main heat exchanger	Ø			3/	4"		
Secondary heat exchanger	Ø			1/	2"		
Power supply							
Power supply				230V	~50Hz		

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT (2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		VED530I	VED540I	VED730I	VED740I
Dimensions and weights					
A	mm	300	300	351	351
В	mm	1133	1133	1533	1533
(mm	737	737	789	789
D	mm	1158	1158	1558	1558
Net weight	kg	42,0	47,0	58,0	61,0
	,	VED532I	VED541I	VED732I	VED741I
Dimensions and weights					
A	mm	300	300	351	351
		4455	1122	1533	1533
В	mm	1133	1133	1333	1333
3	mm mm	737	737	789	789
B :)					



















Fan coil unit for ducted installations



- For district cooling applications
- Horizontal and vertical installation
- Built-in sanitization system
- Large range of available static pressure





DESCRIPTION

The ducted range VDCA_D has been designed for air conditioning in environments where the installation of high-performance units with a wide range of useful head and compact dimensions is required.

Thanks to the availability of various versions and configurations, it's easy to choose the optimal solution for any requirement.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans. They are statically and dynamically balanced and directly coupled to the motor shaft.

The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.

Fan housing in plastic material removable for easy and effective cleaning.

Finned pack heat exchanger

The high-efficiency heat exchanger is designed to operate with a high temperature difference, typical of District Cooling solutions.

Controls and Accessoires

To facilitate and streamline installation operations on-site, we have made it possible through the configurator, and therefore at the ordering stage, to receive the unit with certain accessories already pre-installed in the factory.

With copper pipes and aluminum fins, the main heat exchanger has female gas hydraulic connections and is equipped with air vents.

The hydraulic connections can be inverted during installation.

Air filter

All fan coils come equipped with an easily removable and cleanable air filter. Various types of air filters are available through the configurator to meet different needs.

Control

The unit's electrical box is reversible, with the option of mounting it also on the same side of the water connections.

The standard equipment includes a single 10-pin control board as an interface for the electrical connections, the preparation for the VMF series thermostat fastener and the included supply of a DIN guide for the installation of a third-party control.

To facilitate and streamline installation operations on-site, we have made it possible through the configurator, and therefore at the ordering stage, to receive the unit with certain accessories already pre-installed in the factory. We redirect your attention to the configurator available on this datasheet or to the unit selection software.

We redirect your attention to the configurator available on this datasheet or to the unit selection software.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	VDCA
5	Size
	1, 2, 3, 5, 7
6	main heat exchanger
0	Standard
7	Secondary heat exchanger
0	No present
1	Present
8	Configuration
D	High head
P	Low head
9	Installation
U	Universal
V	Only vertical
10	Position of connections
D	Water connections and electrical panel on the right
G	Water connections and electrical panel on the left
L	Hydraulic connections on the left and electric connections on the opposite side
R	Hydraulic connections on the right and electric connections on the opposite side
11	Use
V	With VMF system
W	Without control board
12	Device / accessoires
Н	Electric heater
I	loniser
Р	Photocatalytic lamp
W	Without devices
13	Filter
В	Basic filter
М	Increased filter
Р	Special for units with photocatalytic device
V	With washable mesh filter

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

PRO503: Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SA503: Wall-mountable ambient sensor, compatible with AER503IR.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: Water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

VMF-RIC: Thermostat interface for fan coil units

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate

and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, Dl24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, Dl24 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L=2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Valves and additional water coil

BV: Hot water heat exchanger with 1 row.

VCF_X: 3-way valve kit for fan coils with single heat exchanger and hydraulic connections on the left side, for installation in 4-pipe systems. The kit is composed by 2 insulated 3-way valves and 4 connections complete with electrothermal actuators, insulating shells for the valves and with hydraulic fittings. 230V power supply. Hydraulic connections: Valve body Ø G 3/4" Male; Valve side connection pipes Ø G 3/4" Female; Unit side connection pipes Ø G 3/4" Male.

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VDP: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 230 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

VCT102: These are 3-way ball valves made of bronze, with female/female connections \emptyset 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCT103: These are 3-way ball valves made of bronze, with female/female connections $\,\emptyset\,$ 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adjustment provided.

VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/ $\,$ adjustment provided.

Installation accessories

AMP: Wall mounting kit

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. DSC: Condensate drainage device.

Accessories for intake

RDA_V: Straight intake connection with rectangular flange.

RDA_C: Straight intake connection with circular flanges.

RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

MZC: Plenum with motorised dampers.

MZCACV: Electrical system with relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse sup-

MZCAC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with an asynchronous motor.

KFV: Circular flanges kit for plenum.

GA: Intake grid with fixed louvers

GAF: Intake grid with filter and fixed louvers

GM: Flow grid with adjustable louvers.

Delivery accessories

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.

RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

RDM_V: Straight delivery coupling in galvanised sheet metal.

RDM_C: Straight discharge internally insulated, with circular flanges.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
AER503IR (1)	•	•	•	•	•
F3VU	•	•	•	•	•
PR0503	•	•	•	•	•
SA5 (2)	•	•	•	•	•
SA503 (3)	•	•	•	•	•
SW3 (2)	•	•	•	•	•
SW5 (2)	•	•	•	•	•
TX (4)	•	•	•	•	
VMF-RIC	•	•		•	•

⁽¹⁾ Wall-mount installation.

VMF system

VMF system

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
DI24	•	•	•	•	•
VMF-E19 (1)	•	•	•	•	•
VMF-E3	•	•	•	•	•
VMF-E4DX	•	•	•	•	•
VMF-E4X	•	•	•	•	•
VMF-I0	•	•	•	•	•
VMF-IR	•	•	•	•	•
VMF-SW	•	•	•	•	•
VMF-SW1	•	•	•	•	•
VMHI	•	•	•		•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

(Heating only) additional heat exchanger

Accessory	VDCA100D	VDCA200D	VDCA300D
BV130 (1)	•		
BV162 (1)			•
BV230 (1)		•	

(1) Not available for sizes with oversized main coil.

⁽²⁾ Probe for AER503IR-TX thermostats, if fitted.(3) Thermostat probe for AER503IR if available.

⁽⁴⁾ Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

Water valves

Valve Kit for 4 pipe systems with main coil

Accessory	VDCA100D	VDCA200D	VDCA300D
VCF3X4L	•	•	
VCF3X4R	•	•	•

3 way valve kit

	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
3 way valve kit					
Main heat exchanger	VCZ43 / VCZ4324	VCZ43 / VCZ4324	VCZ43 / VCZ4324	VCF45CS	VCF45CS
Secondary heat exchanger for					
four pipes	-	-	-	-	-
Additional coil "BV"	VCF45 / VCF4524	VCF45 / VCF4524	VCF45 / VCF4524	-	-

 $VCZ43-VCF45-VCF45H-VCF47H\ A limentazione\ 230V-VCZ4324-VCF4524\ Power\ supply\ 24V-Hydraulic\ connection\ \emptyset\ 3/4"$

2 way valve kit

	VDCA100D	VDCA200D	VDCA300D
2 way valve kit			
Main heat exchanger	VCZD3 / VCZD324	VCZD3 / VCZD324	VCZD3 / VCZD324
Secondary heat exchanger for			
four pipes	-	-	-
Additional coil "BV"	VCFD4/VCFD424	VCFD4/VCFD424	VCFD4 / VCFD424

VCZD3 - VCFD4 Power supply 230V - VCZD324 - VCFD424 Power supply 24V

- Hydraulic connection Ø 3/4"

Combined adjustment and balancing valve cold side

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
VDP15	•	•	•	•	•
VDP15HF (1)	•	•	•	•	•
VDP15LF		•	•		
VDP20HF				•	•

(1) The compatibility of the valves with the unit must be checked using the project capacity. Select the appropriate valve based on the project water flow rate.

2-way globe valves actuator excluded

z way globe valves actuator co	Acidaca	
Accessory	VDCA500D	VDCA700D
VCT103	•	•
Accessory	VDCA500D	VDCA700D
VCT102	•	•
Accessory	VDCA500D	VDCA700D
VCTK	•	•
Accessory	VDCA500D	VDCA700D
VCTKM	•	•

Installation accessories

Installation accessories

Accessory	VDCA100D	VDCA200D	VDCA300D
AMP	•	•	•

Condensate drip

Accessory	VDCA100D	VDCA200D	VDCA300D
BCZ4 (1)	•	•	•
BCZ6 (2)	•	•	•

(1) For vertical installation.(2) For horizontal installation.

Accessory	VDCA100D	VDCA200D	VDCA300D
BC9 (1)	•	•	•

(1) For horizontal installation.

Accessory	VDCA500D	VDCA700D
BCV45	•	
BCV67		•

Condensate recirculation device

Accessory	VDCA100D	VDCA200D	VDCA300D		
DSCZ4 (1)		•			

⁽¹⁾ DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Accessories for intake

RPM300V RPM450V RPM670V

	rectangular flanges				
essory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
100V	•				
A200V		•			
A300V			•		
DA450V				•	
DA670V					•
ntake straight inte	rnally insulated, with circula	nr flanges			
cessory	VDCA100D		VDCA200D		VDCA300D
DAC100V	•				
DAC200V			•		
DAC300V					•
ntake plenum with	rectangular flanges				
ccessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
PA100V	•				
PA200V		•			
PA300V			•		
PA450V				•	
PA670V					•
ntake plenum with	circular flanges				
ccessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
1100V	•				
A200V		•			
A300V			•		
A450V				•	
A670V					•
ircular flanges kit t	for plenum				
ccessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
FV				•	•
FV10		•	•		
ntake grids					
ccessory	VDCA100D		VDCA200D		VDCA300D
iA32	•				
iA42			•		
iA62					•
ntake grid with filt	er and fixed louvers				
ccessory	VDCA100D		VDCA200D		VDCA300D
AF32	•				
iAF42			•		
AF62					•
low grid with adju					
ccessory	VDCA100D		VDCA200D		VDCA300D
M32	•				
M42			•		
iM62					•
elivery accessor		dar flanger			
	ternally insulated, with circu		VDCV300D	VDC VEUUD	VDCAZOOD
ccessory M100V	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
	•				
M200V		•			
M300V			•		
M450V				•	
M670V					•
elivery plenum int	ternally insulated, with recta	angular flanges			
cessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
M100V	•				
1111001					
RPM200V		•			

Straight delivery coupling

Accessory	VDCA100D	VDCA200D	VDCA300D
RDM100V	•		
RDM200V		•	
DDW3UUA			

Delivery straight internally insulated, with circular flanges

Accessory	VDCA100D	VDCA200D	VDCA300D
RDMC100V	•		
RDMC200V		•	
RDMC300V			•

Plenum with motor-driven dampers

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
MZC320	•				
MZC5040				•	
MZC530					
MZC7050					•
MZC830			•		

Electrical system with relays

Accessory	VDCA500D	VDCA700D
MZCACV (1)	•	•

 $(1) \ \ It is mandatory to use MZCACV if the intake of the unit combined with the MZC accessory exceeds 0.7 Ampere.$

Electric plant

Accessory	VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
MZCAC	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

2-pipe

			VC	CA10	0D			VC	CA20	0D		VDCA300D			VDCA500D				VDCA700D							
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
		UL	L	М	Н	НН	UL	L	М	Н	НН	UL	L	М	Н	НН	UL	L	М	Н	НН	UL	L	М	Н	НН
Heating performances 45 °C/35 °C (1)																										
Heating capacity k	W 1	1,57	1,79	2,58	2,81	4,03	2,74	2,95	3,80	4,08	5,34	3,46	4,15	5,46	5,69	6,66	4,44	5,15	7,02	8,21	10,11	8,25	10,00	12,63	14,62	16,67
Water flow rate system side //	h 1	136	156	224	244	350	238	256	330	354	463	300	360	474	494	578	386	447	609	713	877	716	868	1096	1269	1447
Pressure drop system side ki	Pa	7	9	17	19	37	23	26	40	46	74	11	16	26	28	37	6	8	14	18	26	9	13	20	26	33
Cooling performance 5.5 °C / 14.5 °C (2)																										
Cooling capacity k	W 1	1,21	1,38	1,98	2,16	3,10	2,11	2,27	2,92	3,13	4,10	2,66	3,19	4,20	4,38	5,12	3,42	3,96	5,40	6,31	7,77	6,34	7,69	9,71	11,23	12,81
Sensible cooling capacity k	W 0	0,90	1,03	1,51	1,65	2,46	1,52	1,64	2,16	2,33	3,15	2,00	2,43	3,28	3,44	4,11	2,44	2,81	3,77	4,39	5,44	4,98	5,88	7,20	8,19	9,27
Water flow rate system side 1/	/h 1	115	132	190	207	296	202	217	279	299	392	254	305	401	418	489	327	378	516	603	743	606	735	928	1074	1225
Pressure drop system side kl	Pa	6	7	14	17	32	19	22	35	39	64	10	13	22	24	32	5	7	12	16	23	8	11	17	22	28
Cooling performances 9 °C / 18 °C (3)																										
Cooling capacity k	W 0	0,79	0,91	1,30	1,42	2,04	1,39	1,49	1,92	2,06	2,69	1,75	2,09	2,76	2,88	3,36	2,24	2,60	3,55	4,15	5,10	4,17	5,05	6,38	7,38	8,42
Sensible cooling capacity k	W C	0,75	0,86	1,27	1,39	2,04	1,27	1,38	1,81	1,95	2,64	1,68	2,04	2,75	2,88	3,36	2,05	2,36	3,16	3,69	4,56	4,17	4,93	6,04	6,88	7,78
Water flow rate system side	/h	76	86	125	136	195	132	142	183	197	257	167	200	264	275	321	214	249	339	396	488	398	483	610	705	805
Pressure drop system side k	Pa	3	3	7	8	15	9	10	16	19	30	5	6	10	11	15	2	3	6	7	11	4	5	8	10	13
Fan																										
Type ty	pe		Ce	entrifu	gal			Ce	entrifu	gal			Ce	entrifu	gal			Œ	entrifu	gal			Ce	entrifu	gal	
Fan motor ty	pe		Asy	nchror	nous			Asy	nchror	ous			Asy	nchror	nous			Asy	nchror	nous			Asy	nchror	nous	
Number n				2					2					3					2					3		
Air flow rate m	³/h 2	260	288	398	435	680	400	436	585	635	870	500	606	840	886	1100	800	911	1204	1393	1700	1400	1621	2017	2380	2800
High static pressure P	a :	32	26	50	60	24	34	28	50	59	30	45	26	50	56	37	50	29	50	67	35	63	32	50	70	44_
Input power V	V	33	34	52	75	85	43	44	67	95	107	54	61	87	98	120	137	144	198	259	282	217	233	285	371	408
<u>Electrical wiring</u>		1	_1	4	6	6	1	1	4	6	6	1	_1_	4	6	7	1	1	3	5	5	1	1	3	5	5
Duct type fan coil sound data (4)																										
Sound power level (inlet + radiated) dB	(A) 4	17,0	46,0	53,0	54,0	55,0	50,0	49,0	56,0	57,0	59,0	54,0	52,0	58,0	59,0	61,0	52,0	51,0	57,0	63,0	61,0	63,0	62,0	66,0	68,0	68,0
Sound power level (outlet) dB	(A) 4	45,0	44,0	50,0	52,0	54,0	48,0	48,0	55,0	56,0	59,0	52,0	50,0	57,0	58,0	60,0	48,0	47,0	53,0	59,0	57,0	58,0	58,0	62,0	64,0	63,0
Diametre hydraulic fittings																										
Main heat exchanger	0			3/4"					3/4"					3/4"					3/4"					3/4"		
Power supply																										
Power supply			23	0V~50)Hz			23	0V~50)Hz			23	0V~50	OHz			23	0V~50)Hz			23	0V~50)Hz	

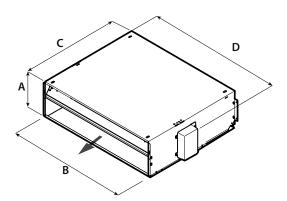
⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 45 °C/35 °C;
(2) Room air temperature 24°C d.b./18°C w.b.; Water (in/out) 5.5 °C/14.5 °C; EUROVENT
(3) Room air temperature 26°C d.b./18.6°C w.b.; Water (in/out) 9 °C/18 °C; EUROVENT
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

Eurovent certified speed: H,M,L

Only for units configured with electric heater (field 12 of the configurator, option H)

		VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
Electric heater						
Number	no.	1	1	1	1	1
Heating power	kW	1310	1970	2190	2920	4000

DIMENSIONS



		VDCA100D	VDCA200D	VDCA300D	VDCA500D	VDCA700D
Dimensions and weights						
A	mm	217	217	217	300	351
В	mm	781	1001	1122	1133	1153
(mm	584	584	584	737	789
D	mm	807	1027	1148	1158	1558



















Fan coil unit for ducted installations



- For district cooling applications
- · Horizontal and vertical installation
- Built-in sanitization system
- Large range of available static pressure





DESCRIPTION

The ducted range VDCB has been designed for air conditioning in environments where the installation of high-performance units with a wide range of useful head and compact dimensions is required.

Thanks to the availability of various versions and configurations, it's easy to choose the optimal solution for any requirement.

FEATURES

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans. They are statically and dynamically balanced and directly coupled to the motor shaft.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

The plastic augers are extractable for easy and efficient cleaning.

Finned pack heat exchanger

The high-efficiency heat exchanger is designed to operate with a high temperature difference, typical of District Cooling solutions.

With copper pipes and aluminum fins, the main heat exchanger has female gas hydraulic connections and is equipped with air vents.

The hydraulic connections can be inverted during installation.

Air filter

All fan coils come equipped with an easily removable and cleanable air filter. Various types of air filters are available through the configurator to meet different needs.

Controls and Accessoires

The unit's electrical box is reversible, with the option of mounting it also on the same side of the water connections.

The standard equipment includes a single 10-pin control board as an interface for the electrical connections, the preparation for the VMF series thermostat fastener and the included supply of a DIN guide for the installation of a third-party control.

To facilitate and streamline installation operations on-site, we have made it possible through the configurator, and therefore at the ordering stage, to receive the unit with certain accessories already pre-installed in the factory. We redirect your attention to the configurator available on this datasheet or to the unit selection software.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	VDCB
	Size
5	1,2,3,5,7
6	main heat exchanger
0	Standard
7	Secondary heat exchanger
0	No present
1	Present
8	Configuration
D	Low head
Р	High head
9	Installation
U	Universal
V	Only vertical
10	Position of connections
D	Water connections and electrical panel on the right
G	Water connections and electrical panel on the left
L	Hydraulic connections on the left and electric connections on the opposite side
R	Hydraulic connections on the right and electric connections on the opposite side
11	Use
V	With VMF system
W	Without control board
12	Device / accessoires
Н	Electric heater
1	loniser
P	Photocatalytic lamp
W	Without devices
13	Filter
М	With increased filter
P	Special for units with photocatalytic device
S	With basic filter
V	With washable mesh filter

ACCESSORIES

Control panels

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **F3VU:** interface board to receive 3 separate voltage commands (corresponding to 3 speeds) and converting them into three analog voltages in the range of 0-10V.

PRO503: Wall box for AER503IR and VMF-E4 thermostats.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SA503: Wall-mountable ambient sensor, compatible with AER503IR.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

VMF-RIC: Thermostat interface for fan coil units

VMF Components

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-EAX: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L=2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Valves and additional finned-pack heat exchanger for water

BV: Hot water heat exchanger with 1 row.

VCF_X: 3-way valve kit for fan coils with single heat exchanger and hydraulic connections on the left side, for installation in 4-pipe systems. The kit is composed by 2 insulated 3-way valves and 4 connections complete with electrothermal actuators, insulating shells for the valves and with hydraulic fittings. 230V power supply. Hydraulic connections: Valve body Ø G 3/4" Male; Valve side connection pipes Ø G 3/4" Female; Unit side connection pipes Ø G 3/4" Male.

VCZ: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is

combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VDP: Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with Ø 3/4'M water connections, a 230 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

VCT102: These are 3-way ball valves made of bronze, with female/female connections \emptyset 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCT103: These are 3-way ball valves made of bronze, with female/female connections \emptyset 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adiustment provided.

VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/ adjustment provided.

Installation accessories

AMP: Wall mounting kit

BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing. **DSC:** Condensate drainage device.

Accessories for intake

RDA_V: Straight intake connection with rectangular flange.

RDA_C: Straight intake connection with circular flanges.

RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

MZC: Plenum with motorised dampers.

KFV: Circular flanges kit for plenum.

GA: Intake grid with fixed louvers

GAF: Intake grid with filter and fixed louvers

GM: Flow grid with adjustable louvers.

Delivery accessories

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.

RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

RDM_V: Straight delivery coupling in galvanised sheet metal.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
AER503IR (1)	•	•	•	•	•
F3VU	•	•	•	•	•
PR0503	•	•	•	•	•
SA5 (2)	•	•	•	•	•
SA503 (3)	•	•	•	•	•
SW3 (2)	•	•	•	•	•
SW5 (2)	•	•	•	•	•
TX (4)	•	•	•	•	•
VMF-RIC	•	•	•	•	•

- (1) Wall-mount installation.
 (2) Probe for AERSO3IR-TX thermostats, if fitted.
 (3) Thermostat probe for AERSO3IR if available.
 (4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

To manage and control a VMF system, it is mandatory to include the VMF-E19I accessory on board the fan coil unit.

VMF system

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
DI24	•	•	•	•	•
VMF-E19I (1)	•	•	•	•	•
VMF-E3	•	•	•	•	•
VMF-E4DX	•	•	•	•	•
VMF-E4X	•	•	•	•	•
VMF-IO	•	•	•	•	•
VMF-IR	•	•	•	•	•
VMF-SW	•	•	•	•	•
VMF-SW1	•	•	•	•	•
VMHI	•	•	•		•

(1) Mandatory accessory.

(Heating only) additional coil

Accessory	VDCB100D	VDCB200D	VDCB300D
BV130 (1)	•		
BV162 (1)			•
BV230 (1)		•	

⁽¹⁾ Not available for sizes with oversized main coil.

Water valves

3 way valve kit

	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
3 way valve kit					
Main heat exchanger	VCZ43 / VCZ4324	VCZ43 / VCZ4324	VCZ43 / VCZ4324	VCF45CS	VCF45CS
Secondary heat exchanger for					
four pipes	-	-	-	-	-
Additional coil "BV"	VCF45 / VCF4524	VCF45 / VCF4524	VCF45 / VCF4524	-	-

 $VCZ43-VCF45-VCF45H-VCF47H\ A limentazione\ 230V-VCZ4324-VCF4524\ Power\ supply\ 24V-Hydraulic\ connection\ \emptyset\ 3/4"$

2 way valve kit

	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
2 way valve kit					
Main heat exchanger	VCZD3 / VCZD324	VCZD3 / VCZD324	VCZD3 / VCZD324	-	-
Secondary heat exchanger for					
four pipes	-	-	-	-	-
Additional coil "BV"	VCFD4/VCFD424	VCFD4 / VCFD424	VCFD4 / VCFD424	-	-

Combined adjustment and balancing valve cold side

Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
VDP15	•	•	•	•	•
VDP15HF (1)	•	•	•	•	•
VDP15LF	•	•	•		
VDP20HF				•	•

⁽¹⁾ The compatibility of the valves with the unit must be checked using the project capacity. Select the appropriate valve based on the project water flow rate.

2-way globe valves actuator excluded

Accessory	VDCB500D	VDCB700D
VCT103	•	•

VCFD3 Power supply 230V, VCFD324 Power supply 24V - Hydraulic connections Ø 3/4" VCFD4 Power supply 230V, VCFD424 Power supply 24V - Hydraulic connections Ø 1/2"; For additional coil (heating only) BV.

Accessory		VDCB500D		VDCB700D	
VCT102		•	1	•	
Accessory		VDCB500D		VDCB700D	
VCTK		•		•	
Accessory		VDCB500D		VDCB700D	
VCTKM		•		•	
Installation accessori	es				
Installation accessories					
Accessory	VDCB100)D	VDCB200D		VDCB300D
AMP	•		•		•
Condensate drip					
Accessory	VDCB100	OD	VDCB200D		VDCB300D
BCZ4 (1)	•		•		•
BCZ6 (2)	•		•		•
(1) For vertical installation. (2) For horizontal installation.					
Accessory	VDCB100	00	VDCB200D		VDCB300D
BC9 (1)	•		•		•
(1) For horizontal installation.					
Accessory		VDCB500D		VDCB700D	
BCV45		•			
BCV67				•	
Condensate recirculatio	n device				
	VDCB100D	VDCB101D	VDCB200D	VDCB300D	VDCB301D
	•	•			
Accessory DSCZ4	•	•	•		1
DSCZ4 Accessories for intake	2	•	·		
DSCZ4 Accessories for intake Intake straight with rect	e tangular flanges				
DSCZ4 Accessories for intake Intake straight with rect Accessory	tangular flanges VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V	e tangular flanges				VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V	tangular flanges VDCB100D	VDCB200D			VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA300V RDA450V	tangular flanges VDCB100D	VDCB200D	VDCB300D		VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA300V RDA450V	tangular flanges VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
DSC74 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V	tangular flanges VDCB100D	VDCB200D	VDCB300D	VDCB500D	
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory	tangular flanges VDCB100D •	VDCB200D	VDCB300D	VDCB500D	
DSC74 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V	tangular flanges VDCB1000 .	VDCB200D	VDCB300D • VDCB200D	VDCB500D	
DSC74 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V	tangular flanges VDCB100D v v v v v v v v v v v v	VDCB200D	VDCB300D	VDCB500D	• VDCB300D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC300V	tangular flanges VDCB100D . y insulated, with circular flanges	VDCB200D	VDCB300D • VDCB200D	VDCB500D	
DSC74 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDA6100V RDA6200V RDA6200V RDA6300V RDA6300V Intake plenum with rect	tangular flanges VDCB100D v v vi insulated, with circular flanges vDCB100D v cangular flanges	VDCB200D • anges	VDCB300D VDCB200D •	VDCB500D	VDCB300D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC300V RDAC300V RDAC300V Intake plenum with rect Accessory	tangular flanges VDCB100D v ty insulated, with circular fla VDCB100D c tangular flanges VDCB100D	VDCB200D	VDCB300D • VDCB200D	VDCB500D	• VDCB300D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V	tangular flanges VDCB100D v v vi insulated, with circular flanges vDCB100D v cangular flanges	VDCB200D • anges	VDCB300D VDCB200D •	VDCB500D	VDCB300D
DSC74 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA200V RPA200V RPA200V RPA200V	tangular flanges VDCB100D v ty insulated, with circular fla VDCB100D c tangular flanges VDCB100D	VDCB200D . anges VDCB200D	VDCB300D VDCB200D •	VDCB500D	VDCB300D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA300V RPA300V RPA300V RPA300V RPA300V RPA300V RPA450V	tangular flanges VDCB100D v ty insulated, with circular fla VDCB100D c tangular flanges VDCB100D	VDCB200D . anges VDCB200D	VDCB300D VDCB200D • VDCB300D	VDCB500D	VDCB300D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA200V RPA300V	tangular flanges VDCB100D v ty insulated, with circular fla VDCB100D c tangular flanges VDCB100D	VDCB200D . anges VDCB200D	VDCB300D VDCB200D • VDCB300D	VDCB500D VDCB500D	VDCB300D
DSC74 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA200V RPA200V RPA200V RPA200V RPA200V RPA300V RPA450V RPA450V RPA450V	tangular flanges VDCB100D . by insulated, with circular flanges VDCB100D . cangular flanges VDCB100D .	VDCB200D . anges VDCB200D	VDCB300D VDCB200D • VDCB300D	VDCB500D VDCB500D	VDCB300D VDCB700D
DSC74 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC200V RDAC300V Intake plenum with rect Accessory RPA450V RPA450V RPA450V RPA450V RPA450V RPA670V Intake plenum with circ Accessory	tangular flanges VDCB100D . by insulated, with circular flanges VDCB100D . cangular flanges VDCB100D .	VDCB200D . anges VDCB200D	VDCB300D VDCB200D • VDCB300D	VDCB500D VDCB500D	VDCB300D VDCB700D
DSC74 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC300V Intake plenum with rect Accessory RPA300V RPA450V Intake plenum with circ Accessory RPA670V Intake plenum with circ Accessory RPA100V	tangular flanges VDCB100D VDCB100D VDCB100D VDCB100D Cangular flanges VDCB100D VDCB100D VDCB100D VDCB100D VDCB100D	VDCB200D • VDCB200D • VDCB200D	VDCB300D VDCB200D VDCB300D	VDCB500D VDCB500D	VDCB300D VDCB700D
DSC74 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA450V RPA450V RPA450V RPA450V RPA450V Intake plenum with circ Accessory PA100V PA200V PA200V	tangular flanges VDCB100D VDCB100D VDCB100D VDCB100D vangular flanges VDCB100D valar flanges VDCB100D	VDCB200D • anges VDCB200D •	VDCB300D VDCB200D VDCB300D VDCB300D	VDCB500D VDCB500D	VDCB300D VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA450V RPA450V Intake plenum with circ Accessory Intake plenum with circ Accessory RPA100V RPA450V RPA450V	tangular flanges VDCB100D VDCB100D VDCB100D VDCB100D vangular flanges VDCB100D valar flanges VDCB100D	VDCB200D • VDCB200D • VDCB200D	VDCB300D VDCB200D VDCB300D	VDCB500D VDCB500D	VDCB300D VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC200V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA300V Intake plenum with circ Accessory RPA100V RPA300V Intake plenum with circ Accessory RPA300V RPA450V RPA670V Intake plenum with circ Accessory PA100V PA200V PA300V PA300V PA450V PA300V PA450V	tangular flanges VDCB100D VDCB100D VDCB100D VDCB100D vangular flanges VDCB100D valar flanges VDCB100D	VDCB200D • VDCB200D • VDCB200D	VDCB300D VDCB200D VDCB300D VDCB300D	VDCB500D VDCB500D VDCB500D	VDCB300D VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA450V RPA670V Intake plenum with circ Accessory RPA300V RPA450V RPA670V Intake plenum with circ Accessory PA300V RPA450V RPA670V PA300V PA300V PA300V PA450V PA300V PA450V PA450V PA670V	tangular flanges VDCB100D VDCB100D VDCB100D VDCB100D vangular flanges VDCB100D valar flanges VDCB100D	VDCB200D • VDCB200D • VDCB200D	VDCB300D VDCB200D VDCB300D VDCB300D	VDCB500D VDCB500D VDCB500D	VDCB300D VDCB700D VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA450V RPA450V Intake plenum with circ Accessory RPA100V RPA450V RPA670V Intake plenum with circ Accessory RPA100V RPA450V RPA670V Intake plenum with circ Accessory RPA100V RPA450V RPA670V Intake plenum with circ Accessory RPA100V RPA670V Intake plenum with circ Accessory RPA100V RPA670V RPA670V Intake plenum with circ Accessory RPA670V RPA670V Intake grids	tangular flanges VDCB100D . by insulated, with circular flanges VDCB100D . cangular flanges VDCB100D . ular flanges VDCB100D .	VDCB200D • VDCB200D • VDCB200D	VDCB300D VDCB300D VDCB300D VDCB300D	VDCB500D VDCB500D VDCB500D	VDCB300D VDCB700D VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA300V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA450V Intake plenum with circle Accessory RPA100V RPA450V Intake plenum with circle Accessory RPA100V RPA450V RPA670V Intake plenum with circle Accessory RPA100V RPA670V Intake plenum with circle Accessory RPA100V RPA670V Intake plenum with circle Accessory RPA100V RPA670V Intake grids Accessory	tangular flanges VDCB100D VDCB100D VDCB100D VDCB100D vangular flanges VDCB100D valar flanges VDCB100D	VDCB200D • VDCB200D • VDCB200D	VDCB300D VDCB200D VDCB300D VDCB300D	VDCB500D VDCB500D VDCB500D	VDCB300D VDCB700D VDCB700D
DSCZ4 Accessories for intake Intake straight with rect Accessory RDA100V RDA200V RDA450V RDA670V Intake straight internall Accessory RDAC100V RDAC200V RDAC300V Intake plenum with rect Accessory RPA100V RPA200V RPA200V RPA200V RPA300V RPA450V	tangular flanges VDCB100D . ty insulated, with circular flanges VDCB100D . tangular flanges VDCB100D . VDCB100D . VDCB100D .	VDCB200D • VDCB200D • VDCB200D	VDCB300D VDCB300D VDCB300D VDCB300D	VDCB500D VDCB500D VDCB500D	VDCB300D VDCB700D VDCB700D

ccessory	VDCB100D		VDCB200D		VDCB300D
iAF32	•			1	
iAF42					
iAF62					•
low grid with adjust	ahle louvers				
ccessory	VDCB100D		VDCB200D		VDCB300D
iM32	•				
iM42			•		
iM62					•
Delivery accessorie	S				
Plenum with motor-d					
ccessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
NZC320	•				
NZC5040				•	
NZC530		•			
NZC7050					•
MZC830			•		
	rnally insulated, with circ				
ccessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
M100V	•				
M200V		•			
M300V			•		
M450V				•	
M670V					•
Delivery plenum inter	rnally insulated, with rect	angular flanges			
ccessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
PM100V	•				
PM200V		•			
PM300V			•		
PM450V				•	
PM670V					•
Delivery straight inte	rnally insulated, with circ	ular flanges			
ccessory	VDCB100D	-	VDCB200D		VDCB300D
DMC100V	•				
DMC200V			•		

Accessory	VDCB100D		VDCB200D		VDCB300D
RDM100V	•				
RDM200V			•		
RDM300V					•
•					
Circular flanges kit	for plenum				
Accessory	VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
KFV				•	•

KFV10

PERFORMANCE SPECIFICATIONS

2-pipe

		VI	CB10	0D			V	CB20	0D			VI)CB30	0D			VD	CB50	DD				CB70)D	_
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
	UL	L	М	Н	НН	UL	L	М	Н	НН	UL	L	М	Н	НН	UL	L	М	Н	НН	UL	L	М	Н	НН
Heating performances 45 °C / 35 °C (1)																									
Heating capacity kW	1,04	1,79	2,58	2,82	4,49	2,18	2,96	3,80	4,08	5,97	2,75	4,14	5,46	5,70	7,06	3,18	5,17	7,02	8,22	11,87	4,37	9,98	12,63	14,64	18,63
Water flow rate system side I/h	90	155	224	245	390	189	257	329	354	518	238	360	474	495	613	276	449	609	713	1030	379	866	1096	1271	1617
Pressure drop system side kPa	3	9	17	19	45	15	26	40	46	91	7	16	26	28	41	3	8	14	18	35	3	13	20	26	40
Cooling performance 5.5 °C / 14.5 °C (2)																									
Cooling capacity kW	0,80	1,37	1,98	2,17	3,45	1,67	2,27	2,92	3,13	4,59	2,11	3,18	4,20	4,38	5,43	2,44	3,97	5,40	6,31	9,12	3,35	7,67	9,71	11,25	14,32
Sensible cooling capacity kW	0,59	1,03	1,51	1,66	2,80	1,19	1,64	2,15	2,33	3,58	1,57	2,43	3,28	3,44	4,40	1,77	2,82	3,77	4,40	6,51	2,93	5,86	7,20	8,20	10,39
Water flow rate system side I/h	77	131	190	207	330	160	217	279	300	439	202	304	401	419	519	233	380	516	604	872	321	733	928	1075	1369
Pressure drop system side kPa	3	7	14	17	39	13	22	35	40	79	6	13	22	24	35	3	7	12	16	30	3	11	17	22	34
Cooling performances 9 °C / 18 °C (3)																									
Cooling capacity kW	0,53	0,90	1,30	1,42	2,27	1,10	1,49	1,92	2,06	3,02	1,39	2,09	2,76	2,88	3,57	1,60	2,61	3,55	4,15	5,99	2,20	5,04	6,38	7,39	9,41
Sensible cooling capacity kW	0,49	0,86	1,27	1,39	2,27	1,00	1,38	1,81	1,96	3,01	1,32	2,04	2,75	2,88	3,57	1,48	2,36	3,17	3,69	5,47	2,20	4,92	6,04	6,89	8,72
Water flow rate system side I/h	50	86	125	136	217	105	143	183	197	288	133	200	264	275	341	153	249	339	397	573	211	481	610	706	899
Pressure drop system side kPa	1	3	7	8	18	6	10	16	19	37	3	6	10	11	16	1	3	6	7	14	1	5	8	10	16
Fan	_																								
Туре type		C	entrifu	gal			Ce	entrifu	gal			C	entrifu	gal			Ce	ntrifu	gal			(6	entrifu	jal	
Fan motor type			Inverte	r				Inverte	er				Inverte	r				nverte	r				Inverte	r	
Number no.			2					2					3					2					3		
Air flow rate m ³ /h	200	287	398	436	800	300	437	585	635	1000	400	606	840	888	1200	600	913	1204	1393	2000	1000	1617	2017	2384	3200
High static pressure Pa	9	26	50	60	43	6	28	50	59	34	3	26	50	56	16	9	29	50	67	19	5	32	50	70	79
Input power W	7	15	30	37	80	10	23	45	55	100	14	35	76	93	121	18	50	103	155	249	31	100	166	255	471
Signal 0-10V %	30	49	69	76	90	30	55	74	81	90	30	61	85	90	90	30	49	66	76	90	30	53	65	75	90
Duct type fan coil sound data (4)																									
Sound power level (inlet + radiated) dB(A	35,0	46,0	53,0	54,0	59,0	40,0	50,0	56,0	57,0	62,0	41,0	52,0	58,0	60,0	61,0	44,0	53,0	60,0	63,0	65,0	49,0	62,0	66,0	69,0	73,0
Sound power level (outlet) dB(A	33,0	44,0	50,0	52,0	57,0	37,0	48,0	55,0	56,0	60,0	39,0	50,0	57,0	58,0	60,0	40,0	51,0	57,0	60,0	64,0	43,0	56,0	62,0	66,0	69,0
Power supply																									
Power supply		23	0V~50)Hz			23	0V~50	OHz			23	0V~50)Hz			23)V~50	Hz			23	0V~50	Hz	

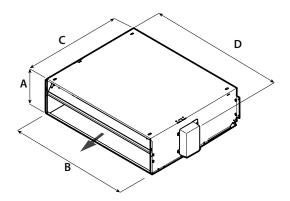
Only for units configured with electric heater (field 12 of the configurator, option H)

		VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
Electric heater						
Number	no.	1	1	1	1	1
Heating power	kW	1310	1970	2190	2920	4000

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 45 °C/35 °C;
(2) Room air temperature 24°C d.b./18°C w.b.; Water (in/out) 5.5 °C/14.5 °C; EUROVENT
(3) Room air temperature 26°C d.b./18.6°C w.b.; Water (in/out) 9 °C/18 °C; EUROVENT
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

Eurovent certified speed: H,M,L

DIMENSIONS



		VDCB100D	VDCB200D	VDCB300D	VDCB500D	VDCB700D
Dimensions and weights						
A	mm	217	217	217	300	351
В	mm	781	1001	1122	1133	1153
C	mm	584	584	584	737	789
D	mm	807	1027	1148	1158	1558















MZC

Plenum with motor-driven dampers



- Multi-zone plenum for controlling air capacity
- Available for channelles on/off and inverter fan coils



DESCRIPTION

The plenum with motor-driven dampers is designed for residential and tertiary applications. It combines optimal ambient comfort with assured energy savings.

Modern plant increasingly require overall air conditioning using channelled systems. Thanks to the electronic control of the dampers, the MZC accessory regulates the room's comfort by adjusting the air flow to meet the actual requirements.

MZC is designed for use in combination with all fan coils with asynchronous or brushless motors and is pre-set to distribute exchange air.

FEATURES

Structure

- Galvanized sheet metal structure, insulated with self-extinguishing material.
- From 2 to 6 delivery outlets, depending on the model. Each outlet is fitted with a motorised damper, with the possibility - if required by the system - to add an MZCSM accessory outlet (possibility not available for all models - see the accessory compatibility table)
- Fresh air injection flange, supplied as standard, for connecting the MZC plenum to a heat recovery unit.
- Pre-setting for the installation of an additional air probe (accessory MZCSA) to control modulating or pressure-independent valves.
- Possibility to install the plenum even on the fan coil intake, using a flange (accessory MZCA)
- Reversible electrical box (right/left)
- Water probe supplied as standard, for the fan coil.

Regulation

- MZC is equipped with a zone thermostat VMHI to define the required temperature setting.
- The status of the dampers (open/closed) is adjusted on reaching the temperature set in each room.
- Management of up to 6 motorized dampers.
- Flow control for each damper (the maximum and minimum damper opening can be set for each outlet).
- Possibility to associate the control of several dampers with the request from the same zone thermostat (VMHI or WT10).

- For installations in which the dampers and room thermostats are uniquely associated, the dampers can be modulated in relation to the room thermostat requirements.
- "Suction plenum" function enabling
- MZC can control the valves that may be installed on the fan coil associated with it (On/Off, modulating or pressure-independent types), for 2- or 4-pipe systems
- Possibility to set the control unit parameters via the supervision serial port.

ACCESSORIES

Control panels

WR10: Two-channel wireless receiver for WT10.

WT10: Wireless thermostat.





n°1 as standard

VMF Components

VMF-VOC: Air quality detection accessory.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Installation accessories

MZCACV: Electrical system with relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.

 $\mbox{\bf MZCAC:}$ Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with an asynchronous motor.

MZCBC: Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with a brushless motor.

MZCSM: Single module with motorized damper.

MZCA: Adapter flange for installing the Plenum even under fan coil suction. **MZCSA:** Air probe for controlling modulating or pressure independent valves

ACCESSORIES COMPATIBILITY

Control	nanels	and	dedicated	accessories
Control	palicis	anu	ueuicateu	accessories

Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
WR10	•	•	•	•	•	•
WT10	•	•	•	•	•	•

VMF system

Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
VMF-VOC	•	•	•	•	•	•
VMHI	•	•	•	•	•	•

Installation accessories

Relay interface board

Accessory	MZC7050													
MZCACV	•													
Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050								
MZCAC	•	•	•	•	•	•								

Compulsory electrical plant

	•					
Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
MZCBC	•	•	•	•	•	•

Single module with damper

Accessory	MZC320	MZC530	MZC830	MZC5040	MZC7050
MZCSM	•	•	•	•	•

Adaptation flange

Accessory	MZC220	MZC320	MZC530	MZC830
MZCA2	•			
MZCA3		•		
MZCA5			•	
MZCA8				•

Air temperature probe

Accessory	MZC220	MZC320	MZC530	MZC830	MZC5040	MZC7050
MZCSA	•	•	•	•	•	•

COMPATIBILITY OF MZC PLENUMS WITH AERMEC FAN COILS

Plenum with motorised dampers - FCZ - PO

Model	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
MZC220	PO,POR					•	•	•													
MZC320	PO,POR										•	•	•								
MZC530	PO,POR													•	•	•	•	٠	•	•	•
Model	Ver	600	601	602	2 6	50	700	701	702	750) 8	00	801	802	850	900	90	1 9	50	1000	1001
MZC830	PO,POR	•	•	•		•	•	•	•	•			•	•	•	•	•				

Plenum with motorised dampers - FCZI - P

Model	Ver	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550	700	701	702	750	900	901	950
MZC220	P,PR	•	•	•	•																			
MZC320	P,PR					•	•	•	•															
MZC530	P,PR																							
MZC830	P,PR																	•	•		•	•	•	•

Plenum with motorised dampers - VED 030-340

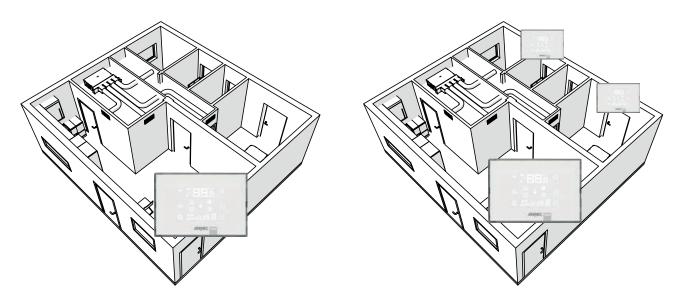
Accessory	VED030	VED040	VED130	VED140	VED230	VED240	VED330	VED340
MZC220	•	•						
MZC320			•	•				
MZC530					•	•		
MZC830							•	•

Plenum with motorised dampers - VED 430-741

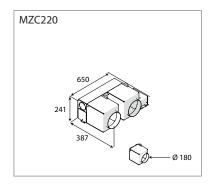
Accessory	VED430	VED440	VED530	VED540	VED630	VED640	VED730	VED740
MZC5040	•	•	•	•				
MZC7050					•	•		

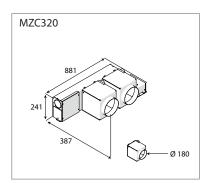
Accessory	VED432	VED441	VED532	VED541		VED632	VED641	VED732	VED741
NZC5040	•	•	•	•					
NZC7050						•	•	•	•
Plenum with	motorised dampe	ers - VED 030l-	340l						
Accessory		VED030I	VED040I	VED130I	VED140I	VED230I	VED240I	VED330I	VED340I
MZC220		•	•						
MZC320				•	•				
MZC530						•	•		
MZC830								•	•
Plenum with Accessory	motorised dampe	ers - VED 530I -		VED54	INI		VED730I	VED	7401
MZC5040		VLU.		VLD34	TVI		YLD/ JUI	VLD.	וטד ו
MZC7050		<u> </u>		<u> </u>			•		
Accessory		VEDS	321	VED54	111		VED732I	VED	7411
MZC5040		•		•					
MZC7050							•		•
Plenum with	motor-driven dan	npers - VES 03	0-340						
Accessory		VES030	VES040	VES130	VES140	VES230	VES240	VES330	VES340
MZC220		•	•						
MZC320				•	•				
MZC530						•	•		
								•	
MZC830							'		
	motor-driven dan	npers - VES 03	01-3401						
Plenum with Accessory	motor-driven dan	npers - VES 03 VES030I	01-3401 VES040I	VES130I	VES140I	VES230I	VES2401	VES330I	VES3401
Plenum with Accessory MZC220	motor-driven dan	<u> </u>		VES130I	VES140I	VES230I	VES240I	VES330I	VES340
Plenum with Accessory MZC220 MZC320	motor-driven dan	VES030I	VESO40I	VES130I	VES140I	VES230I	VES240I	VES330I	VES340I
Plenum with Accessory	motor-driven dan	VES030I	VESO40I			VES2301	VES240I	VES330I	VES340

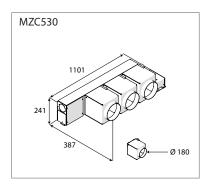
SYSTEM SOLUTIONS

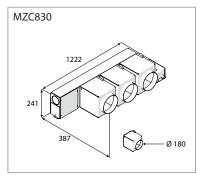


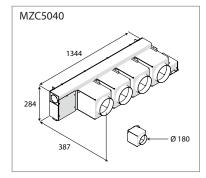
DIMENSIONS

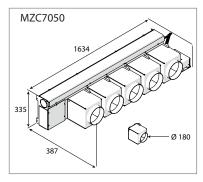


























VEC

Coanda-effect fan coil for cassette installation



- Very quiet
- Total comfort in every season





DESCRIPTION

Thanks to a special air intake and flow grid, these units allow a coanda-effect air flow to be generated, parallel to the ceiling, creating optimal circulation inside the room to be air-conditioned.

They are suitable to be installed inside a suspended ceiling.

FEATURES

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.

In addition to the traditional three-speed asynchronous motor for the "VECs", every unit can be supplied with a "VEC_I" Brushless-type inverter motor controlled by an inverter board.

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

Units are available with a standard coil (20-50) and a larger coil (24-54). Only units with the standard coil can be combined with an additional electric or water coil with 1 row, both available as an accessory.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Air filter

Fire resistance class 1 air filter.

ACCESSORY COMPULSORY

VEC_GL: Air intake and flow grid with adjustable Coanda-effect vents (white M9016 = lacquered white similar to Ral 9016).

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant

panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.

FMT10: Electronic thermostat for fan coil in to 2/4 pipe systems.

PRO503: Wall box for AER503IR and VMF-E4 thermostats. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L=2.5~m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

WMT16: Electronic thermostat with thermostated ventilation.

WMT16CV: Electronic thermostat with continuous ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF Components

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, DI24 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

BV: Hot water heat exchanger with 1 row.

RX: Armoured electric coil with safety thermostat.

VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.

VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

DSC: Condensate drainage device.

BC: Condensate drip.

VCF44 - 45 - for secondary heat exchanger: The 3-way motorised valve kit for the secondary coil heat only. The kit consists of a valve with its insulating shell, actuator and relevant water fittings; it is suitable to be installed on the fan coils with right and left water connections.

PCR: Galvanised plate protection for the controls and the electrical element.

ACCESSORIES COMPATIBILITY

Accessories mandatory

Intake grid and distribution of the air

Model	Ver	20	24	30	34	40	44	50	54
VEC20GL (1)		•	•						
VEC30GL (1)				•					
VEC40GL (1)						•	•	•	•

(1) Mandatory accessory

Control panels and dedicated accessories

Model	Ver	20	24	30	34	40	44	50	54
AER503IR (1)		•	•	•	•	•	•	•	•
FMT10		•	•	•	•	•	•	•	•
PR0503		•	•	•	•	•	•	•	•
SA5 (2)		•	•	•	•	•	•	•	•
SIT3 (3)		•	•	•	•	•	•	•	•
SIT5 (4)		•	•	•	•	•	•	•	•
SW3 (2)		•	•	•	•	•	•	•	•
SW5 (2)		•	•	•	•	•	•	•	•
TX (5)		•	•	•	•	•	•	•	•
WMT10 (5)		•	•	•	•	•	•	•	•
WMT16 (5)	•	•	•	•	•	•	•	•	•
WMT16CV (5)		•	•	•	•	•	•	•	•

- (1) Wall-mount installation.
- (2) Probe for AER503IR-TX thermostats, if fitted.
- (3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
- (4) Probe for AER503IR-TX thermostats, if fitted.
- (5) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF Components

Tim components									
Model	Ver	20	24	30	34	40	44	50	54
DI24		•	•	•	•	•		•	•
VMF-E19 (1)		•	•	•	•	•	•	•	•
VMF-E3		•	•	•	•	•	•	•	•
VMF-E4X		•	•	•	•	•	•	•	•
VMF-IR		•	•	•	•	•	•	•	•
VMF-SW		•	•	•	•			•	•
VMF-SW1		•	•	•	•	•			

Model		Ver	20 24	4 30	34	40	44 50	54
VMHI					•	•		•
1) Also the accessory \	VMF-SIT3V is mandatory if	the unit exceeds 0.7 Am	peres.	'			'	
Common acce	essories							
lectric coil								
Model		Ver	20 24	4 30	34	40	44 50	54
RX22 (1)				'	1		'	
RX32 (1)				•	•			
RX42 (1)						•	•	
RX52 (1)							•	•
	controls and elect		out a nousing also require	e the PCR1 or PCR2 accessor	y, depending on the unit. I	ne neater is not availa	bie for sizes with a larger fr	aiii battery.
Model		Ver	20 24	4 30	34	40	44 50	54
PCR1V					•	•		•
Water coil with	1 row							
Model		Ver	20 2	4 30	34	40	44 50	54
BV122 (1) BV132 (1)		•	•					
3V132 (1) 3V142 (1)		•		•		•		
		· · · · · · · · · · · · · · · · · · ·				<u> </u>	·	
,	zes with oversized main co							
s-way valve kit	: - main coil or acc	VEC24	VEC30	VEC34	VEC40	VEC44	VEC50	VEC54
Main coil	VCF41 - VCF4124	VCF42 - VCF4224	VCF41 - VCF4124	VCF42 - VCF4224	VCF42 - VCF4224	VCF42 - VCF4224	VCF42 - VCF4224	VCF42 - VCF4224
Additional coil							VCF44 - VCF4424	
	VCF44 - VCF4424	-	VCF44 - VCF4424	-	VCF44 - VCF4424	-	VCF44 - VCF4424	
'BV"	VCF44 - VCF4424 : - main coil or acc		VCF44 - VCF4424 	-	VCF44 - VCF4424	-	VCF44 - VCF4424	
'BV"			VCF44 - VCF4424 VEC30	VEC34	VCF44 - VCF4424 VEC40	VEC44	VEC50	VEC54
'BV" 2-way valve kit Main coil	: - main coil or acc	essory BV coil		VEC34 VCFD2 - VCFD224		VEC44 VCFD2 - VCFD224		
'BV" 2-way valve kit Main coil Additional coil	: - main coil or acc	essory BV coil VEC24	VEC30		VEC40		VEC50	
"BV" 2-way valve kit Main coil Additional coil "BV"	- main coil or acc VEC20 VCFD1 - VCFD124	VEC24 VCFD2 - VCFD224	VEC30 VCFD1 - VCFD124		VEC40 VCFD2 - VCFD224		VEC50 VCFD2 - VCFD224	VEC54 VCFD2 - VCFD224 -
"BV" 2-way valve kit Main coil Additional coil "BV" /alves ending w	- main coil or acc VEC20 VCFD1 - VCFD124 VCFD4 - VCFD424 vith 24 ex. VCFD12	VEC24 VCFD2 - VCFD224	VEC30 VCFD1 - VCFD124		VEC40 VCFD2 - VCFD224		VEC50 VCFD2 - VCFD224	
"BV" 2-way valve kit Main coil Additional coil "BV"	- main coil or acc VEC20 VCFD1 - VCFD124 VCFD4 - VCFD424 vith 24 ex. VCFD12	VEC24 VCFD2 - VCFD224	VEC30 VCFD1 - VCFD124		VEC40 VCFD2 - VCFD224 VCFD4 - VCFD424		VEC50 VCFD2 - VCFD224	

(1)	For horizontal installation.

Condensate drainage								
Ver	20	24	30	34	40	44	50	54
	DSC4							

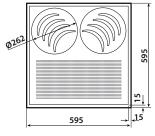
PERFORMANCE SPECIFICATIONS VEC

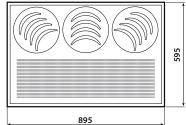
2-pipe

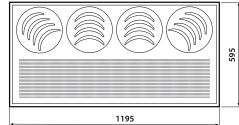
			VEC20)		VEC24	1		VEC30)		VEC34	1		VEC40)		VEC44			VEC50)		VEC54	-
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	1,87	2,54	3,10	2,07	2,50	3,42	3,03	3,64	4,31	4,31	53,18	6,14	4,21	5,21	6,29	5,41	6,68	8,07	4,76	6,34	7,16	6,06	8,08	9,18
Water flow rate system side	I/h	164	223	272	181	219	300	266	319	378	378	454	538	369	457	551	474	586	708	417	556	628	532	709	805
Pressure drop system side	kPa	2	4	6	1	2	3	9	13	17	5	7	9	6	9	12	9	14	19	7	11	14	9	15	19
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	0,95	1,26	1,54	1,20	1,40	1,70	1,50	1,81	2,14	2,15	2,57	3,05	2,09	2,59	3,12	2,69	3,30	4,01	2,37	3,15	3,56	3,02	4,02	4,54
Water flow rate system side	I/h	163	217	265	206	241	292	258	311	368	370	442	525	359	445	537	463	568	690	408	542	612	519	691	781
Pressure drop system side	kPa	3	5	7	2	3	4	9	13	17	5	7	9	6	9	13	10	14	20	7	12	14	17	15	19
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	0,80	1,07	1,31	0,88	1,21	1,52	1,35	1,61	1,91	1,79	2,14	2,47	1,99	2,47	2,99	2,55	3,34	3,91	2,35	3,17	3,61	3,00	4,00	4,28
Sensible cooling capacity	kW	0,64	0,87	1,07	0,67	0,90	1,14	1,03	1,25	1,49	1,26	1,51	1,78	1,58	1,98	2,41	1,91	2,42	2,74	1,68	2,27	2,59	2,09	2,83	3,04
Water flow rate system side	I/h	138	184	225	151	208	261	232	277	329	308	368	425	342	425	514	439	574	673	404	545	621	516	688	736
Pressure drop system side	kPa	3	4	6	1	2	3	6	11	13	5	6	8	6	9	12	11	17	22	7	12	15	17	27	30
Fan																									
Туре	type												Centr	ifugal											
Fan motor	type												Asynch	ronous	;										
Number	no.		1			1			2			2			2			2			2			2	
Air flow rate	m³/h	130	194	247	130	167	247	241	309	383	241	309	383	306	406	511	306	406	511	371	529	613	371	529	613
Input power	W	19	22	25	19	22	25	25	33	44	25	33	44	30	43	57	30	43	57	34	46	67	34	46	67
Electrical wiring		V1	V2	V3	٧1	V2	V3	٧1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3	٧1	V2	V3	٧1	V2	V3
Fan coil sound data (3)																									
Sound power level	dB(A)	35,0	42,0	48,0	35,0	42,0	48,0	37,0	43,0	49,0	37,0	43,0	49,0	38,0	43,0	48,0	38,0	43,0	48,0	43,0	50,0	53,0	43,0	50,0	53,0
Sound pressure	dB(A)	27,0	34,0	40,0	27,0	34,0	40,0	29,0	35,0	41,0	29,0	35,0	41,0	30,0	35,0	40,0	30,0	35,0	40,0	35,0	38,0	45,0	35,0	38,0	45,0
Diametre hydraulic fittings																									
Main heat exchanger	Ø		1/2"			3/4"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"	
Power supply																									
Power supply													230V	~50Hz											

- (1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
 (2) Room air temperature 20 °C d.b.; Water (in/out) 45°C/40°C; EUROVENT
 (3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

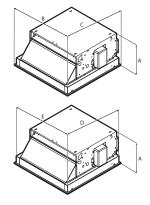
GRID DIMENSIONS (MANDATORY ACCESSORY)







DIMENSIONS



Dimensions and	lucaionhea af	thaith	avid (masvinarina	dimonsions)
Dimensions and	i welants of	ine unii wiin	aria imaximum	aimensionsi

Size			20	24	30	34	40	44	50	54
Dimensions and w	eights									
A		mm	283	283	283	283	283	283	283	283
В		mm	595	595	895	895	1195	1195	1195	1195
C		mm	595	595	595	595	595	595	595	595
Empty weight		kg	16	16	21	21	25	25	25	25
Weight of the grid		kg	3,7	3,7	5,7	5,7	7,0	7,0	7,0	7,0

Dimensions of the unit with grid (dimensions for installation)

Size			20	24	30	34	40	44	50	54
Dimensions and	weights									
A		mm	283	283	283	283	283	283	283	283
D		mm	574	574	574	574	574	574	574	574
E		mm	574	574	874	874	1174	1174	1174	1174

 $\label{lem:continuous} \mbox{Aermec reserves the right to make any modifications deemed necessary.}$ All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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VEC-I

Coanda-effect fan coil for cassette installation



- Very quiet
- Electric saving equal to 50% with respect to a fan coil with 3-speed motor
- Total comfort: reduced variations in temperature and relative humidity in every season





DESCRIPTION

Thanks to a special air intake and flow grid, these units allow a coanda-effect air flow to be generated, parallel to the ceiling, creating optimal circulation inside the room to be air-conditioned.

They are suitable to be installed inside a suspended ceiling.

FEATURES

Ventilation group

 $Comprised \ of a \ dual intake \ centrifugal \ fan \ that \ is \ particularly \ silent, \ statically \ and \ dynamically \ balanced \ and \ directly \ coupled \ to \ the \ motor \ shaft.$

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

Continuous air flow rate variation is made possible by a 0-10V signal generated by Aermec adjustment and control commands or by independent regulation systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors). Apart from the inverter motor of the "VEC-I" models, each unit can be supplied with a single-phase asynchronous "VEC" motor.

Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

Units are available with a standard coil (20-50) and a larger coil (24-54). Only units with the standard coil can be combined with an additional electric or water coil with 1 row, both available as an accessory.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ The hydraulic connections can be inverted during installation.

Air filter

Fire resistance class 1 air filter.

ACCESSORY COMPULSORY

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

 $\textbf{SW5:} \ water \ probe \ kit \ (L=15m) \ with \ probe-holder \ connection \ point, \ fixing \ clip \ and \ probe-holder \ from \ heat \ exchanger.$

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF Components

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L=2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

Common accessories

BV: Hot water heat exchanger with 1 row.

RX: Armoured electric coil with safety thermostat.

VCFD: Motorized 2-way valve kit without insulating shell, can be installed on the main or secondary battery or a battery that is only warm. The kit is made up of a valve, actuator and relative hydraulic fittings. It can be installed on fan coils with connections on the right and on the left.

VCF41 - 42 - 43 - for main heat exchanger: 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.

DSC: Condensate drainage device.

BC: Condensate drip.

PCR: Galvanised plate protection for the controls and the electrical element.

ACCESSORIES COMPATIBILITY

Accessories mandatory

Intake grid and distribution of the air

Accessory	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
VEC20GL	•						
VEC30GL		•	•				
VEC40GL				•	•	•	•

Control panels and dedicated accessories

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
AER503IR	•	•	•	•	•	•	•	•
PR0503	•	•	•	•	•	•	•	•
SA5	•	•	•	•	•	•	•	•
SW5	•		•	•	•			•
TX								

VMF Components

Model	Ver	20	24	30	34	40	44	50	54
DI24		•	•	•	•	•	•	•	•
VMF-E19 (1)		•	•	•	•	•	•	•	•
VMF-E3		•	•	•	•	•	•	•	•
VMF-E4X		•	•	•	•	•	•	•	•
VMF-IR		•	•	•	•	•	•	•	•
VMF-SW		•	•	•	•		•		•
VMF-SW1		•	•	•	•	•	•	•	•
VMHI		•	•	•	•	•	•		•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Common accessories

Electric coil

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
RX22	•	•						
RX32			•	•				
RX42					•	•		_
RX52							•	•

Protection for controls and electric resistance

Accessory	VEC20I	VEC24I	VEC30I	VEC34I	VEC40I	VEC44I	VEC50I	VEC54I
DCD1V								

Water coil with 1 row

Accessory	VEC20I	VEC30I	VEC40I	VEC50I
BV122	•			

			VEC20I						VE	C30I						VEC	401						VEC50)		
BV132																										
BV142																							•			
3-way valve kit -																										
	VEC20I	VEC2				EC30I				C34I			VEC	_			VEC44				/EC50I				C54I	
Main coil	VCF41 - VCF4124	VCF42 - VC	F4224		VCF41	- VCF4	124		VCF42 -	VCF42	24	VC	CF42 - V	/CF422	4	VCF	42 - VC	F4224		VCF42	2 - VCF	4224		VCF42	- VCF42	224
Additional coil "BV"	VCF44 - VCF4424	-			VCF44	I - VCF4	1224			-		VC	CF44 - V	/CF422	4		-			VCF4	4 - VCF4	4224			-	
2-way valve kit -																										
	VEC20I	VEC24				EC30I				C34I			VEC				VEC44				/EC50I				C54I	
Main coil	VCFD1 - VCFD124	VCFD2 - VC	FD224		VCFD1	- VCFD)124		VCFD2 -	VCFD2	24	VC	:FD2 - V	CFD22	4	VCFI	D2 - VC	FD224		VCFD2	2 - VCFI	D224		/CFD2	- VCFD2	224
Additional coil "BV"	VCFD2 - VCFD424	-			VCFD4	I - VCFD)424			-		VC	CFD4 - V	/CFD42	4		-			VCFD	4 - VCFI	D424			-	
Valves ending with		4, are 24V.																								
Condensate drip)																									
Accessory		VEC20I		VEC	241		١	VEC30I			VEC3	41		VE	C40I			VEC44	l		VEC	.50I		١	VEC54I	
BC5		•		•				٠			•				•			٠				•			•	
Condensate drai	nage																									
Accessory																										
MCCE35UI y		VEC20I		VEC	241		١	VEC30I			VEC3	41		VE	C40I			VEC44	l		VEC	.50I		١	VEC54I	
DSC4		VEC20I •		VEC				VEC30I			VEC3	41		VI	•			VEC44				501		١	/EC54l •	
DSC4 PERFORMANO	CE SPECIFICA	•	EC									41		VE					<u> </u>					\	• •	
DSC4 PERFORMANO	CE SPECIFICA	•			•		VEC24	•		VEC30	•		VEC34			VEC40			VEC44						VEC54I	il
DSC4 PERFORMANO	CE SPECIFICA	•		•	•	1		•		VEC30 2	•		VEC34 2			VEC40				3			I 3		•	
DSC4 PERFORMANO	CE SPECIFICA	•		VEC20I		_	VEC24			_			_	I	•	_	I	•	VEC44			VEC50			VEC54	H 3
PERFORMANO 2-pipe		•	1	VEC20I 2	3	1 L	VEC24 2 M	· I 3	1	2	· I 3	1 L	2 M	1 3 H	1 1	2	I 3	•	VEC44	3	1	VEC50 2	3		• VEC54 2	3
PERFORMANO 2-pipe Heating performance 7		•	1	VEC20I 2 M	3	_	VEC24 2 M	· I 3	1 1 L	2	· I 3	1 L	2	1 3 H	•	2	I 3	•	VEC44	3	1	VEC50 2 M	3	1 L	• VEC54 2	3 H
PERFORMANC 2-pipe Heating performance 7 Heating capacity	70°C/60°C(1)	tions v	1 L 1,87 164	VEC20I 2 M	3 H	1 L	VEC24 2 M 2,50 219	• I 3 H 3,42 300	1 L 3,03 266	2 M 3,64 319	3 H 4,31 378	1 L 4,31 378	2 M 53,18 454	3 H 6,14 538	1 L 4,21 369	2 M 5,21 457	1 3 H	1 L 5,41 474	VEC44 2 M 6,68 586	3 H 8,07 708	1 L 4,76 417	VEC50 2 M 6,34 556	3 H 7,16 628	1 L	VEC54 2 M 8,08	3 H
DSC4 PERFORMANC 2-pipe Heating performance 7 Heating capacity Water flow rate system sid	70°C/60°C(1)	TIONS V	1 L	VEC20I 2 M	3 H	1 L 2,07	VEC24 2 M	• I 3 H 3,42	1 L	2 M	3 H	1 L	2 M 53,18	3 H	1 L	2 M 5,21	3 H	1 1 L	VEC44 2 M	3 H 8,07	1 L	VEC50 2 M	3 H 7,16	1 L	VEC54 2 M 8,08	3 H 9,1
PERFORMANO 2-pipe Heating performance 7 Heating capacity Water flow rate system side Pressure drop system side	70°C/60°C(1)	tions v	1 L 1,87 164	VEC20I 2 M 2,54 223	3 H 3,10 272	1 L 2,07	VEC24 2 M 2,50 219	• I 3 H 3,42 300	1 L 3,03 266	2 M 3,64 319	3 H 4,31 378	1 L 4,31 378	2 M 53,18 454	3 H 6,14 538	1 L 4,21 369	2 M 5,21 457	3 H 6,29 551	1 L 5,41 474	VEC44 2 M 6,68 586	3 H 8,07 708	1 L 4,76 417	VEC50 2 M 6,34 556	3 H 7,16 628	1 L 6,06 532	VEC54 2 M 8,08 709	9,1 80
PERFORMANO 2-pipe Heating performance 7 Heating capacity Water flow rate system side Pressure drop system side Heating performance 4	70°C/60°C(1)	tions v	1 L 1,87 164	VEC20I 2 M 2,54 223 4	3 H 3,10 272	2,07 181 1	VEC24 2 M 2,50 219	• I 3 H 3,42 300	1 L 3,03 266	2 M 3,64 319	3 H 4,31 378	1 L 4,31 378 5	2 M 53,18 454	3 H 6,14 538	4,21 4,21 369 6	2 M 5,21 457	3 H 6,29 551	5,41 474 9	VEC44 2 M 6,68 586	3 H 8,07 708	1 L 4,76 417	VEC50 2 M 6,34 556	3 H 7,16 628 14	1 L 6,06 532 9	VEC54 2 M 8,08 709	9,7 80
PERFORMANO 2-pipe Heating performance 7 Heating capacity Water flow rate system side Pressure drop system side Heating performance 4 Heating capacity	70°C/60°C(1) de 15°C/40°C(2)	kW 1/h kPa	1 L 1,87 164 2	VEC20I 2 M 2,54 223 4	3 H 3,10 272 6	2,07 181 1	2 M 2,50 219 2	3 H 3,42 300 3	3,03 266 9	2 M 3,64 319 13	4,31 378 17	1 L 4,31 378 5	2 M 53,18 454 7	3 H 6,14 538 9	4,21 4,21 369 6	2 M 5,21 457 9	3 H 6,29 551 12	5,41 474 9	VEC44 2 M 6,68 586 14	3 H 8,07 708 19	4,76 417 7	VEC50 2 M 6,34 556	3 H 7,16 628 14	1 L 6,06 532 9	• VEC54 2 M 8,08 709	9,7 80
PERFORMANO 2-pipe Heating performance 7 Heating capacity Water flow rate system side Pressure drop system side Heating performance 4 Heating capacity Water flow rate system side	70°C/60°C(1) de 15°C/40°C(2)	kW 1/h kPa kW	1 L 1,87 164 2 0,95	VEC20I 2 M 2,54 223 4 1,26	3 H 3,10 272 6	2,07 181 1	2,50 219 2	3 H 3,42 300 3 1,70	3,03 266 9	2 M 3,64 319 13	3 H 4,31 378 17	1 L 4,31 378 5 2,15	2 M 53,18 454 7 2,57	3 H 6,14 538 9	4,21 4,21 369 6	2 M 5,21 457 9	3 H 6,29 551 12	5,41 474 9	2 M 6,68 586 14	3 H 8,07 708 19	1 L 4,76 417 7	VEC50 2 M 6,34 556 11	3 H 7,16 628 14	1 L 6,06 532 9	VEC54 2 M 8,08 709 15	9,7 80 11
PERFORMANO 2-pipe Heating performance 7 Heating capacity Water flow rate system side Pressure drop system side Heating performance 4 Heating capacity Water flow rate system side Pressure drop system side	10°C/60°C(1) de 15°C/40°C(2)	kW 1/h kPa kW 1/h	1 L 1,87 164 2 0,95 163	2 M 2,54 223 4 1,26 217	3 H 3,10 272 6	2,07 181 1 1,20 206	2,50 219 2 1,40 241	3,42 300 3 1,70 292	3,03 266 9	2 M 3,64 319 13 1,81 311	3 H 4,31 378 17 2,14 368	1 L 4,31 378 5	2 M 53,18 454 7 2,57 442	3 H 6,14 538 9	4,21 369 6	2 M 5,21 457 9 2,59 445	3 H 6,29 551 12 3,12 537	5,41 474 9	2 M 6,68 586 14 3,30 568	3 H 8,07 708 19 4,01 690	4,76 417 7	VEC50 2 M 6,34 556 11 3,15 542	3 H 7,16 628 14 3,56 612	6,06 532 9	VEC54 2 M 8,08 709 15 4,02 691	9,7 80 11 4,5 78
PERFORMANO 2-pipe Heating performance 7 Heating capacity Water flow rate system side Pressure drop system side Heating performance 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7	10°C/60°C(1) de 15°C/40°C(2)	kW 1/h kPa kW 1/h	1 L 1,87 164 2 0,95 163	2 M 2,54 223 4 1,26 217 5	3 H 3,10 272 6	1 L 2,07 181 1 1,20 206 2	2,50 219 2 1,40 241	3,42 300 3 1,70 292	3,03 266 9	2 M 3,64 319 13 1,81 311	3 H 4,31 378 17 2,14 368	1 L 4,31 378 5 2,15 370 5	2 M 53,18 454 7 2,57 442	3 H 6,14 538 9	4,21 369 6	2 M 5,21 457 9 2,59 445	3 H 6,29 551 12 3,12 537	5,41 474 9 2,69 463	2 M 6,68 586 14 3,30 568	3 H 8,07 708 19 4,01 690 20	1 L 4,76 417 7 2,37 408 7	VEC50 2 M 6,34 556 11 3,15 542	3 H 7,16 628 14 3,56 612	6,06 532 9	VEC54 2 M 8,08 709 15 4,02 691	9, 80 1 4,:
	10°C/60°C(1) de 15°C/40°C(2)	kW 1/h kPa kW 1/h kPa	1 L 1,87 164 2 0,95 163 3	2,54 223 4 1,26 217 5	3 H 3,10 272 6 1,54 265	1 L 2,07 181 1 1,20 206 2	2,50 219 2 1,40 241 3	3 H 3,42 300 3 1,70 292 4	3,03 266 9 1,50 258 9	2 M 3,64 319 13 1,81 311 13	3 H 4,31 378 17 2,14 368 17	1 L 4,31 378 5 2,15 370 5	2 M 53,18 454 7 2,57 442 7	3 H 6,14 538 9	4,21 369 6 2,09 359 6	2 M 5,21 457 9 2,59 445 9	3 H 6,29 551 12 3,12 537 13	5,41 474 9 2,69 463 10	2 M 6,68 586 14 3,30 568	3 H 8,07 708 19 4,01 690 20	1 L 4,76 417 7 2,37 408 7	VEC50 2 M 6,34 556 11 3,15 542 12	3 H 7,16 628 14 3,56 612 14	1 L 6,06 532 9 3,02 519 17	VEC54 2 M 8,08 709 15 4,02 691	9,7 800 11 4,2 78 4,2
PERFORMANO 2-pipe Heating performance 7 Heating capacity Water flow rate system side Heating performance 4 Heating performance 4 Heating capacity Water flow rate system side Cooling performance 7 Cooling capacity Sensible cooling capacity	10°C/60°C(1) le 15°C/40°C(2) le	kW 1/h kPa kW 1/h kPa kW	1,87 164 2 0,95 163 3	2,54 223 4 1,26 217 5	3 H 3,10 272 6 1,54 265 7	1 L 2,07 181 1 1,20 206 2	2,50 219 2 1,40 241 3	3 H 3,42 300 3 1,70 292 4	3,03 266 9 1,50 258 9	2 M 3,64 319 13 1,81 311 13	3 H 4,31 378 17 2,14 368 17	1 L 4,31 378 5 2,15 370 5	2 M 53,18 454 7 2,57 442 7	3 H 6,14 538 9 3,05 525 9	4,21 369 6 2,09 359 6	2 M 5,21 457 9 2,59 445 9	3 H 6,29 551 12 3,12 537 13	5,41 474 9 2,69 463 10	2 M 6,68 586 14 3,30 568 14	3 H 8,07 708 19 4,01 690 20	1 L 4,76 417 7 2,37 408 7	VECSO 2 M 6,34 556 11 3,15 542 12	3 H 7,16 628 14 3,56 612 14	1 L 6,06 532 9 3,02 519 17	VEC54 2 M 8,08 709 15 4,02 691 15 4,00 2,83	9,7 80 11 4,1 78 11 4,2 3,0
DSC4 PERFORMANO 2-pipe Heating performance 7 Heating capacity Water flow rate system side Pressure drop system side Heating performance 4 Heating capacity Water flow rate system side Pressure drop system side Cooling performance 7 Cooling capacity	10°C/60°C(1) le 15°C/40°C(2) le	kW 1/h kPa kW 1/h kPa kW kW	1,87 164 2 0,95 163 3	2,54 223 4 1,26 217 5	3 H 3,10 272 6 1,54 265 7	1 L 2,07 181 1 1 1,20 206 2	VEC24 2 M 2,50 219 2 1,40 241 3	3 H 3,42 300 3 1,70 292 4 1,52 1,14	3,03 266 9 1,50 258 9	2 M 3,64 319 13 1,81 311 13 1,61 1,25	3 H 4,31 378 17 2,14 368 17 1,91 1,49	1 L 4,31 378 5 2,15 370 5 1,79 1,26	2 M 53,18 454 7 2,57 442 7 2,14 1,51	3 H 6,14 538 9 3,05 525 9	4,21 369 6 2,09 359 6	2 M 5,21 457 9 2,59 445 9	3 H 6,29 551 12 3,12 537 13	5,41 474 9 2,69 463 10	VEC44 2 M 6,68 586 14 3,30 568 14 2,42	3 H 8,07 708 19 4,01 690 20	1 L 4,76 417 7 2,37 408 7 2,35 1,68	VEC50 2 M 6,34 556 11 3,15 542 12 3,17 2,27	3 H 7,16 628 14 3,56 612 14 3,61 2,59	1 L 6,06 532 9 3,02 519 17	VEC54 2 M 8,08 709 15 4,02 691 15 4,00 2,83	9,7 80 11 4,1 78

type												Inve	rter											
no.		1			1			2			2			2			2			2			2	
m³/h	130	194	247	130	167	247	241	309	383	241	309	383	306	406	511	306	406	511	371	529	613	371	529	613
W	4	9	14	4	9	14	11	16	35	11	16	35	16	20	26	16	20	26	18	27	34	18	27	34
%	48	70	90	48	70	90	58	66	90	58	66	90	54	72	90	54	72	90	56	78	90	56	78	90
dB(A)	35,0	42,0	48,0	35,0	42,0	48,0	37,0	43,0	49,0	37,0	43,0	49,0	38,0	43,0	48,0	38,0	43,0	48,0	43,0	50,0	53,0	43,0	50,0	53,0
dB(A)	27,0	34,0	40,0	27,0	34,0	40,0	29,0	35,0	41,0	29,0	35,0	41,0	30,0	35,0	40,0	30,0	35,0	40,0	35,0	38,0	45,0	35,0	38,0	45,0
Ø		1/2"			3/4"			1/2"			3/4"			3/4"			3/4"			3/4"			3/4"	
												230V	~50Hz											
	no. m³/h W %	no. m³/h 130 W 4 % 48 dB(A) 35,0	no. 1 m³/h 130 194 W 4 9 % 48 70 dB(A) 35,0 42,0 dB(A) 27,0 34,0	no. 1 m³/h 130 194 247 W 4 9 14 % 48 70 90 dB(A) 35,0 42,0 48,0 dB(A) 27,0 34,0 40,0	no. 1 1 130 194 247 130 W 4 9 14 4 9 48 70 90 48 48 48 70 49 48 70 49 48 70 49 48 70 70 70 70 70 70 70 70 70 70 70 70 70	no. 1 1 1 m³/h 130 194 247 130 167 W 4 9 14 4 9 % 48 70 90 48 70 dB(A) 35,0 42,0 48,0 35,0 42,0 dB(A) 27,0 34,0 40,0 27,0 34,0	no. 1 1 1 m³/h 130 194 247 130 167 247 W 4 9 14 4 9 14 % 48 70 90 48 70 90 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0	no. 1 1 1 247 247 248 247 248 247 248 247 248 247 248 247 248 247 248 247 248 247 248 247 248 247 248 247 248	no. 1 1 2 m³/h 130 194 247 130 167 247 241 309 W 4 9 14 4 9 14 11 16 % 48 70 90 48 70 90 58 66 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0	no. 1 1 2 2 m³/h 130 194 247 130 167 247 241 309 383 W 4 9 14 4 9 14 11 16 35 % 48 70 90 48 70 90 58 66 90 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 49,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0 41,0	no. 1 1 2 2 m³/h 130 194 247 130 167 247 241 309 383 241 W 4 9 14 4 9 14 11 16 35 11 % 48 70 90 48 70 90 58 66 90 58 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 49,0 37,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0 41,0 29,0	no. 1 1 1 2 2 2 m³/h 130 194 247 130 167 247 241 309 383 241 309 W 4 9 14 4 9 14 11 16 35 11 16 % 48 70 90 48 70 90 58 66 90 58 66 dB(A) 35,0 42,0 48,0 37,0 43,0 49,0 37,0 43,0 d8,0 36,0 42,0 48,0 37,0 43,0 49,0 37,0 43,0 </td <td>no. 1 1 1 2 2 2 2 m³/h 130 194 247 130 167 247 241 309 383 241 309 383 W 4 9 14 4 9 14 11 16 35 11 16 35 % 48 70 90 48 70 90 58 66 90 58 66 90 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 49,0 37,0 43,0 49,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0 41,0 29,0 35,0 41,0 Ø 1/2" 3/4" 1/2" 1/2" 3/4"</td> <td>no. 1 1 1 2 2 2 2 2 309 383 306 W 4 9 14 4 9 14 11 16 35 11 16 35 16 % 48 70 90 48 70 90 58 66 90 58 66 90 54</td> <td>no. 1 1 1 2 2 2 2 2 m³/h 130 194 247 130 167 247 241 309 383 241 309 383 306 406 W 4 9 14 4 9 14 11 16 35 11 16 35 16 20 % 48 70 90 48 70 90 58 66 90 58 66 90 54 72 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 49,0 37,0 43,0 49,0 37,0 43,0 49,0 36,0 35,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0 41,0 29,0 35,0 41,0 29,0 35,0 41,0 29,0 35,0 41,0 29,0 35,0<td>no. 1 1 1 2 2 2 2 2 m³/h 130 194 247 130 167 247 241 309 383 241 309 383 306 406 511 W 4 9 14 4 9 14 11 16 35 11 16 35 16 20 26 % 48 70 90 48 70 90 58 66 90 58 66 90 54 72 90 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 49,0 37,0 43,0 49,0 38,0 43,0 48,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0 41,0 29,0 35,0 41,0 30,0 35,0 40,0</td><td> No. 1</td><td>no. 1 1 2</td><td> No. 1</td><td> No. 1</td><td>no. 1 1 1 2</td><td> No. 1</td><td>no. 1 1 2 3 4 3 3 4</td><td>no. 1 1 1 2</td></td>	no. 1 1 1 2 2 2 2 m³/h 130 194 247 130 167 247 241 309 383 241 309 383 W 4 9 14 4 9 14 11 16 35 11 16 35 % 48 70 90 48 70 90 58 66 90 58 66 90 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 49,0 37,0 43,0 49,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0 41,0 29,0 35,0 41,0 Ø 1/2" 3/4" 1/2" 1/2" 3/4"	no. 1 1 1 2 2 2 2 2 309 383 306 W 4 9 14 4 9 14 11 16 35 11 16 35 16 % 48 70 90 48 70 90 58 66 90 58 66 90 54	no. 1 1 1 2 2 2 2 2 m³/h 130 194 247 130 167 247 241 309 383 241 309 383 306 406 W 4 9 14 4 9 14 11 16 35 11 16 35 16 20 % 48 70 90 48 70 90 58 66 90 58 66 90 54 72 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 49,0 37,0 43,0 49,0 37,0 43,0 49,0 36,0 35,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0 41,0 29,0 35,0 41,0 29,0 35,0 41,0 29,0 35,0 41,0 29,0 35,0 <td>no. 1 1 1 2 2 2 2 2 m³/h 130 194 247 130 167 247 241 309 383 241 309 383 306 406 511 W 4 9 14 4 9 14 11 16 35 11 16 35 16 20 26 % 48 70 90 48 70 90 58 66 90 58 66 90 54 72 90 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 49,0 37,0 43,0 49,0 38,0 43,0 48,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0 41,0 29,0 35,0 41,0 30,0 35,0 40,0</td> <td> No. 1</td> <td>no. 1 1 2</td> <td> No. 1</td> <td> No. 1</td> <td>no. 1 1 1 2</td> <td> No. 1</td> <td>no. 1 1 2 3 4 3 3 4</td> <td>no. 1 1 1 2</td>	no. 1 1 1 2 2 2 2 2 m³/h 130 194 247 130 167 247 241 309 383 241 309 383 306 406 511 W 4 9 14 4 9 14 11 16 35 11 16 35 16 20 26 % 48 70 90 48 70 90 58 66 90 58 66 90 54 72 90 dB(A) 35,0 42,0 48,0 35,0 42,0 48,0 37,0 43,0 49,0 37,0 43,0 49,0 38,0 43,0 48,0 dB(A) 27,0 34,0 40,0 27,0 34,0 40,0 29,0 35,0 41,0 29,0 35,0 41,0 30,0 35,0 40,0	No. 1	no. 1 1 2	No. 1	No. 1	no. 1 1 1 2	No. 1	no. 1 1 2 3 4 3 3 4	no. 1 1 1 2

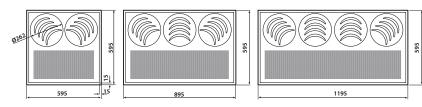
Centrifugal

Туре

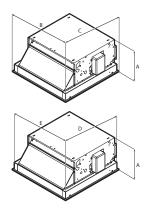
type

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

GRID DIMENSIONS (MANDATORY ACCESSORY)



DIMENSIONS



Dimensions a	nd w	eights	of th	e unit	with	grid (maxin	num d	imen	sions)
Size			20	24	30	34	40	44	50	54
Dimensions and we	eights									
A		mm	283	283	283	283	283	283	283	283
В		mm	595	595	895	895	1195	1195	1195	1195
C		mm	595	595	595	595	595	595	595	595
Empty weight		kg	16	16	21	21	25	25	25	25
Mainha afaha mid		l.a.	2.7	2.7	F 7	г 7	7.0	7.0	7.0	7.0

Dimensions of the unit with grid (dimensions for installation)														
Size			20	24	30	34	40	44	50	54				
Dimensions and weights														
A		mm	283	283	283	283	283	283	283	283				
D		mm	574	574	574	574	574	574	574	574				
E		mm	574	574	874	874	1174	1174	1174	1174				

















FCL

Cassette Type Fan Coil Unit



- · Standard internal three-way valve
- Version with 2-way valve for variable water flow rate systems
- Version without valves





DESCRIPTION

4-way cassettes that can be installed in any type of 2- or 4-pipe system with any heat generator, even at low temperatures. Thanks to the selection of versions and configurations, it's easy to choose the best solution for every

FEATURES

Intake grid and distribution of the air

The recovery and air diffusion grille has an elegant design. In plastic, RAL 9010.

The dimensions of the first nine sizes respect the 600x600 mm modularity of false ceilings, whereas the larger sizes measuring 840x840 mm are designed for quiet operation and optimum performance.

Load-bearing structure

Models with a 600x600 mm module have a reinforced load-bearing structure with side panels in galvanised steel sheet, thermally insulated with internal polystyrene foam elements.

The structure of models with a 840x840 mm module is made entirely of galvanised steel sheet, thermally insulated with polyethylene foam on the inside and with an anti-condensate felt coating.

Ventilation group

Formed of a particularly quiet axial-centrifugal fan, statically and dynamically balanced.

The single-phase electric motor offers three or four speeds (depending on the size), is mounted on anti-vibration supports, and has a permanently enabled condenser.

Heat exchanger coil

Heat exchanger with shaped profile to increase the exchange surface, and easily accessible drain valves.

There are models with a single coil for 2-pipe systems, with the possibility to add an electric heater too, and models with two coils for 4-pipe systems. There is the possibility to combine outside air with the inlet ambient air, and to distribute it in separate rooms.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

There is the possibility to combine outside air with the inlet ambient air, and to distribute it in separate rooms.

Condensate drip

Condensation drip tray in one piece, with V0 self-extinguishing level and overmoulding to insulation in expanded polystyrene with flame retardant additive.

Air filter

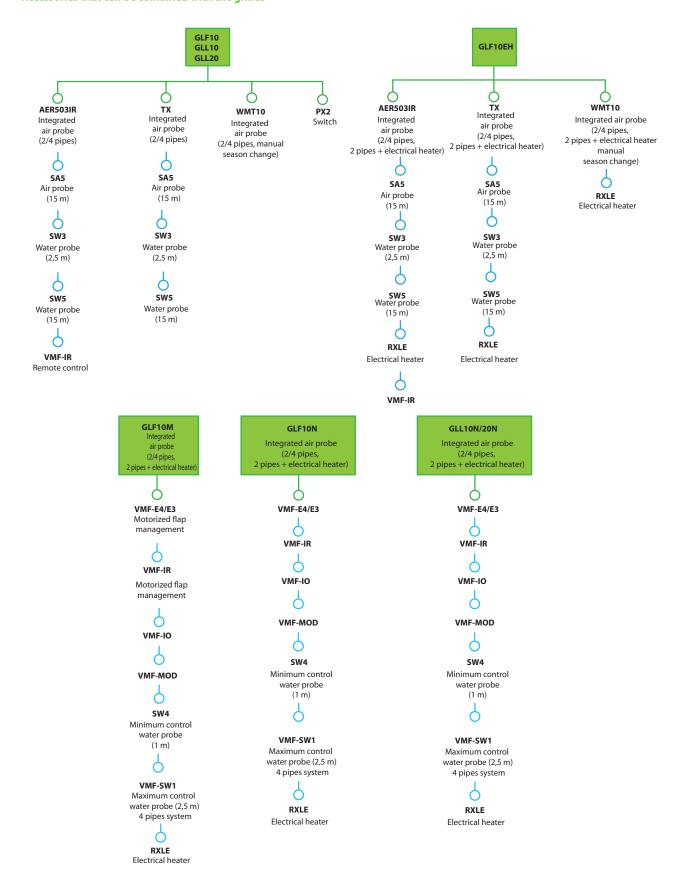
Air filter easily removed and cleaned, self-supporting structure, characterised by a high efficiency and low pressure drops, with class-V0 fire resistance (UL 94).

Versions

FCL Standard with internal 3-way valve **V2** With internal 2-way valve

VL Without internal valve

ACCESSORIES Accessories that can be combined with the grilles



RXLE it can be installed only at the factory.

Intake grids and distribution of the air, compulsory accessory

GLF10: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated louvers. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLF10EH: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLF10M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 panel or the VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control. (size 840x840 not available).

GLF10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available).

GLL10: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLL10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLL20: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLL20N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (MFTAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-MOD: Expansion board for the management of modulating valves.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

Control panels and their accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW4: Water temperature probe allowing automatic season change on electronic controllers supplied with water-side change over.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

Electric heaters it can be installed only at the factory

RXLE: Electric heater for heating, can be installed on board the units. **RXLE20:** Electric heater for heating, can be installed on board the units.

Water valve kit

VCFLX4: 3-way valve kit for single-coil fan coil for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings.

VHL1: 3-way motorised valve kit with 4 connections including the actuator. 230V~50Hz power supply.

VHL124: 3-way motorised valve kit with 4 connections including the actuator. 24V power supply.

VHL20: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 230V~50Hz power supply.

VHL2024: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.

VHL2: 2-way motorised valve kit with 2 connections including the actuator. Power supply 230V~50Hz;

VHL22: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. Power supply 230V~50Hz;

VHL2224: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.

VHL224: 2-way motorised valve kit with 2 connections including the actuator. 24V power supply.

Installation accessories

KFL: Delivery flange, allowing the air to be directed to an adjacent room. **KFL20:** Delivery flange, allowing the air to be directed to an adjacent room. Up to three KFL20 can be assembled on a single unit.

KFLD: Suction flange, allows to introduce external air directly into the room without mixing.

KFLD20: Suction flange, allows to introduce external air directly into the room without mixing. Up to two KFL20D can be assembled on a single unit. FCLMC10: Perimeter housing in painted galvanised sheet metal, 600x600 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.

FCLMC20: Perimeter housing in painted sheet metal, 840x840 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.

ACCESSORIES COMPATIBILITY

Intake grids and distribution of the air

Model	Ver	32	34	36	38	42	44	62	64
GLF10 (1)	FCL,V2,VL	•	•	•	•	•	•	•	•
GLF10EH (2)	FCL,V2,VL	•	•					•	
GLF10M (3)	FCL,V2,VL	•	•	•	•	•	•	•	•
GLF10N (3)	FCL,V2,VL	•	•	•	•	•	•	•	•
Model	Ver	72	82	84	10	2	104	122	124
GLF10 (1)	FCL,V2,VL	•							
	ECL VO VI								
GLF10EH (2)	FCL,V2,VL	•							
GLF10EH (2) GLF10M (3)	FCL,V2,VL FCL,V2,VL	•							

- (1) Not compatible with the VMF system and electric heaters.
- (2) Not compatible with the VMF system, but compatible with electric heaters.
 (3) Compatible with the VMF system and electric heaters.

Intake grid and distribution of the air

Model	Ver	32	34	36	38	42	44	62	64
GLL10 (1)	FCL,V2,VL	•		•	•	•	•	•	•
GLL10N (2)	FCL,V2,VL	•	•	•	•	•	•	•	•
Model	Ver	72	82	84	102		104	122	124
GLL10 (1)	FCL,V2,VL	•							
GLL10N (2)	FCL,V2,VL	•							
GLL20 (1)	FCL,V2,VL		•	•	•		•	•	•
GLL20N (2)	FCL,V2,VL		•	•			•	•	•

- (1) Not compatible with the VMF system and electric heaters.

VMF system

vivir system									
Model	Ver	32	34	36	38	42	44	62	64
DI24	FCL,V2,VL	•	•	•		•	•	•	•
VMF-E3	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-E4DX	FCL,V2,VL		•	•			•	•	•
VMF-E4X	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-IO	FCL,V2,VL		•	•		•	•	•	•
VMF-IR	FCL,V2,VL	•	•	•	•	•	•	•	•
VMF-MOD	FCL,V2,VL		•	•	•	•	•	•	•
VMF-SW1	FCL,V2,VL	•	•	•	•	•	•	•	•
Model	Ver	72	82	84	102	2	104	122	124
Model DI24	Ver FCL,V2,VL	72	82	84	102	2	104	122	124
				_		2			
DI24	FCL,V2,VL	•	•	•	•	2	•	•	•
DI24 VMF-E3	FCL,V2,VL FCL,V2,VL	•	•	•	•			•	•
DI24 VMF-E3 VMF-E4DX	FCL,V2,VL FCL,V2,VL FCL,V2,VL	•	•	•	•	2		•	•
DI24 VMF-E3 VMF-E4DX VMF-E4X	FCL,V2,VL FCL,V2,VL FCL,V2,VL FCL,V2,VL	•	•	•	•	2	•	•	•
DI24 VMF-E3 VMF-E4DX VMF-E4X VMF-I0	FCL,V2,VL FCL,V2,VL FCL,V2,VL FCL,V2,VL FCL,V2,VL	•			•	1	•		

Control panels and dedicated accessories

Model	Ver	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
AER503IR (1)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	· ·
SA5 (2)	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SIT3 (3)	FCL,V2,VL								•	•	•					
SIT5 (4)	FCL,V2,VL	•	•	•	•	•	•	•	•	•		•	•	•	•	•
SW3 (2)	FCL,V2,VL															

Model	Ver	32	34	36	38	42	44	62	64	72	82	84	102	104	122	124
SW4	FCL,V2,VL	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SW5 (2)	FCL,V2,VL	•			•	•	•	•		•	•	•		•		•
TX (5)	FCL,V2,VL	•				•	•	•		•					•	•
WMT10 (5)	FCL,V2,VL	•	•	•	•	•	•	•	•	•			•	•		•

Wall-mount installation.
 Probe for AER503IR-TX thermostats, if fitted.
 Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
 Probe for AER503IR-TX thermostats, if fitted.
 Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

3 way valve kit

Model	Ver	32	34	36	38	42	44	62	64
VHL1 (1)	FCL,V2,VL						•		
VHL124 (1)	FCL,V2,VL		•		•		•		
Model	Ver	72	82	84	102		104	122	124
Model VHL20 (1)	Ver FCL,V2,VL	72	82	. 84	102		104 •	122	124

(1) Obligatory accessory in 4-pipe systems.

2 way valve kit

Model	Ver	32	34	36	38	42	44 62	64
VHL2 (1)	FCL,V2,VL		•		•		•	•
VHL224 (1)	FCL,V2,VL		•		•		•	•
Model	Ver	72	82	84	102	104	122	124
VHL22 (1)	FCL,V2,VL			•		•		•

(1) Compulsory accessory in 4-pipe systems with variable flow rate.

Valve Kit for 4 pipe systems

-unite interest i pipe system	-									
Model	Ver	32	34	36	38	42	44	62	64	72
VCFLX4 (1)	VL	•		•		•		•		•

 $(1) \ \ The \ valve \ must \ be \ commanded \ via \ command \ panels \ enabled \ for \ valve \ control.$

Delivery flange

Delivery hange									
Model	Ver	32	34	36	38	42	44	62	64
KFL	FCL,V2,VL	•	•	•	•	•	•	•	•
KFLD	FCL,V2,VL	•	•	•		•	•	•	•
Model	Ver	72	82	84	102		104	122	124
KFL	FCL,V2,VL								
KFL20	FCL,V2,VL				•			•	•
KFLD	FCL,V2,VL	•							
KFLD20	FCL,V2,VL		•		•		•	•	•

Perimeter case

Model	Ver	32	34	36	38	42	44	62	64
FCLMC10 (1)	FCL,V2,VL	•	•	•	•	•	•	•	•
Model	Ver	72	82	84	102	2	104	122	124
FCLMC10 (1)	FCL,V2,VL	•							
FCLMC20 (1)	FCL,V2,VL		•				•	•	

(1) Can only be combined with GLL/GLLI grilles

PERFORMANCE SPECIFICATIONS

2-pipe

			FCL32			FCL36	,		FCL42			FCL62	2		FCL72			FCL82	2		FCL102	2		FCL122	:
		1	2	3	1	2	3	1	2	4	1	2	4	1	2	4	1	2	4	1	2	4	1	2	4
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	H
Heating performance 70 °C / 60 °C (1)																									
Heating capacity	kW	2,22	2,95	4,00	3,42	4,50	6,27	3,32	4,47	7,34	5,19	6,37	10,49	6,14	7,57	11,32	5,88	8,12	11,88	8,30	11,71	17,73	10,53	14,73	21,75
Water flow rate system side	I/h	194	258	350	300	394	549	290	391	642	454	558	918	538	662	991	514	710	1039	726	1025	1551	921	1289	1903
Pressure drop system side	kPa	4	6	10	6	10	19	6	10	24	12	17	42	14	20	42	7	13	26	6	12	25	11	21	42
Heating performance 45 °C / 40 °C (2)																									
Heating capacity	kW	1,10	1,47	1,98	1,70	2,24	3,12	1,65	2,22	3,64	2,58	3,17	5,21	3,50	3,76	5,63	2,92	4,03	5,90	4,12	5,82	8,81	5,23	7,32	10,80
Water flow rate system side	l/h	192	254	345	295	389	541	287	386	633	448	550	905	530	654	977	507	701	1025	716	1011	1530	909	1271	1877
Pressure drop system side	kPa	4	6	11	6	9	17	5	9	23	10	15	36	13	19	40	7	12	23	4	7	15	10	17	35
Cooling performance 7 °C / 12 °C																									
Cooling capacity	kW	1,14	1,44	1,86	1,77	2,22	2,96	1,94	2,51	3,88	2,63	3,17	4,90	2,75	3,29	5,35	2,76	3,97	5,85	4,00	5,82	8,85	5,31	7,40	10,83
Sensible cooling capacity	kW	0,97	1,22	1,48	1,37	1,75	2,36	1,36	1,79	3,09	1,83	2,23	3,73	1,84	2,29	3,99	1,86	2,69	4,05	2,89	4,22	6,51	3,99	5,63	8,30
Water flow rate system side	I/h	200	253	327	308	387	516	337	437	679	458	551	856	484	571	938	482	695	1032	697	1012	1547	921	1292	1893
Pressure drop system side	kPa	4	7	10	6	9	15	7	11	25	12	16	36	13	18	43	7	14	28	7	13	28	10	19	38
Fan																									
Туре	type	Ce	entrifug	gal	Ce	entrifug	jal	Ce	entrifug	jal	Ce	ntrifug	jal	Ce	entrifug	jal	Ce	entrifu	gal	Ce	entrifug	al	Ce	entrifug	al
Fan motor	type	Asy	nchron	ous	Asy	nchron	ous	Asy	nchron	ous	Asy	nchron	ous	Asy	nchron	ous	Asy	nchron	ous	Asy	nchron	ous	Asy	nchron	ous
Number	no.		1			1			1			1			1			1			1			1	
Air flow rate	m³/h	300	410	600	300	410	600	260	360	700	380	500	880	400	520	900	460	680	1100	560	830	1350	750	1100	1750
Sound power level (3)	dB(A)	35,0	38,0	46,0	35,0	38,0	46,0	35,0	38,0	53,0	41,0	47,0	61,0	44,0	49,0	60,0	39,0	43,0	50,0	40,0	45,0	54,0	44,0	50,0	60,0
Input power	W	21	31	45	21	31	45	-	32	75	26	37	83	50	58	110	45	80	150	50	80	155	55	105	175
Diametre hydraulic fittings																									
Туре	type		Gas - F	:		Gas - F			Gas - F			Gas - F	:		Gas - F	:		Gas - I			Gas - F			Gas - F	
Main heat exchanger	Ø		3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"	
Finned pack heat exchanger																									
Water content main heat exchanger	- 1		0,6			0,8			0,8			1,3			1,3			2,6			4,0			4,0	
Power supply		1																					,		
Power supply		23	0V~50)Hz	23	0V~50)Hz	23	80V~50)Hz	23	0V~50)Hz	23	0V~50)Hz	23	80V~50)Hz	23	30V~50)Hz	23	0V~50	Hz

4-pipe

4-	ni	ne	
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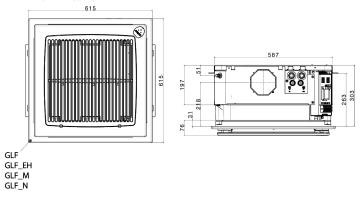
		FCL34			FCL38	3		FCL44			FCL64			FCL84			FCL104			FCL124	ļ
	1	2	3	1	2	3	1	2	3	1	2	4	1	2	4	1	2	4	1	2	4
		. N	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	H
Heating performance 65 °C / 55 °C (1)																					
Heating capacity k	N 1,	74 1,9	5 2,32	1,7	1,95	2,32	1,75	2,04	2,44	2,21	2,50	3,19	4,73	5,71	7,59	5,27	6,53	8,93	6,30	8,31	11,17
Water flow rate system side 1/	h 15	2 17	1 203	152	171	203	153	178	240	194	219	279	414	500	664	461	571	782	551	727	977
Pressure drop system side kl	Pa 6	5 7	10	6	7	10	6	7	10	10	10	19	6	8	12	7	10	17	9	15	25
Cooling performance 7 °C / 12 °C																					
Cooling capacity k	V 1,	14 1,4	4 1,86	1,6	2,05	2,73	1,79	2,31	2,95	2,43	2,93	4,51	2,76	3,97	5,85	3,45	4,84	7,05	4,52	6,11	8,63
Sensible cooling capacity k	V 0,	97 1,2	2 1,48	1,2	1,63	2,20	1,25	1,65	2,13	1,69	2,06	3,43	1,86	2,69	4,05	2,43	3,45	5,15	3,32	4,57	6,60
Water flow rate system side 1/	h 20	0 25	327	284	358	476	314	396	626	424	510	793	482	695	1032	602	845	1238	786	1068	1513
Pressure drop system side kl	Pa 4	7	10	5	8	13	6	10	15	11	16	35	6	12	25	7	13	26	12	22	38
Fan																					
Type ty	oe e	Centri	ugal		Centrifu	gal	0	entrifug	al	(entrifug	al	G	entrifug	al	(entrifug	al	(entrifug	al
Fan motor ty	ре	Asynchi	onous		Synchron	nous	Asy	nchron	ous	Asy	ynchron	ous	Asy	nchron	ous	As	ynchron	ous	As	ynchron	ous
Number n		1			1_			1			1			_1_			1			1	
Air flow rate m	/h 30	00 41	600	300	410	600	260	360	530	380	500	880	460	680	1100	560	830	1350	750	1100	1750
Sound power level (2) dB	(A) 35	,0 38,	0 46,0	35,	38,0	46,0	35,0	39,0	46,0	41,0	47,0	61,0	39,0	43,0	50,0	40,0	45,0	54,0	46,0	50,0	60,0
Input power V	/ 2	1 31	45	21	31	45	22	32	47	32	45	101	45	80	150	50	80	155	55	105	175
Diametre hydraulic fittings																					
Type ty	ре	Gas	- F		Gas - I			Gas - F													
Main heat exchanger	1	3/4			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"	
Secondary heat exchanger	1	1/2	,,,		1/2"			1/2"			1/2"			1/2"			1/2"			1/2"	
Finned pack heat exchanger																					
Water content main heat exchanger		0,	}		0,8			0,8			1,1			2,6			2,6			2,6	
Water content secondary heat exchanger		0,	!		0,2			0,2			0,2			1,4			1,4			1,4	
Power supply																					
Power supply		230V~	50Hz		230V~50)Hz	23	30V~50	Hz	23	30V~50	Hz	23	80V~50	Hz	2:	30V~50	Hz	2:	30V~50	Hz

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

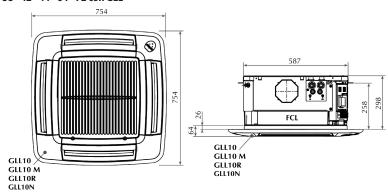
⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT (2) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS

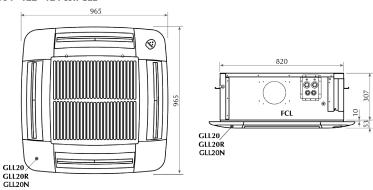
Dimensions FCL 32 - 34 - 36 - 38 - 42 - 44 - 64 - 72 con GLF



Dimensions FCL 32 - 34 - 36 - 38 - 42 - 44 - 64 - 72 con GLL



Dimensions FCL 82 - 84 - 102- 104 - 122 - 124 con GLL



Size			102	104	122	124	32	34	36	38	42	44	62	64	72	82	84
Dimensions and weights																	
	FCL	kg	36	36	36	36	20	21	20	21	21	21	22	22	22	35	36
Empty weight	V2	kg	36	36	36	36	20	21	20	21	20	21	21	22	22	35	36
	VL	kg	35	35	35	35	20	20	20	20	20	20	22	22	22	34	35

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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FCL_Y_UN50_14

















FCLI

Cassette Type Fan Coil Unit



- Electric saving equal to 50% with respect to a fan coil with 3-speed motor
- Total comfort: reduced variations in temperature and relative humidity
- Standard internal three-way valve
- Version with 2-way valve for variable water flow rate systems
- · Version without valves





DESCRIPTION

4-way cassettes that can be installed in any type of 2- or 4-pipe system with any heat generator, even at low temperatures. Thanks to the selection of versions and configurations, it's easy to choose the best solution for every need.

FEATURES

Intake grid and distribution of the air

The recovery and air diffusion grille has an elegant design. In plastic, RAL 9010. The dimensions of the first 5 sizes comply with the 600x600 mm modularity of false ceilings, whereas the larger sizes measuring 840x840 mm are designed for quiet operation and optimum performance of these large models.

Load-bearing structure

Models with a 600x600 mm module have a reinforced load-bearing structure with side panels in galvanised steel sheet, thermally insulated with internal polystyrene foam elements.

The structure of models with a 840x840 mm module is made entirely of galvanised steel sheet, thermally insulated with polyethylene foam on the inside and with an anti-condensate felt coating.

Ventilation group

Formed of a particularly quiet axial-centrifugal fan, statically and dynamically balanced.

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Heat exchanger coil

Heat exchanger with shaped profile to increase the exchange surface, and easily accessible drain valves.

There are models with a single coil for 2-pipe systems, with the possibility to add an electric heater too, and models with two coils for 4-pipe systems. There is the possibility to combine outside air with the inlet ambient air, and to distribute it in separate rooms.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Condensate drip

Condensation drip tray in one piece, with V0 self-extinguishing level and overmoulding to insulation in expanded polystyrene with flame retardant additive.

Air filter

Air filter easily removed and cleaned, self-supporting structure, characterised by a high efficiency and low pressure drops, with class-V0 fire resistance (UL 94).

Versions

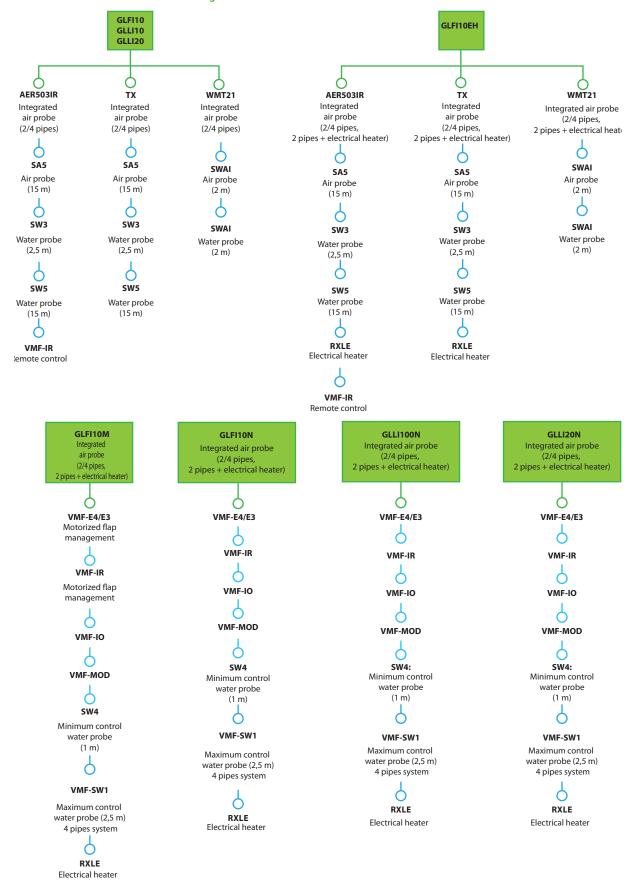
FCLI Standard

V2 With internal 2-way valve

VL Without internal valve

ACCESSORIES

Accessories that can be combined with the grilles



RXLE it can be installed only at the factory.

Intake grids and distribution of the air, compulsory accessory

GLF110: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without over-

lapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated louvers. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLF110EH: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLF110M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 panel or the VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control. (size 840x840 not available).

GLF110N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available)

GLL1100: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLL1100EH: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits with manually orientated fins. Must be combined with a wall-mounted panel. (size 840x840 mm not available).

GLL1100N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X panel as well, and suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLL120: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. Must be combined with a wall-mounted panel.

GLL120N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



VMF system

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (MFTAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1.C.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-MOD: Expansion board for the management of modulating valves.

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Control panels and their accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

SW3: Water probe (L=2.5~m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.

SW4: Water temperature probe allowing automatic season change on electronic controllers supplied with water-side change over.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

SWAI: External air or water temperature probe.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiza)

WMT21: Electronic thermostat for inverter fancoils.

Flactric heaters

RXLE: Electric heater for heating, can be installed on board the units. **RXLE20:** Electric heater for heating, can be installed on board the units.

Water valve kit

VCFLX4: 3-way valve kit for single-coil fan coil for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings.

VHL1: 3-way motorised valve kit with 4 connections including the actuator. $230V\sim50Hz$ power supply.

VHL124: 3-way motorised valve kit with 4 connections including the actuator. 24V power supply.

VHL20: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 230V~50Hz power supply.

VHL2024: Motorised 3-way valve kit with 4 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.

VHL2: 2-way motorised valve kit with 2 connections including the actuator. Power supply 230V~50Hz;

VHL22: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. Power supply 230V~50Hz;

VHL2224: Motorised 2-way valve kit with 2 connections, complete with actuator and the relative hydraulic couplings. 24V power supply.

VHL224: 2-way motorised valve kit with 2 connections including the actuator. 24V power supply.

Installation accessories

KFL: Delivery flange, allowing the air to be directed to an adjacent room.

KFL20: Delivery flange, allowing the air to be directed to an adjacent room. Up to three KFL20 can be assembled on a single unit.

KFLD: Suction flange, allows to introduce external air directly into the room without mixing.

KFLD20: Suction flange, allows to introduce external air directly into the room without mixing. Up to two KFL20D can be assembled on a single unit. FCLMC10: Perimeter housing in painted galvanised sheet metal, 600x600 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.

FCLMC20: Perimeter housing in painted sheet metal, 840x840 mm, used when the fan coil is installed outside the false ceiling. It has an aesthetic and protective purpose only, so the technical characteristics of the fan coil remain unaltered. Can only be combined with GLL/GLLI grilles.

FCLMC20IK: Installation kit for the inverter controller. Mandatory for units with FCLMC20.

ACCESSORIES COMPATIBILITY

Intake grids and distribution of the air

Model	Ver	32	34	42	44	62	64	82	122	124
GLFI10 (1)	FCLI,V2,VL	•	•	•	•	•	•			
GLFI10EH (2)	FCLI,V2,VL	•	•	•		•	•			
GLFI10M (3)	FCLI,V2,VL	•	•	•	•		•	,		
GLFI10N (3)	FCLI,V2,VL	•	•	•	•	•	•			

- (1) Not compatible with the VMF system and electric heaters
- (2) Not compatible with the VMF system, but compatible with electric heaters.
- (3) Compatible with the VMF system and electric heaters.

Intake grid and distribution of the air

Model	Ver	32	34	42	44	62	64	82	122	124
GLLI100 (1)	FCLI,V2,VL	•	•	•	•	•	•			
GLLI100EH (2)	FCLI,V2,VL	•	•	•	•	•	•			
GLLI100N (3)	FCLI,V2,VL	•	•							
GLLI20 (1)	FCLI,V2,VL							•	•	•
GLLI20N (4)	FCLI,V2,VL									•

- (1) Not compatible with the VMF system and electric heaters.
- (2) Not compatible with the VMF system, but compatible with electric heaters.

 (3) Compatible with the VMF system and electric heaters.
- (4) Compatibility with VMF system.

VMF system

Model	Ver	32	34	42	44	62	64	82	122	124
DI24	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-E3	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-E4DX	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-E4X	FCLI,V2,VL	•	•	•	•	•	•			•
VMF-IO	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-IR	FCLI,V2,VL	•					•			•
VMF-MOD	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-SW	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
VMF-SW1	FCLI,V2,VL	•						•		•
VMHI	FCLI,V2,VL	•	•	•	•	•	•	•	•	•

Control panels and dedicated accessories

Model	Ver	32	34	42	44	62	64	82	122	124
AER503IR (1)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SA5 (2)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SW3 (2)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SW4	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SW5 (2)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
SWAI (3)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
TX (4)	FCLI,V2,VL	•	•	•	•	•	•	•	•	•
WMT21	FCLI,V2,VL	•	•	•	•	•	•	•	•	•

- (1) Wall-mount installation
- (2) Probe for AER503IR-TX thermostats, if fitted.
- (3) Probe for thermostat WMT21.
 (4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

3 wav valve kit

Model	Ver	32	34	42	44	62	64	82	122	124
VHL1 (1)	VL		•		•		•			
VHL124 (1)	VL		•		•		•			
VHL20 (1)	VL									•
VHL2024 (1)	VL									•

(1) Obligatory accessory in 4-pipe systems.

2 way valve kit

Model	Ver	32	34	42	44	62	64	82	122	124
VHL2 (1)	VL		•		•		•			
VHL22 (1)	VL									•
VHL2224 (1)	VL									•
VHL224 (1)	VL									

 $(1) \ \ Compulsory\ accessory\ in\ 4-pipe\ systems\ with\ variable\ flow\ rate.$

Valve Kit for 4 pipe systems

Model	Ver	32	34	42	44	62	64	82	122	124
VCFLX4 (1)	VL			•		•				

 $(1) \ \ The \ valve \ must \ be \ commanded \ via \ command \ panels \ enabled \ for \ valve \ control.$

Delivery and suction flange

Model	Ver	32	34	42	44	62	64	82	122	124
KFL	FCLI,V2,VL	•	•	•	•	•	•			
KFL20	FCLI,V2,VL							•	•	•
KFLD	FCLI,V2,VL	•			•		•			
KFLD20	FCLLV2.VL								•	•

Perimeter case

Perimeter case										
Model	Ver	32	34	42	44	62	64	82	122	124
FCLMC10 (1)	FCLI,V2,VL	•	•	•	•	•	•			
FCLMC20 (1)	FCLI,V2,VL							•	•	•
FCLMC20IK (2)	FCLI,V2,VL									•

⁽¹⁾ Can only be combined with GLL/GLLI grilles (2) Mandatory for units with FCLMC20.

PERFORMANCE SPECIFICATIONS

2-pipe

			FCLI32			FCLI42			FCLI62			FCLI82			FCLI122	
		1	2	3	1	2	4	1	2	4	1	2	4	1	2	4
		L	М	Н	L	М	Н	L	М	Н	L	M	Н	L	М	H
Heating performance 70 °C / 60 °C (1)																
Heating capacity kV	2	2,22	2,95	4,00	3,32	4,47	7,34	5,19	6,37	10,49	5,88	8,12	11,88	10,53	14,73	21,75
Water flow rate system side I/h	1	194	258	350	290	391	642	454	558	918	514	710	1039	921	1289	1903
Pressure drop system side kP	1	4	6	10	6	10	24	12	17	42	7	13	26	11	21	42
Heating performance 45 °C / 40 °C (2)																
Heating capacity kV	1	,10	1,47	1,98	1,67	2,21	3,64	2,58	3,21	5,21	2,94	4,05	5,90	5,28	7,37	10,80
Water flow rate system side I/h	1	192	254	345	287	386	633	448	550	905	507	701	1025	909	1271	1877
Pressure drop system side kP	1	4	6	11	5	9	21	10	17	41	7	13	23	12	21	41
Cooling performance 7 °C / 12 °C																
Cooling capacity kW	1	,15	1,46	1,88	1,95	2,52	3,90	2,65	3,19	4,92	2,79	4,04	5,97	5,34	7,47	10,87
Sensible cooling capacity kV	0	,98	1,24	1,50	1,37	1,80	3,11	1,85	2,25	3,75	1,89	2,76	4,17	4,02	5,70	8,34
Water flow rate system side I/h	2	200	253	327	337	437	679	458	551	856	482	695	1032	921	1292	1893
Pressure drop system side kPa	1	4	4	13	7	11	25	12	16	36	7	12	28	10	19	38
Fan																
Type typ	e	C	entrifugal			Centrifugal			Centrifugal			Centrifugal			Centrifugal	
Fan motor typ	e		Inverter			Inverter			Inverter			Inverter			Inverter	
Number no			1			1			1			1			1	
Air flow rate m ³ /	h 3	300	410	600	260	360	700	380	500	880	460	680	1100	750	1100	1750
Input power W		10	13	18	12	16	55	14	20	61	10	14	33	16	33	135
Signal 0-10V %	4	42	62	90	34	46	90	40	52	90	38	54	90	38	54	90
Cassettes sound data (3)																
Sound power level (4) dB(A	3.	5,0	38,0	46,0	35,0	38,0	53,0	41,0	47,0	61,0	39,0	43,0	50,0	44,0	50,0	60,0
Sound pressure (5) dB(a) 2	6,0	29,0	37,0	26,0	30,0	44,0	32,0	38,0	52,0	30,0	34,0	41,0	35,0	41,0	51,0
Diametre hydraulic fittings																
Main heat exchanger Ø			3/4"			3/4"			3/4"			3/4"			3/4"	
Secondary heat exchanger Ø			-			-			-			-			-	
Power supply																
Power supply		23	30V~50Hz			230V~50Hz	<u>'</u>		230V~50Hz	!		230V~50Hz	Z		230V~50Hz	<u>:</u>

4-pipe

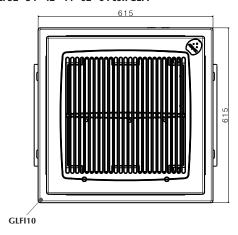
			FCLI34			FCLI44			FCLI64			FCLI124	
		1	2	3	1	2	3	1	2	4	1	2	4
		L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 65 °C / 55 °C (1)													
Heating capacity	kW	1,70	1,97	2,32	1,70	2,02	2,74	2,05	2,76	3,14	6,46	8,30	11,10
Water flow rate system side	l/h	152	171	203	153	178	240	194	219	279	551	727	977
Pressure drop system side	kPa	5	7	9	6	7	12	9	11	19	10	15	25
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	1,15	1,46	1,88	1,80	2,32	3,59	2,29	2,76	4,25	4,55	6,19	8,67
Sensible cooling capacity	kW	0,98	1,24	1,50	1,26	1,66	2,87	1,59	1,93	3,22	3,35	4,64	6,64
Water flow rate system side	l/h	200	253	327	314	396	626	424	510	793	786	1068	1513
Pressure drop system side	kPa	4	7	10	6	10	23	16	23	50	10	20	38
Fan													
Туре	type						Centr	ifugal					
Fan motor	type						Inve	erter					
Number	no.		1			1			1			1	
Air flow rate	m³/h	300	410	600	260	360	700	380	500	880	750	1100	1750
Input power	W	10	13	18	12	16	55	14	20	61	16	33	135
Signal 0-10V	%	42	62	90	34	46	90	40	52	90	38	58	90
Cassettes sound data (2)													
Sound power level (3)	dB(A)	35,0	38,0	46,0	35,0	39,0	53,0	41,0	47,0	61,0	44,0	52,0	60,0
Sound pressure (4)	dB(A)	26,0	29,0	37,0	26,0	30,0	44,0	32,0	38,0	52,0	35,0	41,0	51,0
Diametre hydraulic fittings													
Main heat exchanger	Ø						3/	/4"					
Secondary heat exchanger	Ø						1/	/2"					
Power supply													
Power supply							230V-	~50Hz					

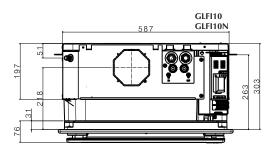
⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45°C/40°C; EUROVENT
(3) For the cassettes, Aermec determines the value of the sound power on the basis of measurements carried out in accordance with the standard UNI EN 16583:15, in observance of the EUROVENT certification and the level of sound pressure (weighed A) measured in an environment with volume V=100m3, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.
(5) Sound pressure (weighed A) measured in an environment with volume V=100m3, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.

⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT
(2) For the cassettes, Aermec determines the value of the sound power on the basis of measurements carried out in accordance with the standard UNI EN 16583:15, in observance of the EUROVENT certification and the level of sound pressure (weighed A) measured in an environment with volume V=100m3, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.
(4) Sound pressure (weighed A) measured in an environment with volume V=100m3, reverberation time t=0.5s direction factor Q=2; distance r=2.5m.

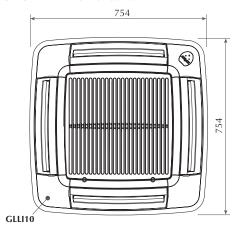
DIMENSIONS

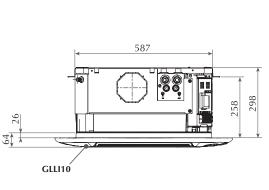
Dimensions FCLI 32 - 34 - 42 - 44 - 62 - 64 con GLFI



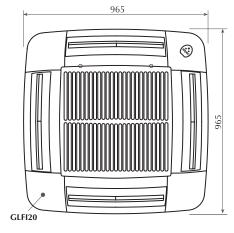


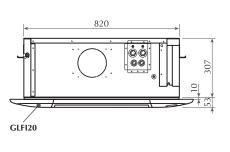
Dimensions FCLI 32 - 34 - 42 - 44 - 62 - 64 con GLLI





Dimensions FCLI 82 - 122 - 124 con GLLI





Size			122	124	32	34	42	44	62	64	82
Dimensions and weights											
	FCLI	kg	36	36	21	21	22	21	22	23	35
Empty weight	V2	kg	36	36	21	21	21	21	22	23	35
	VL	kg	35	35	20	21	20	21	22	22	34

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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FCW

Fan coils wall-mount installation



- · Versions with internal 2 or 3-way valve
- Compact dimensions





DESCRIPTION

Fan coil model for wall-mount installations, whose elegance and reduced dimensions make it aesthetically pleasing; this terminal is thus suitable for applications in residential or light commercial sectors.

To respond to the various system requirements, the product is configurable and available with or without (2- or 3-way) valve, as well as with or without control board, which ensures compatibility with various system requirements. Fan coils without control board must be necessarily combined with an external control device.

VERSIONS

2V Internal 2-way valve and microprocessor control
2VN Internal 2-way valve without microprocessor control
3V Internal 3-way valve and microprocessor control
3VN Internal 3-way valve without microprocessor control
VL Without internal valve but with microprocessor control
VLN Without internal valve and microprocessor control

FEATURES

Case

Aesthetically styled with flat panel:

- Microprocessor control
- Air flow louvered louvers with horizontal adjustment facility

— Colors pure white pantone GRIS 1C RAL 9010.

Ventilation group

Consisting of a tangential fan, especially quiet and directly coupled to the motor shaft.

Three-speed cross flow fan.

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Air filter

Fan coils are fitted with air filters easy to remove and clean.

Contro

The versions with microprocessor control have:

- Timer for programming switch-off or switch-on (TLW4 e PFW5)
- Program for operation in automatic, cooling, heating, ventilation and air ionising mode (TLW4 e PFW5)
- Night time Well-being Program (TLW4)
- Automatic season change (TLW4 e PFW5)
- Automatic re-start after power cut.

ACCESSORIES

FCWCP: Cold plasma mounting kit For models with control board installed

FCW_2V, 3V, VL it is mandatory to select among the user interfaces designed for the FCW series (TLW4 o PFW5)

PFW5: This accessory is essential for fan coil operation (as an alternative to TLW4). The PFW5 wired panel is supplied separately from the fan coil. It is used to set the main device operating parameters, and is essential for setting the Modbus address of the unit (handy only if you want to command the unit via the RS-485 port).

TLW4: Mandatory accessory. Infrared remote control with liquid crystal display for controlling all unit functions. The remote control is delivered separately from the fan coil; with a single remote control it is possible to control more than one fan coil. The remote control is equipped with a support that allows you to hang it on the wall, from which it can be operated without having to be removed.





For models without control board installed

FCW_2VN, 3VN, VLN a user interface must be mounted outside the fan coil, using either a visible or a recessed wall-mount installation.

To make the selection please refer to the "control panels" or "VMF system shett" where you will find comprehensive information on this topic.

VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
PFW5 (1)	•	•	•	•	•	•
TLW4 (1)	•	•	•	•	•	•
Accessory	FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
	TCTTJJZT	I CAADDDA	FCW432V	FCW433V	FCW332V	LCAADODA
PFW5 (1)	•	•	• •	• •	• •	•

(1) Mandatory accessory.

Cold plasma mounting kit

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW232VN	FCW233V	FCW233VN	FCW332V	FCW332VN
FCWCP	•	•	•	•	•	•	•	•	•	•
Accessory	FCW333V	FCW333VN	FCW432V	FCW432VN	FCW433V	FCW433VN	FCW532V	FCW532VN	FCW533V	FCW533VN

VMF system

,						
Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
VMF-485LINK	•	•	•	•	•	•
Accessory	FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
VMF-485LINK	•	•	•	•	•	•

The VMF-485LINK accessory is not compatible with radiant floor heating systems.

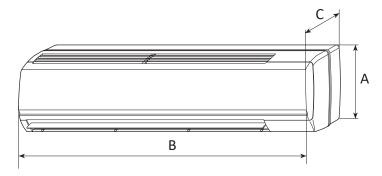
PERFORMANCE SPECIFICATIONS

2-pipe

2 ріре			FCW23V			FCW33V			FCW43V			FCW53V			FCW232	v		FCW233	v
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	2,85	3,66	4,29	3,73	4,51	5,24	6,44	7,84	8,56	8,20	13,06	15,28	2,35	3,02	4,03	2,35	3,02	4,03
Water flow rate system side	I/h	250	321	377	328	396	460	565	688	751	718	1145	1339	206	265	354	206	265	354
Pressure drop system side	kPa	4	6	9	9	12	16	16	22	26	10	23	30	9	14	24	9	14	24
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,42	1,82	2,14	1,85	2,24	2,61	3,21	3,90	4,26	4,10	6,50	7,60	1,17	1,50	2,00	1,17	1,50	2,00
Water flow rate system side	I/h	246	316	371	322	390	453	556	677	739	712	1129	1320	203	261	348	203	261	348
Pressure drop system side	kPa	4	6	8	9	12	16	15	22	25	10	22	29	9	14	24	9	14	24
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	1,37	1,74	2,05	1,78	2,15	2,50	3,07	3,74	4,08	4,40	6,50	7,45	1,10	1,45	1,90	1,10	1,45	1,90
Sensible cooling capacity	kW	1,16	1,47	1,73	1,51	1,82	2,04	2,59	3,10	3,47	3,30	5,05	5,80	0,92	1,20	1,55	0,92	1,20	1,55
Water flow rate system side	l/h	236	299	353	306	370	430	528	643	702	755	1115	1278	189	249	327	189	249	327
Pressure drop system side	kPa	5	7	9	8	11	15	15	21	26	12	24	30	9	14	23	9	14	23
Fan																			
Туре	type		Tangentia	ıl		Tangentia			Tangentia	ıl		Tangentia			Tangentia	ı	1	angentia	ıl
Fan motor	type		synchrono			synchrono			synchrono			synchrono			synchrono			ynchrono	
Number	no.		1			1			1			1			1		<u> </u>	1	
Air flow rate	m³/h	280	340	389	330	400	446	476	602	684	592	945	1179	270	330	380	270	330	380
Input power	W	23	24	27	22	23	27	31	41	48	38	55	75	23	24	27	23	24	27
Fan coil sound data (3)																-			
Sound power level	dB(A)	42,0	48,0	53,0	42,0	48,0	53,0	44,0	49,0	54,0	44,0	54,0	60,0	42,0	48,0	53,0	42,0	48,0	53,0
Sound pressure	dB(A)	34,0	39,5	44,5	34,0	39,5	44,5	35,5	40,5	45,5	35,5	45,5	51,5	34,0	39,5	44,5	34,0	39,5	44,5
Diametre hydraulic fittings	(-7	/-	,-	,-	,-	,-		/-	,-	,-	/-	,-		,-	,-	,-	,-	/-	
Main heat exchanger	Ø		1/2"			1/2"			1/2"			3/4"			1/2"			1/2"	
Power supply																			
Power supply		2	30V~50H	łz	2	.30V~50H		2	30V~50H		2	30V~50H	7	2	30V~50H	łz	2	30V~50H	
· one: supply		_			-			_									·		
		_	FCW332		_	FCW333		_	FCW432		_	FCW433\		_	FCW532			CW533	
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
11 (70.05 (50.05 (5)		L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)	LAM	2.25	4.26	r 02	2.25	4.26	r 02	(20	7 22	7.07	(20	7 22	7.07	0.04	11 00	14.00	0.04	11.00	14.00
Heating capacity	kW	3,25	4,36	5,03	3,25	4,36	5,03	6,29	7,23	7,97	6,29	7,23	7,97	8,04	11,80	14,00	8,04	11,80	14,00
Water flow rate system side	I/h	286	383	442	286	383	442	552	635	699	552	635	699	704	1034	1227	704	1034	1227
Pressure drop system side	kPa	13	22	29	13	22	29	21	27	32	21	27	32	10	21	28	10	21	28
Heating performance 45 °C / 40 °C (2)	1111		2.47	2.50	1	2.47	2.50	2.42	2.40			2.40						= 00	
Heating capacity	kW	1,62	2,17	2,50	1,62	2,17	2,50	3,13	3,60	3,96	3,13	3,60	3,96	4,00	5,90	7,00	4,00	5,90	7,00
Water flow rate system side	I/h	281	377	434	281	377	434	543	624	688	543	624	688	695	1025	1216	695	1025	1216
Pressure drop system side	kPa	13	22	29	13	22	29	20	26	31	20	26	31	11	22	30	11	22	30
Cooling performance 7 °C / 12 °C																			
Cooling capacity	kW	1,55	2,08	2,40	1,55	2,08	2,40	3,00	3,45	3,80	3,00	3,45	3,80	4,00	6,00	7,00	4,00	6,00	7,00
Sensible cooling capacity	kW	1,28	1,68	1,97	1,28	1,68	1,97	2,01	2,50	2,85	2,01	2,50	2,85	2,85	4,50	5,30	2,85	4,50	5,30
Water flow rate system side	I/h	267	358	413	267	358	413	516	593	654	516	593	654	686	1030	1201	686	1030	1201
Pressure drop system side	kPa	13	22	29	13	22	29	21	27	32	21	27	32	11	23	30	11	23	30
Fan																			
Туре	type		Tangentia			Tangentia		-	Tangentia			Tangentia			Tangentia			angentia	
Fan motor	type	As	synchrono	ous	A:	synchrono	us	As	synchrono	ous	As	synchrono	us	As	synchrono	ous	As	ynchrono	us
Number	no.		1			1			1			1			1	-		1	
Air flow rate	m³/h	320	390	440	320	390	440	370	470	540	370	470	540	535	859	1082	535	859	1082
Input power	W	22	23	27	22	23	27	31	41	48	31	41	48	38	55	75	38	55	75
Fan coil sound data (3)																			
Sound power level	dB(A)	42,0	48,0	53,0	42,0	48,0	53,0	44,0	49,0	54,0	44,0	49,0	54,0	44,0	54,0	60,0	44,0	54,0	60,0
Sound pressure	dB(A)	34,0	39,5	44,5	34,0	39,5	44,5	35,5	40,5	45,5	35,5	40,5	45,5	35,5	45,5	51,5	35,5	45,5	51,5
Diametre hydraulic fittings																			
Main heat exchanger	Ø		1/2"			1/2"			1/2"			1/2"			3/4"			3/4"	
Power supply																			
Power supply		2	30V~50H	łz	2	30V~50H	lz	2	30V~50H	łz	2	30V~50H	Z	2	30V~50H	lz	2	30V~50H	lz

⁽¹⁾ Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
(3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
Dimensions and weights							
A	mm	298	305	360	365	298	298
В	mm	880	990	1170	1450	880	880
C	mm	205	210	220	230	205	205
Empty weight	kg	9	10	19	28	9	9
		FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V

		FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
Dimensions and weights							
A	mm	305	305	360	360	365	365
В	mm	990	990	1170	1170	1450	1450
C	mm	210	210	220	220	230	230
Empty weight	kg	10	10	19	19	28	28

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Fan coils wall-mount installation



- · Versions with internal 2 or 3-way valve
- Electric saving equal to 50% with respect to a fan coil with 3-speed motor
- Total comfort: reduced temperature and humidity oscillations
- Fully silent operation





DESCRIPTION

Fan coil model for wall-mount installations, whose elegance and reduced dimensions make it aesthetically pleasing; this terminal is thus suitable for applications in residential or light commercial sectors.

The product is configurable and available with or without (2- or 3-way) valve which ensures compatibility with various system requirements.

VERSIONS

2V Internal 2-way valve and microprocessor control

3V Internal 3-way valve and microprocessor control

 $\begin{picture}(20,20) \put(0,0){\line(1,0){10}} \put(0,$

FEATURES

Case

Aesthetically styled with flat panel:

- Air flow louvered louvers with horizontal adjustment facility
- Motorised deflector louvers that can be activated by remote control TLW3 for vertical orientation of the outlet air with steps fixed positions and continuous oscillation
- Colors pure white pantone GRIS 1C RAL 9010.

Ventilation group

Consisting of a tangential fan, especially quiet and directly coupled to the motor shaft.

Brushless motor with continuous speed variation 0-100%.

Inverter motor allows precise adaptation to the real indoor environment requirements without temperature oscillations.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Air filter

Fan coils are fitted with air filters easy to remove and clean.

Control

The versions with microprocessor control have:

- Timer for programming switch-off or switch-on (TLW4/ PFW4)
- Program for operation in automatic, cooling, heating, ventilation and air ionising mode (TLW4/ PFW4)
- Night time Well-being Program (TLW4/ PFW4)
- Automatic season change (TLW4/ PFW4)
- Automatic re-start after power cut.
- Possibility of using a contact on the board to switch off the unit (window contact) or change the set point (presence contact) via microswitch.
- Controllable via RS485 port with Modbus RTU communication protocol.

ACCESSORIES

FCWCP: Cold plasma mounting kit For models with control board installed

FCWI_2V, 3V, VL it is mandatory to select among the user interfaces designed for the FCWI series (TLW4 o PFW4)

PFW4: This accessory is essential for fan coil operation (as an alternative to TLW4). The PFW4 wired panel is supplied separately from the fan coil. It is used to set the main device operating parameters, and is essential for setting the Modbus address of the unit (handy only if you want to command the unit via the RS-485 port).

TLW4: Mandatory accessory. Infrared remote control with liquid crystal display for controlling all unit functions. The remote control is delivered separately from the fan coil; with a single remote control it is possible to control more than one fan coil. The remote control is equipped with a support that allows you to hang it on the wall, from which it can be operated without having to be removed.





VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

common panion						
Accessory	FCWI23VL	FCWI33VL	FCWI43VL	FCWI53VL	FCWI232V	FCWI233V
PFW4 (1)	•	•	•	•	•	•
TLW4 (1)	•	•	•	•	•	•
Accessory	FCWI332V	FCWI333V	FCWI432V	FCWI433V	FCWI532V	FCWI533V
PFW4 (1)	•	•	•	•	•	•
TLW4 (1)	•	•	•	•	•	•
1211 (1)						

(1) Mandatory accessory.

Plasmacluster mounting kit

Accessory	FCWI23VL	FCWI33VL	FCWI43VL	FCWI53VL	FCWI232V	FCWI233V	FCWI332V	FCWI333V	FCWI432V	FCWI433V	FCWI532V	FCWI533V
FCWCP		•	•	•	•		•	•	•	•		- .

VMF system

Accessory	FCWI23VL	FCWI33VL	FCWI43VL	FCWI53VL	FCWI232V	FCWI233V
VMF-485LINK	•	•	•	•	•	•
Accessory	FCWI332V	FCWI333V	FCWI432V	FCWI433V	FCWI532V	FCWI533V
VMF-485LINK	•	•	•	•	•	•

The VMF-485LINK accessory is not compatible with radiant floor heating systems.

PERFORMANCE SPECIFICATIONS

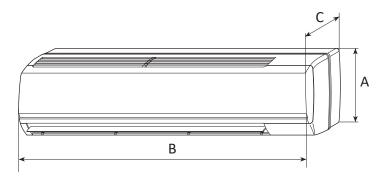
2-pipe

- 1-11-2		FCWI23V	L	ı	CWI33V	Ĺ	ı	CWI43V	L	ı	CWI53V	ī		CW1232	V	F	CWI233	
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																		
Heating capacity kW	3,12	4,52	4,75	3,46	5,33	5,74	6,36	9,24	9,86	8,31	13,80	15,24	2,57	3,73	4,46	2,57	3,73	4,46
Water flow rate system side I/h	274	397	417	304	468	504	558	811	865	728	1147	1335	226	327	392	226	327	392
Pressure drop system side kPa	8	16	17	9	19	22	16	30	34	10	23	30	11	21	29	11	21	29
Heating performance 45 °C / 40 °C (2)																		
Heating capacity kW	1,55	2,25	2,37	1,71	2,65	2,86	3,17	4,60	4,91	4,16	6,51	7,58	1,28	1,85	2,21	1,28	1,85	2,21
Water flow rate system side I/h	269	390	411	298	461	496	549	798	851	722	1131	1316	222	323	385	222	323	385
Pressure drop system side kPa	8	16	17	9	19	21	15	30	32	10	22	29	11	21	29	11	21	29
Cooling performance 7 °C / 12 °C																		
Cooling capacity kW	1,50	2,15	2,27	1,65	2,54	2,74	3,03	4,41	4,70	4,46	6,51	7,43	1,20	1,79	2,10	1,20	1,79	2,10
Sensible cooling capacity kW	1,27	1,82	1,92	1,40	2,15	2,24	2,38	3,43	3,61	3,34	5,06	5,78	1,02	1,51	1,78	1,02	1,51	1,78
Water flow rate system side I/h	258	369	391	284	437	471	521	758	809	765	1117	1275	207	308	362	207	308	362
Pressure drop system side kPa	8	15	16	8	18	20	17	27	30	12	22	28	10	19	26	10	19	26
Fan																		
Type type									Tang	ential								
Fan motor type									Inve	rter								
Number no.		1			1			1			1			1			1	
Air flow rate m ³ /h	250	400	440	290	450	490	450	690	760	590	960	1210	200	300	400	200	300	400
Input power W	9	17	19	9	17	20	13	27	34	17	35	58	9	17	19	9	17	19
Fan coil sound data (3)																		
Sound power level dB(A)	37,0	50,0	52,0	38,0	50,0	52,0	41,0	53,0	55,0	44,0	54,0	60,0	37,0	50,0	52,0	37,0	50,0	52,0
Sound pressure dB(A)	29,0	42,0	44,0	30,0	42,0	44,0	33,0	45,0	47,0	36,0	46,0	52,0	29,0	42,0	44,0	29,0	42,0	44,0
Diametre hydraulic fittings																		
Main heat exchanger Ø		1/2"			1/2"			1/2"			3/4"			1/2"			1/2"	
Power supply																		
Power supply									230V-	~50Hz								

		FCWI33	2V		FCWI333	V		CWI432	V	F	CWI433	V		FCWI532	V	F	CWI533	V
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н	L	М	Н
Heating performance 70 °C / 60 °C (1)																		
Heating capacity kV	3,0	1 5,15	5,51	3,01	5,15	5,51	6,21	8,53	9,18	6,21	8,53	9,18	8,15	11,82	13,96	8,15	11,82	13,96
Water flow rate system side I/I	26	5 452	484	265	452	484	545	749	805	545	749	508	714	1036	1224	714	1036	1224
Pressure drop system side kP	a 1	30	34	11	30	34	21	36	41	21	36	41	10	21	28	10	21	28
Heating performance 45 °C / 40 °C (2)																		
Heating capacity kV	1,5	0 2,56	2,74	1,50	2,56	2,74	3,09	4,24	4,56	3,09	4,24	4,56	4,05	5,91	6,98	4,05	5,91	6,98
Water flow rate system side 1/1	26	0 445	476	260	445	477	536	736	793	536	736	793	704	1027	1213	704	1027	1213
Pressure drop system side kP	1	30	34	11	30	34	20	35	40	20	35	40	11	22	30	11	22	30
Cooling performance 7 °C / 12 °C																		
Cooling capacity kV	1,4	4 2,46	2,63	1,44	2,46	2,63	2,96	4,07	4,38	2,96	4,07	4,38	4,05	6,01	6,98	4,05	6,01	6,98
Sensible cooling capacity kV	1,2	2 2,08	2,15	1,22	2,08	2,15	2,32	3,16	3,36	2,32	3,16	3,36	3,04	4,67	5,44	3,04	4,67	5,44
Water flow rate system side I/h	24	8 423	453	248	426	453	509	699	753	509	699	753	695	1032	1198	695	1032	1198
Pressure drop system side kP	1	28	32	11	28	32	18	32	37	18	32	37	11	23	30	11	23	30
Fan																		
Type typ	e								Tang	ential								
Fan motor typ	e								Inve	rter								
Number no		1			1			1			1			1			1	
Air flow rate m ³ /	h 25	0 430	460	250	430	460	430	620	690	430	620	690	530	870	1110	530	870	1110
Input power W	9	17	20	9	17	20	13	27	34	13	27	34	17	35	58	17	35	58
Fan coil sound data (3)																		
Sound power level dB(A) 38,	0 50,0	52,0	38,0	50,0	52,0	41,0	53,0	55,0	41,0	53,0	55,0	44,0	54,0	60,0	44,0	54,0	60,0
Sound pressure dB(A) 30,	0 42,0	44,0	30,0	42,0	44,0	33,0	45,0	47,0	33,0	45,0	47,0	36,0	46,0	52,0	36,0	46,0	52,0
Diametre hydraulic fittings																		
Main heat exchanger Ø		1/2"			1/2"			1/2"			1/2"			3/4"			3/4"	
Power supply																		
Power supply									230V-	~50Hz								

- (1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
 (2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT
 (3) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



		FCWI23VL	FCWI33VL	FCWI43VL	FCWI53VL	FCWI232V	FCWI233V
Dimensions and weights	'						
A	mm	298	305	360	365	298	298
В	mm	880	990	1170	1450	880	880
C	mm	205	210	220	230	205	205
Empty weight	kg	9	10	19	28	9	9
		FCWI332V	FCWI333V	FCWI432V	FCWI433V	FCWI532V	FCWI533V

		FCWI332V	FCWI333V	FCWI432V	FCWI433V	FCWI532V	FCWI533V
Dimensions and weights							
A	mm	305	305	360	360	365	365
В	mm	990	990	1170	1170	1450	1450
C	mm	210	210	220	220	230	230
Empty weight	kg	10	10	19	19	28	28

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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EHT

Active chilled beams

Primary air flow rate for single unit 17,0 ÷ 947,0 m³/h Nominal width 600 mm



- Easy installation, thanks to the integrated valves.
- Extremely high induction ratios.
- High primary air flow rate at required low useful static pressure.
- Double water-side heat exchanger with low pressure drops.
- 4-pipe unit that can be installed in both 2-pipe and 4-pipe systems.



DESCRIPTION

The EHT series is the new generation of active chilled beams developed by Aermec in partnership with Aachen**University** (Germany). These terminals are particularly easy to install because their dimensions are compatible with modular 600 x 600 mm suspended ceilings and they are already fitted with hydronic control components (each terminal has two 2-way valves, one for the hot circuit and one for the cold circuit, and actuators).

The ease of installation is also linked to other factors, such as:

- possibility of front or side hydraulic connection,
- primary air connection on both sides,
- possibility of adjacent installations,
- reduced terminal height.

The innovative nozzle geometry was developed and optimised with the help of CFD analyses and verified with accurate aeraulic tests in the Aermec and Aachen University laboratories.

The result of the research was a terminal with a high specific Watt per metre power, which reduces the number of terminals and thus lower costs and space requirements.

Aeraulic optimisation results in low pressure drops leading to reduced ventilation consumption and noise.

The use of two inclined heat exchangers maximises the exchange area and halves the hydraulic pressure drops, thereby providing maximum system efficiency.

Simple access to all components makes maintenance and cleaning quick and easy.

A system of this type is able to limit operating costs thanks to its high energy efficiency, which also safeguards the environment. This is one of Aermec's foremost goals, as it skilfully develops its products combining maximum practicality with the minimum environmental impact.

Chilled Beams are terminals that work in cooling mode with medium temperature water, so that the chillers feeding them can work at maximum efficiency. Room humidity is controlled by Primary Air Handling Units, this way mould and bacterial growth is prevented from forming because there is no condensation in the rooms.

APPLICATION

Chilled beams are suitable for ventilation, cooling and heating of rooms up to 4 m high. They can be installed in open space offices, airports, train stations and hospital wards and always ensure that the air is exchanged properly and evenly distributed by optimising the temperature throughout.







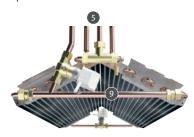
ADVANTAGES OF THE EHT ACTIVE CHILLED BEAMS RANGE

- Quiet operation, thanks to the innovative design of the nozzles and the lack of moving parts;
- Energy savings;
- Optimum environmental comfort because of the perfect air distribution;
- Excellent hygiene standards: the primary air is dehumidified during the initial treatment phase, so there is no condensate at all on the chilled beam, eliminating the root cause of mould proliferation caused by stagnating condensate;
- Optimum access to components: the components are accessed from below, just by opening the suction grille;
- Continuous service, thanks to the head positioning of two adjacent units;
- No maintenance: filtering is handled by the air treatment unit.

MAIN COMPONENTS



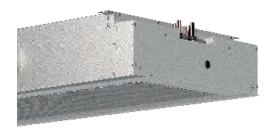
- 1. Plenum
- 2. Primary air inlet
- 3. Suspension brackets
- 4. Nozzles
- 5. Hydraulic connections
- 6. Coils
- 7. Deflectors
- 8. Grille
- 9. Control component

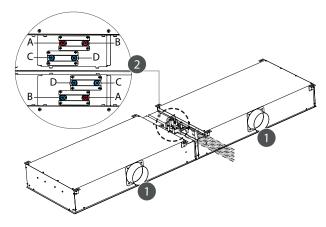


Hydraulic connections and control components on the hydronic side (two 2-way valves and actuators inside the terminal).

HYDRAULIC CONNECTIONS

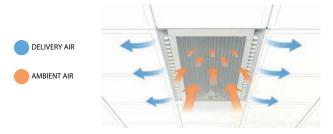
Hydraulic connections can be done on the side or front.





- A. Outlet
- B. Inlet
- C. Outlet
- D. Inlet
- 1. Primary air inlet
- 2. Hydraulic connections

AIR FLOW RATE



When the ambient air enters the exchange coils, it heats up or cools down depending on the operating season.

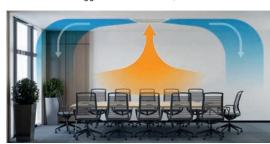
OPERATION

EHT chilled beams have been developed with the aim of obtaining high performance while still ensuring the highest degree of comfort in the occupied area.

This is achieved through the coanda effect and the inductive effect.

Coanda effect:

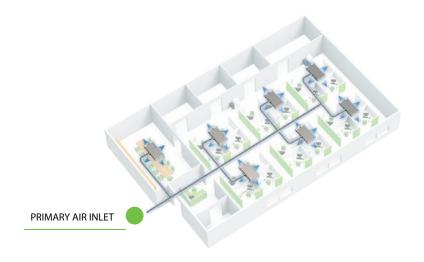
It keeps the air flow on the ceiling until it reaches residual speeds and temperatures that do not trigger critical situations, such as cold air currents.



Coanda effect.

Inductive effect:

Primary fresh air is filtered and treated by a dedicated plant and sent by the fans therein to the chilled beam plenums. The suitable overpressure that is maintained in the plenums pushes the primary air through the nozzles which, due to the particular geometry of their profile, inject it into the environment. The high speed of the air coming out of the nozzles forms low-pressure areas around them, which draw in ambient air and force it through the heat exchange coils.



CONFIGURATOR

By suitably combining the numerous options available, it is possible to configure each model in such a way as to meet the most specific system requirements.

require	ileitts.
Field	Description
1,2,3	EHT
4	Nominal width
6	600 mm
5,6	Nominal length
09	900 mm
12	1200 mm
15	1500 mm
18	1800 mm
21	2100 mm
24	2400 mm
27	2700 mm
30	3000 mm
7	Delivery range
0	XS air flow rate
1	S air flow rate
2	M air flow rate
3	L air flow rate
4	XL air flow rate

ACCESSORIES

MCR: Electronic control board to control the active chilled beams of the EHT family.

MCR-HP: The MCR-HP accessory is a humidity probe that can ensure the correct operation of chilled beams.

MZCSA: Air probe for controlling modulating or pressure independent

Accessories available for all versions.

GENERAL TECHNICAL DATA

C:		A			Cooling pe			-			ng perforn		
Size	Q _p M³/h	Δp _a Pa	<u>Δθ,</u> Κ	Q _{wN.c} L/h	Δp _{w.c} KPa	<u>Δθ_{w.c}</u>	<u>Р</u> W	P _{w.c}	<u>Δθ,</u> Κ	Q _{wN.h} L/h	Δp _{w.h} KPa	Δθ _{w.h}	P=P _{w.h}
EHT 6090	17	50	9	141	1,2	K	383	325	30	69	0,9	4,1	328
EHT 6090	24	100	9	155	1,4	2,2	478	396	30	69	0,9	4,7	372
HT 6090	29	150	9	155	1,4	2,4	535	436	31	69	0,9	5	398
HT 6091	34	50	9	141	1,2	2,4	511	395	31	69	0,9	5,2	406
EHT 6091	47	100	9	151	1,4	2,7	630	470	31	69	0,9	5,6	455
EHT 6091	58	150	9	155	1,4	2,9	724	526	31	69	0,9	6,1	492
EHT 6092	67	50	9	141	1,2	2,7	673	445	30	69	0,9	4,9	380
EHT 6092	95	100	9	155	1,4	3	865	541	31	69	0,9	5,4	430
EHT 6092	116	150	8	155	1,4	3,3	989	594	31	69	0,9	5,8	463
EHT 6093	84	50	9	151	1,4	2,7	755	469	31	69	0,9	5,3	417
EHT 6093	118	100	8	141	1,2	3,3	945	543	31	69	0,9	6,1	473
EHT 6093	145	150	8	155	1,4	3,4	1111	617	31	69	0,9	6,5	510
EHT 6094	135	50	9	151	1,4	2,8	950	490	31	69	0,9	5,8	463
EHT 6094	190	100	8	151	1,4	3,3	1223	576	31	69	0,9	6,5	524
EHT 6094	232	150 50	8	151	1,4	3,6	1426	635	32	69 73	0,9	7	565
EHT 6120 EHT 6120	24 34	100	9	137 144	1,6 1,8	2,6 3	500	418 500	31 31	73	1,1	5,7 6,6	482 549
EHT 6120	42	150	8	144	1,8	3,3	616 697	554	32	73	1,1 1,1	7	593
EHT 6121	49	50	8	130	1,6	3,3	668	501	32	73	1,1	7,3	605
EHT 6121	68	100	8	144	1,8	3,6	833	601	32	73	1,1	8,4	686
EHT 6121	83	150	8	141	1,7	4	938	655	32	73	1,1	8,8	738
EHT 6122	97	50	8	137	1,6	3,6	902	571	31	73	1,1	6,9	566
EHT 6122	137	100	8	141	1,7	4,1	1144	677	32	73	1,1	7,6	642
EHT 6122	167	150	8	141	1,7	4,5	1306	737	32	73	1,1	8,1	691
EHT 6123	121	50	8	144	1,8	3,6	1011	599	32	73	1,1	7,4	622
EHT 6123	171	100	8	144	1,8	4,2	1285	702	32	73	1,1	8,5	710
EHT 6123	208	150	8	144	1,8	4,6	1472	763	33	73	1,1	9,1	764
EHT 6124	194	50	8	126	1,4	4,1	1256	595	32	73	1,1	8,1	691
EHT 6124	273	100	8	141	1,7	4,4	1652	722	33	73	1,1	9,4	790
EHT 6124	334	150	8	141	1,7	4,8	1926	788	33	73	1,1	10,2	854
EHT 6124	32	50	8	144	2,3	3,1	625	516	31	80	1,4	6,9	646
EHT 6150	45	100	8	144	2,3	3,6	762	609	32	80	1,4	7,9	735
EHT 6150 EHT 6151	54 63	150 50	8	141 144	2,2	3,7	839 830	655 615	32 32	80 80	1,4 1,4	8,4 8,7	787 804
EHT 6151	89	100	8	144	2,3	4,3	1024	721	33	80	1,4	10,1	920
EHT 6151	109	150	8	144	2,3	4,7	1158	787	33	80	1,4	10,6	992
EHT 6152	127	50	8	137	2,1	4,3	1117	684	32	80	1,4	8,2	755
EHT 6152	178	100	8	144	2,3	4,8	1415	808	33	80	1,4	9,5	861
EHT 6152	218	150	7	141	2,2	5,3	1614	871	33	80	1,4	10,2	931
EHT 6153	158	50	8	144	2,3	4,3	1255	717	32	80	1,4	8,9	831
EHT 6153	223	100	8	144	2,3	5	1590	830	33	80	1,4	10,2	951
EHT 6153	272	150	7	144	2,3	5,4	1829	902	33	80	1,4	10,9	1027
EHT 6154	254	50	8	141	2,2	4,5	1606	741	33	80	1,4	10,2	932
EHT 6154	357	100	7	141	2,2	5,2	2071	855	34	80	1,4	11,3	1062
EHT 6154	436	150	7	144	2,3	5,6	2416	930	34	80	1,4	12,7	1158
EHT 6180	39	50	8	141	2,7	3,6	725	592	32	84	1,6	8,3	811
EHT 6180	55	100	8	141	2,7	4,2	880	693	33	84	1,6	9,5	927
EHT 6180	67	150	8	141	2,7	4,6	982	754	33	84	1,6	10,5	1005
EHT 6181 EHT 6181	78 110	50 100	8	141 141	2,7 2,7	4,3 5	972 1192	706 817	33	84 84	1,6	10,5	1020 1171
EHT 6181	135	150	8 7	141	2,7	5,4	1352	892	35	84	1,6 1,6	12,1 13,3	1275
EHT 6182	157	50	8	137	2,7	4,9	1320	785	33	84	1,6	9,9	957
EHT 6182	220	100	7	141	2,7	5,6	1653	903	34	84	1,6	11,3	1094
EHT 6182	269	150	7	141	2,7	6	1899	982	34	84	1,6	12,2	1185
EHT 6183	195	50	8	141	2,7	5	1475	811	34	84	1,6	11,1	1061
EHT 6183	275	100	7	141	2,7	5,7	1874	937	34	84	1,6	12,8	1219
EHT 6183	336	150	7	141	2,7	6,2	2149	1004	35	84	1,6	13,7	1319
EHT 6184	313	50	7	141	2,7	5,2	1905	838	34	84	1,6	12,2	1185
EHT 6184	441	100	7	141	2,7	5,9	2468	965	35	84	1,6	14,1	1366
EHT 6184	538	150	7	141	2,7	6,4	2866	1033	36	84	1,6	15,2	1482
EHT 6210	47	50	9	231	8,7	2,9	939	779	33	87	1,8	9,9	994
EHT 6210	66	100	8	231	8,7	3,4	1142	917	34	87	1,8	11,4	1138
EHT 6210	80	150	8	234	9	3,7	1278	1005	34	87	1,8	12,1	1226
EHT 6211	93	50	8	231	8,7	3,5	1247	930	34	87	1,8	12,6	1252
EHT 6211	131	100	8	227	8,4	4,1	1533	1087	35	87	1,8	14,5	1443
FI 17		150	0	234	9	4,4	1744	1199	36	87	1,8	15,9	1573
EHT 6211	160		8										
EHT 6211 EHT 6212 EHT 6212	186 262	50 100	8	234	9 8,4	3,9 4,6	1688	1054 1219	34 35	87 87	1,8 1,8	11,9	1171 1347

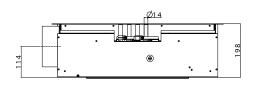
					Cooling pe	<u>rformance</u>	es .				ng perform	ances	
Size	Q _p	Δp _a	Δθͺς	$Q_{wN.c}$	$\Delta p_{w,c}$	$\Delta\theta_{w.c}$	P	$P_{w,c}$	$\Delta\theta_{,h}$	$Q_{wN,h}$	$\Delta p_{w,h}$	$\Delta\theta_{w,h}$	P=P _{w.h}
	M³/h	Pa	K	L/h	KPa	K	W	W	K	L/h	KPa	K	W
EHT 6212	320	150	8	231	8,7	5	2418	1328	35	87	1,8	14,6	1460
EHT 6213	233	50	8	234	9	4	1889	1095	34	87	1,8	12,8	1295
EHT 6213	327	100	8	231	8,7	4,7	2378	1264	35	87	1,8	14,7	1491
EHT 6213	400	150	7	234	9	5,1	2741	1378	36	87	1,8	16,4	1631
EHT 6214	373	50	8	231	8,7	4,2	2400	1129	35	87	1,8	14,6	1461
EHT 6214	524	100	8	223	8,2	5	3072	1287	36	87	1,8	17	1690
EHT 6214	640	150	7	231	8,7	5,3	3600	1419	37	87	1,8	18,3	1839
EHT 6240	54	50	8	231	10,1	3,2	1046	862	34	91	2,1	11,4	1176
EHT 6240	76	100	8	227	9,8	3,8	1265	1006	35	91	2,1	13,1	1350
EHT 6240	93	150	8	234	10,4	4,1	1428	1111	35	91	2,1	13,9	1461
EHT 6241	108	50	8	234	10,4	3,8	1407	1039	35	91	2,1	14,5	1493
EHT 6241	152	100	8	231	10,1	4,5	1719	1201	36	91	2,1	16,7	1726
EHT 6241	186	150	8	231	10,1	4,9	1944	1310	37	91	2,1	18,3	1887
EHT 6242	216	50	8	223	9,5	4,4	1886	1150	35	91	2,1	13	1382
EHT 6242	304	100	8	231	10,1	5	2381	1345	36	91	2,1	15,6	1608
EHT 6242	371	150	7	234	10,4	5,4	2728	1464	36	91	2,1	16,8	1746
EHT 6243	270	50	8	195	7,2	5	2042	1122	35	91	2,1	14,7	1544
EHT 6243	379	100	7	234	10,4	5,1	2685	1394	36	91	2,1	16,9	1782
EHT 6243	463	150	7	231	10,1	5,6	3076	1498	37	91	2,1	18,8	1955
EHT 6244	432	50	8	205	8	5	2657	1185	36	91	2,1	16,8	1746
EHT 6244	608	100	7	234	10,4	5,3	3510	1438	38	91	2,1	19,5	2029
EHT 6244	742	150	7	231	10,1	5,8	4071	1543	39	91	2,1	21	2211
EHT 6270	61	50	8	231	11,5	3,5	1147	939	35	91	2,3	13,1	1368
EHT 6270	86	100	8	231	11,5	4,1	1392	1099	36	91	2,3	15	1576
EHT 6270	106	150	8	231	11,5	4,5	1566	1205	36	91	2,3	16,7	1729
EHT 6271	123	50	8	231	11,5	4,2	1545	1126	36	91	2,3	16,6	1751
EHT 6271	173 211	100 150	8 7	227	11,1	4,9	1889	1300	38 39	91	2,3	19,2	2031
EHT 6271	246	50	8	231	11,5	5,3 4,7	2134	1415 1262	39	91 91	2,3	21,1	2224 1633
EHT 6272 EHT 6272	346	100	7	227	11,5 11,1	5,5	2100 2617	1438	37	91	2,3	15,6 18	1889
EHT 6272	422	150	7	220	10,4	5,5 6	2979	1541	38	91	2,3		2054
EHT 6273	307	50	8	227	11,1	4,9	2338	1292	37	91	2,3	19,3 17,7	1829
EHT 6273	432	100	7	231	11,1	5,6	2962	1490	38	91	2,3	20,3	2123
EHT 6273	527	150	7	231	11,5	6	3414	1618	39	91	2,3	21,7	2308
EHT 6274	492	50	7	223	10,8	5,1	3009	1333	38	91	2,3	19,3	2056
EHT 6274	692	100	7	227	11,1	5,8	3893	1535	40	91	2,3	23,4	2428
EHT 6274	845	150	7	231	11,5	6,2	4545	1666	41	91	2,3	25,4	2654
EHT 6300	69	50	8	231	12,9	3,8	1255	1020	35	95	2,6	14,4	1567
EHT 6300	97	100	8	227	12,5	4,5	1508	1177	36	95	2,6	16,5	1808
EHT 6300	118	150	8	223	12,1	4,9	1681	1279	37	95	2,6	18,3	1978
EHT 6301	138	50	8	223	12,1	4,6	1672	1202	37	95	2,6	18,3	2009
EHT 6301	194	100	7	227	12,5	5,3	2048	1387	39	95	2,6	21,1	2335
EHT 6301	237	150	7	227	12,5	5,7	2317	1509	40	95	2,6	23,2	2562
EHT 6302	276	50	7	227	12,5	5,1	2287	1347	37	95	2,6	17,2	1871
EHT 6302	388	100	7	231	12,9	5,8	2873	1551	38	95	2,6	19,8	2169
EHT 6302	473	150	7	227	12,5	6,3	3271	1659	39	98	2,7	21,3	2362
EHT 6303	344	50	7	231	12,9	5,2	2567	1395	38	95	2,6	19,4	2099
EHT 6303	484	100	7	227	12,5	6	3234	1585	39	95	2,6	22,4	2443
EHT 6303	591	150	7	231	12,9	6,4	3733	1719	40	98	2,7	23,8	2660
EHT 6304	551	50	7	231	12,9	5,4	3314	1437	39	98	2,7	21,3	2363
EHT 6304	775	100	7	227	12,5	6,2	4272	1631	41	95	2,6	25,8	2801
EHT 6304	947	150	7	231	12,9	6,6	4995	1768	42	95	2,6	27,7	3067

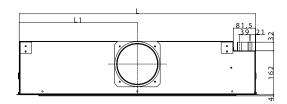
Key

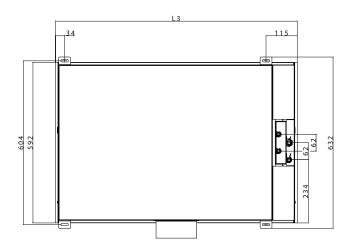
	Reference values in cooling		Reference values in heating
Θr	Reference room air temperature 26 °C		Reference room air temperature 22 °C
Θw	Average temperature of the water		Average temperature of the water
Θw_1	Water inlet temperature 16 °C		Water inlet temperature 50 °C
Θw_2	Water Outlet Temperature		Water Outlet Temperature
Θр	Primary air temperature 16 °C		Primary air temperature 22 °C
۸۵	Difference between the reference room air temperature and the average	Δθ,	Difference between the reference room air temperature and the average
Δθ,ς	temperature of the water entering the coil $\Delta\Theta = \Theta_r - \Theta_{w1}$	ΔO _{,h}	temperature of the water entering the coil $\Delta\Theta = \Theta_r - \Theta_{w1}$
Q_{p}	Primary air flow rate	Q_{p}	Primary air flow rate
Δp_a	Pressure drop - air side	Δp_a	Pressure drop - air side
$Q_{wN,c}$	Nominal water flow rate	$Q_{wN,h}$	Nominal water flow rate
$\Delta p_{w,c}$	Water side pressure drop	Δp_{wh}	Water side pressure drop
$\Delta\theta_{w,c}$	Water side temperature difference	$\Delta\theta_{w,h}$	Water side temperature difference
Р	Total cooling capacity	Р	Total heating capacity
$P_{w,c}$	Water side cooling capacity	$P_{w,h}$	Water side heating capacity

DIMENSIONS AND WEIGHTS

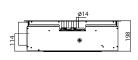
EHT6090 ÷ EHT6214

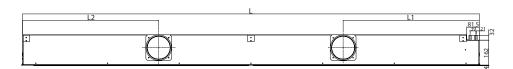


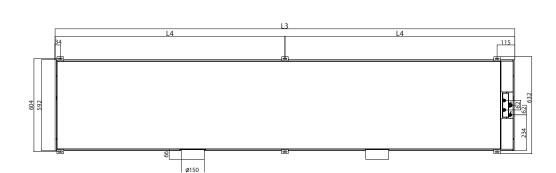




EHT6240 ÷ EHT6304







		FIIT COCO	FUT COOS	FUT COOS	FUT COOS	FUT COO.	FUT (120	FUT (124	FUT (122	FUT (122	FUT (124
Dimensions and weights		EHT 6090	EHT 6091	EHT 6092	EHT 6093	EHT 6094	EHT 6120	EHT 6121	EHT 6122	EHT 6123	EHT 6124
Width	mm	592	592	592	592	592	592	592	592	592	592
Nominal length	mm	900	900	900	900	900	1200	1200	1200	1200	1200
I	mm	872	872	872	872	872	1172	1172	1172	1172	1172
L1	mm	436	436	436	436	436	586	586	586	586	586
L2	mm	-	-	-	-	-	-	-	-	-	-
L3	mm	892	892	892	892	892	1192	1192	1192	1192	1192
L4	mm	-	-	-	-	-	-	-	-	-	-
Net weight	kg	26,0	26,0	26,0	26,0	26,0	35,0	35,0	35,0	35,0	35,0
Gross weight	kg	31	31	31	31	31	41	41	41	41	41
		EHT 6150	EHT 6151	EHT 6152	EHT 6153	EHT 6154	EHT 6180	EHT 6181	EHT 6182	EHT 6183	EHT 6184
Dimensions and weights		LIII 0130	LIII 0131	LIII 0132	LIII 0155	LIII 0134	LIII 0 100	LIII 0101	LIII 0 102	LIII 0103	LIII 0104
Width	mm	592	592	592	592	592	592	592	592	592	592
Nominal length	mm	1500	1500	1500	1500	1500	1800	1800	1800	1800	1800
L	mm	1472	1472	1472	1472	1472	1772	1772	1772	1772	1772
L1	mm	736	736	736	736	736	886	886	886	886	886
L2	mm	-	-	-	-	-	-	-	-	-	-
L3	mm	1492	1492	1492	1492	1492	1792	1792	1792	1792	1792
L4	mm	-	-	-	-	-	-	-	-	-	-
Net weight	kg	43,0	43,0	43,0	43,0	43,0	52,0	52,0	52,0	52,0	52,0
Gross weight	kg	52	52	52	52	52	62	62	62	62	62
		EHT 6210	EHT 6211	EHT 6212	EHT 6213	EHT 6214	EHT 6240	EHT 6241	EHT 6242	EHT 6243	EHT 6244
Dimensions and weights		LIII UZ IU	LIII UZ I I	LIII UZ IZ	LIII 02 13	LIII UZ 14	LIII 0240	LIII 0241	LIII 0242	LIII 0243	LIII UZ44
Width	mm	592	592	592	592	592	592	592	592	592	592
Nominal length	mm	2100	2100	2100	2100	2100	2400	2400	2400	2400	2400
L	mm	2072	2072	2072	2072	2072	2372	2372	2372	2372	2372
L1	mm	1036	1036	1036	1036	1036	711	711	711	711	711
L2	mm	-	-	-	-	-	711	711	711	711	711
L3	mm	2092	2092	2092	2092	2092	2392	2392	2392	2392	2392
L4	mm	-	-	-	-	-	1196	1196	1196	1196	1196
Net weight	kg	61,0	61,0	61,0	61,0	61,0	69,0	69,0	69,0	69,0	69,0
Gross weight	kg	72	72	72	72	72	83	83	83	83	83
		EHT 6270	EHT 6271	EHT 6272	EHT 6273	EHT 6274	EHT 6300	EHT 6301	EHT 6302	EHT 6303	EHT 6304
Dimensions and weights					2 02.70						
Width	mm	592	592	592	592	592	592	592	592	592	592
Nominal length	mm	2700	2700	2700	2700	2700	3000	3000	3000	3000	3000
 L	mm	2672	2672	2672	2672	2672	2972	2972	2972	2972	2972
L1	mm	881	881	881	881	881	886	886	886	886	886
L2	mm	881	881	881	881	881	886	886	886	886	886
							2992	2992	2992	2992	2992
	mm	2692	2692	2692	2692	2692	2332	2332	2772	2772	2772
L3 L4	mm mm	2692 1346	2692 1346	2692 1346	2692 1346	1346	1496	1496	1496	1496	1496
L3											

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VENTILCASSAFORMA

Template for recessed installation of fancoils in the wall



Ideal for residential or office solutions



DESCRIPTION

Ventilcassaforma has been designed to respond to the needs to rationalise spaces to suit modern interior architecture. Ventilcassaforma is a galvanised template that makes it possible to make a space to house fan coils in the

The template will make masonry work easier during the construction of a niche where the fan coil will be installed. When the work is finished, the fan coil will be completely hidden from view.

VERSIONS

CHU-L: For fan coils in the Omnia ULP - ULIP series. CHF: For fan coils in the FCZ P. FCZI P series

FFATURES

- Recess box;
- Closure panel;
- Outer frame with deflector;
- Cover bases, cross-members, covers.

All parts are made of galvanised steel and treated with epoxy-polyester resin-based thermo-hardening base paint in grey with rough glazed finish in order to hold the paint. The final colour can be chosen by the client.

Socket box embedded in the wall

Made of galvanised steel, this is the box housing the fan coil. The box is recessed in the wall during building work making the construction of a niche where the fan coils will be installed much easier.

Holes for fitting the fan coil and preparing an electric plant with a socket and GEWISS fuse holder are already present on the back panel.

The box can accommodate the hydraulic system pipes and condensation drain pipes thanks to the presence of several easily-removable elements on the sides and base.

Closure panel

Made of steel pre-treated with base paint and no slots present. Easily removable for servicing and cleaning the air filter.

Outside frame

The perimeter of the box has an outer frame made of pre-treated steel making it possible to cover the perimeter part of the wall and hide any imperfections that overtime show possible crumbling on the edge of the plaster work.

Deflector

Manual, with which the flow of air can be directed into the room. The deflector is incorporated in the frame.

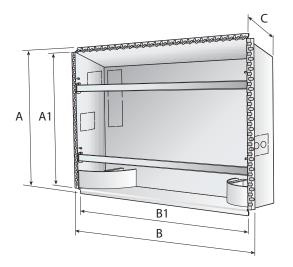


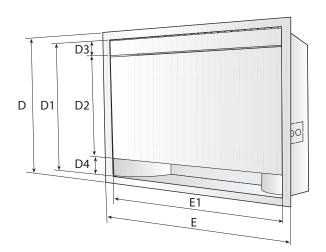
ACCESSORIES COMPATIBILITY

	_	7	L	
г	L	L	-6	1

	Ver	20	0	250		300	350)	400		150	50	0	550		600	650	0	900		950
	HP	CHF	22	CHF22		CHF32	CHF	32	CHF42	C	HF42	CHF	42	CHF42		HF62	CHF	62	CHF62	2 (HF62
FCZI-H																					
	Ver	20	0	250		300	350)	400		150	50	0	550		700	75	0	900		950
	HP	CHF	22	CHF22		CHF32	CHF	32	CHF42	C	HF42	CHF	42	CHF42	(HF62	CHF	62	CHF62	2 (HF62
FCZ-P																					
	Ver	100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
	P,PR	CHF17	CHF17	CHF17	CHF17	CHF22	CHF22	CHF22	CHF22	CHF32	CHF32	CHF32	CHF32	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42	2 CHF42	CHF42
	PO,POR	-	-	-	-	CHF22		CHF22	CHF22	CHF32	CHF32	CHF32	CHF32	CHF42	CHF42	CHF42	CHF42	CHF42	CHF42	2 CHF42	CHF42
	PPC	CHF17	-	-	CHF17	CHF22	-	-	CHF22	CHF32	-	-	CHF32	CHF42	-	-	CHF42	CHF42	-	-	CHF42
The accessory c	annot be fitted on the config	gurations i	ndicated	with -																	
	Ver	600	60	1 6	02	650	700	701	702	750	80	00	801	802	850	900	90	1 !	950	1000	1001
	P,PR	CHF62	CHF	62 CH	F62	CHF62	CHF62	CHF62	CHF62	CHF6	2 CH	F62 (HF62	CHF62	CHF62	CHF62	2 CHF	62 C	HF62	CHF62	CHF62
	PO,POR	CHF62		62 CH		CHF62	CHF62	CHF62	CHF62				-	-	-	CHF62			HF62	-	-
										CHF6	2 (11)	F62	_	_	CHF62	CHF62				CHF62	_
	PPC	CHF62			-	CHF62	CHF62	-		СПГС	2 CH	102			СПГОД	CULO	2 -	(HF62	CITIOZ	
The accessory co	PPC annot be fitted on the config				-	CHF62	CHF62	-	-	CHEC	2 CH	102			CHF0Z	CHro	2 -	()	HF62	CIII UZ	
,					-	CHF62	CHF62	-	-	CHIC	2 CH	102			CHFOZ	Cnro.	<u> </u>	C	HF62	CHIOZ	
The accessory co				with -		CHF62 00 30		350			102 4:				550					00 901	
,	annot be fitted on the config	gurations i	ndicated	with -	250 3	00 30		350	400	401 4	102 4	50 50	0 501	502	550		701 7		50 90		950
FCZI-P	annot be fitted on the config	gurations i	ndicated	with -	250 3	00 30	1 302	350	400	401 4	102 4	50 50	0 501	502	550	700	701 7	702 7	50 90	00 901	950
FCZI-P	annot be fitted on the config	gurations i	ndicated	with -	250 3	00 30	1 302	350	400	401 4	102 4: 1F42 CH	50 50	0 501	502	550	700	701 7	702 7	50 90	00 901	950
,	annot be fitted on the config Ver P,PR	gurations i	ndicated	with - 202 7 CHF22 CI	2 50 3 HF22 CH	00 30	1 302	350	400	401 4	102 4: 1F42 CH	50 50 F42 CHF	0 501	502	550	700	701 7	702 7 HF62 CH	50 9 (F62 CH	00 901	950
FCZI-P	annot be fitted on the config Ver P,PR Ver	gurations i	ndicated	with - 202 7 CHF22 CI	250 3 HF22 CH	00 30	1 302	350	400	401 4	102 4: 1F42 CH	50 50 F42 CHF	0 501	502	550	700	701 7	702 7 HF62 CH	50 9 (F62 CH	00 901	950
FCZI-P	annot be fitted on the config Ver P,PR Ver	gurations i	ndicated	with - 202 7 CHF22 CI	250 3 HF22 CH	00 30	1 302	350	400	401 4	102 4: 1F42 CHI 2 CHU	50 50 F42 CHF	0 501	502	550	700	701 7	702 7 HF62 CH	50 9 (F62 CH	00 901	950

DIMENSIONS





		CHU12L	CHU17L	CHU27L	CHU37L
Dimensions jig	1				
A	mm	691	691	691	691
A1	mm	648	648	648	648
В	mm	692	802	1032	1252
B1	mm	644	754	984	1204
(mm	186	186	186	186
D	mm	724	724	724	724
D1	mm	634	634	634	634
D2	mm	494	494	494	494
D3	mm	70	70	70	70
D4	mm	-	-	-	-
E	mm	713	823	1053	1273
E1	mm	633	743	973	1193

		CHF17	CHF22	CHF32	CHF42	CHF62
Dimensions jig						
A	mm	728	728	728	728	833
A1	mm	684	684	684	684	789
В	mm	732	842	1073	1293	1414
B1	mm	684	794	1025	1245	1366
C	mm	240	240	240	240	240
D	mm	760	760	760	760	865
D1	mm	680	680	680	680	785
D2	mm	493	493	493	493	598
D3	mm	93	93	93	93	93
D4	mm	94	94	94	94	94
E	mm	753	863	1094	1314	1435
E1	mm	673	783	1014	1234	1355

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Control panels

Range of control panels for fan coils



 Wide range of panels for the simple, complete control of all the fan coil functions.

ACCESSORIES

AERCAB: 100 meter skein of shielded cable (4-pole wire + shield) for connection with RS485 serial port and CAN.

T-TOUCH AND T-TOUCH-I



Characteristics and equipment supplied as standard

- Installation on the fan coil.
- Air and water probes supplied as standard.
- RS485 serial port for connection with the VMF network (MASTER).
- Connection with VMF-E4X user interface.
- Control of the 3 speeds of the asynchronous motors.
- 0-10 V and/or PWM output for brushless motors.
- Two triac outputs for control of valves and/or accessories.
- MS input (micro switch).
- Inverter fault input.
- Visualisation of the speeds and the temperature set-point.

Compatibility with the hydronic terminals

Thermostat	Unit	Range
T-TOUCH	FCZ	AS - U - UA - DS
T-TOUCH-I	FCZI	AS - U

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories		
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier	supplied as standard	cumplied as standard
with heater	supplied as stalldard	supplied as stalldard
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and		
3-way valve		
4-pipe systems		
with 2-way valve	cumplied as standard	cumplied as standard
with 3-way valve	supplied as standard	supplied as stalldard

AER503IR



Characteristics and equipment supplied as standard

- Flush installation (503-502 module box, or plasterboard boxes).
- Management of fan coils with asynchronous and brushless motor.
- Automatic / manual season changeover.
- Control of up to 2 On/Off valves.
- Control of 1 modulating valve 0-10.
- Temperature and ventilation control.
- Internal air probe.
- Compatibility with VMF-IR.
- Overall dimensions (mm): H=86 W=125 D=46.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil and INVERTER fancoil, without on board controls.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	SA5	SW5
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier		
with heater		
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and		
3-way valve		
with 2-way valve and radiant panel (heating)		
radiant panel only (heating)		
4-pipe systems		
with 2-way valve	SA5	SW5
with 3-way valve		

TX



Characteristics and equipment supplied as standard

- Wall-mount installation.
- Management of fan coils with asynchronous and brushless motor.
- Automatic / manual season changeover.
- Control of up to 2 On/Off valves.
- Temperature and ventilation control (3 speeds).
- Internal air probe
- Management of fins and external contact.
- Overall dimensions (mm): H=148 W=70 D=27.5.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil and INVERTER fancoil, without on board controls.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories		SW3/ SW5
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier		
with heater		
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and 3-way valve		
with 2-way valve and radiant panel (heating)		
radiant panel only (heating)		
with twin delivery (Dualjet)		
4-pipe systems		
with 2-way valve	SA5	SW3/SW5
with 3-way valve		

PXAI



Characteristics and equipment supplied as standard

- Installation on the fan coil.
- Automatic / manual season changeover.
- Control of up to 2 On/Off valves.
- Temperature and ventilation control (3 speeds).
- Internal water probe (2.5m) and air probe (2.3m).
- Management of fins and external contact.
- Overall dimensions (mm): H=148 W=70 D=27.5.

Compatibility with the hydronic terminals

Compatible with all fancoil of the series FCZ-P, FCZI-P.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories	- - - - supplied as standard - - -	supplied as standard
with 2-way valve		
with 3-way valve		
with Cold Plasma purifier		
with 2-way valve and Cold Plasma purifier		
with 3-way valve and Cold Plasma purifier		
with heater		
with 2-way valve and heater		
with 3-way valve and heater		
cooling only, with heater for heating		
cooling only, with heater for heating and		
3-way valve		
4-pipe systems		
with 2-way valve	supplied as standard	cumplied as standard
with 3-way valve		supplied as stalldard

TXB AND TXBI



Characteristics and equipment supplied as standard

- Installation on the fan coil.
- Automatic / manual season changeover.
- Control of up to 2 On/Off valves.
- Temperature and ventilation control (3 speeds).
- Internal air probe.
- Water probe (supplied) for controlling the minimum or maximum depending on the system, with the possibility to fit an external air probe (SA5).

Compatibility with the hydronic terminals

TXE

Compatible with all fancoil of the series FCZ.

TXBI

Compatible with all fancoil of the series FCZI.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe	
without accessories			
with 2-way valve			
with 3-way valve			
with Cold Plasma purifier			
with 2-way valve and Cold Plasma purifier			
with 3-way valve and Cold Plasma purifier			
with heater			
with 2-way valve and heater	supplied as standard	supplied as standard	
with 3-way valve and heater			
cooling only, with heater for heating			
cooling only, with heater for heating and			
3-way valve			
with 2-way valve and radiant panel (heating)			
radiant panel only (heating)			
with twin delivery (Dualjet)			
4-pipe systems			
with 2-way valve	cumplied as standard	cumplied as standard	
with 3-way valve	supplied as standard	supplied as standard	

WMT16 - 16V



Characteristics and equipment supplied as standard

- Wall-mount installation.
- Manual season changeover.
- Temperature and ventilation control (3 speeds).
- Thermostat-controlled ventilation WMT16 Continuos WMT16CV
- Internal air probe.
- Overall dimensions (mm): H=130 L=85 P=40.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil without on board controls.

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Compatibility with 2 pipe systems

2-pipe systems	Air temperature probe	Water temperature probe	
without accessories	— internal		
with 2-way valve	IIILEIIIAI	-	
4-pipe systems			
with 2-way valve	internal	-	

WMT10



Characteristics and equipment supplied as standard

- Wall-mount installation.
- Manual season changeover.
- Control of up to 2 On/Off valves.
- Temperature and ventilation control (3 speeds).
- Internal air probe.
- Overall dimensions (mm): H=75 W=127 D=25.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil without on board controls.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe
without accessories		
with 2-way valve		
with heater	internal	-
with 2-way valve and heater		
cooling only, with heater for heating		
4-pipe systems		
with 2-way valve	internal	-

FMT10

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Characteristics and equipment supplied as standard

- Wall-mount installation.
- Automatic / manual season changeover.
- Control of up to 2 On/Off valves, or 1 valve and 1 heater.
- Temperature and ventilation control (3 speeds).
- Air probe (supplied) to be installed on the fan coil intake.
- Overall dimensions (mm): H=80 W=118 D=40.

Compatibility with the hydronic terminals

Compatible with all ON/OFF fancoil without on board controls.

Compatibility with 2 and 4 pipes systems

2-pipe systems	Air temperature probe	Water temperature probe	
without accessories			
with 2-way valve			
with heater	supplied as standard	-	
with 2-way valve and heater			
cooling only, with heater for heating			
4-pipe systems			
with 2-way valve	supplied as standard	-	

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VMF

Multi Flow Variable Systems



- Components for plant management:
- Air conditioning
- Heating
- Hot domestic water (HDW)



DESCRIPTION

Hydronic system management and control unit for air conditioning, heating and domestic hot water production.

The VMF system ensures the complete control of every single component of a hydronic system, both local and centralised, through communication between the various system components, managing the performance without neglecting the end user's request for comfort at any time, but reaching it as efficiently as possible, with consequent energy savings.

Summing up the advantages of a such an innovative control with the flexibility of a hydronic system, you achieve a more effective and efficient alternative to variable refrigerant volume (VRF) systems.

The VMF system can manage different areas, each of which has one of the following types of terminals:

- Fancoil;
- Radiant only (heating only);
- Fancoil + Radiant;
- MZC Zone;
- MZC Zone + Radiant.

FEATURES

The VMF system is extremely flexible, to the extent that it offers various control and management steps, also expandable at different times:

- 1. Control of a single zone;
- Control of a Master/Slave zone (one MASTER fancoil and up to 5 SLAVE fancoils):
- Control of a network consisting of several independent zones (one MASTER fancoil and up to 5 SLAVE fancoils for each zone, or another of the types of terminals provided);
- Control of several zones, plus heat pump management (if compatible with the VMF system);
- Control of several zones, of heat pumps and management of the domestic hot water:
- 6. Control of several zones, heat pumps, domestic hot water production and additional pumps (up to a maximum of 12 using 3 additional VMF-CPR modules):
- Control of several zones, heat pumps, domestic hot water production, additional pumps and management of up to 3 heat recovery units (with the possibility to manage up to 3 VMF-VOC probes) and/or a boiler;

CONTROL PANELS

The VMF system can pilot and manage a different number of areas, depending on the panel used:

- VMF-E6 / E5: maximum 64 zones (so a maximum of 64 Master Fancoil, each of which will pilot 5 Slave, for a total of 384 Fancoil):
- VMF-RCC: maximum 10 zones (then a maximum of 10 Master Fancoil, each of which will pilot 5 Slave, for a total of 50 Fancoil).

In addition to the centralised control provided by the VMF-E6/E5/RCC panel, the MASTER system terminal must be equipped with a local control interface; this interface can be mounted on board the terminal itself or on a wall panel.

Via panel VMF-E6/E5/RCC it is possible to control several functions:

- Identify the various zones by giving each of them a name that characterises it;
- Control and set the ON-OFF function and the temperature setting of each zone;
- Set and manage the heat pump temperature;
- Schedule time slots.

Simple installation of the fancoil network thanks to the SELF-DETECTION function of the MASTER fancoils.

SYSTEM COMPONENTS

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.



Command interfaces

D124: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, D124 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. It is supplied with a graphite grey plate; however, to allow the interface to be customised so that it fits in perfectly with the style of any home, D124 is compatible with plates of the major brands available on the market, for more information please refer to our documentation.

VMF-E2D: Machine user interface to be combined with VMF-E19 accessory, dedicated to the DUALJET range. It has 2 selector switches, one for temperature and the other for speed control.

VMF-E2H: User interface on the machine, to be combined with the VMF-E19 accessory, dedicated to the HL series. It has 2 selector switches, one for temperature and the other for speed control.

VMF-E2Z: User interface on the fan coil, with two selectors, one for temperature and the other for speed control; to be combined with accessories VMF-F19 and VMF-F19I

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.

VMF-E4DX: A wall-mounted user interface to be combined with VMF-E19, VMF-E19I, VMF-E24 ed VMF-E24I accessories. Featuring an innovative, extremely slim and cost-effective design, it allows running functions via a capacitive touchscreen keyboard with LCD display. You can choose to adjust the environment temperature with a panel-mounted sensor probe (standard), or with the VMF-E19/E19I probe, or through mediated reading. It also enables the activation of an air purifier (Cold Plasma/ UV lamp) and a heating element. Light grey front panel PANTONE 425C (METAL).

VMF-E4X: A wall-mounted user interface to be combined with VMF-E19, VMF-E19I, VMF-E19I, VMF-E24I accessories. Featuring an innovative, extremely slim and cost-effective design, it allows running functions via a capacitive touchscreen keyboard with LCD display. You can choose to adjust the environment temperature with a panel-mounted sensor probe (standard), or with the VMF-E19/E19I probe, or through mediated reading. It also enables the activation of an air purifier (Cold Plasma/ UV lamp) and a heating element. Light grey front panel PANTONE COOL GRAY 1C.

VMF-E5: Black recessed panel with backlit graphic LCD display and capacitive keyboard, it allows the centralised command/control of a complete hydronic system consisting of Fan coils: up to 64 fan coil zones consisting of 1 master + up to 5 slaves; Chiller/heat pump (accessory required for RS 485 interface), pumps: up to 12 configurable zone pumps; boiler: boiler hook-up management for hot water production; heat recovery units: up to 3 hook-ups per programmable recovery units based on time periods and/or by measuring air quality with the VMF-VOC accessory; domestic water module: complete management of the domestic hot water production through the control of: diverter valve/pump, integrated heating element, storage tank

temperature sensor, anti-legionella circuit system. The panel is available in both white (VMF-E5B) and black (VMF-E5N).

VMF-E6: White flush-mounting panel with 4.3 inch colour touchscreen. For the centralised command/control of a complete hydronic/aeraulic system consisting of: fan coils (up to 64 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (up to 4), MZC accessories (up to 5) for the management of radiant panels (using a suitable number of VMF-REB accessories, up to 64 radiant panels associated with the fan coil zones and up to 32 radiant panels associated with the zones served by MZC), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/Os, control of heat recovery units and VOC probes (up to 4).

VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMF-RCC: Flush-mounting panel for the centralised command/control of a complete hydronic system consisting of: fan coils (up to 10 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (if you want to manage up to 4 outdoor units, the MULTICONTROL accessory must be provided), MZC accessories (up to 3) for the management of radiant panels using a suitable number of VMF-REB 1/VMF-REB 2/VMF-REB 3 accessories, (up to 28 zones total), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/O, control of heat recovery units and VOC probes (up to 3).

VMF-VOC: Air quality detection accessory.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Thermostats

VMF-E19: Thermostat, accessory to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe, it controls systems with 2 pipes, 4 pipes, 2 pipes + Cold Plasma, 2 pipes + UV lamps, 2 pipes + Heating element. Equipped with an external contact to be used as a remote ON-OFF at low voltage. By means of 2-wire serial communication, it allows for the creation of a single fan coil area (1 master + maximum 5 slaves). Compared to the previous model, thanks to a different dip switch configuration, it allows implementing new features: 1. In systems with two pipes and a heating element, the latter can be activated as a complete replacement. allowing you to warm the environment exclusively with this accessory. 2. Dualjet features are available in standard software and can be set via dip switch. 3. Economy contact/presence sensor. 4. Additional water sensor for overall control in 4-pipe systems (with VMF-SW1 accessory). 5. Serial RS485, ModBus RTU protocol, for centralised control. 6. Possibility of inserting expansion boards for future developments. The VMF-E19 accessory must be therefore used in masters in the presence of multiple zones, or for communication with the chiller/heat pump. 7. Compatibility with the VMF-IO accessory. Compatibility with VMF-LON expansion board. The thermostat is protected by a fuse.

VMF-E19I: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe, it controls systems with 2 pipes, 4 pipes, 2 pipes + Cold Plasma, 2 pipes + UV lamps, 2 pipes + Heating element. Equipped with an external contact to be used as a remote ON-OFF at low voltage. By means of 2-wire serial communication, this thermostat allows for the creation of a single fan coil area (1 master + maximum 5 slaves). Compared to the previous model, thanks to a different dip switch configuration, it allows implementing new features:In systems with two pipes and a heating element - the latter can be activated as a complete replacement - allowing you to warm the environment exclusively with this accessory - Dualiet features are available in standard software and can be set via dip switch - Economy contact/presence sensor - Additional water sensor for overall control in 4-pipe systems (with VMF-SW1 accessory) - Serial RS485, ModBus RTU protocol, for centralised control - Possibility of inserting expansion boards for future developments. The VMF-E19 accessory must be therefore used in masters in the presence of multiple zones, or for communication with the chiller/heat pump - Compatibility with the VMF-IO accessory - Compatibility with VMF-LON expansion board. The thermostat is protected by a fuse.

VMF-E19Y: Thermostat, accessory to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe, it controls systems with 2 pipes, 4 pipes, 2 pipes + Cold Plasma, 2 pipes + UV lamps, 2 pipes + Heating element. Equipped with an external contact to be used as a remote ON-OFF at low voltage. By means of 2-wire serial communication, it allows for the creation of a single fan coil area (1 master + maximum 5 slaves).

Compared to the previous model, thanks to a different dip switch configuration, it allows implementing new features: 1. In systems with two pipes and a heating element, the latter can be activated as a complete replacement, allowing you to warm the environment exclusively with this accessory. 2. Dualjet features are available in standard software and can be set via dip switch. 3.Economy contact/presence sensor. 4. Additional water sensor for overall control in 4-pipe systems (with VMF-SW1 accessory). 5. Serial RS485, ModBus RTU protocol, for centralised control. 6. Possibility of inserting expansion boards for future developments. The VMF-E19 accessory must be therefore used in masters in the presence of multiple zones, or for communication with the chiller/heat pump. 7. Compatibility with the VMF-IO accessory. Compatibility with VMF-LON expansion board. The thermostat is protected by a fuse.

VMF-FMD: The VMF-FMD panel is a flush-mounted thermostat that, when used in stand-alone mode or within a centralised supervisory system (BMS), can manage plant requirements where an actuator (a heating furniture valve, radiant system head, zone valve, zone circulator) is to be controlled as a function of room temperature.

VMF-IO: Manage the unit exclusively from a centralized VMF control panel without area control panel.

VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.

VMF-YCC: Electric on/off completion unit for the VMF-E19Y accessory (mandatory for the unit with options P and X).

VMF-YCCH: Electric on/off completion unit for the VMF-E19Y accessory (mandatory for the unit with option H).

VMF-YICC: Electric inverter completion unit for the VMF-E19Y accessory (mandatory for the unit with options P and X).

VMF-YICCH: Electric inverter completion unit for the VMF-E19Y accessory (mandatory for the unit with option H).

Intake grids and distribution of the air, compulsory accessory

GLF10M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 panel or the VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control. (size 840x840 not available).

GLF10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available).

GLF110M: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm adapts perfectly to standard false ceilings without overlapping parts. It is equipped with an infrared receiver with an emergency operation button, a thermostat card which also requires the installation of the VMF-E4 panel or the VMF-IR remote control. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be orientated with the remote control. (size 840x840 not available).

GLFI10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4 or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. (size 800x800 mm not available).

GLL10N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLL20N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

GLLI100N: Recovery and air supply grille in plastic, RAL 9010 colour, measuring 600x600 mm; adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X panel as well, and suitable for use with the RXLE heater. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated. **GLLI20N:** Recovery and air supply grille in plastic, RAL 9010 colour, measuring 840x840 mm, adapts perfectly to standard false ceilings without overlapping parts. Fitted with a thermostat board that necessarily requires the installation of the VMF-E4X or VMF-IR panel as well. Intake is in the central part, where the easily removable air filter is housed. Delivery is via the perimeter slits that can be manually orientated.

Probes

VMF-SW: Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.

VMF-SW1: Additional water probe (L=2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range

Modules

AERCAB: 100 meter skein of shielded cable (4-pole wire + shield) for connection with RS485 serial port and CAN.

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.

VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

VMF-REB: Only available for VMF-E6, manages the heads of the radiant panels (each module can manage up to 8), one pump and up to 3 thermostats through digital input.

VMF-REB 1: Only available for VMF-RCC, manages the heads of 10 radiant panels associated with fancoil and up to 10 thermostats through digital input

VMF-REB 2: Only available for VMF-RCC, manages the heads of 10 radiant panels associated with MZC and up to 10 thermostats through digital input **VMF-REB 3:** Only available for VMF-RCC, manages the heads of 8 radiant panels associated with MZC and up to 10 thermostats through digital input **VMF-SIT3:** Interface boards that allow connecting thermostats to a fan coil with a high-power motor (for selection, see all the thermostat and fan coil documentation); if a VMF-E19 thermostat is used, this accessory will be replaced by the normal SIT3.

VMF-SIT3V: Relay interface board. Mandatory accessory on units where motor absorption exceeds 0.7 A. The relay interface board is supplied with a 2A fuse to protect the fan coil. If the fan coil absorbs more than 2A and up to 4A, the fuse inside must be replaced with a 4A fuse supplied.

Electrical panels for DHW (Domestic hot water management for other suppliers' storage tanks, not available for VMF-E6)

VMF-ACS3KM: Electrical panel for the complete command/control of a hot water storage tank (3-way control valve, integrated single phase 3kW resistor command, anti-legionella function and temperature sensor)

VMF-ACS3KTN: Electrical panel for the complete command/control of a hot water storage tank (3-way control valve, integrated three-phase 3kW resistor command, anti-legionella function and temperature sensor).

VMF-ACS6KTN: Electrical panel for the complete command/control of a hot water storage tank (3-way control valve, integrated three-phase 6kW resistor command, anti-legionella function and temperature sensor).

VMF-ACS8KTN: Electrical panel for the complete command/control of a hot water storage tank (3-way control valve, integrated three-phase 8kW resistor command, anti-legionella function and temperature sensor).

Heat storage tank with integrated domestic hot water management (no need to be combined with a VMF-ACS accessory)

SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.

Control systems

AERCONNECT: Web server allowing local and remote supervision of the VMF-E6 system (by appropriately configuring the DNS service supplied with the purchase of the accessory) via web pages; allows simultaneous access for up to 8 users

VMF-485EXP: This accessory, specifically mounted in the VMF-E5/RCC panel, adds an RS485 serial communication port to external supervision (BMS, Aerweb or Aermec supervision systems). Not available for VMF-E6.

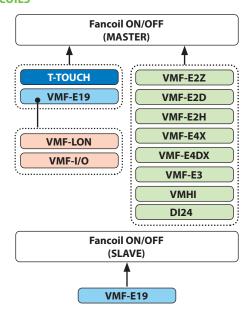
VMF-MONITORING: PC software to monitor and control the operation of one or several VMF controlled systems. Through the VMF-E5/RCC expansion board, the VMF-485EXP panel provides the RS485 serial communication port used by the VMF-MONITORING application for controlling the hydronic system. The maximum number of controllable systems, each with VMF-E5 and VMF-485EXP expansion, is 10 (not available for VMF-E6).

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

COMPATIBILITY OF VMF COMPONENTS WITH ON/OFF FAN COILS



Type of component:



Thermostat board + Command interface

Expansion board

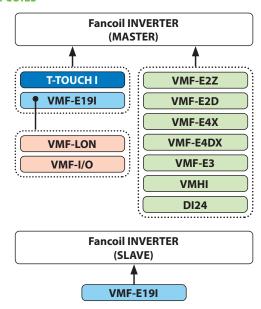
Command interfaces

Note:

- Each fan coil (Master or Slave) may have just one thermostat board, selected from those that are compatible;
- The E19 thermostat board can manage just one expansion board, selected from those available;
- Each Master fan coil must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models	
	FCZ (AS-AF-U-UA-UF)	
VMF-E2Z	FCZ-D (DS)	
	FCZ-H	
VMF-E2D	Omnia UL (S)	
VMF-E2H	Onmia HL (S-SM)	
	FCZ (AS-AF-U-UA-UF)	
	FCZ-D (DS)	
VAAE EAV (EADV) (VAAE E2	FCZ-H	
VMF-E4X (E4DX) / VMF-E3	Omnia UL (S)	
	Omnia radiant	
	FCW	
	FCZ (AS-AF-U-UA-UF-DS)	
T-TOUCH	FCZ-D (DS)	
	FCZ-H	
	FCZ (AS-AF-U-UA-UF)	
	FCZ-D (DS)	
VMHI / DI24	FCZ-H	
	Omnia UL (S)	
	Omnia radiant	

COMPATIBILITY OF VMF COMPONENTS WITH INVERTER FAN COILS



Type of component:

Thermostat board

Thermostat board + Command interface

Expansion board

Command interfaces

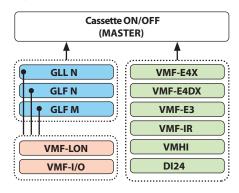
Note

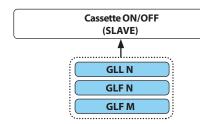
- Each fan coil (Master or Slave) may have just one thermostat board, selected from those that are compatible;
- The E19I thermostat board can manage just one expansion board, selected from those available;
- Each Master fan coil must have just ONE command interface, selected from those that are compatible:

FCZI (AS-AF-U-UF)
FCZI-H
Omnia ULI (S)

Command interfaces	Compatible ranges or models
	FCZI (AS-AF-U-UF)
	FCZI-D (DS)
VMF-E4X (E4DX) / VMF-E3	Omnia ULI (S)
	Omnia radiant plus
	FCWI
T-TOUCH-I	FCZI (AS-AF-U-UF)
	FCZI (AS-AF-U-UF)
VMUL/DI24	FCZI-D (DS)
VMHI / DI24	Omnia ULI (S)
	Omnia radiant plus

COMPATIBILITY OF VMF COMPONENTS WITH ON/OFF CASSETTES





Type of component:

Delivery suction grille with thermostat board



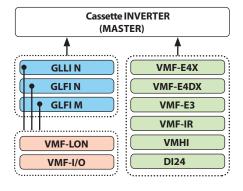
Command interfaces

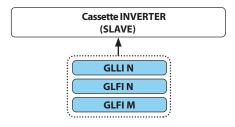
Note:

- Each Cassette (Master or Slave) must have a delivery recovery grille (fitted with a VMF thermostat board) selected from those that are compatible:
- The delivery recovery grilles can manage just one expansion board, selected from those available;
- Each Master Cassette must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models
VME FAV (FADV) /VME F2	FCL
VMF-E4X (E4DX) / VMF-E3	VEC
VME ID	FCL
VMF-IR	VEC
VMHI / DI24	FCL
VIVINI / DIZ4	VEC

COMPATIBILITY OF VMF COMPONENTS WITH INVERTER CASSETTES





Type of component:

- Delivery suction grille with thermostat board

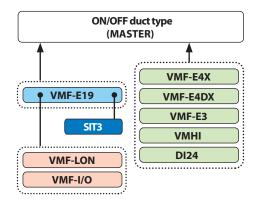
 Expansion board
 - Command interfaces

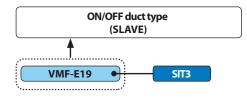
Note:

- Each Cassette (Master or Slave) must have a delivery recovery grille (fitted with a VMF thermostat board) selected from those that are compatible:
- The delivery recovery grilles can manage just one expansion board, selected from those available;
- Each Master Cassette must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models
VAAE EAV (EADV) /VAAE E2	FCLI
VMF-E4X (E4DX) / VMF-E3	VEC-I
VMF-IR	FCLI
	VEC-I
VIALIL / DIDA	FCLI
VMHI / DI24	VEC-I

COMPATIBILITY OF VMF COMPONENTS WITH ON/OFF DUCT TYPE FAN COILS





Type of component:

Thermostat board

Motor control board

Expansion board

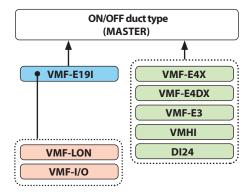
Command interfaces

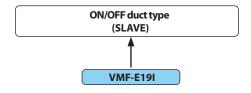
Note:

- Each duct type fan coil (Master or Slave) may have just one thermostat board, selected from those that are compatible;
- The VMF-E19 thermostat board can manage just one expansion board, selected from those available;
- Depending on the size of the duct type fan coil, a motor control board (VMF-SIT3 or SIT3) may be needed;
- Each Master fan coil must have just ONE command interface, selected from those that are compatible:

Command interfaces	Compatible ranges or models
	VED
VME FAV (FADV) /VME F2	VES
	FCZ PO
VMF-E4X (E4DX) / VMF-E3	FCY
	Omnia UL (P - PAF)
	FCZ-H (P-PO)
	VED
VMHI / DI24	VES
	FCZ PO
	FCY
	Omnia UL (P - PAF)
	FCZ-H (P-PO)

COMPATIBILITY OF VMF COMPONENTS WITH INVERTER DUCT TYPE FAN COILS





Type of component:

Thermostat board

Expansion board

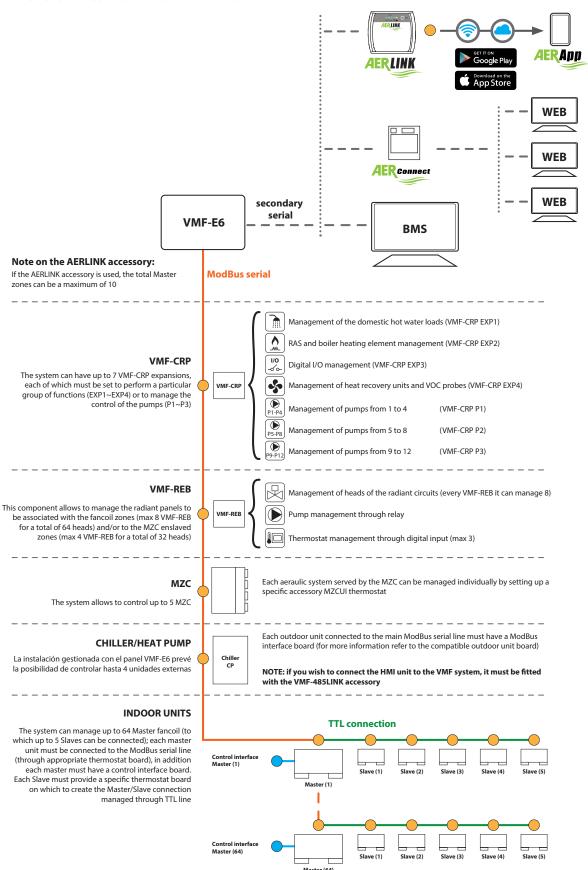
Command interfaces

Note:

- Each duct type fan coil (Master or Slave) may have just one thermostat board, selected from those that are compatible;
- The VMF-E19I thermostat board can manage just one expansion board, selected from those available;
- Each Master fan coil must have just ONE command interface, selected from those that are compatible:

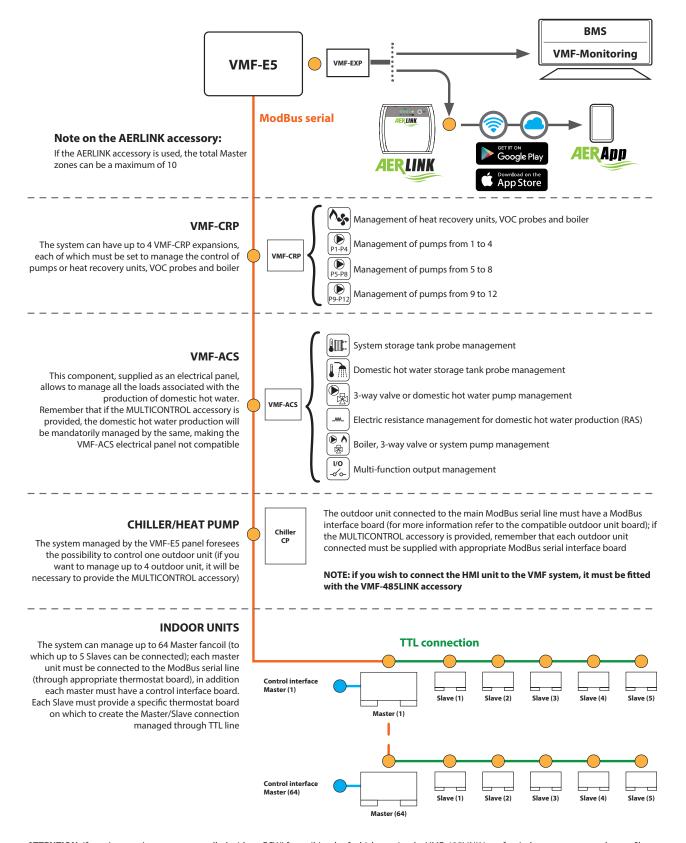
Command interfaces	Compatible ranges or models
	VED I
	VES I
VMF-E4X (E4DX) / VMF-E3	FCZI P
VIVIF-E4X (E4DX) / VIVIF-E3	FCYI
VMHI / DI24	Omnia UL (P - PAF)
	FCZI-H (P-PO)
	VED I
	VES I
	FCZI P
	FCYI
	Omnia UL (P - PAF)
	FCZI-H (P-PO)

EXAMPLE OF SYSTEM COMPONENTS WITH VMF-E6



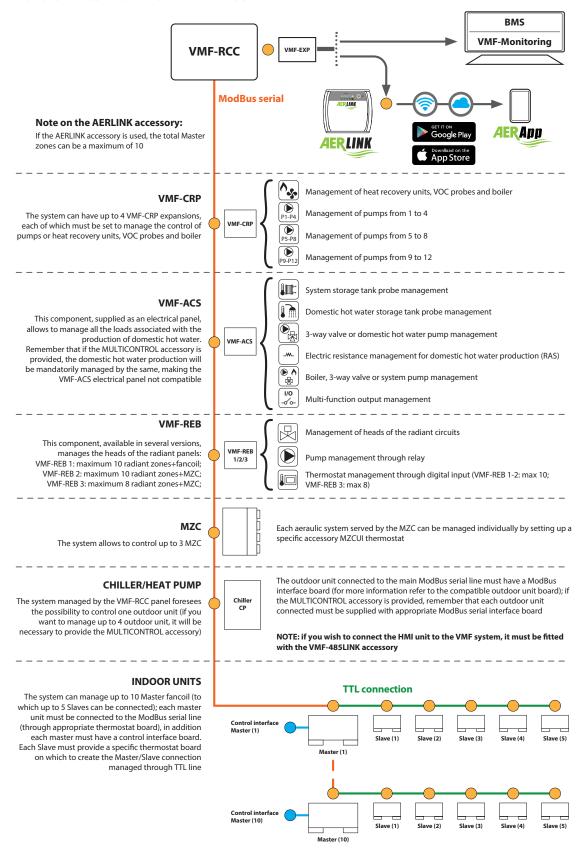
ATTENTION: if one (or more) areas are controlled with an FCWI fan coil (each of which require the VMF-485LINK interface), these areas cannot have a Slave unit

EXAMPLE OF SYSTEM COMPONENTS WITH VMF-E5



ATTENTION: if one (or more) areas are controlled with an FCWI fan coil (each of which require the VMF-485LINK interface), these areas cannot have a Slave unit.

EXAMPLE OF SYSTEM COMPONENTS WITH VMF-RCC



ATTENTION: if one (or more) areas are controlled with an FCWI fan coil (each of which require the VMF-485LINK interface), these areas cannot have a Slave

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HEAT RECOVERY UNIT

Objective air quality and energy saving: Aermec offers a large range of air-air heat recovery units for industrial and commercial systems and for Controlled Mechanical Ventilation Systems for residential.

The heat recovery units, provided with appropriate accessories (heat exchange coils, heat pump refrigerant circuit, etc.), actively participate in the air treatment providing an important contribution to the air conditioning of the spaces served.

The catalogued range of nominal available air flow rates is from 100 to around 16.100 m³/h.

	HEAT RECOVERY UNITS		Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
new	RPS	Counter-current flow heat recovery unit with inverter motor	800			228
	REPURO	With cross-flow exchanger	100-650			233
	TRS	Heat recovery unit with enthalpy exchanger	250-1300			239
	RPLI	Counter-current flow heat recovery unit with inverter motor	200-3900			241
	RTD	Thermodynamic recovery unit with integrated heat pump	1100-3200			246
	RPF	High performance heat recovery unit with cross-current recuperator	790-4250			250
	URX-CF	With cross-flow exchanger and refrigerant circuit	750-3300			254
	URHE-CF	High efficiency version with cross-flow exchanger and refrigerant circuit	1000-3300			258
	ERSR	High-efficiency heat recovery with rotary recovery unit	1000-30000			262















RPS

Counter-current flow heat recovery unit with inverter motor

Nominal air flow rate 800 m³/h



- VMC solution for classrooms, bars, restaurants, offices, hotels, shops
- Minimum air flow rate 800 m³/h
- Fully silent operation
- Ventilation management by VOC probe
- Photocatalytic device



DESCRIPTION

RPS is a counter-current heat recovery unit ideal for retrofit solutions for classrooms, offices, hotels, bars, restaurants, shops. With versatile installation and compact dimensions, it can be adapted to any existing space by drilling just two 300mm holes in one of the perimeter walls of the building, thus avoiding outside air ducts.

Thanks to the high thermal efficiency of the heat recovery unit, the appropriately filtered and treated fresh air is introduced at a temperature close to that of the room.

VERSIONS

RPS800A: With rear external air inlets and upper air delivery RPS800B: With side external air inlets and upper air delivery

FEATURES

Structure

The external metal casing is treated with RAL9003 anti-corrosion polyester paint and insulated internally with a 12mm thick high sound-absorbing mattress with low thermal conductivity.

The natural anodised aluminium delivery air distribution grille is adjustable. The stale air is suctioned through special micro-punched grilles directly in the unit casing.

Ventilation group

The ventilation unit consists of fan plug fans with rear-facing blades and a directly coupled Ec-type electric motor.

The use of fan plug fans reduces the power input compared to fans with front-facing blades.

Heat exchanger

Plate heat exchanger with counter-current flow.

Condensate drip

The aluminium condensate drip tray is thermally insulated and must be connected to a condensate discharge system.

Air filtration

As standard the fresh air is filtered through an ePM1 50% filter in accordance with ISO 16890 (F7 in accordance with EN 779).

As standard the exhaust air is filtered through an ePM10 50% filter in accordance with ISO 16890 (M5 in accordance with EN 779).

For version A only, other Coarse 30% filters in accordance with ISO 16890 (G2 in accordance with EN 779) are fitted to the outside air vents to protect the unit from large components such as pollen, leaves and insects. The filters are easily accessible for maintenance and cleaning.

Air sanitisation

As standard, the fresh air flow has a latest-generation device with a photo-catalytic UV lamp for active sanitisation.

The hydrogen peroxide produced by the photo-catalytic reaction, disseminated and carried by the air flow, makes this sanitisation action effective on the surfaces of the unit as well as in the air in the place of installation and by contact with the surfaces of the rooms treated.

Regulation

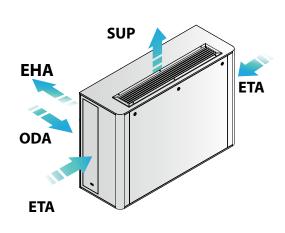
The power is supplied through the control board positioned on the inside panel of the heat recovery unit.

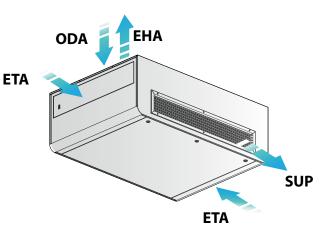
The unit is managed by a microprocessor control card and is controlled by the ultra-thin, flush-mounted control panel, which controls the functions from a capacitive touch screen with an LCD display.

The main adjustment functions are as follows:

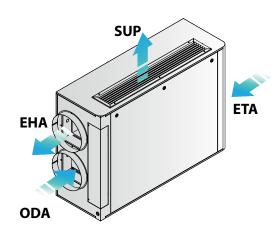
- Manual fresh and exhaust air ventilation speed control
- Fresh and exhaust air ventilation speed control according to the air quality (by VOC probe)
- Freecooling
- Heat recovery unit anti-freeze function
- Ambient air cleaning function
- Photo-catalytic device management
- ON/OFF from digital input
- Management via RS485 serial with Modbus RTU protocol

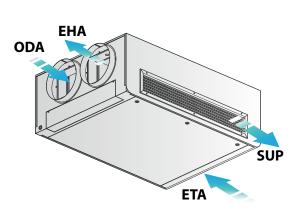
RPS800A





RPS800B





ODA = External air

ETA = Extracted air

SUP = Air introduced

EHA = Exhaust air

ACCESSORIES

AVM: Anti-vibration supports.

KVOC: The kit consists of the VOC probe, the 230V/24V power supply and cables for connecting the VOC probe, power supply and controller.

ACCESSORIES COMPATIBILITY

VOC probe kit

Accessory	RPS800A	RPS800B
KV0C800	•	
Antivibration		
Accessory	RPS800A	RPS800B
AVM	•	•

The accessory is not required for horizontal installation.

PERFORMANCE SPECIFICATIONS

SIZE			RPS800
Power supply	'		230V ~ 50Hz
Unit type			UVNR - UVB (Non-residential 2-way ventilation unit)
Nominal/maximum fresh air rate		m3/h	800
Nominal/maximum exhaust air rate		m3/h	750
Heat recovery system type			Statico a flussi controcorrente
Winter thermal efficiency	(1)	%	81
Heat capacity recovered in winter	(1)	kW	4,4
Summer thermal efficiency	(2)	%	77
Heat capacity recovered in summer	(2)	kW	1,9
Maximum electric input power		kW	0,300
Sound power L _w A		dB(A)	59,0
Fans			
Туре			Plug fan EC
Number			1+1
Filters			
Fresh air filter			EPM1 50% (F7)
Exhaust air filter			EPM10 50% (M5)

(1) Fresh air: Tbs = 0° C; RH = 80%; Exhaust air Tbs = 20° C; RH = 50%; nominal air flow rate (2) Fresh air: Tbs = 35° C; RH 50%; Exhaust air Tbs = 26° C; RH = 50%; nominal air flow rate

ROOM VENTILATION AIR FLOW RATES

School classrooms

For the calculation of the ventilation rate in school classrooms, reference can be made to the UNI 10339 standard (which sets the air renewal flow rate per student and by type of institution) and to Decree No. 81 of 20/03/2009

(which establishes the minimum and maximum number of students per class and by type of institution).

	UNI10339 - Sheet 3	Presidential decree no. 81 of 20/03/2009		Fresh	air rate	Max occupants (fresh air rate 800 m3/h)
	Air flow rate per person		oer class			Persons
	M3/h per person	Min	Max	Min	Max	No.
Schools						
Nursery school	14	18	29	259	418	56
Primary school	18	15	27	270	486	44
Middle school	22	18	30	389	648	37
High school	25	27	30	680	756	32

Bar, restaurants, officies, hotels, shops or stores

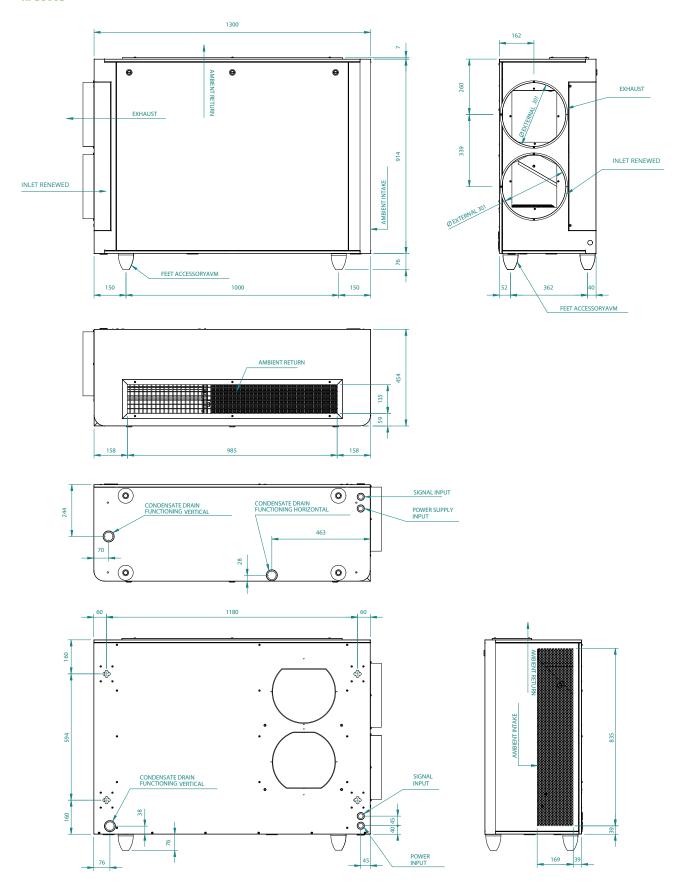
For the calculation of the ventilation rate in other types of buildings, reference can be made to the UNI 10339 standard, which sets the air renewal flow rate per person based on the type of indoor space.

	UNI10339 - Sheet 3	Max occupants (fresh air rate 800 m3/h)
	Air flow rate per person	Persons
	M³/h per person	No.
Bars, Restaurants		
Bar	40	20
Dining rooms restaurants	36	22
Offices		
Open space offices	40	20
Hotels		
Hall, lounges	40	20
Dining rooms	36	22
Shops		
Beauty salons	50	16
Stores	41	19

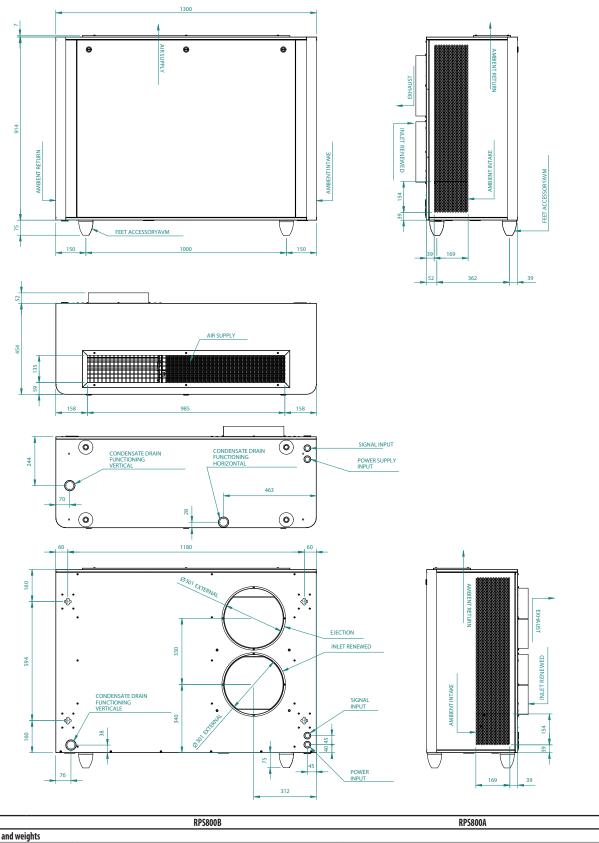
N.B.: the values given are indicative, assess the correct VMC sizing during the design phase.

DIMENSIONS

RPS800B



RPS800A



		RPS800B	RPS800A
Dimensions and we	ights		
Empty weight	kg	120	116
•			

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REPURO

Duct-type residential 2-way ventilation unit with heat recovery



- Compact dimensions
- High efficiency, reaching 90%+ (UNI EN 308)
- · Cold Plasma purifier



DESCRIPTION

REPURO it's an innovative counter-current heat recovery system that ensures the right air renewal in closed areas.

Thanks to the use of high-efficiency heat exchangers, REPURO allows fresh air to be delivered at a temperature close to that of the room itself, thereby cutting the energy costs that would be incurred with a traditional air renewal system or mechanical ventilation alone.

VERSIONS

Standard

R With electric heater

Installation:

- Ceiling or wall: (100 170)Floor or wall: (250 650)
- **FEATURES**
- Hexagonal heat recovery unit with a wider heat exchange surface;
- Free-standing sheet metal panels with internal insulation;
- Standard G4 filter on the fresh air;
- Standard G2 filter on the exhaust air;
- The filters can be removed for cleaning or replacement;
- The unit has in-built protection against frost formation with temperatures > -10°C;
- High efficiency, reaching 90%+ (UNI EN 308);
- Free cooling in the intermediate seasons, thanks to the automatic bypass function (not available for sizes 100 - 170);
- "No frost" bypass (RePuro 450-550-650), with PLSNF accessory;
- Air purification guaranteed by the Cold Plasma purifier: this is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionised air, free of foul odours;
- Nominal flow rate regulation from 0 to 100%;
- Centrifugal fans, directly coupled with the EC high-efficiency brushless electric motors with variable speed (ERP2015);
- Microprocessor control card that interfaces with the VMF system;

- Unit control by means of a wired panel (supplied as standard) with an innovative, extremely thin design. The functions are controlled via the capacitive touch keypad with an LCD display. Electric heater activation in the RePuro_R versions. Light grey front panel PANTONE COOL GRAY 1C;
- The 6-metre wired cable is provided as standard;
- Easy mounting on the wall (with the plate (provided), or on the floor (with the AVM accessory);
- Can adapt to an existing system;
- Compact dimensions;
- Silent operation;
- Filter change warning;
- Installation requires a condensate discharge system.

ACCESSORIES

VCH: 3-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.

BC: Condensate drip.

AVM: Anti-vibration supports.

SSR: Wall mounting kit

FF7: Filter with F7 efficiency class for the fresh air.

BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.

KSAE: External air sensor.

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

Plenum with multi-way flange

PLS350: Vacuum delivery plenum with sound-absorbent covering and multi-way flange.

PLS350E: Delivery plenum with sound-absorbent covering and multi-way flange. An electric heater is housed inside.

PLS350L: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp is housed inside.

PLS350LE: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp and an electric heater are housed inside.

PLS350W: Delivery plenum with sound-absorbent covering and multi-way flange. A water coil with condensate collection tray is housed inside; it is mandatory to fit the water valve as well.

PLS350WE: Delivery plenum with sound-absorbent covering and multi-way flange. An electric heater and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.

PLS350WL: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.

PLS350WLE: Delivery plenum with sound-absorbent covering and multi-way flange. A water coil with condensate collection tray, a germicidal lamp, and an electric heater are housed inside; it is mandatory to fit the water valve as well.

PLS650: Vacuum delivery plenum with sound-absorbent covering and multi-way flange.

PLS650E: Delivery plenum with sound-absorbent covering and multi-way flange. An electric heater is housed inside.

PLS650L: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp is housed inside.

PLS650LE: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp and an electric heater are housed inside.

PLS650W: Delivery plenum with sound-absorbent covering and multi-way flange. A water coil with condensate collection tray is housed inside; it is mandatory to fit the water valve as well.

PLS650WE: Delivery plenum with sound-absorbent covering and multi-way flange. An electric heater and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.

PLS650WL: Delivery plenum with sound-absorbent covering and multi-way flange. A germicidal lamp and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.

PLS650WLE: Delivery plenum with sound-absorbent covering and multi-way flange. A water coil with condensate collection tray, a germicidal lamp, and an electric heater are housed inside; it is mandatory to fit the water valve as well.

Plenum with 1-way flange

PLSM350: Vacuum delivery plenum with sound-absorbent covering and 1-way flange.

PLSM350E: Delivery plenum with sound-absorbent covering and 1-way flange. An electric heater is housed inside.

PLSM350L: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp is housed inside.

PLSM350LE: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp and an electric heater are housed inside.

PLSM350W: Delivery plenum with sound-absorbent covering and 1-way flange. A water coil with condensate collection tray is housed inside; it is mandatory to fit the water valve as well.

PLSM350WE: Delivery plenum with sound-absorbent covering and 1-way flange. An electric heater and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.

PLSM350WL: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.

PLSM350WLE: Delivery plenum with sound-absorbent covering and 1-way flange. A water coil with condensate collection tray, a germicidal lamp, and an electric heater are housed inside; it is mandatory to fit the water valve as well.

PLSM650: Vacuum delivery plenum with sound-absorbent covering and 1-way flange.

PLSM650E: Delivery plenum with sound-absorbent covering and 1-way flange. An electric heater is housed inside.

PLSM650L: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp is housed inside.

PLSM650LE: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp and an electric heater are housed inside.

PLSM650W: Delivery plenum with sound-absorbent covering and 1-way flange. A water coil with condensate collection tray is housed inside; it is mandatory to fit the water valve as well.

PLSM650WE: Delivery plenum with sound-absorbent covering and 1-way flange. An electric heater and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.

PLSM650WL: Delivery plenum with sound-absorbent covering and 1-way flange. A germicidal lamp and a water coil with condensate collection tray are housed inside; it is mandatory to fit the water valve as well.

PLSM650WLE: Delivery plenum with sound-absorbent covering and 1-way flange. A water coil with condensate collection tray, a germicidal lamp, and an electric heater are housed inside; it is mandatory to fit the water valve as well.

VMF system

VMF-E5B: White recessed panel with backlit graphic LCD display and capacitive keypad for centralised command/control of a complete hydronic system.

VMF-E5N: Black recessed panel with backlit graphic LCD display and capacitive keypad for centralised command/control of a complete hydronic system.

VMF-VOC: Air quality detection accessory.

ACCESSORIES COMPATIBILITY

Model	Ver	100	170	250	350	450	550	650
BMConverter	.,R	•	•	•	•	•	•	•
KSAE	.,R	•	•	•	•	•	•	•
VMF-CRP	R		•	•	•		•	

Plenum with multi-way flange

Model	Ver	100	170	250	350	450	550	650
PLS350		•						
PLS350E		•						
PLS350L		•						
PLS350LE		•	•	•	•			
LUSSOULE	R	•	•	•				
PLS350W (1)		•						
PLS350WE (1)		•						
PLS350WL (1)		•						
PLS350WLE (1)		•						
PLS650	.,R					•	•	
PLS650E	.,R					•	•	•
PLS650L	.,R					•	•	
PLS650LE	.,R					•	•	•
PLS650W (1)	.,R					•	•	•
PLS650WE (1)	.,R					•	•	
PLS650WL (1)	.,R					•	•	•
PLS650WLE (1)	.,R					•	•	•

⁽¹⁾ It is mandatory to also provide for the water valve.

Water valves

3 wav valve kit

5 may varve kit							
Ver	100	170	250	350	450	550	650
.,R	VCH						
2 way valve kit							
Ver	100	170	250	350	450	550	650
R	VCHD						

Installation accessories

Condensate drip

Model	Ver	100	170	250	350	450	550	650
BC10 (1)	.,R	•	•	•	•	•	•	•
BC20 (2)	.,R	•					•	•

⁽¹⁾ For vertical installation.(2) For horizontal installation.

(2) FUI HUHZUHTAI HISTAHATION.

Anti-vibration support feet

Ver	100	170	250	350	450	550	650
.,R	-	-	AVM	AVM	AVM	AVM	AVM

The accessory cannot be fitted on the configurations indicated with -

Wall mounting kit

Ver	100	170	250	350	450	550	650
.,R	-	-	SSR	SSR	SSR	SSR	SSR

The accessory cannot be fitted on the configurations indicated with -

External air sensor

Ver	100	170	250	350	450	550	650
.,R	BMConverter						

Accessories

Plenum with multi-way flange

Model	Ver	100	170	250	350	450	550	650
PLS350		•						
PLS350E		•						
PLS350L		•						
PLS350LE		•	•	•	•			
LUSSOULE	R	•	•	•				
PLS350W (1)		•						
PLS350WE (1)		•						
PLS350WL (1)		•						
PLS350WLE (1)		•						
PLS650	.,R					•	•	•
PLS650E	.,R					•	•	•
PLS650L	.,R					•	•	•
PLS650LE	.,R					•	•	•
PLS650W (1)	.,R					•	•	•
PLS650WE (1)	.,R					•	•	•
PLS650WL (1)	.,R					•	•	•
PLS650WLE (1)	.,R					•	•	•

⁽¹⁾ It is mandatory to also provide for the water valve.

Plenum with 1-way flange

Model	Ver	100	170	250	350	450	550	650
PLSM350	.,R	•	•	•	•			
PLSM350E	.,R	•	•	•	•			
PLSM350L	.,R		•	•	•			
PLSM350LE	.,R	•	•	•	•			
PLSM350W (1)	.,R	•	•	•	•			
PLSM350WE (1)	.,R	•	•	•	•			
PLSM350WL (1)	.,R	•	•	•	•			
PLSM350WLE (1)	.,R	•	•	•	•			
PLSM650	.,R					•	•	•
PLSM650E	.,R					•	•	•
PLSM650L	.,R					•	•	•
PLSM650LE	.,R					•	•	•
PLSM650W (1)	.,R					•	•	•
PLSM650WE (1)	.,R					•	•	•
PLSM650WL (1)	.,R					•	•	•
PLSM650WLE (1)	.,R					•	•	•

⁽¹⁾ It is mandatory to also provide for the water valve; if you intend to use the system with post heating battery, or in any case in all those cases in which the air temperature in the channels could cause condensation on the external surfaces of the pipes, it is mandatory to adequately isolate the components of the system.

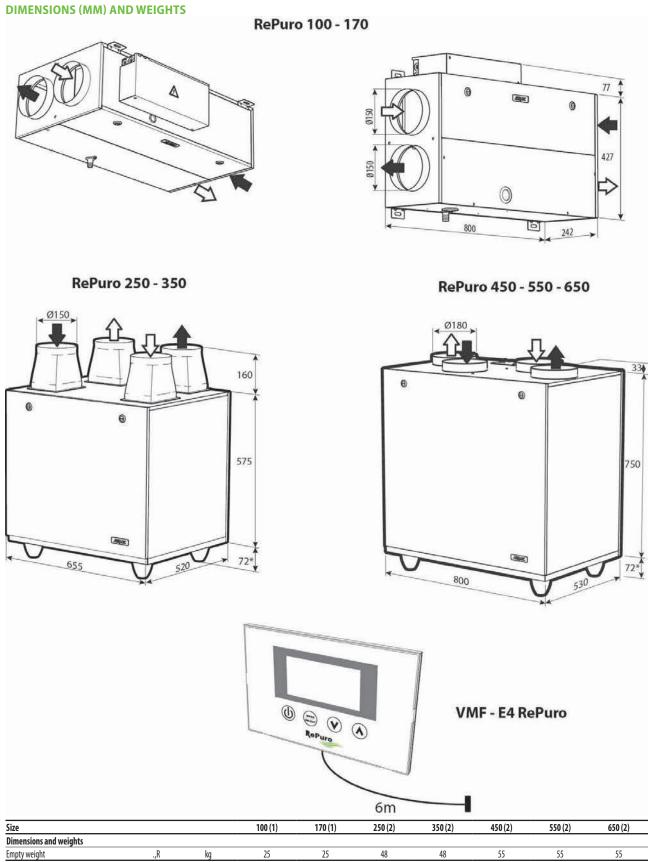
VMF system

Model	Ver	100	170	250	350	450	550	650
VMF-E5B	.,R	•	•	•	•	•	•	•
VMF-E5N	.,R	•	•	•	•	•	•	•
VMF-VOC	R	•	•		•	•	•	

PERFORMANCE SPECIFICATIONS

Size		100 (1)	170 (1)	250 (2)	350 (2)	450 (2)	550 (2)	650 (2)
Heat recovery unit								
Power supply					230V ~ 50Hz			
Summer recovery (3)								
Recovery efficiency	%	90	85	86	82	83	81	78
Recovered heating power	W	180	289	430	573	750	887	1015
Winter recovery (4)								
Recovery efficiency	%	94	91	91	89	90	88	87
Recovered heating power	W	957	1573	2329	3171	4118	4940	5734
General data								
SEC	kWh/(m²a)	-36	-38	-37	-40	-40	-40	-40
CLASS					А			
Total input power	W	45	65	160	180	220	280	360
Heat recovery unit performance								
Nominal air flow rate	m³/h	100	170	250	350	450	550	650
High static pressure	Pa	85	20	195	133	100	120	70

⁽¹⁾ Ceiling or wall installation
(2) Floor or wall installation
(3) Exhaust air temperature 26°C D.B., 50% R.H; Fresh air temperature 32°C D.B., 50% R.H.
(4) Exhaust air temperature 20°C D.B., 50% R.H; Fresh air temperature -10°C D.B., 80% R.H.



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⁽¹⁾ Ceiling or wall installation (2) Floor or wall installation

PuroDistribution

A complete range for air distribution which, combined with the innovative RePuro heat recovery and air purification units, provides designers, installers and users with an efficient, practical installation solution that guarantees optimum comfort throughout the lifecycle of the system.

EASY "PLUG & PLAY" INSTALLATION

LOW DUCT HEIGHT FOR IN-WALL AND SCREED-FLOOR APPLICATION

ANTI-STATIC AND ANTI-BACTERIAL PROPERTIES



The picture is intended purely as an example of a system with semi-rigid, semi-oval, antibacterial ducts. This example consists of:

- RePuro heat recovery units
- 2 Duct with fresh/exhaust air intake
- Interconnection between RePuro and the distribution box 3
- 4 Hydronic box
- Air distribution with semi-rigid, semi-oval, antibacterial ducts
- Terminals with designer intakes or grilles

In addition to point 5, the Aermec range also includes a further 2 air distribution systems:

- Air distribution with semi-rigid, round ducts
- Air distribution with rigid, rectangular ducts

For more information about all the types and solutions available, refer to the "AerDistribution" selection program and the technical documentation, both available at www.aermec.com

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TRS

Heat recovery unit with enthalpy exchanger



- Compact dimensions
- Fans coupled to brushless Ec motors with low energy consumption
- Easy installation
- Horizontal installation



DESCRIPTION

The TRS heat recoveries, for horizontal inside installation allow the combination of maximum comfort with a safe energy saving.

It is more and more necessary in modern systems to create a forced ventilation, but also involves the expulsion of climate-controlled air, thus determining a higher energy consumption.

TRSintends to solve these problems using a static heat recovery unit that saves most of the energy that would otherwise be lost.

The unit adopts high-efficiency heat recovery with countercurrent flows which consists of flat sheets of special paper that allow you to recover both sensible and latent heat (humidity). Therefore, no condensate drip tray or the relative drain pipe is required.

The high static pressures available allow ducts to be mounted, thereby allowing the extraction or input of air across multiple environments simultaneously.

They can be integrated in the direct expansion and hydronic systems both in heating and cooling mode.

FEATURES

- Very compact units that can only be installed horizontally, which require simple maintenance of the heat exchanger and filters both removable from the side.
- Free-cooling in mid-season thanks to the automatic by-pass function;

- Centrifugal fans with Brushless EC motor, with the possibility to adjust the speed on 10 different levels through the obligatory accessory TR-SPTS, touch screen control panel. In the absence of this accessory it will only be possible, by acting on the remote on-off contact, to operate the fans always at maximum speed;
- Built-in electrical panel with electronic board for the control of ventilation and free-cooling functions;
- Hexagonal-shaped enthalpy recovery unit to increase the exchange surface;
- Self-supporting panels in galvanized sheet with insulation, both internal and external. Access via the side door;
- ISO 16890 ePM₂₅ 95% efficiency class filter with synthetic cleanable media and COARSE 50% pre-filter on fresh air, COARSE 50% filter on return air intake;
- Pressure switch with integrated dirty filter signal;
- Connections to funnels with plastic fittings;
- Silent operation;
- The installation does not require a condensate drain system.

ACCESSORIES

The following accessories are available for complete control of the TRS recovery units:

TRSPTS: Control panel with Touch Screen. Mandatory accessory.

TRSQSW: Wall CO2 probe.

TRSUSW: Wall humidity probe.

ACCESSORIES COMPATIBILITY

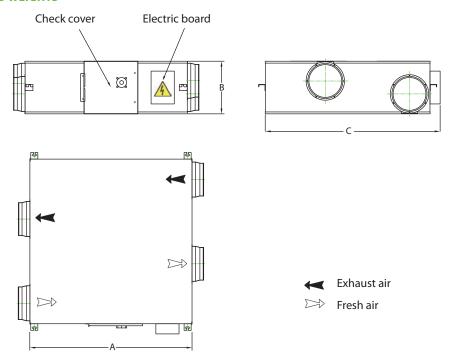
Accessory	TRS251	TRS351	TRS501	TRS651	TRS801	TRS1001	TRS1301
TRSPTS	•	•	•	•	•	•	•
TRSQSW	•	•	•	•	•	•	•
TRSUSW	•	•	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

		TRS251	TRS351	TRS501	TRS651	TRS801	TRS1001	TRS1301
Fans (1)								
Nominal air flow rate	m³/h	250	350	500	650	800	1000	1300
Nominal useful head	Pa	90	140	110	100	140	140	140
Maximum input power	A	0,5	0,6	0,6	1,2	1,4	2,1	2,7
Туре	type				EC			
Speed number	no.	10	10	10	10	10	10	10
SFP int.	W/(m³/s)	812,00	670,00	547,00	846,00	865,00	881,00	873,00
Maximum input power	kW	0,08	0,13	0,15	0,23	0,32	0,39	0,50
Sound data (2)								
Sound pressure level (1 m)	dB(A)	34,0	37,0	39,0	40,0	42,0	43,0	44,0
Heating performances (3)								
Winter thermal efficiency	%	73,0	74,0	76,0	74,0	76,0	76,0	74,2
Enthalpy winter efficiency	%	65,0	65,0	67,0	65,0	65,0	62,0	59,0
Cooling performances (4)								
Summer thermal efficiency	%	73,0	74,0	76,0	74,0	76,0	76,0	74,0
Summer enthalpy efficiency	%	62,0	62,0	63,0	60,0	63,0	60,0	58,0
Heat recovery unit								
Dry heating efficiency (5)	%	73,0	74,0	76,0	74,0	76,0	76,0	74,0
Power supply					230V~50Hz - 60Hz			

- (1) Performances referring to clean filters
 (2) Sound pressure level assessed at 1m from suction / discharge ports and the inspection side at nominal conditions in free field.
 (3) Recovery air 20 °C 50%; External air 5 °C 80%.
 (4) Recovery air 26 °C 50%; External air 34 °C 50%.
 (5) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K, excluding the heating gain generated by the fan motors and the internal leakage.

DIMENSIONS AND WEIGHTS



		TRS251	TRS351	TRS501	TRS651	TRS801	TRS1001	TRS1301
Dimensions and weights								
A	mm	599	804	904	884	1134	1216	1216
В	mm	814	814	894	1186	1186	1199	1199
C	mm	100	100	107	85	85	85	85
Empty weight	kg	30	37	43	65	71	83	83

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Counter-current flow heat recovery unit with inverter motor



- Compact dimensions
- EC fan Plug-fan
- Versions with water coil or electric for the post-heating
- Horizontal installation



DESCRIPTION

The RPLI heat recoveries, for horizontal inside installation allow the combination of maximum comfort with a safe energy saving.

It is more and more necessary in modern systems to create a forced ventilation, but also involves the expulsion of climate-controlled air, thus determining a higher energy consumption.

The unit is equipped with a counter-current heat recovery unit and allows an effective heat exchange between the expulsion air flow and fresh air that is pre-heated or pre-cooled, depending on the season, thus saving the energy that would otherwise be lost with the expelled exhaust air.

They can be integrated in the direct expansion and hydronic systems both in heating and cooling mode.

VERSIONS

Horizontal installation:

RPLI (L o P): L low, P high, useful static pressure RPLI_E: With electric heating coil.

RPLI_W: With water coil:Cooled / hot

Also to be used with cooled water:

- For sizes 030-100 in flow orientation 1 (°);
- Sizes 070-100 with flow orientation 2 (X), in this configuration, the coil is not available for sizes 030-050;

The following can only be used with hot water:

Sizes 140-400 with any type of flow configuration (° and X).

FEATURES

- Plug-fan radial fan with EC motors;
- Aluminium plate counter-current flow heat recovery unit with heating efficiency in compliance with the European regulation 1253, housing in condensate collection basin;
- Ventilation by-pass of the external air flow equipped with internal damper, with free cooling and even anti-freeze function;
- Synthetic filter class M5 according to EN779 placed on the expelled air intake;
- Synthetic filter class F7 according to EN779 placed on the external air inlet;
- Filters fouling pressure switches assembled;
- Self-supporting sandwich panels in galvanised sheet metal with injected polyurethane insulation density 45 kg/m³ and a thickness of 25 mm.

The polyurethane is in compliance with the standard UL 94 class HBF and the panel with the standard NF P 512: 1986 in class M1;

- Condensate collection basin in galvanised steel;
- Easy accessible fans, from bottom for the sizes 030-100, from the side for the sizes 140-400;
- Accessible filters, from the top and from the bottom for the sizes 030-100, from the side for the sizes 140-400;
- The fan can be controlled with a 0-10 Vdc controller, RVC or RVCL accessory.

ACCESSORIES

Regulation

HRB: Electrical panel (IP56) to be installed outside the heat recovery unit. It is formed of a plastic electric box 300x220x120. It houses an electronic board for controlling the loads, 4 NTC temperature probes (6m long), a 4-pole serial cable + shield for connecting the control card to the user interface of the system, and an interface panel. Via the configuration of 10 DIP switches, the electronic board in the kit can control: an electric heater for pre-warming the air taken in from the room; up to 2 electric heaters (with cascade management) for the post-treatment of the fresh air delivered back into the room; a component for air purification (e.g. UV lamp, Plasmacluster,

RVC: Speed regulator supplied in n°2 pieces.

Additional modules

M4F: External module equipped with pre-filters class G4 (according to EN779) to be placed on the external air inlet.

MBF: External module with water cooling coil and condensate collection basin (only for sizes 140-400).

MBF_X: External module with water cooling coil and condensate collection basin (only for sizes 140X-400X).

MBP: Module with post-heating water coil.

MBE: Module with electric coil (anti-freeze and/or post-heating function).

MSU: Module equipped with silencer baffles. The accessory is supplied in n°1 piece

FGC: Circular flanges. The accessory is supplied in n°1 piece.

Adjustment accessories

TWWV050: 3-way valve (the valve body only - does not include the pipe kit for connection to the heat recovery unit or external module with coil) PN16 KVS 1.0 DN15.

TWWV100: 3-way valve (the valve body only - does not include the pipe kit for connection to the heat recovery unit or external module with coil) PN16 KVS 2.5 DN15.

TWWV400: 3-way valve (the valve body only - does not include the pipe kit for connection to the heat recovery unit or external module with coil) PN16 KVS 6.3 DN20.

TF100: DN15 threaded couplings with shank and flat-seal idle nut for heat recovery unit / external module with coil.

TF400: DN20 threaded couplings with shank and flat-seal idle nut for heat recovery unit / external module with coil.

TWWVA: Actuator for 3-way valve 24V, for receiving ON-OFF or modulating commands (0-10V), for correct operation provide the VMF-MOD accessory. **FCDA:** Servomotor for free cooling damper.

VMF-MOD: Expansion board for the management of modulating valves.

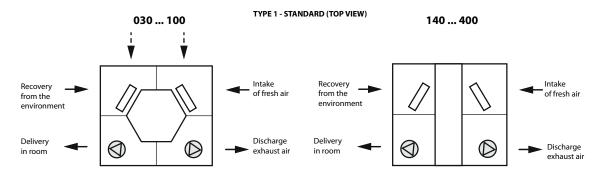
CONFIGURATOR

COMITICON	
Field	Description
1,2,3,4	RPLI
5,6,7	Size 030, 050, 070, 100, 140, 200, 300, 400
8	Version
L	Low useful static pressure
Р	High useful static pressure
9	Installation
0	Horizontal
10	Flow orientation
0	Type 1
X	Type 2
11	Exchanger
0	No internal coil
E	Post-heating electric internal coil
W	Water coil (1)

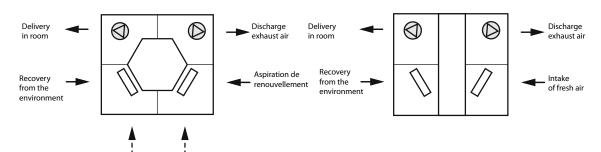
⁽¹⁾ Can also be used with chilled water: with sizes 030-100 in flow orientation 1 (°), 070-100 in flow orientation 2 (X); the coil is not available for sizes 030-050 with flow orientation 2 (X). Sizes 140-400 can only

be used with hot water.

AVAILABLE ORIENTATION



TYPE 2 - TO BE REQUESTED DURING ORDER (TOP VIEW)



ACCESSORIES COMPATIBILITY

Regulation

Regulation								
egulation and control pa	anel (outside the h	eat recovery u	nit)					
Ver	030	050	070	100	140	200	300	400
L,P	HRB	HRB	HRB	HRB	HRB	HRB	HRB	HRB
peed regulator								
Ver	030	050	070	100	140	200	300	400
L	RVC40	RVCL	RVCL	RVC40	RVCL	RVC40	RVC40	RVC40
Р	RVC40	RVC40	RVC40	RVC40	RVC40	RVC40	RVC40	RVC40
dditional modules								
xternal module equippe	d with pre-filters							
Ver	030	050	070	100	140	200	300	400
L,P	M4F03	M4F05	M4F07	M4F10	M4F14	M4F20	M4F30	M4F40
kternal module with wa	ter cooling coil							
Ver	030	050	070	100	140	200	300	400
L,P	-	-	-	-	MBF14	MBF20	MBF30	MBF40
e accessory cannot be fitted on the co	onfigurations indicated with	-						
Ver	030	050	070	100	140	200	300	400
L,P	-	-	-	-	MBF14X	MBF20X	MBF30X	MBF40X
e accessory cannot be fitted on the co	onfigurations indicated with	-						
way valve kit		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,				
ccessory	MBF14	MBF14X	MBF20	MBF20X	MBF30	MBF30X	MBF40	MBF40X
WWV020	•	•	•	•				
NWV400		1		1	•	•	•	•
readed coupling	MBF14	MBF14X	MBF20	MBF20X	MBF30	MBF30X	MBF40	MBF40X
ccessory F100	MIDF14 •	MDF14X	MBF2U •	MBF2UX •	UCTUINI	Νυστουίλι	IVIDE#U	ΙΝΙΟΓΉΟΛ
F400	· · · · · · · · · · · · · · · · · · ·	· ·	· ·	· ·	•	•	•	•
tuator for valves								
ccessory	MBF14	MBF14X	MBF20	MBF20X	MBF30	MBF30X	MBF40	MBF40X
VWVA	•	•		•	•	•	•	
lodule with post-heating	n water ceil							
Ver	030	050	070	100	140	200	300	400
L,P	MBP03	MBP05	MBP07	MBP10	MBP14	MBP20	MBP30	MBP40
,	MDI 03	INDI 03	MDI 07	MIDI TO	TI IUM	MDI 20	11101 30	101110
lodule with electric coil	020		070	100	140		200	400
Ver L,P	030 MBE03	050 MBE05	070 MBE07	100 MBE10	140 MBE14	200 MBE20	300 MBE30	400 MBE40
L _I I	MIDLOS	MIDLOJ	INIDLO7	MIDLIU	MULIT	MIDLZU	MDLJU	WIDLAG
lodule equipped with sil								
Ver	030	050 MCU05	070	100	140	200	300	400
L,P	MSU03	MSU05	MSU07	MSU10	MSU14	MSU20	MSU30	MSU40
ircular flanges	A74	050	474	400	440	300	300	400
Ver L,P	030 FGC030	050 FGC050	070 FGC070	100 FGC100	140 FGC140	200 FGC200	300 FGC300	400 FGC400
L,r	rucusu	rucusu	rucu/u	ruciou	<u> </u>	FUCZUU	<u> </u>	FGC400
ccessories								
way valve kit								
Ver	030	050	070	100	140	200	300	400
L,P	TWWV050	TWWV050	TWWV100	TWWV100	TWWV400	TWWV400	TWWV400	TWWV400
hreaded coupling								
Ver	030	050	070	100	140	200	300	400
L,P	TF100	TF100	TF100	TF100	TF400	TF400	TF400	TF400
ctuator for 3-way valves	;							
Ver	030	050	070	100	140	200	300	400
L,P	TWWVA	TWWVA	TWWVA	TWWVA	TWWVA	TWWVA	TWWVA	TWWVA
ree cooling damper actu				'				
Ver	030	050	070	100	140	200	300	400
L,P	FCDA	FCDA	FCDA	FCDA	FCDA	FCDA	FCDA	FCDA

Expansion board for managing the modulating valves

Ver	030	050	070	100	140	200	300	400
L.P	VMF-MOD							

PERFORMANCE SPECIFICATIONS

RPLI - L

Size		030	050	070	100	140	200	300	400
Heat recovery unit									
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	400V 3~50Hz
Unit type					UVNR (non-resider	tial ventilation uni	t)		
Heat recovery system type	Type/n°				Static at counte	r-current flow / 1			
Heat capacity recovered (EN308) (1)	kW	1,6	2,4	3,6	4,8	7,1	10,0	14,9	19,7
Dry heating efficiency (2)	%	81,1	78,1	76,8	75,3	76,0	76,3	75,5	75,6
Information in compliance with Annex V of regulation EU	no. 1253/2014								
Nominal air flow rate supply / recovery	m³/s	0,08	0,13	0,19	0,26	0,39	0,54	0,82	1,08
Nominal air flow rate supply / recovery	m³/h	300	450	700	950	1400	1950	2950	3900
Minimum air flow rate	m³/h	200	250	400	550	800	1150	1750	2350
Fans (3)									
Commissioning	type				Analogue signal	of EC fan (0-10Vdc)			
Туре	type				I				
Number	no.	2	2	2	2	4	2	2	2
Supplied electrical power consumption	kW	0,07	0,09	0,14	0,21	0,33	0,45	0,47	0,73
Recovered electrical power consumption	kW	0,06	0,09	0,14	0,20	0,31	0,41	0,44	0,69
Total input electric power	kW	0,13	0,17	0,28	0,41	0,64	0,86	0,91	1,42
SFP int.	W/(m ³ /s)	820,00	953,00	907,00	1120,00	1132,00	1103,00	748,00	928,00
SFP int. lim. 2018	W/(m ³ /s)	1329	1234	1185	1131	1132	1118	1053	1015
Filters face velocity	m/s	0,8	1,2	1,0	1,4	2,2	2,2	1,9	2,5
Nominal external pressure Δp (3)	Pa	100	100	110	110	110	110	110	110
Useful static supply pressure	Pa	323	401	191	143	112	110	132	196
Useful static recovery pressure	Pa	328	416	198	161	154	149	164	242
Supplied internal pressure drop Δps int.	Pa	115	228	189	293	268	270	245	290
Recovered internal pressure drop Δps int.	Pa	110	213	182	274	228	230	213	244
Fans static efficiency (4)	%	35.8%	57.0%	57.0%	59.7%	57.0%	49.2%	67.2%	66.9%
Internal leakage (5)	%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
External leakage	%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%
Air filter									
Expelled air filter	Type/n°				М	5/1			
Delivery air filter	Type/n°				F	7/1			
Delivery filter energy classification					On re	quest			
Recovery filter energy classification					On re	quest			

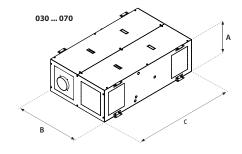
⁽¹⁾ Expelled air: Tdb=25°C; Twb<14°C. Fresh air: Tdb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K, excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters
(4) According to regulation EU 327/2011
(5) External leakage test performed at +400 Pa and -400 Pa; internal leakage test performed at 250 Pa

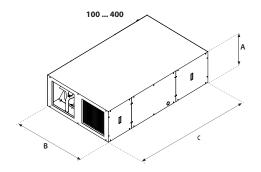
RPLI - P

Size		030	050	070	100	140	200	300	400
Heat recovery unit									
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	400V 3~50Hz	400V 3~50Hz
Unit type					UVNR (non-resider	ntial ventilation un	it)		
Heat recovery system type	Type/n°				Static at counte	r-current flow / 1			
Heat capacity recovered (EN308) (1)	kW	1,6	2,4	3,6	4,8	7,1	10,0	14,9	19,7
Dry heating efficiency (2)	%	81,1	78,1	76,8	75,3	76,0	76,3	75,5	75,6
Information in compliance with Annex V of regulation EU	no. 1253/2014								
Nominal air flow rate supply / recovery	m³/s	0,08	0,13	0,19	0,26	0,39	0,54	0,82	1,08
Nominal air flow rate supply / recovery	m³/h	300	450	700	950	1400	1950	2950	3900
Minimum air flow rate	m³/h	200	250	400	550	800	1150	1750	2300
Fans (3)									
Commissioning	type				Analogue signal	of EC fan (0-10Vdc))		
Туре	type					EC			
Number	no.	2	2	2	2	2	4	4	2
Supplied electrical power consumption	kW	0,04	0,08	0,11	0,22	0,35	0,41	0,55	0,87
Recovered electrical power consumption	kW	0,04	0,08	0,11	0,21	0,33	0,38	0,50	0,82
Total input electric power	kW	0,09	0,16	0,23	0,42	0,68	0,79	1,04	1,69
SFP int.	W/(m³/s)	543,00	903,00	694,00	1116,00	1095,00	918,00	770,00	999,00
SFP int. lim. 2018	$W/(m^3/s)$	1329	1234	1185	1131	1132	1118	1053	1015
Filters face velocity	m/s	0,8	1,2	1,0	1,4	2,2	2,2	1,9	2,5
Nominal external pressure Δp (3)	Pa	100	100	125	125	145	145	150	150
Useful static supply pressure	Pa	506	338	279	638	412	469	462	303
Useful static recovery pressure	Pa	511	353	285	656	452	509	493	349
Supplied internal pressure drop Δps int.	Pa	115	228	189	293	268	270	245	290
Recovered internal pressure drop Δps int.	Pa	110	213	182	274	228	230	213	244
Fans static efficiency (4)	%	61,7	61,7	61,7	57,2	57,2	61,8	66,9	62,7
Internal leakage (5)	%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%
External leakage	%	<3%	<3%	<3%	<3%	<3%	<3%	<3%	<3%
Air filter									
Expelled air filter	Type/n°				М	5/1			
Delivery air filter	Type/n°				F	7/1			
Delivery filter energy classification					On re	equest			
Recovery filter energy classification					On re	equest			

(1) Expelled air: Idb=25°C; Twb<-14°C. Fresh air: Idb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K, excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters
(4) According to regulation EU 327/2011
(5) External leakage test performed at +400 Pa and -400 Pa; internal leakage test performed at 250 Pa

DIMENSIONS AND WEIGHTS





Size		030	050	070	100	140	200	300	400
Dimensions and weights									
A	mm	400	400	435	435	460	460	600	600
В	mm	800	800	945	945	1100	1600	1700	2050
С	mm	1300	1300	1600	1600	1800	1800	2350	2350
Empty weight	kg	95	93	125	123	160	210	287	340

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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RTD

Thermodynamic recovery unit with integrated heat pump

Air flow rate 1100 - 3200 m³/h



- Compact dimensions
- · Compressor with inverter
- EC fan Plug-fan
- Fixed point adjustment in delivery
- Horizontal installation



DESCRIPTION

Is an air replacement, filtration and treatment unit equipped with high efficiency thermodynamic recovery performed by an integrated cooling circuit. The inverter compressor allows a high energy saving at the same time as maintaining the set delivery temperature.

The unit can be integrated in the direct expansion and hydronic systems both in heating and cooling mode.

FEATURES

Versions

Horizontal installation:

- RTD: Standard unit with constant flow-rate control.
- RTD_Q: Units with flow modulation according to the concentration of CO₂
- RTD_W: Unit with internal hot/cold water coil complete with three-way valve, modulating servo-control and anti-freeze thermostat.

Main components

- Cooling circuit BLDC inverter compressor.
- Plug fans with EC inverter motor.
- Safety valve.
- Lower sandwich panels in galvanised sheet metal with injected polyurethane insulation; upper and side panel in galvanised sheet metal internally lined with insulating mat
- Synthetic filter class Coarse 85% according to EN16890 on the outside air inlet complete with fouling detection pressure switch.

— Condensate collection tank in aluminium alloy with side discharge.

Regulation

- **Power and control electrical panel** on the machine.
- Programmable controller able to manage all the advanced functions present on the unit (with fixed point adjustment in delivery; cooling, heating, automatic, free cooling functions; compressor, fans and eventual water coil modulation).
- Remote panel (mandatory accessory)) in graphic display version or Touch version.

ACCESSORIES

CPVR: Recovery fan constant air flow rate control (accessory supplied separately; the function is enabled on the controller).

PRGD1: Control panel for wall or flush-mount installation with graphic display. Maximum installation distance of 10m.

PRGDX: Touch screen control panel for wall or flush-mount installation complete with black and white frame. Maximum installation distance of 150m

MRE: Single-stage anti-freeze electric heater module 2 kW to be installed on the external air intake (required for outdoor air temperatures below -5° C). **MF:** Coarse 85% efficiency filters module (EN16890) to be positioned in re-

MF: Coarse 85% efficiency filters module (EN16890) to be positioned in recovery (side extraction) complete with filter clogging pressure switch.

■ The remote controller is required for unit operation, it is possible to select between PRGD1 and PRGDX.

ACCESSORIES COMPATIBILITY

Recovery fan constant air flow rate control and xontrol panel

Model	Ver	11	14	17	21	26	32
CPVR (1)	.,Q,QW,W	•	•	•	•	•	•
PRGD1 (2)	.,Q,QW,W	•	•	•	•	•	•
PRGDX	.,Q,QW,W	•	•	•	•		•

- (1) Accessory supplied separately.
 (2) The remote controller is required for unit operation, it is possible to select between PRGD1 and PRGDX.

Anti-freeze electric heater module

Model	Ver	11	14	17	21	26	32
MRE2M	.,Q,QW,W	•	•				
MRE3M	.,Q,QW,W			•			
MRE3T	.,Q,QW,W				•		_
MREST	.,Q,QW,W					•	•

Coarse 85% efficiency filters module (EN16890)

Model	Ver	11	14	17	21	26	32
MF5R1	.,Q,QW,W	•	•				
MF5R2	.,Q,QW,W			•	•		
MF5R3	.,Q,QW,W					•	•
MF7M1	.,Q,QW,W	•	•				
MF7M2	.,Q,QW,W			•	•		
MF7M3	.,Q,QW,W					•	•

CONFIGURATOR

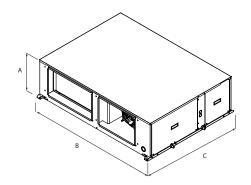
Field	Description
Field	Description
1,2,3	RTD
4,5	Size
4,3	11, 14, 17, 21, 26, 32
6	Ventilation control type
0	Constant flow (standard unit)
Q	Control via air quality probe
7	Internal hot/cold water coil
0	No coil (standard unit)
W	Internal water coil

PERFORMANCE SPECIFICATIONS

PERFORMANCE SPECIFIC		RTD11	RTD14	RTD17	RTD21	RTD26	RTD32
Air flow rates	'				'		'
Nominal air flow rate	m³/h	1100	1400	1700	2100	2600	3200
Minimum air flow rate	m³/h	950	1200	1450	1800	2200	2700
Maximum air flow rate	m³/h	1200	1550	1850	2300	2850	3500
Delivery fan							
Туре	type	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan
Fan motor	type	EC Inverter motors					
Number	no.	1	1	1	1	1	1
Nominal useful head	Pa	150	150	150	150	150	150
Maximum useful head	Pa	510	580	520	360	570	380
Cooling input power	kW	0,19	0,20	0,23	0,32	0,43	0,62
Heating input power	kW	0,18	0,18	0,22	0,30	0,39	0,56
Expulsion fan		*		,		,	
Туре	type	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan	Plug-fan
Fan motor	type	EC Inverter motors					
Number	no.	1	1	1	1	1	1
Nominal useful head	Pa	150	150	150	150	150	150
Maximum useful head	Pa	530	600	520	370	590	400
Cooling input power	kW	0,17	0,16	0,19	0,27	0,33	0,46
Heating input power	kW	0.18	0,18	0,22	0,31	0,39	0.54
Performance in cooling mode at maximum	compressor speed (1)	-,,,,	-,	-,	-7	-,	-,-
Cooling capacity	kW	6,70	8,00	8,80	11,20	14,10	16,30
Sensible cooling capacity	kW	5,70	6,80	7,80	9,80	12,10	13,80
Compressors absorbed power	kW	1,80	2,20	2,30	3,20	4,00	4,50
Total input power EN14511 2017	kW	2,09	2,43	2,58	3,55	4,48	5,15
EER EN14511:2017	W/W	3,20	3,30	3,42	3,16	3,14	3,16
EER	W/W	3,11	3,15	3,24	2,96	2,95	2,92
Performance in heating mode at maximum		-,	-7	-,-:			_,-
Heating capacity	kW	7,70	9,30	10.60	13,80	16,90	20.00
Compressors absorbed power	kW	1,60	2,00	2,20	2,90	3,30	4,10
COP refrigerant circuit	W/W	4,83	4,64	4,82	4,74	5,12	4,87
COP EN14511:2017 (2)	W/W	4,07	4,13	4,26	4,20	4,45	4,18
COP	W/W	3,94	3,92	4,02	3,91	4,15	3,84
Total input power EN14511 2017	kW	1,90	2,20	2,50	3,30	3,80	4,80
Total input power	kW	2,00	2,40	2,60	3,50	4,10	5,20
Compressor					-,	-,	-,
Туре	type	Twin-rotary BLDC					
Compressor regulation	Туре	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Number	no.	1	1	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A	R410A	R410A
Electric data	7,50			1111011			
Input power at full load	kW	4,30	4,50	4.50	5,30	6,10	6.10
Input current at full load	A	14,40	13.80	13.80	17.90	16.90	16.90
Power supply		,	.5,00	.5,00	,,,,	.0,,,	.0,20
Power supply		230V 50Hz	230V 50Hz	230V 50Hz	400V 3N 50Hz	400V 3N 50Hz	400V 3N 50Hz
i orici supprij		AJUT JUIL	AJUT JUIL	AJUY JUIL	TOUT JIL JUIL	TOUT JIL JUIL	1001 311 30112

⁽¹⁾ Cooling mode: aire temperature 35°C Tbs / 24°C Tbh ; ambient air 27°C Tbs / 19°C Tbh . (2) Heating mode: aire temperature 7°C Tbs / 6°C Tbh ; ambient air 20°C Tbs / 15°C Tbh.

DIMENSIONS



Size			11	14	17	21	26	32
Dimensions and weights								
A	.,Q,QW,W	mm	430	430	530	530	630	630
В	.,Q,QW,W	mm	1508	1508	1508	1508	1508	1508
(.,Q,QW,W	mm	1100	1100	1100	1100	1100	1100
		kg	133	135	148	160	179	179
F	Q	kg	135	137	150	162	181	181
Empty weight	QW	kg	135	142	161	172	197	197
	W	kg	140	142	159	170	195	195
Weight functioning		kg	133	135	148	160	179	179
	Q,QW,W	kg	-	-	-	-	-	-

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RPF

High performance heat recovery unit with cross-current recuperator

Air flow rate 790 - 4250 m³/h



- Cross-current heat recovery with performances superior than 90%
- Plug fans coupled with ec brushless motors for energy costs reduction



DESCRIPTION

Heat recovery units RPF have been designed for commercial applications and permits to combine an excellent ambient comfort with a sure energy saving.

It is more and more necessary in modern systems to create a forced ventilation, but also involves the expulsion of climate-controlled air, thus determining a higher energy consumption.

The units RPF thanks to the cross-current heat recuperator permit to save more than 90% of energy which otherwise would be lost with expelled stuffy air.

RPF could be integrated with traditional systems realized with fan coils, chillers, and could work both in winter and in summer. This series is indicated for both horizontal and vertical installation.

CONFIGURATIONS

O Horizontal right supply

P Horizontal left supply

V Vertical right supply

Z Vertical left supply

Each of the different configurations could be further customized thanks to the choice of the accessories.

For further information, please refer to the technical documentation on the website.

STRUCTURE

The structure is formed by aluminium profiles with thermic cut, connected by nylon angles charged with glassfibre.

The sealing panels, of 50 mm thickness, are of the sandwich type in pre-painted plate RAL 9002 (external) and galvanized sheet iron (internal) insulated with polyurethane with density 45 kg/m³. The expandent of the polyurethane foam is based on water permitting to reach GWP=0 (Global Warming Potential).

The casing is in fire reaction class M1 according to the French regulation NF P 92-512:1986. Removable panels are also foreseen to access to internal components, equipped with safety locks, condensate drain and internal modulating rolling shutter of motorized and controlled bypass for free-cooling.

Fans

Fans of supply and extract of plug-fan-type with synchronous motor with electronic control permanent magnetos (EC). The impellers are oriented in such a way to grant an optimal air flow which goes through the internal components, with the minimum noise.

Air filter

Air filtration with a filter with G4 efficiency (according to EN779) with low pressure drops on extracted air flow and a compact filter and with efficiency F7 (according to EN779) having a large filtrating surface made of glass microfibre paper, inserted in the intake flow.

The two typologies of filters are positioned upstream of the components to be protected, in order to grant low pressure drops, having a large surface available. The filtrating cells are fixed on a proper bearing frame to avoid any by-pass of non-treated air.

Their extractability is guaranteed from a proper side opening (standard), superior or inferior (optional) [with reference to the horizontal version].

Heat recovery unit

Static high efficiency cross-current heat recovery unit with high efficiency and aluminium plate.

The heat recovery unit guarantees the non-contamination of air flows, because the plates are properly sealed. Its performance is not inferior to 90% (EN308) in function to the external conditions: Air of intake: -10°C/90% - Air of extract 20°C/50% and equal capacities between supply and extract.

It is included also the function of automatic defrosting made easy by the internal modulating rolling shutter and from the possible modulation with intake flow.

REGULATION

Costituted by power electric panel and programmable controller with integrated graphic display. Everything is internally fitted in the unit in an accessible position. The function of regulation are:

- Ventilation control (manual control of the standard fans speed);
- Thermo-regulation completed with all electric/electronic components (modality of regulation in standard extract);

- Integrated logics of energy savings: modulating free-cooling / free-heating, anti-freeze, night cooling, air quality control, dynamic set point, speed economy of ventilation, ranges of time;
- Complete interfaceability with BMS systems.

FUNCTIONALITY AND TECHNOLOGICAL ADVANTAGES

The elimination from closed rooms of the polluting elements, produced mainly from people and the simultaneous external air input, are at the basis of the concept of controlled mechanical ventilation (VMC) of the internal rooms.

The purpose of ventilation is to raise the standard of internal air quality with consequent positive effects for health and productivity of the occupiers. The change of air has positive effects also on the good maintenance of the building.

For the building to be requalified, the Controlled Mechanical Ventilation is almost a mandatory choice in order to reach high energy standards, which are imposed by the current legislation.

Very high ventilation efficiency

Since the ventilation represents one of the major factor of energy consumption, particular attention has been given to the study and to the creation of the ventilation system.

Fans of the plug-fan type with EC brushless motors have been used both in supply and in extraction; they permit high performances and reduced consumptions. Furthermore, compared with the traditional centrifugal fans, they don't have belts or pulleys with consequent easiness of capacity regulation, compactness, versatility, and an easy maintenance.

A particular adaptative logic permits to adjust the effective air capacity required from the system with more consequent advatages in terms of reduction of consumptions.

Maximum efficiencies

In this context RPF is proposed as the high efficient and performing solution for double flow ventilation systems with heat recovery.

The key-concept on which is based the RPF proposal are:

- Very high efficiency heat recovery attested by EUROVENT certification and maintenance of the complete separation of intake and discharge air flow;
- Reduced ventilation energy consumptions, thanks to a detailed dimensioning of the components in order to have low total values of SFP (Specific Fan Power or rather energy consumption for m³/h of total processed capacity);
- High efficiency filtration and low pressure drops;
- Advanced electronic management for the energy saving and of controlling of internal pollutants functions VOC (Volatile Organic Compounds):
- Compactness of dimensions and logic of installation "plug and play".

Air quality in room

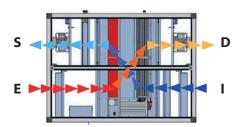
proper software.

Particular attention has been given naturally also to the quality of air in the room, standard assigned to filters with efficiency G4 on extracted air flow and on compact filter with efficiency F7 included on intake air flow. Naturally all these technological advantages are controlled by a thermoregulation of last generation, able to manage the different working procedures; assuring the maximum energy saving in every usage condition by using a

BASIC CONFIGURATION

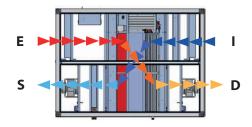
RPF O Horizontal configuration

Right supply (seen from above)



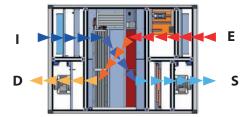
RPF P Horizontal configuration

Left supply (seen from above)



RPF V Vertical configuration

Right supply (seen from the accessible side)



 $\mathsf{D} = \mathsf{Discharge}$

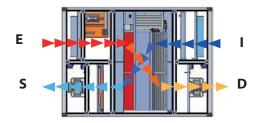
I = Intake

S = Supply

E = Extract

RPF Z Vertical configuration

Left supply (seen from the accessible side)



PERFORMANCE SPECIFICATIONS

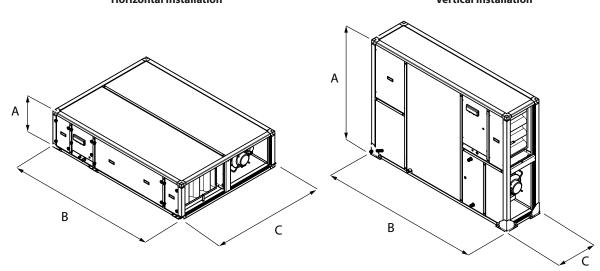
		RPF008	RPF010	RPF013	RPF020	RPF031	RPF042
Heat recovery unit							
Power supply		230V~50Hz 400V 3~50Hz					
Unit type				UVNR (non-residen	tial ventilation unit)		
Heat recovery system type	Type/n°			Static at counte	r-current flow / 1		
Heat capacity recovered (EN308) (1)	kW	4,2	5,4	7,0	10,7	16,6	22,8
Dry heating efficiency (2)	%	80,0	79,9	80,0	79,9	79,9	83,8
Information in compliance with Annex V of r)14					
Nominal air flow rate supply / recovery	m³/s	0,22	0,28	0,36	0,56	0,86	1,18
Nominal air flow rate supply / recovery	m³/h	790	1000	1300	2000	3100	4250
Minimum air flow rate	m³/h	200	200	400	1000	1000	1300
Maximum air flow rate	m³/h	980	1260	1530	2350	3700	4600
Fans (3)							
Commissioning	type			Analogue signal o	of EC fan (0-10Vdc)		
Туре	type			E	:(
Number	no.	2	2	2	2	2	2
Supplied electrical power consumption	kW	0,16	0,24	0,33	0,60	0,79	1,30
Recovered electrical power consumption	kW	0,15	0,23	0,33	0,56	0,76	1,20
Total input electric power	kW	0,31	0,47	0,66	1,16	1,55	2,50
Maximum input power	kW	0,60	1,24	1,26	1,66	5,26	5,26
Maximum input power	A	4,6	7,5	7,5	9,3	11,1	11,1
SFP int.	W/(m ³ /s)	625,00	667,00	743,00	1142,00	919,00	1211,00
SFP int. lim. 2018	W/(m³/s)	1127	1118	1109	1227	1031	1253
Filters face velocity	m/s	1,8	2,0	1,8	2,2	2,2	2,1
Nominal external pressure Δp (3)	Pa	200	250	250	250	250	225
Jseful static supply pressure	Pa	191	218	169	134	215	143
Useful static recovery pressure	Pa	196	233	175	152	255	184
Supplied internal pressure drop Δps int.	Pa	174	198	219	319	304	372
Recovered internal pressure drop Δps int.	Pa	176	189	227	355	293	379
Fans static efficiency (4)	%	61,7	57,2	57,2	61,8	66,9	62,7
nternal leakage (5)	%	0,3	0,3	0,3	0,1	0,3	0,2
External leakage	%	<3	<3	<3	<3	<3	<3
Air filter							
Delivery filter energy classification					В		
Recovery filter energy classification				On re	quest		

¹⁾ Expelled air: Tdb=25°C; Twb<14°C. Fresh air: Tdb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K, excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters
(4) According to regulation EU 327/2011
(5) External leakage test performed at +400 Pa and -400 Pa; internal leakage test performed at 250 Pa

DIMENSIONS

RPF 008 - 031 **Horizontal Installation**

RPF 008 - 042 **Vertical Installation**



Size			008	010	013	020	031	042
Dimensions and weights								
٨	0,P	mm	450	450	524	560	700	-
A	V,Z	mm	1054	1258	1374	1694	1948	1550
D	0,P	mm	1915	1915	2174	2334	2654	-
D	V,Z	mm	1915	1915	2174	2334	2654	2974
(0,P	mm	1054	1258	1374	1694	1948	-
· ·	V,Z	mm	450	450	524	560	700	1130
Emptyweight	0,P	kg	194	220	264	328	452	-
Empty weight	V,Z	kg	194	220	264	328	452	585

www.aermec.com

[■] The weights are standard configuration units without accessories.

















URX-CF

Heat recovery unit with refrigerant circuit

Air flow rate 750 - 3300 m³/h



 Heat pump cooling circuit with high yield and low noise scroll compressors.



DESCRIPTION

The URX-CF series is the mono-bloc solution designed for the installation requirements typical for public spaces like bars, restaurants, offices, meeting rooms.

The URX-CF units combine in one mono-bloc unit, besides the fan, filter, and heat recovery sections, a heat pump refrigerant circuit with scroll compressors of high output and low noise.

The supply air is heated or cooled, based on the season, through the heat pump refrigerant circuit located within the unit and charged with refrigerant R410A.

This allows for a complete machine, with autonomous operation during every season and able to provide both the required air renewal for rooms and an efficient heat recovery.

The careful design of the machine combines very compact dimensions, which permit easy installation in false ceilings, with an excellent accessibility for maintaining all the internal components.

FEATURES

Panels

Self-supporting sandwich panel 20 mm thick in galvanised steel for internal and external surfaces with injected polyurethane insulation (density 40 kg/ m^3).

Heat recovery

Cross flow plate heat exchanger in aluminium with outputs over 50% in winter conditions.

Air filters

Class G4, located before the heat recovery both in the supply and return air flow.

Fans

Double inlet forward curved blades with direct drive motor. Single phase 230V-50Hz single speed motor. The air flow is controlled, within \pm 15% of the nominal, through an electronic speed controller supplied as standard.

Refrigerant circuit

Heat pump complete with high efficiency low noise scroll compressors, 4 way refrigerant cycle reversing valve, evaporator coil, condenser coil, liquid receiver, liquid separator, double thermostatic expansion valve, liquid sight

glass (only for models 150, 210, 330), filter drier, high/low pressure pressostats.

Accessibility

From below for the heat recovery, the filters, the condensate drain tray and the fans.

Regulation

The unit is provided with an electrical panel complete with power and control section (included the control for the 3 way valve for the supplementary hot water coil and associated actuators), ensuring the control of all the refrigerant circuit functions.

Included are:

- NTC return air temperature sensor;
- External air temperature sensor;
- Dampers and actuators in the free-cooling version;
- Pressure switch in the supply air filter;
- Card RS485

Supplied loose is a remote mounted control terminal for automatic control of the unit and an outlet to power and control a light to conform with the current regulation for smoking zones.

ACCESSORIES COMPATIBILITY

SUF33

Circular flanges					
Accessory	URX07CF	URX10CF		URX15CF	URX21CF
FGC07	•				
FGC10		•			
FGC15				•	
FGC21					•
Hot water coil module					
Accessory	URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
MBC07	•				
MBC10		•			
MBC15	-		•		
MBC21				•	
MBC33					•
Free-cooling module					
Accessory	URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
FCE07	•				
FCE10		•			
FCE15			•		
FCE21				•	
FCE33					•
Module with electric co	oil				
Accessory	URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
MBX07	•	'			
MBX10		•			
MBX15			•		,
MBX21				•	
MBX33					•
Module equipped with	silonsou haffles				
Accessory	URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
SUF07	•	UIIATUCI	UIMIJCI	UNATE	OUVOOC
SUF10	<u> </u>	•			
SUF15		•	•		
SUF21			•	•	
JUI 2 I				•	

PERFORMANCE SPECIFICATIONS

		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
Heat recovery unit						
Power supply		230V~50Hz	230V~50Hz	400V~ 3N 50Hz	400V~ 3N 50Hz	400V~ 3N 50Hz
Cooling performances (1)						
Total cooling capacity (heat recovery + refrigerant circuit)	kW	6,1	7,3	10,2	15,0	23,0
Cooling capacity available	kW	1,4	1,7	2,2	3,4	5,1
Cooling capacity recovered	kW	0,9	1,3	2,0	2,8	4,2
Summer thermal efficiency	%	46,2	51,2	53,2	53,6	53,6
Total input power	kW	2,60	2,80	3,80	5,00	6,90
Heating performances (2)						
Heating capacity total (heat recovery + refrigerant circuit)	kW	8,8	10,8	15,8	22,8	33,3
Heating capacity available	kW	2,4	2,3	3,0	4,8	5,2
Recovered heating power	kW	2,9	4,3	7,1	10,1	14,3
Winter thermal efficiency	%	46,2	51,2	53,2	53,6	53,6
Total input power	kW	2,00	2,00	3,30	4,00	5,50
Compressor						
Туре	type	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor regulation	Туре	On-Off	On-Off	On-Off	On-Off	On-Off
Number	no.	1	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A	R410A
Refrigerant charge (3)	kg	2,4	2,9	3,0	3,7	4,5
Delivery fan						
Туре	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1	1
Nominal air flow rate	m³/h	750	1000	1500	2100	3300
Minimum air flow rate	m³/h	640	850	1275	1785	2800
High static pressure	Pa	278	233	239	166	289
Total fan input power	kW	0,37	0,42	0,51	0,62	1,25
Total fan input current	A	2,4	2,4	3,6	3,6	6,6
Recovery fan						
Туре	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1	1
Nominal air flow rate	m³/h	750	1000	1500	2100	3300
Minimum air flow rate	m³/h	640	850	1275	1785	2800
High static pressure	Pa	248	218	233	163	273
Total fan input power	kW	0,37	0,42	0,51	0,62	1,25
Total fan input current	A	2,4	2,4	3,6	3,6	6,6

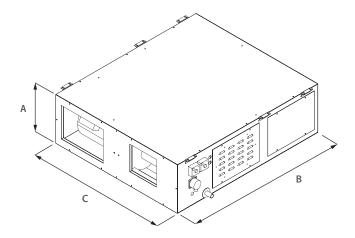
Recovery air 26 °C 50%; External air 34 °C 50%.
 Recovery air 20 °C 50%; External air 5 °C 80%.
 The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
Hot water coil (accessory)						
Row	no.	2	2	2	2	2
Pressure drop - air side	Pa	11	18	23	42	78
Heating operations 70 °C / 60 °C (1)						
Heating capacity	kW	5,00	6,00	8,70	10,30	16,80
Water flow rate	l/h	442	523	763	902	1475
Pressure drop	kPa	16	22	9	12	31
Heating operations 45 °C / 40 °C (2)						
Heating capacity	kW	1,90	2,20	3,40	3,70	7,50
Water flow rate	l/h	336	382	584	638	1306
Pressure drop	kPa	11	14	6	7	28

⁽¹⁾ Water temperature (in/out) 70°C/60°C; Compressor operating. (2) Water temperature (in/out) 45°C/40°C; Compressor operating.

		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF	
Electric heating coil - (accessory)			,				
Power supply		400V 3 ~ 50Hz					
Stages	no.	1	1	1	1	1	
Heating capacity	kW	3,00	4,50	6,00	9,00	12,00	
Input current	A	4,6	6,8	11,4	17,2	26,0	
Pressure drop - air side	Pa	10	10	10	10	10	

DIMENSIONS



		URX07CF	URX10CF	URX15CF	URX21CF	URX33CF
Dimensions and weights						
A	mm	450	450	550	550	600
В	mm	1300	1300	1500	1500	1600
(mm	1500	1500	1800	1800	1800
Empty weight	kg	205	218	272	298	328

■ The weights are standard configuration units without accessories.

















URHE-CF

Heat recovery unit with refrigerant circuit

Air flow rate 1000 - 3300 m³/h



- Heat pump cooling circuit with high yield and low noise scroll compressors.
- High efficiency



DESCRIPTION

The units of the series URHE-CF are a highly efficient solution for satisfying the requirements of thermohygrometric wellness and air changes in air conditioning systems that are used in civil and service sector environments such as offices, bars, restaurants, etc.

The URHE-CF units are perfectly efficient machines in that they use a high performance plate cross flow heat recovery unit together with a heat pump refrigerant circuit operating with the R410A. refrigerant.

The use of the high performance cross flow heat recovery unit allows you to substantially reduce the start-up period of the refrigerant circuit during the year, thereby minimizing electrical energy consumption.

The unit's small size makes it easy to install also in false ceilings, maintaining excellent accessibility for the upkeep of all its internal components.

The numerous accessories that are available upon request, like for example the compact high efficiency filters, the water coils or the silencers, complete the functions of the machine that is generally combined with an air conditioning system.

FEATURES

Panels

Structure made of aluminium profiles with fibreglass reinforced nylon corners

Sandwich panels, 25 mm thick, in galvanised sheet metal for the inner surface, pre-painted for the external surface with injected polyurethane insulation (density 42 kg/m^3).

Heat recovery

Aluminium cross flow plates optimised to guarantee elevated performance.

Air filters

Class G4, 80% gravimetric efficiency, according to EN 779, thickness 48 mm, located before the heat recovery both in the supply and return air flow.

Fans

Centrifugal fans with forward-curved blades with high pressure head motor directly attached. The air flow rate is kept constant by means of an electronic control device.

Refrigerant circuit

Heat pump with R410A refrigerant, equipped with high performance, quiet rotary or scroll compressors (depending on the size), 4-way cycle inversion valves, evaporator coil, condenser coil, liquid receiver, thermostatic valve, liquid indicator, filter-drier, high pressure switch, low pressure switch, safety valve, bypass valve (for smaller sizes).

Regulation

The unit is provided with an electrical panel complete with power and control section (included the control for the 3 way valve for the supplementary hot water coil and associated actuators), ensuring the control of all the refrigerant circuit functions.

Included are:

- NTC return air temperature sensor;
- External air temperature sensor;
- Dampers and actuators in the free-cooling version;
- Pressure switch in the supply air filter;
- Card RS48

Supplied loose is a remote mounted control terminal for automatic control of the unit and an outlet to power and control a light to conform with the current regulation for smoking zones.

ACCESSORIES COMPATIBILITY

Hot water coil module

not water ton module				
Accessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
MBCH1	•	•	•	
MBCH2				•

Module	with	electric	coll

Module with electric coil				
cessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
CX1	•			
CX2		•		
CX3			•	
CX4				•
compact high efficiency				
essory	URHE15CF	URHE	25CF	URHE33CF
1	•			
2				
3				•
odule equipped with sile	encer baffles.			
cessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
S1	•	•	•	
S2				•
ee-cooling module				
essory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
:1	•	•	•	•
ase for floor installation.				
ressory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
1	•	•		
2			•	
3				•
	of the additional modules.			
cessory	URHE10CF	URHE15CF	URHE25CF	URHE33CF
M1	•	•	•	•
oof for outdoor installati	ion			
	OII.			
	UDUE10CE	UDUE1ECE	HDHESECE	HDHESSEE
	URHE10CF	URHE15CF	URHE25CF	URHE33CF
1	URHE10CF •	URHE15CF •		URHE33CF
2			URHE25CF	
i1 i2 i3				URHE33CF
of for outdoor installati	ion of the additional modules.			·
E1 E2 E3 Boof for outdoor installati	ion of the additional modules. URHE10CF	• URHE15CF	• URHE25CF	
E1 E2 E3 Boof for outdoor installati cessory	ion of the additional modules.			• URHE33CF
E1 E2 E3 Prof for outdoor installati E8SSORY M1	ion of the additional modules. URHE10CF	• URHE15CF	• URHE25CF	·
ed to the cooling.	ion of the additional modules. URHE10CF •	• URHE15CF •	URHE25CF	URHE33CF
est for outdoor installativessory All M2 t free-cooling.	ion of the additional modules. URHE10CF URHE10CF	URHE15CF URHE15CF	• URHE25CF	• URHE33CF
est free-cooling.	ion of the additional modules. URHE10CF •	• URHE15CF •	URHE25CF URHE25CF	URHE33CF • URHE33CF
E1 E2 E3 Doof for outdoor installati cessory M1 M2 t free-cooling. cessory	ion of the additional modules. URHE10CF URHE10CF	URHE15CF URHE15CF	URHE25CF	URHE33CF
est for outdoor installativessory M1 M2 t free-cooling. Ressory H1 H2 Doof for silencer baffles.	ion of the additional modules. URHE10CF URHE10CF	URHE15CF • URHE15CF •	URHE25CF • URHE25CF	URHE33CF URHE33CF URHE33CF
of for outdoor installativessory It free-cooling. Lessory It free-free cooling. Lessory Lessory Lessory Lessory Lessory Lessory Lessory Lessory	ion of the additional modules. URHE10CF URHE10CF URHE10CF	URHE15CF URHE15CF URHE15CF	URHE25CF URHE25CF URHE25CF	URHE33CF • URHE33CF
cessory E1 E2 E3 cof for outdoor installaticessory M1 M2 it free-cooling. cessory H1 H2 cof for silencer baffles. cessory MSS1 MSS2	ion of the additional modules. URHE10CF URHE10CF	URHE15CF • URHE15CF •	URHE25CF • URHE25CF	URHE33CF URHE33CF URHE33CF

PERFORMANCE SPECIFICATIONS

		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Heat recovery unit					
Power supply		230V~50Hz	230V~50Hz	400V~ 3N 50Hz	400V~ 3N 50Hz
Cooling performances (1)					
Total cooling capacity (heat recovery + refrigerant circuit)	kW	6,6	8,7	13,8	19,8
Cooling capacity available	kW	1,8	3,1	3,3	5,4
Cooling capacity recovered	kW	2,2	3,2	4,5	5,8
Summer thermal efficiency	%	82,0	80,0	68,0	65,0
Total input power	kW	2,60	2,90	5,10	6,50
Heating performances (2)					
Heating capacity total (heat recovery + refrigerant	kW	10,9	14,2	24,8	33,1
circuit)	KVV	10,9	14,2	24,0	33,1
Heating capacity available	kW	2,8	2,9	3,9	7,0
Recovered heating power	kW	3,6	10,0	15,3	19,6
Winter thermal efficiency	%	82,0	80,0	73,0	71,0
Total input power	kW	2,20	2,40	4,20	4,90
Compressor					
Number	no.	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A
Delivery fan					
Туре	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1
Nominal air flow rate	m³/h	1000	1500	2500	3300
Minimum air flow rate	m³/h	800	1100	2000	2500
High static pressure	Pa	320	245	140	220
Total fan input power	kW	0,42	0,46	1,10	1,10
Total fan input current	A	3,1	3,1	5,3	5,3
Recovery fan					
Туре	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Number	no.	1	1	1	1
Nominal air flow rate	m³/h	1000	1500	2500	3300
Minimum air flow rate	m³/h	800	1100	2000	2500
High static pressure	Pa	320	245	140	220
Total fan input power	kW	0,42	0,46	1,10	1,10
Total fan input current	A	3,1	3,1	5,3	5,3

⁽¹⁾ Recovery air 26 °C 50%; External air 34 °C 50%. (2) Recovery air 20 °C 50%; External air 5 °C 80%.

Technical data MBCH - Hot water coil (accessory)

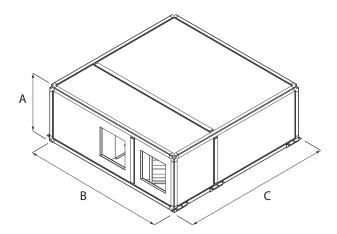
		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Hot water coil (accessory)					
Row	no.	2	2	2	2
Pressure drop - air side	Pa	7	18	37	37
Heating operations 70 °C / 60 °C (1)					
Heating capacity	kW	7,70	10,30	15,60	19,70
Water flow rate	l/h	673	906	1363	1725
Pressure drop	kPa	11	8	18	32
Heating operations 45 °C / 40 °C (2)					
Heating capacity	kW	2,60	4,00	6,50	7,60
Water flow rate	l/h	446	700	1118	1311
Pressure drop	kPa	3	6	14	22

⁽¹⁾ Water temperature (in/out) 70°C / 60°C ; Compressor operating. (2) Water temperature (in/out) 45°C / 40°C ; Compressor operating.

Technical data MBCX - Electric heating coil - (accessory)

		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Electric heating coil - (accessory)					
Power supply			400V/3	/50Hz	
Stages	no.	1	1	1	1
Heating capacity	kW	5,00	7,50	12,50	10,00
Input current	A	7,6	11,4	19,0	25,1
Pressure drop - air side	Pa	10	10	10	10

DIMENSIONS



		URHE10CF	URHE15CF	URHE25CF	URHE33CF
Dimensions and weights	,				
A	mm	580	580	580	580
В	mm	1640	1640	1640	1970
C	mm	1500	1500	1990	2310
Empty weight	kg	300	310	373	410

■ The weights are standard configuration units without accessories.











ERSR

High-efficiency heat recovery with rotary recovery unit

Air flow rate 1000 - 30000 m³/h



- · Technology high efficiency
- · Mechanically controlled ventilation
- Recovery of up to 80% of the energy of the expelled air
- Air purification



DESCRIPTION

The ERSR heat recovery units for indoor and outdoor installation are designed for commercial applications and are able to combine maximum environmental comfort with definite energy saving.

It is more and more necessary in modern systems to create a forced ventilation, but also involves the expulsion of climate-controlled air, thus determining a higher energy consumption.

But ERSR units are equipped with a rotary heat recovery unit (upon request, also hygroscopic rotary) that enables you to save more than 80% of the energy that would otherwise be lost with the expelled stale air.

These units can be integrated with fan coils and chillers, and can operate both in winter and summer.

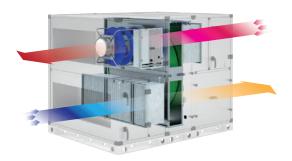
VERSIONS

H With a hygroscopic rotary recovery **T** With a sensitive rotary recovery

STRUCTURE

- Rotary heat recovery unit (with the option in hygroscopic material), high-efficiency and low pressure drops.
- Soft air bag F7 filters (flow and recovery) equipped with a standard differential pressure switch, which can be extracted from either side facilitate their periodic cleaning.
- Fans (intake and flow), Plug fan with back curved blades with a directly coupled, electronically controlled motor for sizes 07-17 and with an inverter for sizes 21-24.
- Support frame and sandwich panels, 50 mm thick, in galvanised sheet steel for internal surfaces and pre-painted externally, and with mineral wool insulation (density 40 kg/m³). Base in galvanised sheet steel continuous profiles. Sizes 07 to 09 are monoblocs whilst the other sizes are divided into sections. The unit can be inspected from both sides.
- The unit is equipped with a power electric control board on the machine and adjustment purposely designed to reduce energy consumption.
 Equipped with a communication serial port on RS485 with MODBUS Master/Slave protocol.

FEATURES



- Air expelled
- Air recovery from the room
- Outdoor fresh air
- Air introduced into the room

Quality of the air

Nowadays, the quality of air inside rooms is fundamental. The mechanically controlled ventilation system is not only indispensable from an energetic point of view, but also for the comfort of the rooms.

ACCESSORIES

CAP: Intake waterproof cover. **BDL:** Delivery waterproof cover.

TDP: Roof for outdoor installation.

VRC: Condensate drip tray.

VVR: Variable speed recovery unit.

KDP: Dehumidification and post-heating management kit.

RBC: 3-way valve hot water coil module. **RBF:** 3-way valve cold water coil module.

Harmful elements and smells in the air are eliminated by the efficient filtration system with bag filters (F7), which are easily extracted and regenerated.

High-efficiency air circulation thanks to plug-fans with electronically controlled motors or inverters, depending on the sizes

Freecooling: free comfort

During in-between seasons, outdoor climatic conditions can be more pleasant than those indoors. In such situations, the ERSRs stop the recovery unit enabling the intake of fresh outdoor air to air-condition indoor rooms at zero cost

High-efficiency recovery unit (80% of the energy of the expelled air)

Air heat recovery both in summer and winter, thanks to the rotary recovery unit (hygroscopic version also available). Air introduced into the room is always optimised, thanks to the heat exchange between the air recovery and outdoor fresh air.

State of the art electronic control

Naturally, all these technological advantages are controlled by state of the art heat regulation, thus ensuring maximum energy savings in every condition of use.

21

BDL21

24

BDL24

RBE: Electric coil module.

RBP: 3-way valve cold water and post-heating coil module.

MSS: Module equipped with silencer baffles.

FRR: Rectangular flange.

GAR: Rectangular anti-vibration joint.

HSR: Fresh air intake damper with servocontrol.

RSR: Recirculation damper module. **HG4:** Flat filters efficiency G4.

ACCESSORIES COMPATIBILITY

Regulation

Rectangular	flange.
-------------	---------

Ver

H,T

Ver	07	09	12	15	17	21	24
H,T	FRR09	FRR09	FRR12	FRR15	FRR17	FRR21	FRR24
ondensate drain tray.							
Ver	07	09	12	15	17	21	24
Н,Т	VRC07	VRC09	VRC12	VRC15	VRC17	VRC21	VRC24
dditional modules							
ectangular anti-vibration	joint.						
Ver	07	09	12	15	17	21	24
Н,Т	GAR07	GAR09	GAR12	GAR15	GAR17	GAR21	GAR24
ecirculation damper mod	ule.						
Ver	07	09	12	15	17	21	24
H,T	-	-	RSR12	RSR15	RSR17	RSR21	RSR24
e accessory cannot be fitted on the conf	figurations indicated with -						
lat filters efficiency G4.							
	07	09	12	15	17	21	24
Ver	0/			13			
Ver H,T	HG407	HG409	HG412	HG415	HG417	HG421	HG424
	HG407						HG424
H,T	HG407						HG424 24
H,T resh air intake damper wit	HG407 th servocontrol.	HG409	HG412	HG415	HG417	HG421	
H,T resh air intake damper wit Ver H,T	HG407 th servocontrol. 07 HSR07	HG409 09 HRS09	HG412 12 HRS12	HG415	HG417	HG421 21	24
H,T resh air intake damper wit Ver	HG407 th servocontrol. 07 HSR07	HG409 09 HRS09	HG412 12 HRS12	HG415	HG417	HG421 21	24

15

BDL15

17

BDL17

12

BDL12

09

BDL09

07

BDL07

Accessories

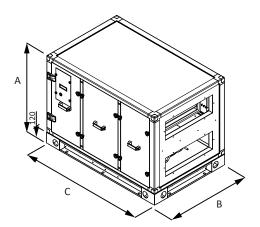
Air quality probe (VOC)	Air c	uality	probe ((VOC)	١.
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Ver

07	0,5		14	13	17		41	44
QP	QP		QP	QP	QP		QP	QP
						· ·		
07	09		12	15	17		21	24
		9						VVR24
			2	******		1		
			12	15	17		21	24
KDP			KDP	KDP	KDP		KDP	KDP
					,		'	
07			12	15	17		21	24
		9						CAP24
	CALO		CRI 12	CNI 13	CAI 17		CRIZI	CAI 24
	00		12	15	17		21	24
		<u> </u>						RBC24
ПОСОТ	NDCO		NDC12	HOCIS	HDCI7	ı	IDCZ1	IIDCZ I
ATIONS		07		12	15	17		24
		U/	U9	12	15	1/		24
					400V 3N ~ 50H7			
				IIVNR (III		lential)		
	Tyne/n°			O VIVIV	int ventuation not resid	icitiai)		
		5.8	10.3	10 A	31 /	<i>I</i> 11 3	64.3	85,0
								78,7
regulation FU no.		17,0	70,7	70,5	70,0	10,7	70,5	70,7
regulation 20 noi		0.31	0.54	1.03	1.65	2.17	3.39	4,47
								16100
		-	-	-	-	-	-	-
					,			
	type			A	Analog signal of EC fan			
	type							
	no.	1	1	1	1	1	1	1
	kW	0,27	0,48	0,85	1,31	1,90	2,20	2,80
	kW	0,27	0,48	0,86	1,30	1,90	2,20	2,80
	kW	0,84	2,04	6,10	8,78	10,20	22,37	30,37
	W/(m ³ /s)	1061,00	994,00	927,00	733,00	669,00	778,00	759,00
	W/(m³/s)	1141	1106	1033	942	887	886	887
	m/s	1,8	1,9	1,8	1,8	1,8	1,6	1,7
	Pa	100	100	100	100		100	100
	Pa	360	520	1000	1100	900	1440	1500
				1000			1440	1500
								241
								244
								65,8
								< 3
	%	0,2	0,2	0,1	0,1	0,1	0,1	0,1
	T / 0							
	Type/n°							
	Type/n° Type/n°				D			
	07 VVR07 ting manage 07 KDP 07 CAP07 ule. 07 RBC07	QP QP QP QP VVR07 VVR07 VVR07 VVR07 VVR07 VVR0 ting management kit. QP KDP KDP QP KDP CAP07 CAP0 ule. QP RBC07 RBC0 ATIONS N/W W % regulation EU no. 1253/2014 m³/s m³/h m³/h type no. kW kW kW kW	QP QP VVR07 QP VVR07 VVR09 ting management kit. Q7 Q9 KDP KDP CAP09 ule. Q7 Q9 RBC07 RBC09 ATIONS Type/n° kW 5,8 % 79,0 regulation EU no. 1253/2014 m²/s 0,31 m²/s 0,31 m²/h 1100 m²/h - type 100 type 100 kW 0,27 kW 0,27 kW 0,27 kW 0,27 kW 0,27 kW 0,24 W/(m³/s) 1141 m/s 1,8 Pa 100 Pa 360 Pa 269 Pa 269	QP QP QP VVR07 QP VVR07 VVR09 VVR12 ting management kit. Q7 Q9 12 KDP KDP KDP O7 Q9 12 CAP07 CAP09 CAP12 ule. O7 Q9 Type/n° kW 5,8 10,3 % 79,0 78,9 regulation EU no. 1253/2014 m³/h 1100 1950 m³/h 1100 1950 m³/h 1100 1950 m³/h 1100 1950 m³/h 1 1 kW 0,27 0,48 kW 0,27 0,48 kW 0,84 2,04 W/(m³/s) 1061,00 994,00 W/(m³/s) 1141 1106 m/s 1,8 1,9 Pa	QP QP QP QP 07 09 12 15 VWR07 VVR09 VVR12 VVR15 ting management kit. 07 09 12 15 KDP KDP KDP KDP O7 09 12 15 CAP15 UVIN (U O7 09 12 15 RBC12 RBC15 ATIONS O7 09 12 UVIN (U Type /n° UVIN (U % 79,0 78,9 78,3 regulation EU no. 1253/2014 U 1,03 UVIN (U 1,03 <	QP QP QP QP QP 07 09 12 15 17 WR07 WR09 WR12 WR15 WR17 ting management kit. 07 09 12 15 17 KDP KDP KDP KDP CAP07 CAP09 CAP12 CAP15 CAP17 UIE. 07 09 12 15 17 RBC07 RBC09 RBC12 RBC15 RBC17 APREC07 RBC19 APREC16	QP QP QP QP 07 09 12 15 17 WR07 WR09 WR12 WR15 WR17 ting management kit. 07 09 12 15 17 KDP KDP KDP KDP KDP 4007 CAP12 CAP15 CAP17 utle. 07 09 12 15 17 RBC09 RBC12 RBC15 RBC17 ARD RBC9 ARD RBC12 ARD RBC17 ARD RBC9	QP QP

⁽¹⁾ Expelled air: Tdb=25°C; Twb<14°C. Fresh air: Tdb=5°C.
(2) Relation between the inlet air heating gain and the expulsion air heating loss, both relating to the outside temperature, measured in dry reference conditions, with balanced mass flow and an internal/external air heating difference of 20K, excluding the heating gain generated by the fan motors and the internal leakage.
(3) Performances referring to clean filters
(4) According to regulation EU 327/2011
(5) External leakage test performed at +400 Pa and -400 Pa; internal leakage test performed at 250 Pa

DIMENSIONS AND WEIGHTS



Size		07	09	12	15	17	21	24
Dimensions and weights								
A	mm	965	1285	1445	1765	2085	2405	2725
В	mm	895	1005	1375	1695	1855	2335	2665
C	mm	1375	1535	2045	2365	2365	3005	3005
Empty weight	kg	240	340	570	820	1010	1610	1980

AIR CONDITIONING

The air handling units customized according to different needs of the installer to carry the best comfort and the best quality in civil commercial and industrial.

	AIR HANDLING	UNITS	Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Compact air handling un	its				
	TVS	Air flow rate 800÷5200 m³/h	800-5200	4,40-27,80	10,50-66,40	
new	TVH	Air flow rate 800÷5200 m³/h	800-5200	4,70-29,30	11,60-73,90	
	TS	Air flow rate 810÷4225 m³/h	810-4225	4,39-24,93	8,89-52,44	
	TA	Air flow rate 800÷5000 m³/h	800-5000	4,2-39,6	3,9-72,8	290
	TN	Air flow rate 3000÷23000 m³/h	3000-23000	12,6-127,8		295
	Modular air handling uni	ts				
	NCD	Air handling units	1134-79475			302
	SPL 025-130		4000-13000			305
	SPL 160-250		16000-25000			
	Packaged ROOF-TOP uni	ts				
	RTX N1-N8	For medium crowding applications		12,70-49,95	13,50-50,79	
	RTX 09-16	For medium crowding applications		50-135	49-141	318
	RTX 17-23	For medium crowding applications			152-310	324
	RTY 01-10	For high crowding applications		30,2-133,6	29,3-137,9	329

















TVS

Air handling unit



- · Centrifugal fan with EC motor
- · Horizontal and vertical installation
- Available units with heat exchanger with 4-6 rows
- Large range of available static pressure
- Ductable unit



DESCRIPTION

TVS it is a thermoventilation unit designed to guarantee high heads in small to medium-sized rooms with nominal air flow rates from 800 to 5200 m $^3/h$. As standard, it is suitable for 2-pipe systems, however the availability (as an accessory) of the secondary water coil, which can be installed inside the unit downstream of the main coil, makes it also suitable for 4-pipe systems. The unit is suitable for both horizontal installation in suspended ceilings and vertical installation on walls for greater versatility in use.

FEATURES

Structure

The supporting structure is made of galvanised steel sheet panels of suitable thickness. The panels are internally insulated with M1 fire reaction class insulation according to French standard NFP 92-501.

The bottom panels, which can be inspected, are of the sandwich type made of galvanised steel sheet with 15 mm thick polyurethane insulation (density 45 kg/m³)

The particular formulation of the polyurethane foam provides the sandwich panels with reaction to fire class M1 according to NFP standard 92-501. The polyurethane foam was developed with precise specifications to achieve the exceptional value of GWP = 0 (Global Warming Potential), not contributing to the greenhouse effect.

The presence of sandwich type panels on the bottom of the machine enables to significantly reduce the noise outside the unit in typical horizontal suspended ceiling installations.

The unit is supplied with specific brackets for attaching it to the wall.

Heat exchanger coil

Heat exchanger made with copper pipes and aluminium louvers blocked by the mechanical expansion of the pipes.

The main heat exchanger can be 4 or 6-row.

The secondary heat exchanger, available as an accessory, is 2-row.

Hydraulic connections

The hydraulic connections are on the right and are made with female threaded connections, however male-male threaded sleeves, with air release valves, are supplied to facilitate hydraulic connections.

The side of the hydraulic connections can be reversed on site by turning the coil.

The definition of "RH connections side" or "LH connections side" refers to the position of the coil connections in relation to the air flow direction (convection: air flow from behind a hypothetical operator inserted in the flow).

Condensate drip

The galvanised steel condensate drip tray is thermally insulated and has a double drain on the right and left. The unused condensate drain must be sealed.

Ventilation group

The ventilation unit consists of double intake centrifugal fans with blades facing forwards.

The electric motor, directly coupled to the impeller, is of the EC type. The use of the EC motor allows significant energy savings when compared to traditional AC motors and a continuous control of the rotation speed, simplifying air flow rate calibration operations on site.

Except for the first two sizes, Sensorless fans with integrated flow control are installed, without the need for additional accessories.

Air filtration

Air filtration is provided, as standard, by 48 mm thick corrugated synthetic filters with Coarse 55% efficiency according to EN ISO 16890 (G4 according to EN 779) positioned in the intake.

The filters are easily accessible for servicing and cleaning. Extraction is carried out by pulling them out from below by removing the respective panel.

Electrical wiring

On the side of the hydraulic connections there is an electric box, with IP55 protection rating, for connecting power and the 0-10V control signal or a potentiometer of the ventilation unit.

In the case of reversing the side of the hydraulic connections, there is no need to reverse the position of the electrical connections.

VENTILATION EFFICIENCY

All fans in the range TVS use an EC motor that, operating without slip losses, consumes less energy than conventional AC motors.

This applies to all speeds, i.e. also to partial load operation. The EC motor therefore uses less energy than the AC motor under all operating conditions

and has a significantly higher level of efficiency of the drive system (motor and control).

In addition, continuous speed control via the 0-10V signal allows the air flow rate to be varied, and the static pressure can be adapted to the system's pressure drop, making unit start-up particularly easy.



Fans in sizes from TVS204 to TVS526 use an innovative "driver" that provides advanced functions that go far beyond simple speed control via the 0-10V signal (factory setting) and monitoring of operating limits to enable safe operation.

In fact, advanced operating modes can be activated through the use of free PC software, an RS485 interface cable and a commercially available USB to RS485 converter.

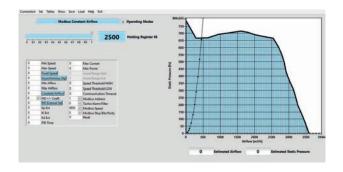
Particularly innovative is the operating mode with constant flow rate control. The air flow rate can be varied via an analogue 0-10V signal or the desired value can be set via the dedicated software.

Sensorless constant flow rate

Sensorless constant flow rate control is performed without the use of pres-

The driver determines the operating point by measuring the rotational speed and input power of the fan and then adjusts the rotational speed to maintain the set value of the air flow rate within a predetermined range.

This control system can compensate for a change in system pressure loss or a change in unit pressure loss due to e.g. filter fouling.



CONFIGURATOR

ACCESSORIES

BS2x: 2 row water coil: 2-row water coil for 4-pipe system, located internally, downstream of the main coil. The threaded sleeves for the hydraulic connections and the air vent valve are supplied.

F7x: filter with ePM1 50% efficiency: Filter with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be placed inside the unit in place of the standard filter.

F7x: filter with ePM1 80% efficiency: Filter with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be placed inside the unit in place of the standard filter.

SMBEx: Electric coil module with double safety thermostat (manual and automatic) to be installed on the unit's flow side. Not compatible for vertical installation.

SMF7x: Filter module with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.

SMF9x: Filter module with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.

SM2Sx: Mixing chamber module complete with two galvanised steel calibration dampers to be positioned at the intake of the unit. The damper pins are equipped with an easily removable hand control.

SMLFx: Module consisting of state-of-the-art devices with UV germicidal lamp with photocatalytic effect for active disinfection. To be placed at the discharge of the unit. The complete elimination of germs, bacteria and viruses cannot be achieved by using SMLFx modules alone, but a reduction in microbial load means less exposure to infection.

FAIx: Filter holder flange to allow intake in a direction perpendicular to the air flow through the unit. The use of the flange does not allow the installation of other accessories or the ducting of the unit to the intake.

SERx: Galvanised steel damper to be installed on the intake or flow side of the unit. The damper pin is equipped with an easily removable hand control. GRAx: Natural anodised aluminium intake grid with fixed louvers inclined at 45°. To be installed at the intake of the unit via the supplied flange.

GRMx: Natural anodised aluminium flow grille with two rows of adjustable louvers. To be installed on the unit's flow side via the flange supplied.

V2Vx for main and secondary coil: 2-way valve for main and secondary

V3Vx for main and secondary heat exchanger: 3-way valve for main and secondary coil.

AV24F - 24V / ON-OFF actuator for main and secondary coil: 24V / ON-

OFF actuator for main and secondary coil.

AV24FM - 24V / ON-OFF - 0-10V actuator for main and secondary coil: Actuator with 24V power supply for ON-OFF or modulating 0-10V control of 2-way and 3-way main and secondary coil valves.

AV24M - 24V / 0-10V actuator for main and secondary coil: Actuator with 24V power supply for modulating 0-10V control of 2-way and 3-way main and secondary coil valves.

GT2x - 2-way valve tube assembly for main coil: Hose assembly and hydraulic fittings for connecting the 2-way valve to the main coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

GT2Px - 2-way valve hose assembly for secondary coil: Hose assembly and hydraulic fittings for connecting the 2-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

GT3x - 3-way valve hose assembly for main coil: Hose assembly and hydraulic fittings for connecting the 3-way valve to the main coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

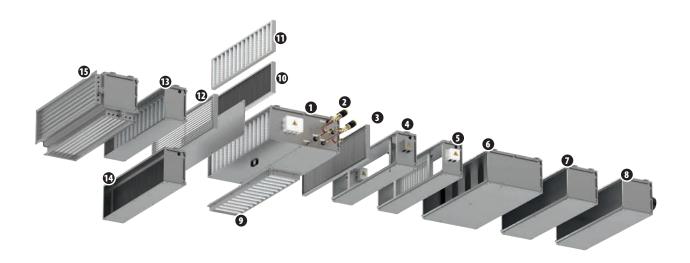
GT3Px - 3-way valve hose assembly for secondary coil: Hose assembly and hydraulic fittings for connecting the 3-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

PVV: Potentiometer for fan speed control. The +10V signal is available directly on the electrical connection box located outside the unit.

SMSSx - Silencer baffles module: Module consisting of rock wool silencing baffles covered with polyethylene film and protective mesh to prevent flaking. To be installed on the flow and/or intake side of the unit.

SPCx: Closed plenum to be positioned at the flow or intake of the unit. Depending on the opening of the flow/intake hole, the accessory allows flow/intake in both longitudinal and perpendicular directions to the air flow through the unit.

SPMx: Plenum with circular flows to be positioned at the flow and/or intake of the unit. The multi-diameter (200mm, 180mm, 150mm) circular plastic couplings allow the connection of circular ducts. Flow/intake is allowed in the longitudinal direction of the air flow through the unit.



Key:		6	SMSS	12	GRA
1	TVS	7	SPC	13	SMF9
2	Valvola (V3V, AV24,GT3, GT3P)	8	SPM	14	SMF7
3	GRM	9	FAI	15	SM2S
4	SMLF	10	F7		
5	SMBE	11	F9		

ACCESSORIES COMPATIBILITY

Control

Potentiometer for fan speed control

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
PVV														

Water valves

2 way valve kit

	TVS084	TVS154	TVS204	TVS274	TVS344	TVS404	TVS524
Main coil	<u> </u>						
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
Secondary coil							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3
	TVS086	TVS156	TVS206	TVS276	TVS346	TVS406	TVS526
Main coil							
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
Secondary coil							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3

Tabella 3 way valve kit

labella 3 way valve kit							
	TVS084	TVS154	TVS204	TVS274	TVS344	TVS404	TVS524
Main coil	'						
Three-way valve	V3V2	V3V2	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
Secondary coil							
Three-way valve	V3V1	V3V1	V3V4	V3V4	V3V4	V3V5	V3V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT3P1	GT3P1	GT3P2	GT3P2	GT3P2	GT3P3	GT3P3
	TVS086	TVS156	TVS206	TVS276	TVS346	TVS406	TVS526
Main coil							
Three-way valve	V3V2	V3V2	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
Secondary coil							
Three-way valve	V3V1	V3V1	V3V4	V3V4	V3V4	V3V5	V3V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM

Heating only additional coil

2 row water coil

Pipe assembly

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
BS21	•	•												
BS22			•	•										
BS23					•	•								
BS24							•	•	•	•				
BS25												•	•	•

GT3P2

GT3P2

GT3P2

GT3P3

GT3P3

GT3P1

GT3P1

Electric coil module

2-stage electric coil module

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
SMBE1 (1)	•	•												
SMBE2 (1)			•	•										
SMBE3 (1)					•	•								
SMBE4 (1)							•	•	•	•				
SMBE5 (1)													•	

⁽¹⁾ Module not compatible for vertical installation.

Installation accessories

Filter module	• with ePM1	50%	efficiency

Accessory	TVCUQA	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
MF71	TVS084		173134	173130	173204	1 7 3 2 0 0	1732/4	1732/0	173344	173340	173404	173400	173324	173320
MF72	•	•												
			•	•										
MF73					•	•								
MF74							•	•	•	•				
MF75						-					•	•	•	•
ilter module	with ePM1	80% effic	iency											
ccessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS52
MF91	•	•												
MF92			•	•		_						_		
MF93					•	•								
MF94							•	•	•	•				
MF95												•	•	•
Silencer baffle	s module													
ccessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS52
MSS1	•	•												
SMSS2														
SMSS3					•	•								
SMSS4							•							
MSS5											•	•	•	
hotocatalytic	dovice	dula						-				1		
Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS52
MLF1	1 1 3 0 0 4	1 1 3 0 6 0	I V J I J H	טעונייו	i ¥3£U 4	1 7 3 2 0 0	1134/4	1432/0	1 7)) 777	טדעניו	1 7 2 7 0 1	1 7 3400	1 7 3 3 24	1 1 3 3 2
SMLF2	-	-		•										
SMLF3		-	•	•	•	•								
SMLF4					•	•	•							
								•	•	•				
MLF5											•	•	•	<u> </u>
Mixing chamb	er module	complete	with two	calibrat	ion damp	oers								
Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS52
SM2S1	•	•												
SM2S2			•	•										
SM2S3					•	•								
SM2S4							•		•					
SM2S5											•	•	•	
Closed plenum	1													
			TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS52
accessory	TVS084	TVS086	1 1 2 1 2 1											
	1VS084 •	1VS086 •	113131											
SPC1			•											
SPC2				•									.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
SPC1 SPC2 SPC3				•	•	•								
SPC1 SPC2 SPC3 SPC4				•		•	•	•	•	•		•	•	•
PC1 PC2 PC3 PC4 PC5	•	•		•		•		•	•	•	•	•		•
PC1 PC2 PC3 PC4 PC5 Plenum with c	ircular deli	veries	•		•		•						•	
PC1 PC2 PC3 PC4 PC5 Plenum with c	ircular deli TVS084	veries		• TVS156		TV5206		TVS276	TVS344	TVS346	• TVS404	• TVS406		
SPC1 SPC2 SPC3 SPC4 SPC5 Plenum with c Accessory	ircular deli	veries	TVS154	TVS156	•		•						•	
SPC1 SPC2 SPC3 SPC4 SPC5 Plenum with c Accessory SPM1 SPM2	ircular deli TVS084	veries	•		TV5204	TVS206	•						•	
EPC1 EPC2 EPC3 EPC4 EPC5 EPC5 EPC8 EPC8 EPC8 EPC8 EPC8 EPC8 EPC8 EPC8	ircular deli TVS084	veries	TVS154	TVS156	•		* TVS274	TVS276	TVS344	TV\$346			•	
EPC1 EPC2 EPC3 EPC4 EPC5 EPC5 EPC8 EPC8 EPC8 EPC8 EPC8 EPC8 EPC8 EPC8	ircular deli TVS084	veries	TVS154	TVS156	TV5204	TVS206	•				TVS404	TV5406	* TVS524	TVS52
EPC1 EPC2 EPC3 EPC4 EPC5 EPC5 EPC8 EPC8 EPC8 EPC8 EPC8 EPC8 EPC8 EPC8	ircular deli TVS084	veries	TVS154	TVS156	TV5204	TVS206	* TVS274	TVS276	TVS344	TV\$346			•	
SPC1 SPC2 SPC3 SPC4 SPC5 SPCS SPC4 SPC5 SPC8 SPC8 SPC8 SPC8 SPC8 SPC8 SPC8 SPC8	ircular deli TVS084 •	veries TV5086	TVS154	TVS156	TVS204	TVS206	* TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	• TVS524	TVSS2
PC1 PC2 PC3 PC4 PC5 Plenum with c Accessory PM1 PM2 PM3 PM4 PM5 Accessory	ircular deli TVS084	veries TV5086	TVS154	TVS156	TV5204	TVS206	* TVS274	TVS276	TVS344	TV\$346	TVS404	TV5406	* TVS524	TVS52
PC1 PC2 PC3 PC4 PC5 Plenum with c Accessory PM1 PM2 PM3 PM4 PM5 Tabella Filter 1 Accessory	ircular deli TVS084 •	veries TV5086	TVS154	TVS156	TVS204	TVS206	* TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	• TVS524	TVS52
PC1 PC2 PC3 PC4 PC5 Plenum with c ccessory PM1 PM2 PM3 PM4 PM5 Cabella Filter 1 ccessory Al1 Al2	ircular deli TVS084	veries TV5086	TVS154	TVS156	TVS204	TVS206	* TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	• TVS524	TVS52
PC1 PC2 PC3 PC4 PC5 Plenum with c Accessory PM1 PM2 PM3 PM4 PM5 Tabella Filter 1 Accessory Al1 Al2 Al3	ircular deli TVS084	veries TV5086	TVS154	TVS156 • TVS156	TVS204	TVS206	* TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	• TVS524	TVS52
SPC1 SPC2 SPC3 SPC4 SPC5 SPC4 SPC5 SPM1 SPM2 SPM3 SPM4 SPM5 SPM5 SPM4 SPM5 SPM5 SPM6 SPM6 SPM6 SPM7 SPM7 SPM7 SPM8 SPM8 SPM8 SPM8 SPM8 SPM8 SPM8 SPM8	ircular deli TVS084	veries TV5086	TVS154	TVS156 • TVS156	TV5204	TVS206	* TVS274	TVS276	TVS344	TVS346	TVS404 * TVS404	TVS406	. TVS524	TVS52
SPC1 SPC2 SPC3 SPC4 SPC5 SPC4 SPC5 SPM1 SPM2 SPM3 SPM4 SPM5 SPM5 SPM4 SPM5 SPM5 SPM6 SPM6 SPM6 SPM7 SPM7 SPM7 SPM8 SPM8 SPM8 SPM8 SPM8 SPM8 SPM8 SPM8	ircular deli TVS084	veries TV5086	TVS154	TVS156 • TVS156	TV5204	TVS206	TVS274	TVS276	TVS344 •	TVS346 •	TVS404	TVS406	• TVS524	TVS52
PC1 PC2 PC3 PC4 PC5 Plenum with c Accessory PM1 PM2 PM3 PM4 PM5 Fabella Filter f Accessory All All All All All All	ircular deli TVS084 •	veries TV5086	TVS154	TVS156 • TVS156	TV5204	TVS206	TVS274	TVS276 TVS276	TVS344 • TVS344	TVS346 •	TVS404 * TVS404	TVS406	. TVS524	TVS52
SPC1 SPC2 SPC3 SPC4 SPC4 SPC5 Plenum with c Accessory SPM1 SPM2 SPM3 SPM4 SPM5 Fabella Filter (Accessory SPM1 SPM5 Fabella Filter (Accessory SPM1 SPM5 Fabella Filter (Accessory SPM1 SPM5 Fabella Filter (Accessory	ircular deli TV5084 . flange TV5084 .	. veries TV5086 . TV5086 .	TVS154	TVS156 TVS156	TV5204	TVS206	TVS274	TVS276	TVS344 •	TVS346 •	TVS404 . TVS404	TVS406	. TVS524	TVS52
EPC1 EPC2 EPC3 EPC4 EPC5 EPC6 EPC6 EPC6 EPC6 EPC6 EPC6 EPC6 EPC7 EPC7 EPC7 EPC7 EPC7 EPC7 EPC7 EPC7	ircular deli TVS084	veries TVS086 .	TVS154 . TVS154	TVS156 TVS156	TV5204	TV5206 TV5206	TVS274 TVS274	TVS276 TVS276	TVS344 • TVS344	TVS346 . TVS346	TVS404 . TVS404	TVS406	. TVS524	TVS52
EPC1 EPC2 EPC3 EPC4 EPC5 EPC6 EPC6 EPC6 EPC7 EPC7 EPC7 EPC7 EPC7 EPC7 EPC7 EPC7	ircular deli TV5084 . flange TV5084 .	. veries TV5086 . TV5086 .	TVS154 . TVS154	TVS156 TVS156	TV5204	TV5206 TV5206	TVS274 TVS274	TVS276 TVS276	TVS344 • TVS344	TVS346 . TVS346	TVS404 . TVS404	TVS406	. TVS524	TVS52
EPC1 EPC2 EPC3 EPC4 EPC5 EPC6 EPC6 EPC6 EPC7 EPC7 EPC7 EPC7 EPC7 EPC7 EPC7 EPC7	ircular deli TV5084 . flange TV5084 .	. veries TV5086 . TV5086 .	TVS154 TVS154 TVS154	TVS156 TVS156	TV5204 TV5204 .	TV5206 TV5206	TVS274 TVS274	TVS276 TVS276	TVS344 • TVS344	TVS346 . TVS346	TVS404 . TVS404	TVS406	. TVS524	TVS52
SPC1	ircular deli TV5084 . flange TV5084 .	. veries TV5086 . TV5086 .	TVS154 TVS154 TVS154	TVS156 TVS156	TV5204 TV5204 .	TVS206 TVS206	TVS274 TVS274 TVS274	TVS276 TVS276	TVS344 • TVS344	TVS346 . TVS346	TVS404 TVS404 TVS404	TVS406	. TVS524	TVS52

Alluminium Intake grids

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
GRA1	•	•												
GRA2				•										
GRA3					•	•								
GRA4								•	•	•				
GRA5											•	•	•	•

Alluminium delivery grille

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
GRM1	•													
GRM2														
GRM3					•									
GRM4							•	•	•	•				
GRM5														

Filter with ePM1 50% efficiency

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS34	4 TVS	346	TVS404	TVS406	TVS524	TVS526
F71	•	•													
F72			•	•											
F73					•	•									
F74							•	•	•	•					
F75												•	•	•	•
Accessory		TVS	084 TVS0	86 TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
Accessory F71		TVS	084 TVS0	86 TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
		TVS		86 TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
F71		TVS		86 TVS154		TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
F71 F72		TVS		86 TVS154				TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526

Filter with ePM1 80% efficiency

Accessory	TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
F91	•	•												
F92			•	•										
F93					•	•								
F94							•	•	•	•				
F95											•	•	•	•

4-ROW COIL UNIT PERFORMANCE DATA

Units designed to operate with all recirculating air or maximum 10% of external air.

		TVS084	TVS154	TVS204	TVS274	TVS344	TVS404	TVS524
Performance in heating mode 70 °C / 60	°C - Main coil 2-	pipe system (1)						
Heating capacity	kW	10,50	18,80	25,10	31,90	41,40	54,20	66,40
Water flow rate	l/h	901	1615	2157	2738	3557	4659	5705
Pressure drop	kPa	26	25	37	23	41	38	55
Performance in heating mode 45 °C / 40	°C - Main coil fo	r 2-pipe systems (2)						
Heating capacity	kW	5,20	9,30	12,40	15,80	20,50	26,80	32,70
Water flow rate	l/h	896	1600	2139	2718	3525	4610	5640
Pressure drop	kPa	28	27	40	24	44	40	58
Heating performance 65 °C /55 °C - Seco	ndary coil 4-pipe	system (3)						
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - Main	coil 2 pipe syste	m (4)						
Cooling capacity	kW	4,40	7,70	10,90	13,20	17,90	23,20	27,80
Sensible cooling capacity	kW	3,30	6,00	8,20	10,40	13,60	17,10	20,70
Water flow rate	l/h	753	1322	1870	2266	3078	3979	4766
Pressure drop	kPa	22	20	33	20	36	34	46
Fan								
Туре	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m³/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	213	242	351	361	380	403	414
Maximum useful head (4-pipes) (5)	Pa	194	217	321	337	342	377	375
Input power (2-pipes) (6)	W	199	358	545	825	826	998	1494
Input power (4 pipes) (6)	W	207	377	574	859	896	1044	1608
Sound data (7)								
Sound power level (inlet + radiated)	dB(A)	66,0	68,0	77,0	77,0	78,0	80,0	80,0
Sound power level (outlet)	dB(A)	66,0	68,0	74,0	76,0	74,0	77,0	78,0
Diametre hydraulic fittings								
Main heat exchanger	Ø	3/4"F	3/4" F	1"F	1"F	1"F	1″F	1″F
Secondary heat exchanger	Ø	1/2"F	1/2" F	3/4"F	3/4"F	3/4" F	3/4"F	3/4" F
Condensate discharge diameter	mm	1/2″M	1/2" M	1/2"M	1/2" M	1/2" M	1/2" M	1/2" M
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
Air filter								
Туре	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
Electric coil								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4+4	6+6	6+6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

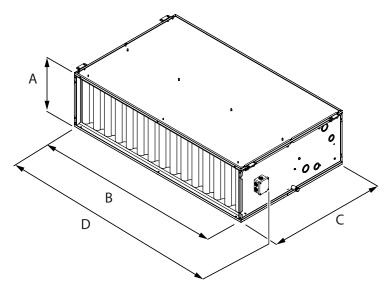
⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C
(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C
(4) Room air 27 °C b.5.47% U.R.; Water (in/out) 7 °C/12 °C
(5) Maximum high static pressure at nominal air flow rate, in heating mode
(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode
(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode

6-ROW COIL UNIT PERFORMANCE DATA

		TVS086	TVS156	TVS206	TVS276	TVS346	TVS406	TVS526
Performance in heating mode 70 °C/	60 °C - Main coil 2-	pipe system (1)						
Heating capacity	kW	11,50	20,60	27,40	35,10	45,40	58,30	72,00
Water flow rate	I/h	986	1774	2359	3017	3900	5009	6189
Pressure drop	kPa	40	27	30	23	42	31	45
Performance in heating mode 45 °C/	40 °C - Main coil fo	r 2-pipe systems (2)						
Heating capacity	kW	5,70	10,20	13,60	17,30	22,50	28,90	35,80
Water flow rate	l/h	978	1762	2342	2985	3876	4980	6166
Pressure drop	kPa	42	29	32	25	44	33	48
Heating performance 65 °C/55 °C - Se	condary coil 4-pipe	e system (3)						
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	I/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - Ma	in coil 2 pipe syste	em (4)						
Cooling capacity	kW	5,30	9,00	12,30	15,40	20,70	25,90	31,60
Sensible cooling capacity	kW	3,80	6,70	9,00	11,60	15,00	18,70	22,90
Water flow rate	l/h	912	1538	2104	2649	3554	4443	5427
Pressure drop	kPa	39	24	28	23	41	30	42
Fan								
Туре	type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m³/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	204	230	338	351	364	392	397
Maximum useful head (4-pipes) (5)	Pa	185	205	308	327	326	366	358
Input power (2-pipes) (6)	W	203	368	557	839	856	1016	1544
Input power (4 pipes) (6)	W	211	387	588	873	932	1064	1658
Sound data (7)								
Sound power level (inlet + radiated)	dB(A)	67,0	69,0	78,0	77,0	78,0	81,0	80,0
Sound power level (outlet)	dB(A)	67,0	69,0	74,0	77,0	74,0	78,0	79,0
Diametre hydraulic fittings								
Main heat exchanger	Ø	3/4"F	3/4" F	1″F	1″F	1" F	1″F	1″F
Secondary heat exchanger	Ø	1/2″F	1/2″ F	3/4"F	3/4"F	3/4" F	3/4"F	3/4" F
Condensate discharge diameter	mm	1/2" M	1/2" M	1/2"M	1/2" M	1/2"M	1/2" M	1/2" M
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
Air filter								
Туре	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
Electric coil								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4+4	6+6	6+6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 70°C / 60°C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C / 40°C
(3) Room air temperature 20°C d.b.; Water (in/out) 65°C / 55°C
(4) Room air 27°C b.s. 47% U.R.; Water (in/out) 7°C/12°C
(5) Maximum high static pressure at nominal air flow rate, in heating mode
(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode
(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode

DIMENSIONS



Unit for horizontal installation

		TVS084	TVS086	TVS154	TVS156	TVS204	TVS206	TVS274	TVS276	TVS344	TVS346	TVS404	TVS406	TVS524	TVS526
Dimensions and weig	hts														
A	mm	300	300	300	300	390	390	390	390	390	390	390	390	390	390
В	mm	700	700	1000	1000	1000	1000	1400	1400	1400	1400	2000	2000	2000	2000
C	mm	700	700	700	700	850	850	850	850	850	850	850	850	850	850
D	mm	770	770	1070	1070	1070	1070	1470	1470	1470	1470	2070	2070	2070	2070
Net weight	kg	27,0	28,0	42,0	44,0	56,0	59,0	79,0	83,0	89,0	94,0	119,0	125,0	120,0	126,0

















TVH

Air handling unit



- · Plug fan with EC motor
- · Horizontal installation only
- Available units with heat exchanger with 4-6 rows
- Large range of available static pressure
- Ductable unit
- 15 mm thick sandwich panelling



DESCRIPTION

TVH it is a thermoventilation unit designed to guarantee high heads in small to medium-sized rooms with nominal air flow rates from 800 to 5200 m^3/h . As standard, it is suitable for 2-pipe systems, however the availability (as an accessory) of the secondary water coil, which can be installed inside the unit downstream of the main coil, makes it also suitable for 4-pipe systems. **The unit is suitable for horizontal installation.**

FEATURES

Structure

The load-bearing structure is made of sandwich-type panels made of galvanised steel sheet with 15 mm thick polyurethane insulation (density 45 kg/m 3).

The particular formulation of the polyurethane foam provides the sandwich panels with reaction to fire class M1 according to NFP standard 92-501. The polyurethane foam was developed with precise specifications to achieve the exceptional value of GWP = 0 (Global Warming Potential), not contributing to the greenhouse effect.

The presence of sandwich type panels enables to significantly reduce the noise outside the unit in typical horizontal suspended ceiling installations.

Specific brackets supplied with the unit make it easier to secure it to the wall.

Heat exchanger coil

Heat exchanger made with copper pipes and aluminium louvers blocked by the mechanical expansion of the pipes.

The main heat exchanger can be 4 or 6-row.

The secondary heat exchanger, available as an accessory, is 2-row.

Hydraulic connections

The hydraulic connections are on the right and are made with female threaded connections, however male-male threaded sleeves, with air release valves, are supplied to facilitate hydraulic connections.

The side of the hydraulic connections can be reversed on site by turning the coil.

The definition of "RH connections side" or "LH connections side" refers to the position of the coil connections in relation to the air flow direction (convection: air flow from behind a hypothetical operator inserted in the flow).

Condensate drip

The galvanised steel condensate drip tray is thermally insulated and has a double drain on the right and left. The unused condensate drain must be sealed.

Ventilation group

The ventilation unit consists of plug fans with reversed blades. The use of plug fans allows a reduction in input power compared to fans with forward-facing blades.

The electric motor, directly coupled to the impeller, is of the EC type.

The use of the EC motor allows significant energy savings when compared to traditional AC motors and a continuous control of the rotation speed, simplifying air flow rate calibration operations on site.

Air filtration

Air filtration is provided, as standard, by 48 mm thick corrugated synthetic filters with Coarse 55% efficiency according to EN ISO 16890 (G4 according to EN 779) positioned in the intake.

The filters are easily accessible for servicing and cleaning. Extraction is carried out by pulling them out from below by removing the respective panel.

Electrical wiring

On the side of the hydraulic connections there is an electric box, with IP55 protection rating, for connecting power and the 0-10V control signal or a potentiometer of the ventilation unit.

In the case of reversing the side of the hydraulic connections, there is no need to reverse the position of the electrical connections.

VENTILATION EFFICIENCY

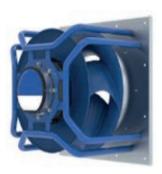
All fans in the range TVH use an EC motor, which, due to the special efficiency of the system, consumes less energy than conventional AC motors. This applies to all speeds, i.e. also to partial load operation.

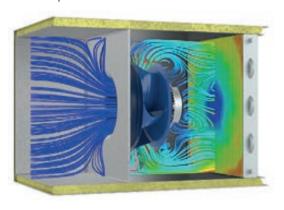
In addition, continuous speed control via the 0-10V signal allows the air flow rate to be varied, and the static pressure can be adapted to the system's pressure drop, allowing a perfect machine - system match.

The innovative mixed-flow geometry of the composite impeller allows a particularly homogenous aeraulic distribution over the next component. The positive effect of homogeneous aeraulic distribution is reflected in a decrease in pressure drops and an increase in the cooling efficiency of the heat exchange coil located downstream of the fan.

For the same processed air flow rate there is therefore less electric input power and a higher cooling efficiency.

In addition, by means of the pressure probe (relying on an external controller) or the flow rate/pressure regulator, which are supplied as accessories, it is possible to carry out ventilation control in constant flow rate or constant pressure on the flow channel.





CONFIGURATOR

Field	Description
1,2,3	TVH
4,5	Size 08, 15, 20, 27, 34, 40, 52
6	Version
4	4-row finned pack main heat exchanger with right-hand connections
6	6-row finned pack main heat exchanger with right-hand connections

ACCESSORIES

BS2x: 2 row water coil: 2-row water coil for 4-pipe system, located internally, downstream of the main coil. The threaded sleeves for the hydraulic connections and the air vent valve are supplied.

F7x: filter with ePM1 50% efficiency: Filter with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be placed inside the unit in place of the standard filter.

F7x: filter with ePM1 80% efficiency: Filter with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be placed inside the unit in place of the standard filter.

SERx: Galvanised steel damper to be installed on the intake or flow side of the unit. The damper pin is equipped with an easily removable hand control. **GRAx:** Natural anodised aluminium intake grid with fixed louvers inclined at 45°. To be installed at the intake of the unit via the supplied flange.

GRMx: Natural anodised aluminium flow grille with two rows of adjustable louvers. To be installed on the unit's flow side via the flange supplied.

V2Vx for main and secondary coil: 2-way valve for main and secondary coil.

V3Vx for main and secondary heat exchanger: 3-way valve for main and secondary coil.

AV24F - 24V / ON-OFF actuator for main and secondary coil: 24V / ON-OFF actuator for main and secondary coil.

AV24FM - 24V / ON-OFF - 0-10V actuator for main and secondary coil: Actuator with 24V power supply for ON-OFF or modulating 0-10V control of 2-way and 3-way main and secondary coil valves.

AV24M - 24V / 0-10V actuator for main and secondary coil: Actuator with 24V power supply for modulating 0-10V control of 2-way and 3-way main and secondary coil valves.

GT2x - 2-way valve tube assembly for main coil: Hose assembly and hydraulic fittings for connecting the 2-way valve to the main coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

GT2Px - 2-way valve hose assembly for secondary coil: Hose assembly and hydraulic fittings for connecting the 2-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

GT3x - 3-way valve hose assembly for main coil: Hose assembly and hydraulic fittings for connecting the 3-way valve to the main coil. The hose

assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

GT3Px - 3-way valve hose assembly for secondary coil: Hose assembly and hydraulic fittings for connecting the 3-way valve to the secondary coil. The hose assembly allows the coil to be operated in countercurrent in the case of the right-hand side connections (standard configuration) and in direct current operation in the case of the left-hand side connections (modification to be carried out on site).

PVV: Potentiometer for fan speed control. The +10V signal is available directly on the electrical connection box located outside the unit.

HMBEx: Electric coil module with double safety thermostat (manual and automatic) to be installed on the unit's flow side.

HMF7x: Filter module with ePM1 50% efficiency according to EN ISO 16890 (F7 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.

HMF9x: Filter module with ePM1 80% efficiency according to EN ISO 16890 (F9 according to EN 779) to be positioned at the unit's flow or intake in order to carry out a two-stage filtration. Filter extraction from below.

HMLFx: Module consisting of state-of-the-art devices with UV germicidal lamp with photocatalytic effect for active disinfection. To be placed at the discharge of the unit. The complete elimination of germs, bacteria and viruses cannot be achieved by using SMLFx modules alone, but a reduction in microbial load means less exposure to infection.

HM25x: Mixing chamber module complete with two galvanised steel calibration dampers to be positioned at the intake of the unit. The damper pins are equipped with an easily removable hand control.

HMSSx - **Silencer baffles module:** Module consisting of rock wool silencing baffles covered with polyethylene film and protective mesh to prevent flaking. To be installed on the flow and/or intake side of the unit.

RPx: Regulator to control ventilation in constant flow rate or constant pressure on the flow duct. An external regulator must be provided for thermoregulation.

SPD: Pressure probe for constant flow rate or constant pressure control on the flow duct. In order to carry out the control, the pressure probe must be controlled by an external regulator.

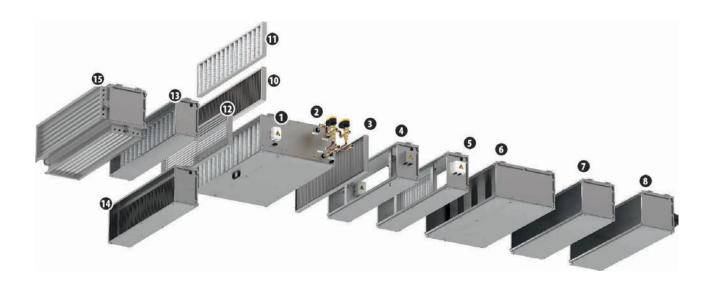
SPF: Differential pressure switch to signal filter fouling status.

HPCx: Closed plenum to be positioned at the flow or intake of the unit. Depending on the opening of the flow/intake hole, the accessory allows

flow/intake in both longitudinal and perpendicular directions to the air flow through the unit.

HPMx: Plenum with circular flows to be positioned at the flow and/or intake of the unit. The multi-diameter (200mm, 180mm, 150mm) circular plastic couplings allow the connection of circular ducts. Flow/intake is allowed in the longitudinal direction of the air flow through the unit.

SCS: Servocontrol with 24V power supply for 0-10V modulating control of the SER damper or the HM2S mixing chamber dampers.



Key:		6	HMS
1	TVH	7	HPC
2	Valvola (V3V, AV24,GT3, GT3P)	8	HPM
3	GRM	9	FAI
4	HMLF	10	F7
5	HMBE	11	F9

HMSS	12	GRA
HPC	13	HMF9
НРМ	14	HMF7
FAI	15	HM2S

ACCESSORIES COMPATIBILITY

Control

Potentiometer for fan speed control

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
PVV	•			•			•	•	•	•	•	•	•	.

Water valves

2 way valve kit

	TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
Main coil	'						
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
Secondary coil							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3
	TVH086	TVH156	TVH206	TVH276	TVH346	TVH406	TVH526
Main coil							
2 way valve	V2V2	V2V3	V2V4	V2V5	V2V5	V2V6	V2V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT21	GT21	GT22	GT23	GT23	GT24	GT24
Secondary coil							
2 way valve	V2V1	V2V1	V2V4	V2V4	V2V4	V2V5	V2V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT2P1	GT2P1	GT2P2	GT2P2	GT2P2	GT2P3	GT2P3

Tabella 3 way valve kit

Tabella 3 way valve kit							
	TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
Main coil	'	-					
Three-way valve	V3V2	V3V3	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
Secondary coil							
Three-way valve	V3V1	V3V1	V3V4	V3V4	V3V4	V3V5	V3V5
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT3P1	GT3P1	GT3P2	GT3P2	GT3P2	GT3P3	GT3P3
	TVH086	TVH156	TVH206	TVH276	TVH346	TVH406	TVH526
Main coil							
Three-way valve	V3V2	V3V3	V3V4	V3V5	V3V5	V3V6	V3V6
Actuator	AV24F/AV24M	AV24F/AV24M	AV24FM	AV24FM	AV24FM	AV24FM	AV24FM
Pipe assembly	GT31	GT31	GT32	GT33	GT33	GT34	GT34
Secondary coil							

Heating only additional coil

2 row water coil

Three-way valve

Pipe assembly

Actuator

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
BS21	•	•												
BS22			•	•										
BS23					•	•								
BS24							•	•	•	•				
BS25												•	•	•

V3V4

AV24FM

GT3P2

V3V4

AV24FM

GT3P2

V3V5

AV24FM

GT3P3

V3V5

AV24FM

GT3P3

V3V4

AV24FM

GT3P2

V3V1

GT3P1

AV24F/AV24M AV24F/AV24M

V3V1

GT3P1

Electric coil module

2-stage electric coil module

Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
HMBE1	•	•												
HMBE2			•	•										
HMBE3					•	•								
HMBE4							•	•	•	•				
HMBE5											•	•	•	<u> </u>

Installation accessories

GRA5

Installation														
Filter modul														
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH52
HMF71	•	•												
HMF72			•	•										
HMF73					•	•								
HMF74							•	•	•	•				
HMF75											•	•	•	•
ilter modul	le with ePM1	80% effi	ciency											
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH52
HMF91	•	•												
HMF92			•	•										
HMF93					•	•								
HMF94							•	•	•	•				
HMF95											•	•	•	•
Silencer baff	fles module													
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH52
HMSS1		•												_
HMSS2						-								
HMSS3														
łMSS4								•	•	•				
HMSS5											•		•	
	tic device m	odule									'	'		
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH20	06 TVI	1274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH52
IMLF1	•	•												
HMLF2			•											
HMLF3					•	•								
IMLF3					•	•			•	•	•			
								•	•	•	•			
HMLF5												•	•	•
Mixing cham Accessory	nber module TVH084	complet TVH086	TVH154	calibration TVH156	on dampe TVH204	_	16 TVI	1274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH52
HM2S1	•	•	1111131	1111150	1111201	111120	111	127 1	1111270	TVIIDTT	11115-10	1111101	1111100	111132
HM2S2			•	•										
HM2S3					•	•								
HM2S4						•			•	•				
HM2S5								•	•	•	•	•	•	•
							1	1	1		1	1	-18	
Closed plenu Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH52
HPC1	•	•	1111131	1411130	1111201	1111200	1111271	1111270	1711511	1111510	1111101	1711100	1111521	111152
HPC2	· ·	•												
			•	•										_
HPC3					•	•								
HPC4							•	•	•	•				
HPC5											•	•	•	•
	n circular de													
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH52
HPM1	•	•												
HPM2			•	•										
HPM3					•	•								
HPM4														
HPM5											•	•		•
Galvanised s	steel dampe	rs												
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH52
SER1	•	•												
			•	•										
SER2														
SER2 SER3							•	•	•	•				
SER2 SER3 SER4							•	•	•	•	•	•	•	•
SER2 SER3 SER4 SER5	Intake grids						•	•	•	•	•	•	•	•
ER2 ER3 ER4 ER5	Intake grids	TVH086	TVH154	TVH156	TVH204	TVH206	* TVH274	TVH276	TVH344	TVH346	TVH404	· TVH406	· TVH524	
EER2 EER3 EER4 EER5 Alluminium Accessory			TVH154	TVH156	TVH204	TVH206								
SER2 SER3 SER4 SER5 Alluminium Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206								
GER2 GER3 GER4 GERS Alluminium Accessory GRA1 GRA2	TVH084	TVH086				TVH206								
SER2 SER3 SER4 SER5 SERS Alluminium Accessory GRA1 GRA2 GRA3 GRA4	TVH084	TVH086			TVH204									TVH52

Δ	llum	inium	delivery	arille
M	IIUIII	IIIIIUIII	ueliveiv	urme

Allullillillillilli	delivery gri	iie												
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
GRM1	•	•												
GRM2														
GRM3					•	•								
GRM4								•						
GRM5														
Filter with e	PM1 50% ef	ficiency												
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
F71	•	•												
F72			•	•										
F73					•				-					
F74							•	•	•	•				
F75													•	
Filter with e	PM1 80% ef	ficiency												
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
F91	•	•												
F92														
F93					•	•								
F94							•		•					
F95											•	•	•	•
Flow rate ad	ljuster													
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
RP1	•	•	•	•										
RP2					•	•	•	•	•	•	•	•	•	•
Differential	pressure pr	obe												
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SPD	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Filter foulin	g pressure s	witch												
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
SPF	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Servocontro	.I													
Sei vocontro	ונ													
Accessory	TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526

4-ROW COIL UNIT PERFORMANCE DATA

Units designed to operate with all recirculating air or maximum 10% of external air.

		TVH084	TVH154	TVH204	TVH274	TVH344	TVH404	TVH524
Performance in heating mode 70 °C / 60	0°C - Main coil 2-	pipe system (1)						
Heating capacity	kW	11,60	20,80	28,50	36,60	47,10	60,30	73,90
Water flow rate	l/h	994	1787	2454	3150	4054	5189	6353
Pressure drop	kPa	31	31	48	31	53	42	60
Performance in heating mode 45 °C / 40	0°C - Main coil fo	r 2-pipe systems (2)						
Heating capacity	kW	5,70	10,30	14,10	18,20	23,40	29,80	36,50
Water flow rate	l/h	985	1769	2431	3123	4017	5125	6270
Pressure drop	kPa	33	32	51	33	56	45	64
Heating performance 65 °C/55 °C - Seco	ondary coil 4-pipe	e system (3)						
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - Main	1 coil 2 pipe syste							
Cooling capacity	kW	4,70	8,30	11,90	14,30	19,30	24,90	29,30
Sensible cooling capacity	kW	3,50	6,20	8,50	10,80	14,10	17,60	21,40
Water flow rate	l/h	815	1422	2038	2447	3316	4267	5032
Pressure drop	kPa	27	25	41	23	44	38	51
Fan								
Туре	type	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m³/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	202	232	438	536	540	443	521
Maximum useful head (4-pipes) (5)	Pa	183	207	408	512	502	417	482
Input power (2-pipes) (6)	W	151	287	313	491	533	620	1006
Input power (4 pipes) (6)	W	159	305	335	511	581	656	1074
Sound data (7)								
Sound power level (inlet + radiated)	dB(A)	74,0	74,0	70,0	76,0	72,0	73,0	79,0
Sound power level (outlet)	dB(A)	72,0	75,0	72,0	78,0	73,0	75,0	81,0
Diametre hydraulic fittings								
Main heat exchanger	Ø	3/4"F	3/4" F	1″F	1"F	1"F	1"F	1"F
Secondary heat exchanger	Ø	1/2″F	1/2" F	3/4"F	3/4"F	3/4" F	3/4"F	3/4" F
Condensate discharge diameter	mm	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
Air filter								
Туре	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
Electric coil								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4+4	6+6	6+6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

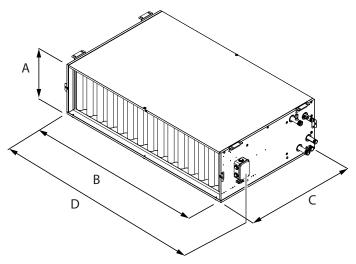
⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 70 °C / 60 °C
(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C / 40 °C
(3) Room air temperature 20 °C d.b.; Water (in/out) 65 °C / 55 °C
(4) Room air 27 °C b.5.47% U.R.; Water (in/out) 7 °C/12 °C
(5) Maximum high static pressure at nominal air flow rate, in heating mode
(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode
(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode

6-ROW COIL UNIT PERFORMANCE DATA

		TVH086	TVH156	TVH206	TVH276	TVH346	TVH406	TVH526
Performance in heating mode 70 °C	:/ 60 °C - Main coil 2-							
Heating capacity	kW	12,40	22,60	30,80	39,40	51,30	64,90	80,10
Water flow rate	I/h	1070	1941	2652	3391	4407	5578	6889
Pressure drop	kPa	54	32	37	31	53	34	50
Performance in heating mode 45 °C	:/ 40 °C - Main coil fo	r 2-pipe systems (2)						
Heating capacity	kW	6,20	11,20	15,30	19,60	25,50	32,20	39,90
Water flow rate	I/h	1063	1923	2630	3369	4377	5537	6855
Pressure drop	kPa	58	34	40	33	57	37	53
Heating performance 65 °C/55 °C - 9	Secondary coil 4-pipe	system (3)						
Heating capacity	kW	4,40	8,10	14,40	18,40	23,60	28,30	32,90
Water flow rate	l/h	380	697	1235	1579	2031	2433	2828
Pressure drop	kPa	6	26	18	20	32	19	25
Cooling performances 7 °C / 12 °C - M	Main coil 2 pipe syste	m (4)						
Cooling capacity	kW	5,60	9,70	13,60	16,70	22,30	28,10	33,70
Sensible cooling capacity	kW	4,00	6,90	9,50	12,10	15,80	19,60	24,00
Water flow rate	l/h	965	1666	2329	2862	3827	4819	5789
Pressure drop	kPa	46	30	36	26	49	34	47
Fan								
Туре	type	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan	Plug Fan
Fan motor	type	EC	EC	EC	EC	EC	EC	EC
Number	no.	1	2	1	1	2	2	2
Nominal air flow rate	m³/h	800	1500	2000	2600	3400	4000	5200
Nominal useful head	Pa	150	150	200	200	200	200	200
Maximum useful head (2-pipes) (5)	Pa	193	219	425	525	524	432	505
Maximum useful head (4-pipes) (5)	Pa	174	194	395	501	486	406	466
Input power (2-pipes) (6)	W	155	297	322	500	555	635	1036
Input power (4 pipes) (6)	W	163	315	344	520	601	671	1102
Sound data (7)								
Sound power level (inlet + radiated)	dB(A)	74,0	75,0	70,0	76,0	73,0	73,0	79,0
Sound power level (outlet)	dB(A)	73,0	75,0	72,0	78,0	73,0	75,0	82,0
Diametre hydraulic fittings								
Main heat exchanger	Ø	3/4" F	3/4" F	1"F	1"F	1″F	1″F	1"F
Secondary heat exchanger	Ø	1/2″F	1/2" F	3/4" F	3/4" F	3/4" F	3/4"F	3/4" F
Condensate discharge diameter	mm	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M	3/4" M
Power supply								
Power supply		230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz	230V~50Hz
Air filter								
Туре	type	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)	Coarse 55% (G4)
Electric coil								
Electric coil capacity	kW	1,5 + 1,5	2,5 + 2,5	4+4	6+6	6+6	7,5 + 7,5	7,5 + 7,5
Stages	no.	2	2	2	2	2	2	2
Power supply		400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz

⁽¹⁾ Room air temperature 20°C d.b.; Water (in/out) 70°C / 60°C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C / 40°C
(3) Room air temperature 20°C d.b.; Water (in/out) 65°C / 55°C
(4) Room air 27°C b.s. 47% U.R.; Water (in/out) 7°C/12°C
(5) Maximum high static pressure at nominal air flow rate, in heating mode
(6) Input power at nominal air flow rate, at nominal high static pressure, in heating mode
(7) Sound data in 2-pipe configuration, at nominal air flow rate, at nominal high static pressure, in heating mode

DIMENSIONS



Unit for horizontal installation

		TVH084	TVH086	TVH154	TVH156	TVH204	TVH206	TVH274	TVH276	TVH344	TVH346	TVH404	TVH406	TVH524	TVH526
Dimensions and we	ights														
A	mm	300	300	300	300	390	390	390	390	390	390	390	390	390	390
В	mm	700	700	1000	1000	1000	1000	1400	1400	1400	1400	2000	2000	2000	2000
C	mm	700	700	700	700	850	850	850	850	850	850	850	850	850	850
D	mm	758	758	1058	1058	1058	1058	1458	1458	1458	1458	2058	2058	2058	2058
Net weight	kg	30,0	31,0	43,0	45,0	55,0	58,0	69,0	73,0	80,0	85,0	110,0	116,0	110,0	116,0













TS

Air handling unit



- Very quiet
- Available units with heat exchanger with 3-4-6 rows
- Ductable units



DESCRIPTION

The air-conditioning units of the TS series are intended for civil, commercial and hotel systems in small to medium sized environments. They are distinguished by their compactness (a necessary requisite for false ceiling applications) and low noise. The wide range of accessories meets various system requirements.

STRUCTURE

Case

Structure made of Galvanized steel 10/10 sheet steel and internally covered with sheets of polyethylene and polyester to obtain improved thermal and acoustic insulation.

Ventilation group

Statically and dynamically balanced centrifugal fans:

- Three-speed electrical motor with running capacitor permanently activated and internal thermal protection
- Transmission system relay card for each speed (excluding the models TS13 and TS16)
- Useful static pressure available for any canalisation

Heat exchanger coil

3, 4 or 6 row coils, powered with hot or cold water and made of copper piping with aluminium louvered fins blocked by mechanical expansion of the pipes. The threaded sleeves for the hydraulic connections and the air bleeding valve are supplied. The coils can be rotated on site.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Condensate drip

Condensate drip tray in stainless steel AISI 304 with insulation.

ACCESSORIES

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant

panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **FMT10:** Electronic thermostat for fan coil in to 2/4 pipe systems.

PXAE: Electronic thermostat with thermostated or continuous ventilation.

SA5: air probe kit (L = 15 m) with probe-locking cable grommet.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualiet).

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

WMT16: Electronic thermostat with thermostated ventilation.

WMT16CV: Electronic thermostat with continuous ventilation.

TSBA: 2-row coil for post-heating, contained in a delivery installation plenum.

TSFA: Air filter class Coarse 50%

TSGA: Horizontal suction grille with fixed louvers to produce suction from below together with the TSPA accessory.

TSMX: Section that mixes the recirculating air and the external air. Calibration of the mix via the damper, motorisation is possible.

VCT: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCT: These are 3-way ball valves made of bronze, with female/female connections \emptyset 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adjustment provided.

TSFM: Delivery flange with rectangular section.

VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/ adjustment provided.

ACCESSORIES COMPATIBILITY

Co	nt	rol	pa	ne	ls

Model	13	16	23	34	36	43	46	53	56	63	74	76
AER503IR (1)	•	•	•	•	•	•	•	•	•	•	•	•
FMT10	•	•	•	•	•	•	•	•	•	•	•	•
PXAE	•	•	•	•	•		•	•	•	•	•	•
SA5 (2)	•								•	•		•
SW5 (2)	•	•	•	•	•	•	•	•	•	•	•	•
TX (3)	•		•	•					•			
WMT10 (3)	•	•	•	•	•	•	•		•	•	•	•
WMT16 (3)	•	•	•	•	•	•	•	•	•	•	•	•
WMT16CV (3)		•	•		•	•		•	•			

⁽¹⁾ Wall-mount installation.
(2) Probe for AERSO3IR-TX thermostats, if fitted.
(3) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

2-row	coil	for	nost.	hoa	tina
z-row	COII	IOI	DOST-	nea	una

2-row coil fo	r post-heat	ing									
13	16	23	34	36	43	46	53	56	63	74	76
TSBA10	TSBA10	TSBA20/30	TSBA20/30	TSBA20/30	TSBA40	TSBA40	TSBA50	TSBA50	TSBA60/70	TSBA60/70	TSBA60/70
Air filter											
13	16	23	34	36	43	46	53	56	63	74	76
TSFA10	TSFA10	TSFA20/30	TSFA20/30	TSFA20/30	TSFA40	TSFA40	TSFA50	TSFA50	TSFA60/70	TSFA60/70	TSFA60/70
Intake grids											
13	16	23	34	36	43	46	53	56	63	74	76
TSGA10	TSGA10	TSGA20/40	TSGA20/40	TSGA20/40	TSGA20/40	TSGA20/40	TSGA50/70	TSGA50/70	TSGA50/70	TSGA50/70	TSGA50/70
Section that	mixes										
13	16	23	34	36	43	46	53	56	63	74	76
TSMX10	TSMX10	TSMX20/30	TSMX20/30	TSMX20/30	TSMX40	TSMX40	TSMX50	TSMX50	TSMX60/70	TSMX60/70	TSMX60/70
Plenum with	suction										
13	16	23	34	36	43	46	53	56	63	74	76
TSPA10	TSPA10	TSPA20/30	TSPA20/30	TSPA20/30	TSPA40	TSPA40	TSPA50	TSPA50	TSPA60/70	TSPA60/70	TSPA60/70
Delivery ple	num										
13	16	23	34	36	43	46	53	56	63	74	76
TSPM10	TSPM10	TSPM20/30	TSPM20/30	TSPM20/30	TSPM40	TSPM40	TSPM50	TSPM50	TSPM60/70	TSPM60/70	TSPM60/70
Delivery flar	nge										
13	16	23	34	36	43	46	53	56	63	74	76
TSFM10	TSFM10	TSFM20/30	TSFM20/30	TSFM20/30	TSFM40	TSFM40	TSFM50	TSFM50	TSFM60/70	TSFM60/70	TSFM60/70
2 way valve	kit										
13	16	23	34	36	43	46	53	56	63	74	76
VCT102	VCT102	VCT102	VCT102	VCT102	VCT202	VCT202	VCT202	VCT402	VCT402	VCT402P	VCT402P
3 way valve	kit										
13	16	23	34	36	43	46	53	56	63	74	76
VCT103	VCT103	VCT103	VCT103	VCT103	VCT203	VCT203	VCT203	VCT403	VCT403	VCT403P	VCT403P
Actuator VC	TK 230V										
13	16	23	34	36	43	46	53	56	63	74	76
VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK	VCTK
Actuator 24	v										
13	16	23	34	36	43	46	53	56	63	74	76
VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM	VCTKM

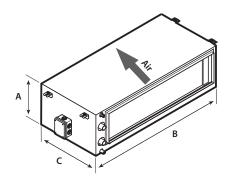
PERFORMANCE SPECIFICATIONS

2-pipe

		TS13			TS16			TS23			TS34			TS36			TS43	
-	1	2	3	1	2	3	1	2	3	1	2		1	2	3	1	2	3
	ΤĖ	M	H	Ĺ	M	 H	i	M	H	Ĺ	M	 H	Ĺ	M	H	i	M	_ _
Cooling performance 7 °C / 12 °C (1)										_								
Cooling capacity kV	4,39	4,65	4,85	4,44	5,21	5,81	7,18	7,65	7,98	8,59	9,20	9,61	9,40	10,08	10,52	7,14	9,35	11,11
Sensible cooling capacity kV	3,39	3,60	3,75	3,41	3,99	4,45	5,82	6,20	6,46	6,80	7,28	7,61	7,43	7,96	8,31	5,75	7,54	8,96
Water flow rate system side 1/1		800	835	764	896	999	1235	1315	1372	1478	1583	1653	1617	1733	1809	1227	1608	1912
Pressure drop system side kP	17	19	21	6	7	9	20	23	24	20	22	24	13	15	16	10	17	23
Heating performance 70 °C / 60 °C (2)																		
Heating capacity kV	8,89	9,43	9,83	9,75	11,34	12,61	14,14	15,04	15,67	17,71	18,92	19,76	19,36	20,71	21,60	14,24	18,33	21,67
Water flow rate system side I/	780	827	862	856	995	1106	1240	1319	1375	1553	1660	1733	1698	1816	1894	1249	1068	1900
Pressure drop system side kP	10	12	13	5	7	8	10	12	12	17	19	21	11	13	14	8	13	18
Fan	_																	
Air flow rate m ³	h 810	877	930	656	803	930	1316	1432	1518	1376	1507	1600	1376	1510	1601	1170	1631	2050
High static pressure Pa	68	80	90	27	41	55	77	91	102	62	75	85	33	40	45	37	72	114
Input power k\	0,1	0,1	0,2	0,1	0,1	0,2	0,2	0,3	0,3	0,2	0,3	0,3	0,2	0,3	0,3	0,3	0,3	0,4
Type typ	e								Centi	ifugal								
Fan motor typ	e								0n	-Off								
Number no		1			1			2			2			2			2	
Diametre hydraulic fittings																		
Type typ	e								G	as								
Main heat exchanger		3/4"			1"			3/4"			3/4"			1″			3/4"	
Power supply																		
Power supply									230V	~50Hz								
	1	TS46			TS53			TCEC			TCC2			TC74			TS76	
		1340			1333			TS56			TS63			TS74			13/0	
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	1 L		3 H	1 L		3 H	1 L		3 H	1 L		3 H	1 L		3 H	1 L		3 H
Cooling performance 7 °C / 12 °C (1)	<u> </u>	2		_	2			2			2			2			2	
Cooling performance 7 °C / 12 °C (1) Cooling capacity	L	2		_	2			2			2			2			2	
	L 8,57	2 M	Н	L	2 M	Н	L	2 M	Н	L	2 M	Н	L	2 M	H 21,92 17,82	L	2 M	Н
Cooling capacity kV	L 8,57	2 M	H 13,44	L 8,05	2 M	H 13,86	9,50	2 M	H 16,47	L 8,11	2 M	H 16,62	L 17,47	2 M	H 21,92	L 19,79	2 M 23,38	H 24,93
Cooling capacity kV Sensible cooling capacity kV	L 8,57 6,90 1474	2 M 11,27 9,06	H 13,44 10,81	8,05 5,68	2 M 11,06 7,80	H 13,86 9,77	9,50 6,73	2 M 13,13 9,31	H 16,47 11,68	8,11 6,40	2 M 12,84 10,12	H 16,62 13,11	17,47 14,20	2 M 20,65 16,78	H 21,92 17,82	19,79 16,04	2 M 23,38 18,95	H 24,93 20,21
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side 1//	L 8,57 6,90 1474	2 M 11,27 9,06 1938	H 13,44 10,81 2311	8,05 5,68 1385	2 M 11,06 7,80 1902	H 13,86 9,77 2384	9,50 6,73 1633	2 M 13,13 9,31 2260	H 16,47 11,68 2833	8,11 6,40 1395	2 M 12,84 10,12 2208	H 16,62 13,11 2858	17,47 14,20 3006	2 M 20,65 16,78 3551	H 21,92 17,82 3771	19,79 16,04 3405	2 M 23,38 18,95 4022	H 24,93 20,21 4289
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side I// Pressure drop system side kP	8,57 6,90 1474 1 8	2 M 11,27 9,06 1938	H 13,44 10,81 2311	8,05 5,68 1385	2 M 11,06 7,80 1902	H 13,86 9,77 2384	9,50 6,73 1633	2 M 13,13 9,31 2260	H 16,47 11,68 2833	8,11 6,40 1395	2 M 12,84 10,12 2208	H 16,62 13,11 2858	17,47 14,20 3006	2 M 20,65 16,78 3551	H 21,92 17,82 3771	19,79 16,04 3405	2 M 23,38 18,95 4022	H 24,93 20,21 4289
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side I// Pressure drop system side kP Heating performance 70 °C / 60 °C (2)	8,57 6,90 1474 1 8	2 M 11,27 9,06 1938 13	H 13,44 10,81 2311 17	8,05 5,68 1385 12	2 M 11,06 7,80 1902 21	H 13,86 9,77 2384 32	9,50 6,73 1633 10	2 M 13,13 9,31 2260 18	H 16,47 11,68 2833 27	8,11 6,40 1395 7	2 M 12,84 10,12 2208 16	H 16,62 13,11 2858 26	17,47 14,20 3006 19	2 M 20,65 16,78 3551 25	H 21,92 17,82 3771 28	19,79 16,04 3405 17	2 M 23,38 18,95 4022 23	H 24,93 20,21 4289 26
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side I// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV	L 8,57 6,90 1474 8 1 18,17 1593	2 M 11,27 9,06 1938 13	H 13,44 10,81 2311 17 27,83	8,05 5,68 1385 12	2 M 11,06 7,80 1902 21	H 13,86 9,77 2384 32 25,89	9,50 6,73 1633 10	2 M 13,13 9,31 2260 18	H 16,47 11,68 2833 27 32,90	8,11 6,40 1395 7	2 M 12,84 10,12 2208 16	H 16,62 13,11 2858 26 35,61	17,47 14,20 3006 19	2 M 20,65 16,78 3551 25 43,80	H 21,92 17,82 3771 28	19,79 16,04 3405 17	2 M 23,38 18,95 4022 23	H 24,93 20,21 4289 26 52,44
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side I// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side I//	L 8,57 6,90 1474 8 1 18,17 1593	2 M 11,27 9,06 1938 13 23,45 2056	H 13,44 10,81 2311 17 27,83 2440	8,05 5,68 1385 12 15,55 1364	2 M 11,06 7,80 1902 21 20,82 1826	H 13,86 9,77 2384 32 25,89 2270	9,50 6,73 1633 10 19,63 1722	2 M 13,13 9,31 2260 18 26,43 2321	H 16,47 11,68 2833 27 32,90 2886	8,11 6,40 1395 7 18,32 1607	2 M 12,84 10,12 2208 16 27,78 2436	H 16,62 13,11 2858 26 35,61 3123	17,47 14,20 3006 19 37,33 3274	2 M 20,65 16,78 3551 25 43,80 3841	H 21,92 17,82 3771 28 46,45 4073	19,79 16,04 3405 17 42,00 3683	2 M 23,38 18,95 4022 23 49,25 4319	H 24,93 20,21 4289 26 52,44 4599
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side I// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side I// Pressure drop system side kF	L 8,57 6,90 1474 8 1 18,17 1593 1 6	2 M 11,27 9,06 1938 13 23,45 2056 10	H 13,44 10,81 2311 17 27,83 2440 14	8,05 5,68 1385 12 15,55 1364	2 M 11,06 7,80 1902 21 20,82 1826 15	H 13,86 9,77 2384 32 25,89 2270	9,50 6,73 1633 10 19,63 1722	2 M 13,13 9,31 2260 18 26,43 2321	H 16,47 11,68 2833 27 32,90 2886	8,11 6,40 1395 7 18,32 1607	2 M 12,84 10,12 2208 16 27,78 2436	H 16,62 13,11 2858 26 35,61 3123	17,47 14,20 3006 19 37,33 3274	2 M 20,65 16,78 3551 25 43,80 3841	H 21,92 17,82 3771 28 46,45 4073	19,79 16,04 3405 17 42,00 3683	2 M 23,38 18,95 4022 23 49,25 4319 20	H 24,93 20,21 4289 26 52,44 4599 22
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side I// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side I// Pressure drop system side kP Fan Air flow rate m³ High static pressure P	L 8,57 6,90 1474 8 8 1593 6 6 h 1173 24	2 M 11,27 9,06 1938 13 23,45 2056	H 13,44 10,81 2311 17 27,83 2440 14	8,05 5,68 1385 12 15,55 1364 9	2 M 11,06 7,80 1902 21 20,82 1826 15	H 13,86 9,77 2384 32 25,89 2270 22	9,50 6,73 1633 10 19,63 1722 9	2 M 13,13 9,31 2260 18 26,43 2321	H 16,47 11,68 2833 27 32,90 2886 22	8,11 6,40 1395 7 18,32 1607 6	2 M 12,84 10,12 2208 16 27,78 2436 13	H 16,62 13,11 2858 26 35,61 3123 21	17,47 14,20 3006 19 37,33 3274 16	2 M 20,65 16,78 3551 25 43,80 3841 22	H 21,92 17,82 3771 28 46,45 4073 24	19,79 16,04 3405 17 42,00 3683 15	2 M 23,38 18,95 4022 23 49,25 4319 20	H 24,93 20,21 4289 26 52,44 4599 22
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side I// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side I// Pressure drop system side kP Fan Air flow rate m³	L 8,57 6,90 1474 8 8 1593 6 6 h 1173 24	2 M 11,27 9,06 1938 13 23,45 2056 10	H 13,44 10,81 2311 17 27,83 2440 14	8,05 5,68 1385 12 15,55 1364 9	2 M 11,06 7,80 1902 21 20,82 1826 15	H 13,86 9,77 2384 32 25,89 2270 22 2387	9,50 6,73 1633 10 19,63 1722 9	2 M 13,13 9,31 2260 18 26,43 2321 15	H 16,47 11,68 2833 27 32,90 2886 22 2391	8,11 6,40 1395 7 18,32 1607 6	2 M 12,84 10,12 2208 16 27,78 2436 13	H 16,62 13,11 2858 26 35,61 3123 21	17,47 14,20 3006 19 37,33 3274 16	2 M 20,65 16,78 3551 25 43,80 3841 22	H 21,92 17,82 3771 28 46,45 4073 24	19,79 16,04 3405 17 42,00 3683 15	2 M 23,38 18,95 4022 23 49,25 4319 20	H 24,93 20,21 4289 26 52,44 4599 22
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side l// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side l// Pressure drop system side kP Fan Air flow rate m³ High static pressure P	L 8,57 6,90 1474 8 8 1 18,17 1593 6 6 h 1173 24 0,3	2 M 11,27 9,06 1938 13 23,45 2056 10	H 13,44 10,81 2311 17 27,83 2440 14 2076 76	15,55 1364 9	2 M 11,06 7,80 1902 21 20,82 1826 15 1775 57	H 13,86 9,77 2384 32 25,89 2270 22 2387 104	9,50 6,73 1633 10 19,63 1722 9	2 M 13,13 9,31 2260 18 26,43 2321 15 1777 38	H 16,47 11,68 2833 27 32,90 2886 22 2391 69 0,5	8,11 6,40 1395 7 18,32 1607 6	2 M 12,84 10,12 2208 16 27,78 2436 13 2570 61	H 16,62 13,11 2858 26 35,61 3123 21 3599 120	17,47 14,20 3006 19 37,33 3274 16 3117 63	2 M 20,65 16,78 3551 25 43,80 3841 22 3869 97	H 21,92 17,82 3771 28 46,45 4073 24 4200 115	19,79 16,04 3405 17 42,00 3683 15 3119	2 M 23,38 18,95 4022 23 49,25 4319 20 3869 63	H 24,93 20,21 4289 26 52,44 4599 22 4225 75
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side l// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side l// Pressure drop system side kP Fan Air flow rate m³ High static pressure P Input power kV	L 8,57 6,90 1474 8 1 18,17 1593 6 6 h 1173 24 7 0,3 e	2 M 11,27 9,06 1938 13 23,45 2056 10	H 13,44 10,81 2311 17 27,83 2440 14 2076 76	15,55 1364 9	2 M 11,06 7,80 1902 21 20,82 1826 15 1775 57	H 13,86 9,77 2384 32 25,89 2270 22 2387 104	9,50 6,73 1633 10 19,63 1722 9	2 M 13,13 9,31 2260 18 26,43 2321 15 1777 38	H 16,47 11,68 2833 27 32,90 2886 22 2391 69 0,5 Centri	8,11 6,40 1395 7 18,32 1607 6	2 M 12,84 10,12 2208 16 27,78 2436 13 2570 61	H 16,62 13,11 2858 26 35,61 3123 21 3599 120	17,47 14,20 3006 19 37,33 3274 16 3117 63	2 M 20,65 16,78 3551 25 43,80 3841 22 3869 97	H 21,92 17,82 3771 28 46,45 4073 24 4200 115	19,79 16,04 3405 17 42,00 3683 15 3119	2 M 23,38 18,95 4022 23 49,25 4319 20 3869 63	H 24,93 20,21 4289 26 52,44 4599 22 4225 75
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side l// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side l// Pressure drop system side kP Fan Air flow rate m³ Air flow rate m³ High static pressure R Input power kV Type type Input power type	L 8,57 6,90 1474 8 8 1593 6 6 173 24 7 0,3 e e e	2 M 11,27 9,06 1938 13 23,45 2056 10	H 13,44 10,81 2311 17 27,83 2440 14 2076 76	15,55 1364 9	2 M 11,06 7,80 1902 21 20,82 1826 15 1775 57	H 13,86 9,77 2384 32 25,89 2270 22 2387 104	9,50 6,73 1633 10 19,63 1722 9	2 M 13,13 9,31 2260 18 26,43 2321 15 1777 38	H 16,47 11,68 2833 27 32,90 2886 22 2391 69 0,5 Centri	8,11 6,40 1395 7 18,32 1607 6 1493 20 0,3 ifugal	2 M 12,84 10,12 2208 16 27,78 2436 13 2570 61	H 16,62 13,11 2858 26 35,61 3123 21 3599 120	17,47 14,20 3006 19 37,33 3274 16 3117 63	2 M 20,65 16,78 3551 25 43,80 3841 22 3869 97	H 21,92 17,82 3771 28 46,45 4073 24 4200 115	19,79 16,04 3405 17 42,00 3683 15 3119	2 M 23,38 18,95 4022 23 49,25 4319 20 3869 63	H 24,93 20,21 4289 26 52,44 4599 22 4225 75
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side // Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side // Pressure drop system side // Pressure drop system side kP Fan Air flow rate // Air flow rate // High static pressure // Input power kV Type type	L 8,57 6,90 1474 8 8 1593 6 6 173 24 7 0,3 e e e	2 M 11,27 9,06 1938 13 23,45 2056 10 1642 48 0,3	H 13,44 10,81 2311 17 27,83 2440 14 2076 76	15,55 1364 9	2 M 11,06 7,80 1902 21 20,82 1826 15 1775 57 0,4	H 13,86 9,77 2384 32 25,89 2270 22 2387 104	9,50 6,73 1633 10 19,63 1722 9	2 M 13,13 9,31 2260 18 26,43 2321 15 1777 38 0,4	H 16,47 11,68 2833 27 32,90 2886 22 2391 69 0,5 Centri	8,11 6,40 1395 7 18,32 1607 6 1493 20 0,3 ifugal	2 M 12,84 10,12 2208 16 27,78 2436 13 2570 61 0,4	H 16,62 13,11 2858 26 35,61 3123 21 3599 120	17,47 14,20 3006 19 37,33 3274 16 3117 63	2 M M 20,65 16,78 3551 25 43,80 3841 22 3869 97 0,8	H 21,92 17,82 3771 28 46,45 4073 24 4200 115	19,79 16,04 3405 17 42,00 3683 15 3119	2 M 18,95 4022 23 49,25 4319 20 3869 63 0,8	H 24,93 20,21 4289 26 52,44 4599 22 4225 75
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side J// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side J// Pressure drop system side kP Fan Air flow rate m³ Air flow rate m³ High static pressure Pr Input power kV Type typ Fan motor typ Number not Diametre hydraulic fittings Type typ	L 8,57 6,90 1474 8 8 1 1593 24 1 0,3 2 e e e	2 M 11,27 9,06 1938 13 23,45 2056 10 1642 48 0,3	H 13,44 10,81 2311 17 27,83 2440 14 2076 76	15,55 1364 9	2 M 11,06 7,80 1902 21 20,82 1826 15 1775 57 0,4	H 13,86 9,77 2384 32 25,89 2270 22 2387 104	9,50 6,73 1633 10 19,63 1722 9	2 M 13,13 9,31 2260 18 26,43 2321 15 1777 38 0,4	H 16,47 111,68 2833 27 32,90 2886 22 2391 69 0,5 Centri	8,11 6,40 1395 7 18,32 1607 6 1493 20 0,3 ifugal	2 M 12,84 10,12 2208 16 227,78 2436 13 2570 61 0,4	H 16,62 13,11 2858 26 35,61 3123 21 3599 120	17,47 14,20 3006 19 37,33 3274 16 3117 63	2 M 20,65 16,78 3551 25 43,80 3841 22 3869 97 0,8	H 21,92 17,82 3771 28 46,45 4073 24 4200 115	19,79 16,04 3405 17 42,00 3683 15 3119	2 M 23,38 18,95 4022 23 49,25 4319 20 3869 63 0,8	H 24,93 20,21 4289 26 52,44 4599 22 4225 75
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side // Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side // Pressure drop system side // Pressure drop system side kP Fan Air flow rate m³ Air flow rate m³ High static pressure Pr Input power kV Type typ Fan motor typ Number no Diametre hydraulic fittings Type typ Main heat exchanger	L 8,57 6,90 1474 8 8 1 1593 24 1 0,3 2 e e e	2 M 11,27 9,06 1938 13 23,45 2056 10 1642 48 0,3	H 13,44 10,81 2311 17 27,83 2440 14 2076 76	15,55 1364 9	2 M 11,06 7,80 1902 21 20,82 1826 15 1775 57 0,4	H 13,86 9,77 2384 32 25,89 2270 22 2387 104	9,50 6,73 1633 10 19,63 1722 9	2 M 13,13 9,31 2260 18 26,43 2321 15 1777 38 0,4	H 16,47 111,68 2833 27 32,90 2886 22 2391 69 0,5 Centri	8,11 6,40 1395 7 18,32 1607 6 1493 20 0,3 1fugal	2 M 12,84 10,12 2208 16 27,78 2436 13 2570 61 0,4	H 16,62 13,11 2858 26 35,61 3123 21 3599 120	17,47 14,20 3006 19 37,33 3274 16 3117 63	2 M M 20,65 16,78 3551 25 43,80 3841 22 3869 97 0,8	H 21,92 17,82 3771 28 46,45 4073 24 4200 115	19,79 16,04 3405 17 42,00 3683 15 3119	2 M 18,95 4022 23 49,25 4319 20 3869 63 0,8	H 24,93 20,21 4289 26 52,44 4599 22 4225 75
Cooling capacity kV Sensible cooling capacity kV Water flow rate system side J// Pressure drop system side kP Heating performance 70 °C / 60 °C (2) Heating capacity kV Water flow rate system side J// Pressure drop system side kP Fan Air flow rate m³ Air flow rate m³ High static pressure Pr Input power kV Type typ Fan motor typ Number not Diametre hydraulic fittings Type typ	L 8,57 6,90 1474 8 8 1 1593 24 1 0,3 2 e e e	2 M 11,27 9,06 1938 13 23,45 2056 10 1642 48 0,3	H 13,44 10,81 2311 17 27,83 2440 14 2076 76	15,55 1364 9	2 M 11,06 7,80 1902 21 20,82 1826 15 1775 57 0,4	H 13,86 9,77 2384 32 25,89 2270 22 2387 104	9,50 6,73 1633 10 19,63 1722 9	2 M 13,13 9,31 2260 18 26,43 2321 15 1777 38 0,4	H 16,47 11,68 2833 27 32,90 2886 22 2391 69 0,5 Centro On	8,11 6,40 1395 7 18,32 1607 6 1493 20 0,3 1fugal	2 M 12,84 10,12 2208 16 227,78 2436 13 2570 61 0,4	H 16,62 13,11 2858 26 35,61 3123 21 3599 120	17,47 14,20 3006 19 37,33 3274 16 3117 63	2 M 20,65 16,78 3551 25 43,80 3841 22 3869 97 0,8	H 21,92 17,82 3771 28 46,45 4073 24 4200 115	19,79 16,04 3405 17 42,00 3683 15 3119	2 M 23,38 18,95 4022 23 49,25 4319 20 3869 63 0,8	H 24,93 20,21 4289 26 52,44 4599 22 4225 75

(1) Room air temperature 27 °Cd.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; (2) Room air temperature 20 °Cd.b.; Water (in/out) 70 °C/60 °C; Unit designed to operate with all recirculating air or maximum 10% of external air.

DIMENSIONS



Size	'	13	16	23	34	36	43	46	53	56	63	74	76
Dimensions and weights	,												
A	mm	295	295	295	295	295	325	325	325	325	375	375	375
В	mm	645	645	1000	1000	1000	1100	1100	1345	1345	1345	1345	1345
(mm	520	520	520	520	520	600	600	600	600	600	600	600
Empty weight	kg	25	27	35	38	42	42	46	48	52	56	61	67

















TA

Air handling unit



- · Horizontal or vertical, configurations
- Available units with heat exchanger with 4-6 rows
- Version with 4 row expansion coil using R410A
- Version with extractor



DESCRIPTION

The air-conditioning units of the TA series are intended for civil, commercial and hotel systems in small to medium sized environments. They are distinguished by their compactness (a necessary requisite for false ceiling applications) and low noise. The wide range of accessories meets various system requirements.

FEATURES

Structure

Made of galvanised steel sandwich panels with polyurethane insulation (density 45 kg/m³), 15 mm thick. The intake and delivery panels are fitted with flanges for the connection to any possible air channels or accessories. The unit is supplied with specific brackets for attaching it to the wall.

Air filtration

Filtration of the air entrusted to class G4 filters in compliance with EN779 (thickness 50mm) as per standard positioned at intake.

Ventilation group

Fans double intake centrifugal with forward blades and directly coupled motor. The 230V-50Hz single-phase motor has many speeds, of which three can be selected via the control panel.

Heat exchanger coil

4 or 6 row coils, powered with hot or cold water and made of copper piping with aluminium louvered fins blocked by mechanical expansion of the pipes. The threaded sleeves for the hydraulic connections and the air bleeding valve are supplied. The coils can be rotated on site.

The possibility to rotate the coils on site is envisioned.

Also available are coils with 4 rows with direct expansion operating with R410A fluid and post-heating coils with 2 rows realised in copper piping with aluminium louvers blocked via mechanical expansion of the pipes.

Condensate drip

Condensate drip tray interior isolated in aluminium alloy.

ACCESSORIES

AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those

with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control. **SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

 $\textbf{WMT16:} \ Electronic \ thermostat \ with \ thermostated \ ventilation.$

WMT16CV: Electronic thermostat with continuous ventilation.

VCT: These are 3-way ball valves made of bronze, with female/female connections \emptyset 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCT: These are 3-way ball valves made of bronze, with female/female connections Ø 1/2". That can be servo-activated via servo commands. The valves do not have fittings and pipes for water connections, which are the installer's responsibility.

VCTK: The VCT series valves can be combined with the actuators On-Off 230V. The actuator must be selected according to the type of system/adjustment provided.

VCTKM: The VCT series valves can be combined with the actuators 24V modulating. The actuator must be selected according to the type of system/ adjustment provided.

M25: Galvanised steel mixing chamber with two dampers for air calibration. Louver pitch 50 mm, the galvanised steel adjustment knob (diameter 8 mm) can be motorised.

M3S: Galvanised steel mixing chamber with three air calibration dampers and galvanised steel plates. Must necessarily be paired with the VRF acces-

FTF: Soft bag filters. Section in galvanised steel sheet metal with F6 soft bag filters. Must necessarily be paired in the powered units.

B2R: Hot water coil with 2 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil.

PBE: Section with post heating coil composed of armoured heaters equipped with a double safety thermostat.

SSL: Module with seven galvanised steel sheet metal silencers and seven stone wool silencers covered by polyethylene film to prevent chipping.

S2Z: Galvanised steel opposed louvers dampers for mixing outside air with recirculating air.

VRF: Recovery fan unit equipped with electronic variable speed control. The unit is contained in a galvanised steel sheet metal section equipped with flat filters, efficiency level G4 (EN779).

SAS: Air calibration damper with galvanised sheet metal louvers to be positioned for intake. Louver pitch 50 mm; the galvanised steel adjustment knob can be motorised.

GMD: Air delivery grill with louvers that can be positioned for the delivery of air in the room to be treated. May be installed directly on the device by removing the flanges or installed on the wall.

GAP: Intake grille with louvers at a fixed 45° angle. May be installed directly on the device by removing the flanges or installed on the wall.

FPI: ISO COARSE 50% filter flange for intake at base.

PMM: Plenum with circular multiple delivery, thickness 1.5 mm. The plenum is equipped with multi-diameter circular connections (200 mm, 180 mm, 150 mm) made of plastic to permit the connection of circular conduits.

PMC: Closed delivery plenum in 1.5 mm thick hot-dip galvanised sheet metal. The plenum allows for flow to be rotated by 90°. Opening the delivery outlet is the installer's responsibility.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	09	11	15	19	24	33	40	50
AER503IR (1)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
SA5 (2)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
SIT3 (3)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	
SW5 (2)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
WMT10 (4)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•
WMT16 (4)	H4,H6,HE,V4,V6,X	•	•	•	•	•		•	•
WMT16CV (4)	H4,H6,HE,V4,V6,X	•	•	•	•	•	•	•	•

- (2) Probe for AER503IR-TX thermostats, if fitted.
 (3) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.

09

11

(4) Wall-mounting. If the unit intake exceeds 0.7Å, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

2 way valve kit

Ver	09	11	15	19	24	33	40	50
H4,H6,V4,V6	VCT102	VCT102	VCT202	VCT202	VCT202	VCT402	VCT402P	VCT402P
av valva kit								
ay valve kit						22	40	
Ver	09	11	15	19	24	33	40	50

Actuator VCTK 230V

Ver	09	11	15	19	24	33	40	50
H4,H6,V4,V6	VCTK							

Actuator 24V

Ver	09	11	15	19	24	33	40	50
H4,H6,V4,V6	VCTKM							
2-damper mixing chamber								

3-damper mixing chamber

Ver	09	11	15	19	24	33	40	50
H4,H6,HE,V4,V6,X	M2S1	M2S1	M2S2	M2S3	M2S4	M2S4	M2S5	M2S5

Ver	09	11	15	19	24	33	40	50
H4,H6,HE,V4,V6,X	M3S1 (1)	M3S1 (1)	M3S2 (1)	M3S3 (1)	M3S4 (1)	M3S4 (1)	M3S5 (1)	M3S5 (1)

(1) It must necessarily be combined with the VRF accessory.

Closed delivery plenum

Vei

H4,H6,HE,V4,V6,X PMC1		PMC1	PMC2	PMC3	PMC4	PMC4	PMC5	PMC5
Soft bag filter section		,						

19

24

33

40

50

15

Ver	09	11	15	19	24	33	40	50		
H4,H6,HE,V4,V6,X	FTF1 (1)	FTF1 (1)	FTF2 (1)	FTF3 (1)	FTF4 (1)	FTF4 (1)	FTF5 (1)	FTF5 (1)		
(1) It must necessarily be combined in the enhanced units										

2-row coil

H4.H6,HE,V4.V6,X B2R1 B2R1 B2R2 B2R3 B2R4 B2R4 B2R5 B2R5	Ver	09	11	15	19	24	33	40	50
	H4,H6,HE,V4,V6,X		B2R1	B2R2	B2R3	B2R4	B2R4	B2R5	

рмм

1 171171								
Ver	09	11	15	19	24	33	40	50
H4,H6,HE,V4,V6,X	PMM1	PMM1	PMM2	PMM3	PMM4	PMM4	PMM5	PMM5

ISO COARSE 50% filter flange for intake at base.

Ver	09	11	15	19	24	33	40	50
H4,H6,HE,V4,V6,X	FPI1	FPI1	FPI2	FPI3	FPI4	FPI4	FPI5	FPI5
ection with post-heating o	coil							
Ver	09	11	15	19	24	33	40	50
H4,H6,HE,V4,V6,X	PBE1	PBE2	PBE3	PBE4	PBE5	PBE6	PBE7	PBE8
ilencer baffles module								
Ver	09	11	15	19	24	33	40	50
H4,H6,HE,V4,V6,X	SSL1	SSL1	SSL2	SSL3	SSL4	SSL4	SSL5	SSL5
zone damper								
Ver	09	11	15	19	24	33	40	50
H4,H6,HE,V4,V6,X	S2Z1	S2Z1	S272	S2Z3	S2Z4	S2Z4	S2Z5	S2Z5
Return ventilating section v Ver	with a G4 filter 09	11	15	19	24	33	40	50
H4,H6,HE,V4,V6,X	VRF1	VRF2	VRF3	VRF4	VRF5	VRF6	VRF7	VRF8
uction damper								
uction damper Ver	09	11	15	19	24	33	40	50
<u> </u>	09 SAS1	11 SAS1	15 SAS2	19 SAS3	24 SAS3	33 SAS3	40 SASS	50 SASS
	SAS1							
Ver H4,H6,HE,V4,V6,X	SAS1							
Ver H4,H6,HE,V4,V6,X Outlet grille with adjustabl	SAS1 e louvers	SAS1	SAS2	SAS3	SAS3	SAS3	SAS5	SAS5
Ver H4,H6,HE,V4,V6,X Dutlet grille with adjustabl Ver	SAS1 e louvers 09	SAS1 11	SAS2 15	SAS3	SAS3 24	SAS3 33	SAS5	SASS 50
Ver H4,H6,HE,V4,V6,X Dutlet grille with adjustabl Ver H4,H6,HE,V4,V6,X	SAS1 e louvers 09	SAS1 11	SAS2 15	SAS3	SAS3 24	SAS3 33	SAS5	SASS 50

4-ROW COIL UNIT PERFORMANCE DATA Units designed to operate with all recirculating air or maximum 10% of external air.

Versions H/V

		TA09H4	TA09V4	TA11H4	TA11V4	TA15H4	TA15V4	TA19H4	TA19V4	TA24H4	TA24V4	TA33H4	TA33V4	TA40H4	TA40V4	TA50H4	TA50V4
Cooling performances 7 °C / 12 °C - 2 pipe sys	tem (1)																
Cooling capacity	kW	4,20	4,20	5,70	5,70	8,70	8,70	12,40	12,40	17,30	17,30	21,70	21,70	27,20	27,20	33,50	33,50
Sensible cooling capacity	kW	3,50	3,50	4,20	4,20	6,20	6,20	8,30	8,30	11,20	11,20	14,30	14,30	18,00	18,00	20,90	20,90
Water flow rate	I/h	722	722	980	980	1496	1496	2132	2132	2975	2975	3732	3732	4678	4678	5761	5761
Pressure drop	kPa	6	6	6	6	7	7	12	12	16	16	23	23	11	11	31	31
Heating performance 70 °C / 60 °C - 2 pipe sy	stem																
Heating capacity	kW	10,40	10,40	13,30	13,30	19,10	19,10	24,70	24,70	34,10	34,10	41,90	41,90	52,80	52,80	58,30	58,30
Water flow rate	l/h	894	894	1139	1139	1642	1642	2124	2124	2932	2932	3603	3603	4538	4538	5013	5013
Pressure drop	kPa	5	5	8	8	7	7	10	10	13	13	19	19	10	10	22	22
2-rows-heating coil with hot water - (accessor	ry) (2)																
Heating capacity	kW	3,90	3,90	8,50	8,50	12,70	12,70	16,00	16,00	21,70	21,70	26,70	26,70	34,80	34,80	40,00	40,00
Water flow rate	I/h	333	333	731	731	1092	1092	1371	1371	1866	1866	2291	2291	2988	2988	3439	3439
Pressure drop	kPa	8	8	11	11	13	13	14	14	18	18	26	26	18	18	23	23
Electric heating coil - (accessory)																	
Heating capacity	kW	4,00	4,00	6,00	6,00	8,00	8,00	10,00	10,00	12,00	12,00	16,00	16,00	20,00	20,00	24,00	24,00
Stages	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Power supply									400V~	-3 50Hz							
Fan																	
Type	type								Centr	rifugal							
Number	no.	1	1	2	2	2	2	1	1	1	1	2	2	2	2	2	2
Air flow rate	m³/h	800	800	1100	1100	1500	1500	1900	1900	2400	2400	3300	3300	4000	4000	5000	5000
High static pressure	Pa	145	145	290	290	176	176	240	240	211	211	245	245	248	248	153	153
Input power	kW	0.2	25	0.	31	0.	38	0.	61	0.	83	0.8	81	0.	98	1.	28
Air filter																	
Туре	type								G4	/ F6							
Sound data																	
Sound power level	dB(A)	62,0	62,0	66,0	66,0	67,0	67,0	72,0	72,0	74,0	74,0	75,0	75,0	76,0	76,0	79,0	79,0
Power supply																	
Power supply									230V	~50Hz							

⁽¹⁾ Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C (2) Water temperature (in/out) 70°C / 60°C.

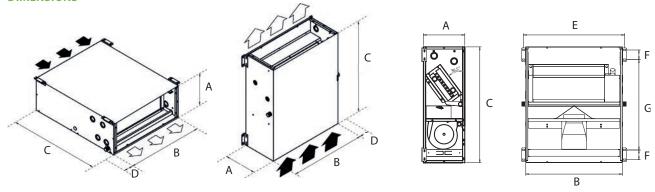
6-ROW COIL UNIT PERFORMANCE DATA

Versions H/V

	TA09H6	TA09V6	TA11H6	TA11V6	TA15H6	TA15V6	TA19H6	TA19V6	TA24H6	TA24V6	TA33H6	TA33V6	TA40H6	TA40V6	TA50H6	TA50V6
Cooling performances 7 °C / 12 °C - 2 pip	e system (1)															
Cooling capacity kW	5,10	5,10	6,70	6,70	11,70	11,70	15,50	15,50	20,60	20,60	26,30	26,30	33,50	33,50	39,60	39,60
Sensible cooling capacity kW	3,40	3,40	4,70	4,70	7,50	7,50	9,80	9,80	12,80	12,80	16,60	16,60	20,90	20,90	25,00	25,00
Water flow rate I/h	868	868	1152	1152	2012	2012	2666	2666	3543	3543	4523	4523	5761	5761	6810	6810
Pressure drop kPa		4	6	6	15	15	29	29	27	27	41	41	31	31	42	42
Heating performance 70 °C / 60 °C - 2 pip	e system															
Heating capacity kW	11,40	11,40	14,80	14,80	21,40	21,40	27,40	27,40	35,60	35,60	46,60	46,60	58,30	58,30	72,80	72,80
Water flow rate I/h	976	976	1273	1273	1838	1838	2356	2356	3058	3058	4005	4005	5013	5013	6260	6260
Pressure drop kPa	4	4	7	7	16	16	23	23	21	21	34	34	22	22	30	30
2-rows-heating coil with hot water - (ac	cessory) (2)															
Heating capacity kW	3,90	3,90	8,50	8,50	12,70	12,70	16,00	16,00	21,70	21,70	26,70	26,70	34,80	34,80	40,00	40,00
Water flow rate I/h	333	333	731	731	1092	1092	1371	1371	1866	1866	2291	2291	2988	2988	3439	3439
Pressure drop kPa	8	8	11	11	13	13	14	14	18	18	26	26	18	18	23	23
Electric heating coil - (accessory)																
Heating capacity kW	4,00	4,00	6,00	6,00	8,00	8,00	10,00	10,00	12,00	12,00	16,00	16,00	20,00	20,00	24,00	24,00
Stages no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Power supply		-						400V~	-3 50Hz				-			
Fan																
Type typ	2							Centi	rifugal							
Number no.		1	2	2	2	2	1	1	1	1	2	2	2	2	2	2
Air flow rate m ³ /	h 800	800	1100	1100	1500	1500	1900	1900	2400	2400	3300	3300	4000	4000	5000	5000
High static pressure Pa	131	131	265	265	158	158	224	224	199	199	224	224	234	234	131	131
Input power kW	0	.25	0.	.31	0.	38	0.	61	0.	83	0.	81	0.	98	1.	28
Air filter																
Type typ	e				G4/F6											
Sound data																
Sound power level dB(A	A) 62,0	62,0	66,0	66,0	67,0	67,0	72,0	72,0	74,0	74,0	75,0	75,0	76,0	76,0	79,0	79,0
Power supply																
Power supply	230V~50Hz															

⁽¹⁾ Room air 27 °C b.s.47% U.R.; Water (in/out) 7 °C/12 °C (2) Water temperature (in/out) 70°C / 60°C.

DIMENSIONS



Unit for horizontal installation

Unit H

· · · · · · · · · · · · · · · · · · ·																	
		TA09H4	TA09H6	TA11H4	TA11H6	TA15H4	TA15H6	TA19H4	TA19H6	TA24H4	TA24H6	TA33H4	TA33H6	TA40H4	TA40H6	TA50H4	TA50H6
Dimensions and weigh	nts																
A	mm	300	300	300	300	300	300	390	390	390	390	390	390	390	390	390	390
В	mm	700	700	700	700	1050	1050	1050	1050	1475	1475	1475	1475	2100	2100	2100	2100
C	mm	700	700	700	700	700	700	850	850	850	850	850	850	1000	1000	1000	1000
D	mm	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
E	mm	732	732	732	732	732	732	1082	1082	1507	1507	1507	1507	2131	2131	2131	2131
F	mm	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
G	mm	655	655	655	655	655	655	905	905	905	905	905	905	905	905	905	905
Weights																	-
With 4-row water coil	kg	28	28	33	33	45	45	60	60	78	78	86	86	135	135	140	140
With 6-row water coil	kg	30	30	35	35	47	47	62	62	81	81	89	89	139	139	144	144

Unit for vertical installation

Unit V

Ollit V																		
		TA09V4	TA09V6	TA11V4	TA11V6	TA11VE	TA15V4	TA15V6	TA19V4	TA19V6	TA24V4	TA24V6	TA33V4	TA33V6	TA40V4	TA40V6	TA50V4	TA50V6
Dimensions and weigh	ts																	
A	mm	300	300	300	300	300	300	300	390	390	390	390	390	390	390	390	390	390
В	mm	700	700	700	700	700	1050	1050	1050	1050	1475	1475	1475	1475	2100	2100	2100	2100
(mm	700	700	700	700	700	700	700	850	850	850	850	850	850	1000	1000	1000	1000
D	mm	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
E	mm	732	732	732	732	732	732	732	1082	1082	1507	1507	1507	1507	2131	2131	2131	2131
F	mm	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
G	mm	655	655	655	655	655	655	655	905	905	905	905	905	905	905	905	905	905
Weights																		
With 4-row water coil	kg	28	28	33	33	33	45	45	60	60	78	78	86	86	135	135	140	140
With 6-row water coil	kg	30	30	35	35	35	47	47	62	62	81	81	89	89	139	139	144	144



















TN

Air handling unit



- Maximum installation flexibility
- EC fan Plug-fan
- Wide choice of accessories.
- Large range of capacities and static pressures.
- Versions available with water coil or with direct expansion.



DESCRIPTION

The TN range offers an alternative to the air treatment unit for flow rates from 2300 to 23000m³/h when the only treatment required is filtering, cooling and/or heating. Designed for domestic, commercial, industrial or hotel systems in small or medium sized contexts.

The units can be installed horizontally or vertically for greater flexibility of use

All the units are always supplied and shipped in the vertical configuration. The customer is responsible for any possible modification from vertical to horizontal.

TN series are characterised by their compact size, low noise levels, and the wide choice of accessories.

The units are available with a plug fan unit with EC motor, or with a transmission centrifugal fan unit with AC motor (the latter comes in both the standard version and the boosted high head version).

FEATURES

Structure

The structure is made of aluminium profiles with sandwich cover paneling made of galvanised steel on the inside and pre-coated RAL 9003 galvanised steel on the outside with polyurethane insulation (density 40 kg/m³) with 25 mm thickness.

Both the panels of the base unit as well as the panels of the plenum have pre-shearing that render them compatible with the insertion of the accessories.

The fixing of the paneling using a panel block profile ensures a perfect seal between the panel and the frame and makes it extremely easy to mount and remove the panels. The 3-way corner joint is made of glass-fibre reinforced nylon.

The condensate drip tray, in galvanised steel, has a threaded drain connection on both sides and can be used whether the unit is installed horizontally or vertically.

Water heat exchanger coils

With copper pipes. Aluminium fins blocked via the mechanical expansion of the pipes. With 4 or 6 rows for the main one (heating or cooling) and 2,3 or 4 rows for the secondary one (heating only).

Evaporative heat exchanger coils

An alternative to the main water coil.

Suitable for R410A refrigerant. With copper pipes. Aluminium fins blocked via the mechanical expansion of the pipes. With 4 or 6 rows and both RH and LH versions.

Electric heating coil

Electric heating coil with finned, armoured elements. With twin safety thermostat (automatic and manual reset). Includes the implementation contactors (commanded with 24Volt AC voltage).

Can be used both for summer post-heating and winter heating. The coil has two asymmetric levels (1/3, 2/3 of the total power) so it can be commanded at up to 3 levels.

Air filter

The air is filtered through synthetic 50mm filters with an efficiency level of Coarse 55% (as per the ISO 16890 standard) on the intake points.

The filters are housed on guides in the main coil section, and can be easily removed for cleaning and maintenance; just remove the panel on the side of the water connections and then take out the filters.

With the FT7MxT accessory, filtering takes place via compact filters with an EPM1 55% efficiency level (as per the ISO 16890 standard).

VENTILATION GROUP

The configurator allows you to choose between two different types of fan unit, to meet every possible system request.

Ventilation group with inverter EC fan plug fun

Far

The fans are of the plug-fan type with reversed blades for excellent performance with single intake.

Motor

The electric motors with extremely high efficiency, directly coupled to the fans, have an external EC rotor with integrated electronic control. They can be controlled continuously by a 0-10V signal. IP55 Protection rating. The motors can be powered with 380-480V/3ph/50-60Hz (the range is however reduced to the power supply required by the ByyExT or ByyExTZ electric battery accessory, if required immediately or if installed at a later date). A standard control option via the ModBus protocol.

Fan unit with transmission

Fan

The fans are of the double suction centrifugal variety with high performance forward blades.

Motor

The single-speed (4-pole) electric motors are of the three-phase asynchronous type, with a closed construction and external ventilation, caged rotor

ACCESSORIES

PLxT: Plenum composed of pre-sheared panels that can be opened on 3 sides, it can be mounted as an inlet or as an outlet; it is compatible with the accessories GAxT, GMxT, SAxT and TPPLxT. It includes mounting brackets and feet (for horizontal and vertical configurations).

FT7MxT: Compact filters with filtering degree ePM1 55% (according to ISO 16890), composed of a plenum that can be opened on two sides, which can be positioned on the outlet of the machine; it is compatible with the accessories GMxT, SAxT and TPPxT. It includes fixing plates and feet (for horizontal and vertical configurations).

B2RxT: Hot water coil with 2 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil, and made of copper piping and aluminium finning blocked by the mechanical expansion of the pipes.

B3RxT: Hot water coil with 3 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil, and made of copper piping and aluminium finning blocked by the mechanical expansion of the pipes.

BR4xT: Hot water coil with 4 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil, and made of copper piping and aluminium finning blocked by the mechanical expansion of the pipes.

SAXT: Air calibration damper with galvanised steel louvers. Louvers pitch 50mm; galvanised steel adjusting pin: can be installed on the equipment base or the plenum.

GMxT: Outlet grille with double row of louvers that can be adjusted when emitting air into the room. Can be installed on the plenum.

GAXT: Suction grille with louvers fixed at an angle of 45°; Can be installed directly on the equipment base or on the plenum accessories.

TPVSxT: Protective roof for Vertical installation with top outlet. Composed of a pre-coated metal sheet, fastened to the side of the unit. To be installled on the unit base. The accessory is not compatible with units equipped with EC plug fans.

TPVFxT: Protective roof for Vertical installation with front delivery. Composed of pre-coated diamond sheet, fastened to the side of the unit. To be installed on: PLxT, FT7MxT and vertical unit base with front outlet.

TPLxT: Protective roof for horizontal installation with Front outlet. Composed of pre-coated diamond sheet, fastened to the side of the unit. To be installed on unit base.

and B3 configuration with horizontal shaft, complying with the IEC, CEI and UNEL standards. IP55 protection rating. They are powered at 400V-3ph-50Hz (standard) or 460V-3ph-60Hz (units with "Z" power supply).

Transmission

The pulleys (supplied with a Taperlock-type conical shrink disk) are statically and dynamically balanced, with a variable diameter for improved fan calibration. The transmission belts may be of the SPA or SPB type.

TPPLxT: Protective roof for the plenum, for horizontal installation with front delivery. Made of pre-painted diamond sheet metal fixed to the sides of the unit (to be installed on PLxT and FT7MxT, from size 3 to size 8).

TPFTLxT: Protective roof for the bag filters, for line installation with front delivery. Made of pre-painted diamond sheet metal fixed to the sides of the unit (to be installed on FT7MxT, on sizes 1 and 2).

P50MBT: Corner support feet for both the horizontal and vertical version. Made of galvanised sheet: they can be fixed directly to the unit with the screws supplied. The accessory has 4 corner feet and 2 side feet.

P50ACT: Lateral support feet for the horizontal version. Made of galvanised sheet: they come with the accessories unit together with the bolts and screws.

ByyExT: Electric coil 400V/3ph/50Hz. Can be positioned inside the standard device, downstream from the main coil. Consists of a sheet metal frame, heating elements (armoured and finned), command contactors (24V AC) and two thermostats (one with automatic reset and the other manual). The electrical heating power (yy in kW) is divided over two sets of heaters 1/3+2/3 that can be controlled up to max. 3 levels. WARNING: To avoid the risk of overheating, make sure the fan is working at the correct flow rate when the coil is activated, and that there is a minimum post-ventilation time when the coil is deactivated.

BYYExTZ: Electric coil 460V/3ph/60Hz. Can be positioned inside the standard device, downstream from the main coil. Consists of a sheet metal frame, heating elements (armoured and finned), command contactors (24V AC) and two thermostats (one with automatic reset and the other manual). The electrical heating power (yy in kW) is divided over two sets of heaters 1/3+2/3 that can be controlled up to max. 3 levels. WARNING: To avoid the risk of overheating, make sure the fan is working at the correct flow rate when the coil is activated, and that there is a minimum post-ventilation time when the coil is deactivated.

CPxT: Adjustment module with sensor for volumetric flow rate (accessory for TNxxE version only).

CPxTP: Adjustment module with sensor for differential pressure (accessory for TNxxE version only).

CPxTV: Speed regulatory (accessory only for TNxxE versions).

ACCESSORIES COMPATIBILITY

1	ACCESSORIES CO	OMPATIBILITY						
PATE	Plenum							
Transcript Tra								
### Sys Afters on the fan delivery 1			LT31 (1)	FL41 (1)	FL31 (1)	FLOI (I)	FL/T(T)	FLOT (1)
1			م طمانیوسی					
FTAME							7	
Treatment and merical configurations: Treatment of links by the pipes 1 2 3 4 5 6 7 8 8881 8207 82081 82081 82081 82081 82081 82081 82081 82081 82081 Treatment of links with 4 pipes 1 2 3 4 5 6 7 8 8881 8207 82081 8208								
	,		11/11/21(1)	117.1111 (1)	1171131 (1)	117/1101 (1)	11/11/1 (1)	11711101 (1)
1 2 3 4 5 6 7 8 8 8 8 8 8 8 8 8		-	ith 4 ninos					
EMRI							7	
The secretary of the se								
1	22	DZ.IIZ.	52.0.	22	52.13.	22.101	22.0.1	22.101
### B3801 B3			ith 4 pipes					
Table Tabl								
1	B3R1T	B3R2T	B3K3T	B3R4T	B3R5T	B3R6T	B3R7T	B3K81
1	ot water coil with	4 rows for lines w	ith 4 pipes					
1				4	5	6	7	8
1	B4R1T		B4R3T					B4R8T
1								
SATI SAZI								
### TRANSPORT PRESENT								
1	SAII	SAZI	SASI	SA41	ICAC	SAOI	SA/I	JA81
1	utlet grille with ac	djustable louvers	i					
A				4	5	6	7	8
1	GM1T	GM2T	GM3T	GM4T	GM5T	GM6T	GM7T	GM8T
1	ntako grida							
GAST							7	
Section Price Pr								
1	ditti	GAZI	0/51	Q/(1)	dist	dioi	G/// I	dioi
TPVSTI (1)	Protective roof for	Vertical installati	on with top outlet					
The accessory is not compatible with units equipped with ECP plug fans. 1 2 3 4 5 6 7 8								
1	TPVS1T (1)	TPVS2T (1)	TPVS3T (1)	TPVS4T (1)	TPVS5T (1)	TPVS6T (1)	TPVS7T (1)	TPVS8T (1)
1) The accessory is not compa	atible with units equipped	l with EC plug fans.					
TPVF1T	Protective roof for	Vertical installati	on with front outle	et				
The contective roof for horizontal installation with front outlet 1								
1	TPVF1T	TPVF2T	TPVF3T	TPVF4T	TPVF5T	TPVF6T	TPVF7T	TPVF8T
1	Protective roof for	horizontal install	ation with front or	utlet				
TPLIT					5	6	7	8
Page								
1 2 3 4 5 6 7 8 TPPLIT (1) TPPL2T (1) TPPL3T (1) TPPL3T (1) TPPLST (
TPPLIT (1) TPP								
To be installed on PLxT and FT7MxT from size 3 to size 8. of for protecting pocket filters for installation on Line with Front outlet 1 2 3 4 5 6 7 8 TPFTLIT (1) TPFTLIZT (1)								
## P50MBT P50MBT P50MBT P50MBT P50MBT P50MBT P50MBT P50MBT P50MBT P50MCT P50ACT P50AC				1PPL41 (1)	IPPLST (1)	IPPL61 (1)	1PPL/1 (1)	IPPL81 (1)
1 2 3 4 5 6 7 8 TPFILIT (1)								
TPFTL1T (1) TPFTL2T (1) - - - - - - - - -	oof for protecting	pocket filters for	installation on Lin	e with Front outle	t			
To be installed on FT7MxT on sizes 1 and 2. Carcessory cannot be fitted on the configurations indicated with - THE SUPPORT FOR SUPPORT SUPPOR			3	4	5	6	7	8
### Accessory cannot be fitted on the configurations indicated with - ### Promport feet 1			-	-	-	-	-	-
### Support feet 1			icated with -					
1 2 3 4 5 6 7 8 P50MBT		-	reacted with "					
P50MBT 8 P50MBT P50ACT			,				7	0
teral support feet 1 2 3 4 5 6 7 8 P50ACT <								
1 2 3 4 5 6 7 8 P50ACT			1 JOHNUI	i John I	1 2011101	1 JUNUI	i John I	I JUNIUI
P50ACT P50ACT<	ateral support fee	t						
ctric coil 400V~3 50Hz 1 2 3 4 5 6 7 8 B07E1T B10E2T B14E3T B18E4T B25E5T B30E6T B40E7T B50E8T ctric coil 460V~3 60Hz 1 2 3 4 5 6 7 8								
1 2 3 4 5 6 7 8 B07E1T B10E2T B14E3T B18E4T B25E5T B30E6T B40E7T B50E8T cetric coil 460V~3 60Hz 1 2 3 4 5 6 7 8	P50ACT	P50ACT	P50ACT	P50ACT	P50ACT	P50ACT P50ACT	P50ACT	P50ACT
1 2 3 4 5 6 7 8 B07E1T B10E2T B14E3T B18E4T B25E5T B30E6T B40E7T B50E8T cetric coil 460V~3 60Hz 1 2 3 4 5 6 7 8	lectric coil 400V~.2	1 50Hz						
B07E1T B10E2T B14E3T B18E4T B25E5T B30E6T B40E7T B50E8T ctric coil 460V~3 60Hz 1 2 3 4 5 6 7 8					5	6	7	Q
ctric coil 460V~3 60Hz 1 2 3 4 5 6 7 8								
1 2 3 4 5 6 7 8	20/EII	JIVLEI	D11E31	DIOLII	DEJEJ 1	550201	D IOLI I	DJULUI
	ectric coil 460V~3	60Hz						
BO7ETTZ B10EZTZ B14E3TZ B18E4TZ B25ESTZ R30F6T7 R40F7T7 R50F8T7								
THE PROPERTY OF THE PROPERTY O	B07E1TZ	B10E2TZ	B14E3TZ	B18E4TZ	B25E5TZ	B30E6TZ	B40E7TZ	B50E8TZ

Adjustment module with sensor for volumetric flow rate

1	2	3	4	5	6	7	8
CP1T (1)	CP1T (1)	CP2T (1)	CP2T (1)	CP2T (1)	CP2T (1)	CP2T (1)	CP2T (1)
(1) According only available	o for Thurs vorcions						

Accessory only available for TNxxE versions.

Adjustment module with sensor for differential pressure

	ı		3	4		0	1		
	CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)	CP1TP (1)	
(1)	Accessory only available	e for TNxxE versions.		•			•	· · ·	

Speed regulatory							
1	2	3	4	5	6	7	8
CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)	CP1TV (1)

⁽¹⁾ Accessory only available for TNxxE versions.

CONFIGURATOR

Field	Description
1,2	TN
3	Size 1, 2, 3, 4, 5, 6, 7, 8
4	Version
4	Water coil, 4 rows (LH side for connections - the connections side can be altered on site)
6	Water coil, 6 rows (LH side for connections - the connections side can be altered on site)
Α	R410A direct expansion coil, 4 rows (RH side for connections - the connections side cannot be altered on site) (1)
В	R410A direct expansion coil, 4 rows (LH side for connections - the connections side cannot be altered on site) (2)
С	R410A direct expansion coil, 6 rows (RH side for connections - the connections side cannot be altered on site) (1)
D	R410A direct expansion coil, 6 rows (LH side for connections - the connections side cannot be altered on site) (2)
5	Fans (3)
В	Centrifugal with AC motor (low head)
E	Plug fans with EC motor
P	Centrifugal with AC motor (high head)
6	Power supply (4)
0	400V ~ 3 50Hz
Z	460V ~ 3 60Hz

⁽¹⁾ With vertical configuration, the coil connections are on the opposite side to motor inspection. When transformed to horizontal configuration, the coil connections may be on the same side as motor inspection or on the opposite side, depending on the type of conversion.

(2) With vertical configuration, the coil connections and motor inspection are on the same side. When transformed to horizontal configuration, the coil connections may be on the same side as motor inspection or "VERSION: the definition of "RH connections side" or "LH connections side" refers to the position of the coil connections in relation to the air flow direction (convection: air flow from behind a hypothetical operator inserted in the flow).

the flow).

** All the units are always supplied and shipped in the vertical configuration. The customer is responsible for any possible modification from vertical to horizontal.

PERFORMANCE SPECIFICATIONS

TN 1-8 with 4-row water coil

Size		1	2	3	4	5	6	7	8
Cooling performance 7 °C / 12 °C (1)									
Cooling capacity	kW	15,6	21,3	29,1	38,1	44,8	56,7	74,7	96,4
Sensible cooling capacity	kW	10,7	14,7	20,1	26,2	33,3	41,7	55,1	70,9
Heating performance 70 °C / 60 °C (2)									
Heating capacity	kW	40,0	54,5	74,9	97,6	131,1	162,9	216,1	277,3
Performance in heating mode with additional coil for	r 4-pipe systems								
Heating capacity with 2 row water coil	kW	25,2	34,0	46,8	61,5	84,4	103,8	138,0	178,5
Heating capacity with 3 row water coil	kW	33,5	45,6	62,7	82,0	110,8	137,3	182,5	234,4
Heating capacity with 4 row water coil	kW	40,0	54,5	74,9	97,6	131,1	162,9	216,1	277,3
Heating performance 45 °C / 40 °C (3)									
Heating capacity	kW	23,4	31,9	43,7	57,0	76,3	94,8	125,8	161,4
Performance in heating mode with additional coil fo	r 4-pipe systems								
Heating capacity with 2 row water coil	kW	14,7	19,8	27,3	36,0	49,0	60,3	80,1	103,8
Heating capacity with 3 row water coil	kW	19,6	26,6	36,6	47,9	64,4	79,8	106,1	136,3
Heating capacity with 4 row water coil	kW	23,4	31,9	43,7	57,0	76,3	94,8	125,8	161,4

⁽¹⁾ Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; (2) Room air temperature 10 °C d.b.; Water (in/out) 70 °C/60 °C (3) Room air temperature 10 °C d.b.; Water (in/out) 45 °C/40 °C;

TN 1-8 with 4-row direct expansion coil

Size		1	2	3	4	5	6	7	8		
Performance in cooling mode with incoming air at 27°C/50% R.H. (1)											
Cooling capacity	kW	12,6	17,1	23,5	30,2	38,5	47,7	63,7	81,5		
Sensible cooling capacity	kW	9,9	13,5	18,5	24,1	30,4	38,0	50,7	65,2		

⁽¹⁾ Incoming air temperature 27°C D.B. 50% R.H.; R410A refrigerant, t.at. EVAP. 10°C, up to 8K, lower transformation at 0K, vapour - liquid vapour from 0 to 1; refer to the selection software.

TN 1-8 with 6-row water coil

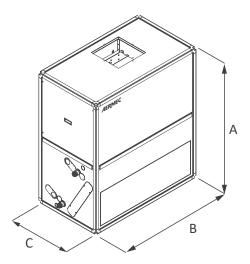
Size		1	2	3	4	5	6	7	8
Cooling performance 7 °C / 12 °C (1)	'								
Cooling capacity	kW	20,0	27,4	37,7	49,2	58,3	74,5	98,9	127,8
Sensible cooling capacity	kW	13,4	18,3	25,2	32,8	41,1	51,8	68,8	88,5
Heating performance 70 °C / 60 °C (2)									
Heating capacity	kW	48,7	66,6	91,5	119,2	157,5	196,8	260,4	334,1
Performance in heating mode with additional coil	for 4-pipe systems								
Heating capacity with 2 row water coil	kW	25,2	34,0	46,8	61,5	84,4	103,8	138,0	178,5
Heating capacity with 3 row water coil	kW	33,5	45,6	62,7	82,0	110,8	137,3	182,5	234,4
Heating capacity with 4 row water coil	kW	40,0	54,5	74,9	97,6	131,1	162,9	216,1	277,3
Heating performance 45 °C / 40 °C (3)									
Heating capacity	kW	28,5	38,9	53,5	69,6	91,7	114,3	151,7	194,6
Performance in heating mode with additional coil	for 4-pipe systems								
Heating capacity with 2 row water coil	kW	14,7	19,8	27,3	36,0	49,0	60,3	80,1	103,8
Heating capacity with 3 row water coil	kW	19,6	26,6	36,6	47,9	64,4	79,8	106,1	136,3
Heating capacity with 4 row water coil	kW	23,4	31,9	43,7	57,0	76,3	94,8	125,8	161,4

⁽¹⁾ Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; (2) Room air temperature 10 °C d.b.; Water (in/out) 70 °C/60 °C (3) Room air temperature 10 °C d.b.; Water (in/out) 45 °C/40 °C;

GENERAL TECHNICAL DATA

Fans										
Size			1	2	3	4	5	6	7	8
Fans: B										
Fan										
Number	4,6,A,B,C,D	no.	1	1	1	1	1	1	1	1
Nr. poles	4,6,A,B,C,D	no.	4	4	4	4	4	4	4	4
Maximum air flow rate with cooling coil	4,6,A,B,C,D	m³/h	3000	4100	5650	7350	9400	11700	15500	20000
Maximum air flow rate with heating coil	4,6,A,B,C,D	m³/h	3500	4700	6400	8000	9750	13400	17800	20000
High static pressure - maximum	4,6,A,B,C,D	Pa	425	455	452	440	383	425	436	400
Total fan input power	4,6,A,B,C,D	kW	0,8	1,1	1,5	2,2	2,2	4,0	4,0	5,5
Version without resistance										
Rated current input	4,6,A,B,C,D	A	1,8	2,4	3,2	4,7	4,7	8,2	8,2	11,1
Peak current	4,6,A,B,C,D	A	5,3	6,2	6,8	6,4	6,4	7,0	7,0	5,9
Version with electric heater										
Rated current input	4,6,A,B,C,D	Α	11,9	16,9	15,0	23,4	30,7	40,8	51,6	83,4
Peak current	4,6,A,B,C,D	A	11,9	16,9	23,4	30,7	40,8	51,6	66,0	83,4
Fan										
Power supply	4,6,A,B,C,D		400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz
Size			1	2	3	4	5	6	7	8
Fans: E										
Fan										
Number	4,6,A,B,C,D	no.	1	1	1	1	1	1	2	2
Nr. poles	4,6,A,B,C,D	no.	-	-	-	-	-	-	-	-
Maximum air flow rate with cooling coil	4,6,A,B,C,D	m³/h	3000	4100	5650	7350	9400	11700	15500	20000
Maximum air flow rate with heating coil	4,6,A,B,C,D	m³/h	3500	4700	6400	8400	10500	13400	17800	23000
High static pressure - maximum	4,6,A,B,C,D	Pa	700	660	700	700	660	640	700	580
Total fan input power	4,6,A,B,C,D	kW	1,5	1,5	2,5	3,4	3,4	3,4	3,4	3,4
Version without resistance										
Rated current input	4,6,A,B,C,D	A	2,4	2,4	4,0	5,4	5,4	5,4	2x5,4	2x5,4
Peak current	4,6,A,B,C,D	A	-	-	-	-	-	-	-	-
Version with electric heater										
Rated current input	4,6,A,B,C,D	A	12,5	16,9	24,2	31,4	41,5	48,8	68,6	83,1
Peak current	4,6,A,B,C,D	A	-	-	-	-	-	-	-	-
Fan										
Power supply	4,6,A,B,C,D		400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz
Size			1	2	3	4	5	6	7	8
Fans: P			•							
Fan										
Number	4,6,A,B,C,D	no.	1	1	1	1	1	1	1	1
Nr. poles	4,6,A,B,C,D	no.	4	4	4	4	4	4	4	4
Maximum air flow rate with cooling coil	4,6,A,B,C,D	m³/h	3000	4100	5650	7350	9400	11700	15500	20000
Maximum air flow rate with heating coil	4,6,A,B,C,D	m³/h	3500	4700	6400	8400	10500	13400	17800	23000
High static pressure - maximum	4,6,A,B,C,D	Pa	600	627	674	672	567	670	625	610
Total fan input power	4,6,A,B,C,D	kW	1,1	1,5	2,2	3,0	3,0	5,5	5,5	7,5
Version without resistance	יוטוייוטוכוט	nff	1,1	1,3	-,-	3,0	3,0	3,3	2,3	در ,
Rated current input	4,6,A,B,C,D	A	2,4	3,2	4,7	6,3	6,3	11,1	11,1	14,9
Peak current	4,6,A,B,C,D	A	6,2	6,8	6,4	7,7	7,7	5,9	5,9	5,6
Version with electric heater	.,,,,,,,,,,,,	.,	- J ₁ L		٧,١	. ,,	.,,	-17	-17	5,0
Rated current input	4,6,A,B,C,D	A	12,5	17,7	24,9	32,3	42,4	54,5	68,9	87,2
Peak current	4,6,A,B,C,D	A	12,5	17,7	24,9	32,3	42,4	54,5	68,9	87,2
Fan	יוטוייוטוכוט	- 1	12,3	17,1	- 1,7	32,3	12,17	5 175	7,00	01 jL
Power supply	4,6,A,B,C,D		400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz	400~3 50Hz
							100 3 30112	100 3 30112	100 3 30112	100 3 30112
It is the maximum static pressure that can be	e supplied by the fa	ın; ıt ıs equal to								
Size			1	2	3	4	5	6	7	8
Finned pack heat exchanger			475	475	FF0	FF0	720	720	0.00	060
Н		mm	475	475	550	550	720	720	960	960

DIMENSIONS



Size			1	2	3	4	5	6	7	8
Dimensions and weights										
A	4,6,A,B,C,D	mm	1334	1334	1497	1497	1822	1822	2309	2309
В	4,6,A,B,C,D	mm	928	1172	1334	1659	1659	1984	1984	2472
C	4,6,A,B,C,D	mm	684	684	765	765	928	928	1172	1172
Size			1	2	3	4	5	6	7	8
Fans: B										
Dimensions and weights										
	4	kg	187	216	270	314	408	466	619	793
Farantaria	6	kg	190	220	275	320	415	475	630	807
Empty weight	A,B	kg	191	220	274	318	412	470	623	797
	C,D	kg	195	225	280	325	420	480	635	812
Size			1	2	3	4	5	6	7	8
Fans: E										
Dimensions and weights										
	4	kg	175	199	249	304	388	466	611	769
Emptywaight	6	kg	178	203	254	310	395	475	622	783
Empty weight	A,B	kg	179	203	253	308	392	470	615	773
	C,D	kg	183	208	259	315	400	480	627	788
Size			1	2	3	4	5	6	7	8
Fans: P										
Dimensions and weights										
	4	kg	197	219	279	316	410	493	646	799
Ftt-l-k	6	kg	200	223	283	321	417	502	657	813
Empty weight	A,B	kg	201	223	283	320	414	497	650	803
	C,D	kg	205	228	289	327	422	507	662	818

Add 50mm to the height of the unit (A), to allow for the feet. The vertical configuration (B/D), the connections and motor inspection are on the same side.







NCD Air handling



- Maximum installation flexibility
- EC fan Plug-fan
- Large range of capacities.







FEATURES

- Central air handling units with double panelling with panel thickness of 50 mm;
- Support structure realised in aluminium alloy sections and a large choice of panels;
- Wide range of sections and components to satisfy all plant engineering requirements
- Double intake centrifugal fans with forward or reverse blades.
- PLUG FAN type fan with Inverter regulation, able to adapt to the most varied system requirements.

Structure

- In aluminium sections;
- New panelling and gaskets, able to guarantee reduced seepage in compliance with the EN1886 Standard;
- Reduction of noise emission thanks to the use of material with high sound-absorption power;
- Small dimensions and contained height.

Internal components

- New high-efficiency heat exchangers with small pressure drops
- 3-damper mixing chamber.

Mixing chamber with three dampers. The configurations for the mixing chambers with three dampers are the following:

- two upper dampers and an internal one for recirculation;
- two front dampers and a horizontal one for recirculation (for overlapping control units);
- two lateral internal dampers and an internal for recirculation (configuration for expulsion and non-ducted fresh air intake).

Large availability of filters

- Filters with large surfaces to reduce the pressure drops and increase the duration;
- Cell pre-filters;
- Roll filters;
- Bag filters;
- Absolute filters;
- Activated carbon filters;
- Germicidal lamp;
- New efficient drop eliminator in PVC;

— New heat recoverers with high heat exchange.

Electric components

- Electronic regulation available able to optimise the performance and simplify installation of the control unit itself;
- New high performance selection software.

ACCESSORIES

Technical rooms;

Accessories for air intake/exhaust sections:

- Flange;
- Blank panel (to be perforated with care by the customer);
- Anti-vibration sheet on the intake/flow vents (with or without damper) with earth cable;
- Aluminium grille (for internal dampers only);
- Manual command on the dampers;
- Proportional servo-control;
- Proportional servo-control with spring return;
- Pedestrian grill on the floor dampers.

Accessories for the fan-motor sections:

- Damper on the flow vent;
- Damper on the flow vent;
- Micro switch on the inspection hatch.

Accessories common to several sections:

- Spot light with window with 24V bulb (the installer must envision the 24V power supply);
- Manometer with dial;
- Pressure switche;
- Instruments-probes holder GJ 1/4" double sleeve;
- Floor reinforced with non-slip sheet steel.

PERFORMANCE SPECIFICATIONS

	Air flow rate m ³ /h	Section heating coil m ²
NCD 1	1134	0,13
NCD 2	1958	0,22
NCD 3	2390	0,27
NCD 4	3132	0,35
NCD 5	3823	0,42
ICD 6	4307	0,48
NCD 7	5257	0,58
NCD 8	6207	0,69
NCD 9	8019	0,89
NCD 10	9477	1,05
ICD 11	11548	1,28
VCD 12	14213	1,58
ICD 13	16978	1,89
ICD 14	19742	2,19
VCD 15	25761	2,86
NCD 16	30772	3,42
NCD 17	37139	4,13
ICD 18	47187	4,80
VCD 19	49235	5,47
NCD 20	55283	6,14
VCD 21	61331	6,81
ICD 22	67379	7,49
ICD 23	73427	8,16
NCD 24	79475	8,83

The performance refers to an air speed through the coils equal to 2.5 $\,$ m/s.

	EXT		734	894	1054	1214	1374	1534	1694	1854	2014
Height with base		INT	620	780	940	1100	1260	1420	1580	1740	1900
			NCD1	NCD1A	NCD2	NCD2	NCD3C	NCD4B	NCD5B	NCD6B	NCD6D
645	524	410	1370-1640	1880-2260	2350-2820	2350-2820	3390-4070	3890-4670	4380-5250	4860-5840	5330-6400
			m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
			NCD1B	NCD3A	NCD4	NCD5	NCD6A	NCD7A	NCD8A	NCD8C	NCD8F
805	684	570	1970-2360	2720-3260	3400-4080	4150-4980	4900-5870	5620-6740	6320-7590	7020-8430	7700-9240
			m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
			NCD2A	NCD4A	NCD6	NCD7	NCD8	NCD8D	NCD9	NCD9C	NCD9F
965	844	730	2580-3090	3550-4260	4440-5330	5420-6500	6400-7680	7350-8820	8270-9920	9180-11020	10070-12090
			m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
			NCD3B	NCD5A	NCD6E	NCD8B	NCD8H	NCD9A	NCD10	NCD10C	NCD11
1125	1004	890	3180-3820	4390-5270	5490-6580	6700-8030	7910-9490	9080-10890		11340-13610	12440-14930
			m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
				NCD6C	NCD7B	NCD8G	NCD9E	NCD10A	NCD10F	NCD11A	NCD12
1285	1164	1050		5220-6270	6530-7830	7970-9560	9410-11290		12150-14580		
				m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
					NCD8E	NCD9B	NCD10B	NCD10G	NCD11D	NCD12A	NCD12C
1445	1324	1210			7570-9090	9240-11090		12530-15040			17180-20610
					m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
						NCD10D	NCD11B	NCD12B	NCD13A	NCD13D	NCD14B
1765	1644	1530						15990-19190			
	_					m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
								NCD13B	NCD14A	NCD14E	NCD15
2085	1964	1850							21870-26250		
								m³/h	m³/h	m³/h	m³/h
										NCD15D	NCD15G
2405	2284	2170									31390-37670
										m³/h	m³/h
											NCD16B
2565	2444	2330									33760-40510
											m³/h

	EXT		2334	2654	2974	3294	3614	3934	4254	4574
Height with base		INT	2220	2540	2860	3180	3500	3820	4140	4460
645	524	410								
			NCD9D							
805	684	570	9200-11040							
			m³/h							
			NCD10E	NCD11C						
965	844	730	12030-14440	13990-16790						
			m³/h	m³/h						
			NCD11E	NCD12D	NCD13C					
1125	1004	890	14860-17830	17280-20730	19700-23640					
			m³/h	m³/h	m³/h					
			NCD13	NCD14	NCD14C	NCD15B				
1285	1164	1050	17690-21230	20570-24680	23450-28140	26330-31590				
			m³/h	m³/h	m³/h	m³/h				
			NCD13E	NCD14D	NCD15C	NCD15E	NCD16A			
1445	1324	1210	20520-24620	23860-28630	27200-32640	30540-36650	33880-40660			
			m³/h	m³/h	m³/h	m³/h	m³/h			
			NCD15A	NCD15F	NCD16C	NCD17A	NCD17D	NCD18B		
1765	1644	1530	26180-31410	30440-36530	34700-41640	38970-46760	43230-51870	47490-56990		
			m³/h	m³/h	m³/h	m³/h	m³/h	m³/h		
			NCD16	NCD16D	NCD17C	NCD18C	NCD19A	NCD20A	NCD21A	NCD21C
2085	1964	1850	31840-38200				52570-63090			
			m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
			NCD17	NCD18	NCD19	NCD20	NCD21	NCD22	NCD23	NCD24
2405	2284	2170		43600-52320						
			m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h
			NCD17B	NCD18A	NCD19B	NCD20B	NCD21B	NCD22A	NCD23A	NCD24A
2565	2444	2330	40330-48390				66590-79910			86290-
			m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	m³/h	103550 m ³ /h

DIMENSIONS



	Section A (mm)	Section B (mm)
NCD1	645	735
NCD2	645	1055
NCD3	645	1215
NCD4	805	1055
NCD5	805	1215
NCD6	965	1055
NCD7	965	1215
NCD8	965	1375
NCD9	965	1695
NCD10	1130	1695
NCD11	1130	2015
NCD12	1285	2015
NCD13	1285	2335
NCD14	1285	2655
NCD15	2085	2015
NCD16	2085	2335
NCD17	2405	2335
NCD18	2405	2655
NCD19	2405	2975
NCD20	2405	3295
NCD21	2405	3615
NCD22	2405	3935
NCD23	2405	4255
NCD24	2405	4575

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SPL 025-130

Swimming Pool Lines air handling unit for health centres

Air flow rate 4000 ÷ 13000 m³/h



- Maximum installation flexibility
- EC fan Plug-fan
- Large range of capacities.



DESCRIPTION

The units from the SPL series represent the ideal solution to guarantee the comfort conditions in small-medium spaces such as health centres, spa areas, fitness centres, small swimming pools, sports facilities, etc.

The unit contains a refrigerant circuit and a system for the recovery of sensible and latent heat coming from the humid air extracted from the space, thereby being optimised for the reduction of energy consumption.

The main function of the unit, which is a "plug and play" machine ready for use, is that of dehumidifying and at the same time ensuring control of the temperature and humidity conditions of the area served.

The unit is fitted with an efficient heat recovery system on the water side, to be used to partially heat the swimming pool water at no cost. The structure and all the internal components are built to ensure the maximum resistance to corrosion

FEATURES

Fitted as standard with panel filters in extract (G4 efficiency class according to EN779) and panel + bag filters (G4 + F9 efficiency class according to EN779) meet the requirements for the applicable standards for indoor air quality. Dirty filter differential pressure switches are provided as standard.

Structure

Anodised aluminium profile with reinforced nylon corner pieces.

Casing made from sandwich type panels (50mm thickness), with internal surface pre-painted galvanised steel, external in pre-painted galvanised steel and insulating material hot injected polyurethane with a density of 42 kg/m³, fixed without screws but with panel locking profiles, doors with keyless handles.

This fixing method allows a uniform pressure on the casing, ensuring an excellent resistance to the leakage of air and water.

The support structures and the seals around components are completely painted to ensure the maximum corrosion resistance. The bottom surfaces of the unit are fitted with drain panels in pre-painted galvanised steel with a central drain point piped sideways.

Thermal recovery section

High efficiency static cross flow in pre-painted aluminium. Including dampers: recirculating damper used for the quick start up of the space, recirculating damper for the "primary" cycle, dampers on the air inlet and extract.

All dampers are manufactured in anodised aluminium and are individually controlled by an external actuator for precise air flow control.

Refrigerant circuit

Fitted with scroll compressor supplied with rubber anti-vibration feet, refrigerant gas/air heat exchanger coil with copper tubes and pre-painted aluminium fins and painted frame, filter, electronic expansion valve, liquid receiver, filter drier, controls (pressure transducers and visual indicators) and safeties (high and low pressure pressostats), brazed copper connections, refrigerant charge of environmentally friendly R410A.

The refrigerant circuit is installed in a compartment isolated from the air flow to facilitate checks and maintenance.

The units on request can also be realized without the refrigerant circuit. The size of the machine remains unchanged.

Fan section

Treated with epoxy paint resistant to corrosion, fitted with "plug fans" with backward curved impeller of high output. Electrical motor directly coupled to the impeller suitable for inverter control (standard).

Filtration systems

Hot water heating coil

With copper tubes and pre-painted aluminium fins to heat the supply air after dehumidification, controlled by a modulating 3 way valve (standard); this allows the accurate control of the supply air temperature. The frame of the coil is in painted galvanised steel to ensure the maximum resistance to corrosion.

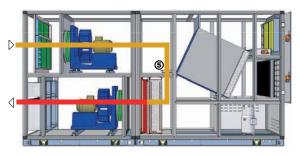
Electric power board

Power and controls panel unit mounted. Electrical installation for the connection of power and controls, set in tubes or conduits with glands and grommets, IP55 protective rating. Remote panel supplied as standard for the control of all the main functions and display of alarms.

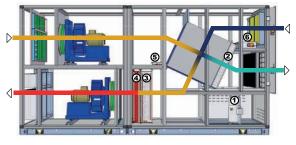
OPERATING SCHEMATICS

The principal operation modes of the unit are shown in the example schematics below.

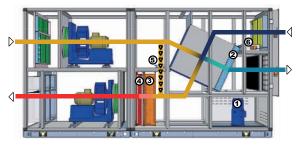
"START UP" CYCLE



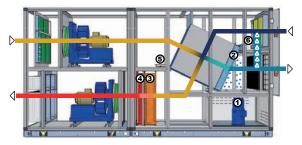
"DEHUMIDIFICATION" CYCLE



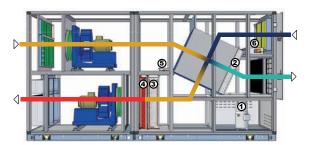
Dehumidification with external air



ehumidification with external air and primary cycle



Dehumidification with external air (night cycle)



In night time mode the unit modifies the operating settings to adapt to the changes of evaporation from the pool and reduce consumption to the minimum.

In all the following schematics the hot water coil is always operating because the external air temperature is below 10°C with a required supply air temperature to compensate for the heat losses from the building.

The operating mode is with no external air flow. The whole air flow is recirculated through damper 5 and returned to the pool area.

The hot water coil is operational.

The "start up cycle" is activated for the time necessary to heat up the area.

In night time mode the unit modifies the operating settings to adapt to the changes of evaporation from the pool and reduce consumption to the minimum.

The operating mode is with external air dehumidifying the space, compensating for evaporation from the pool. The refrigerant circuit (consisting of the compressor 1 and the coils 2 and 3) allows the sensible and latent heat recovery of the extracted air to be transferred to the supply air or the water, through the thermal heat exchange consisting of the double heat exchanger on the water side.

The hot water coil 4 supplements, if necessary, the heating capacity provided by the refrigerant circuit, placed downstream of the entering air flow (condensing coil 3).

When required the compressor also assists in the dehumidification of the pool area.

The supply air flow is modulated by the fan inverter to reach the required hygrometric conditions.

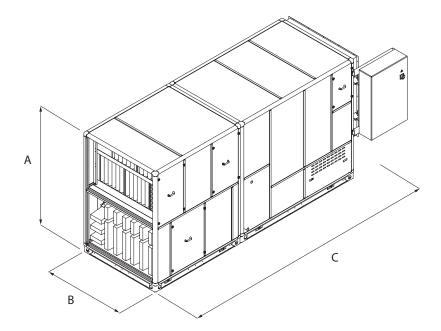
As a function of the external ambient temperature the unit modifies the operating mode to achieve the best efficiency possible.

PERFORMANCE SPECIFICATIONS

			025	040	060	100	130
Nominal airflow (supply/extract)		M³/h	2500	4000	6300	10000	13000
Available pressure (supply/		Pa	400	400	400	400	400
extract)		rd	400	400	400	400	400
Heat recovery capacity	(1)	KW	7,90	12,60	20,40	32,00	41,50
recovered			7,90	12,00	20,40	32,00	41,30
Max heat recovery efficiency	(1)	%	80,80	79,30	80,10	79,50	79,40
Refrigerant circuit recovered	(1)	KW	7,50	10,50	21,30	31,70	45,70
capacity				10,50			· · · · · · · · · · · · · · · · · · ·
Total recovered capacity	(1)	KW	15,40	23,10	41,60	63,70	87,30
Compressor absorbed power	(1)	KW	1,30	1,60	3,70	6,00	8,40
COP	(1)		11,80	14,40	11,20	10,60	10,40
COP	(2)	-	3,90	4,00	4,10	4,00	4,10
Total dehumidification capacity	(1)	Kg/h	15,50	25,20	40,10	63,70	82,70
Supply fan power input		KW	1,60	2,60	3,70	5,90	7,60
Extract fan power input		KW	1,20	1,90	2,70	4,50	5,70
Type / number of compressors		No.			Scroll / 1		
Hot water heating coil							
(standard)							
Capacity (without recovery	(1)	KW	26,10	35,40	61,60	95,30	124,50
active)	(1)		20,10	35,40	01,00	75,50	124,50
Water flow rate	(3)	L/h	2250	3050	5300	8200	10700
Water pressure drop	(3)	KPa	23,50	43,70	33,10	48,80	46,30
Plate heat exchanger R410A/non							
aggressive water (standard)							
Nominal water flow rate	(4)	L/h	950	1120	2500	3600	5400
Pressure drops	(4)	KPa	19,00	19,00	31,00	32,00	33,00
Plate heat exchanger accessible							
non aggressive water/pool water							
(standard)				-			
Water flow rate nominal pool	(5)	L/h	1200	1400	3100	4500	6800
Pressure drop pool side	(5)	KPa	32,40	34,00	31,40	33,00	34,50
Pressure drop intermediate	(5)	KPa	21,20	22,30	20,60	21,60	22,50
circuit side	(5)					2.700	
Electric data							
Unit power supply					400 V-3- 50 Hz		
Maximum total current input		Α	3,50	6,20	11,00	14,60	15,00
supply fan			5,50	0,20	11,00	1 1,00	15,00
Maximum total current input		A	2,60	4,90	6,40	11,30	11,30
extract fan							
Unit maximum current input		Α	11,60	17,10	32,40	49,30	61,30
Unit starting current		A	32,10	46,10	91,40	181,90	184,30

- 1. External air 0°C,80% RH; internal air 29°C,60% RH.
- Values as per conditions of D.M. 7 april 2008 for heating only operation
 Water temperature inlet/outlet 70/60°C; water pressure drop including 3 way valve
- 4. Water temperature inlet/outlet non aggressive 27/37°C
 5. Water temperature inlet/outlet intermediate circuit 37/27°C; water temperature inlet/outlet pool 25/35°C

DIMENSIONS



	,	025	040	060	100	130
A	mm	1765	1765	2245	2405	2405
В	mm	895	895	1055	1375	1695
С	mm	3230	3390	4190	4190	4670
Weight	Kg	900	1000	1350	2060	2600

Aermec S.p.A. Via Roma, 996 - 37040 Bevilacqua (VR) - Italia Tel. 0442633111 - Telefax 044293577 www.aermec.com



SPL 160-250



Swimming Pool Lines Air handling unit high efficiency for health centres.

Air flow from 16000 to 25000 m³/h.

DESCRIPTION

The units from the SPL series represent the ideal solution to guarantee the comfort conditions in small-medium spaces such as health centres, spa areas, fitness centres, small swimming pools, sports facilities, etc. The unit contains a refrigerant circuit and a system for the recovery of sensible and latent heat coming from the humid air extracted from the space, thereby being optimised for the reduction of energy consumption. The main function of the unit, which is a "plug and play" machine ready for use, is that of dehumidifying and at the same time ensuring control of the temperature and humidity conditions of the area served. The unit is fitted with an efficient heat recovery system on the water side, to be used to partially heat the swimming pool water at no cost. The structure and all the internal components are built to ensure the maximum resistance to corrosion.

CHARACTERISTICS

Sizes

3 sizes available

Structure

Anodised aluminium profile with reinforced nylon corner pieces. Casing made from sandwich type panels (50mm thickness), with internal surface pre-painted galvanised steel, external in pre-painted galvanised steel and insulating material hot injected polyurethane with a density of 42 kg/m³, fixed without screws but with panel locking profiles, doors with keyless handles. This fixing method allows a uniform pressure on the casing, ensuring an excellent resistance to the leakage of air and water. The support structures and the seals around components are completely painted to ensure the maximum corrosion resistance. The bottom surfaces of the unit are fitted with drain panels in pre-painted galvanised steel with a central drain point piped sideways.

Thermal recovery section

 High efficiency static cross flow in pre-painted aluminium. Including dampers: recirculating damper used for the quick start up of the space, recirculating damper for the "primary" cycle, dampers on the air inlet and extract. All dampers are manufactured in anodised aluminium and are individually controlled by an external actuator for precise air flow control

Refrigerant circuit

- Fitted with scroll compressor supplied with rubber anti-vibration feet, refrigerant gas/air heat exchanger coil with copper tubes and pre-painted aluminium fins and painted frame, filter, electronic expansion valve, liquid receiver, filter drier, controls (pressure transducers and visual indicators) and safeties (high and low pressure pressostats), brazed copper connections, refrigerant charge of environmentally friendly R410A. The refrigerant circuit is installed in a compartment isolated from the air flow to facilitate checks and maintenance.
- The units on request can also be realized without the refrigerant circuit.
 The size of the machine remains unchanged

Fan section:

 Treated with epoxy paint resistant to corrosion, fitted with "plug fans" with backward curved impeller of high output. Electrical motor directly coupled to the impeller suitable for inverter control (standard).

Filtration systems:

Fitted as standard with panel filters in extract (G4 efficiency class according to EN779) and panel + bag filters (G4 + F9 efficiency class according to EN779) meet the requirements for the applicable standards for indoor air quality. Dirty filter differential pressure switches are provided as standard.

Hot water heating coil:

With copper tubes and pre-painted aluminium fins to heat the supply air after dehumidification, controlled by a modulating 3 way valve (standard); this allows the accurate control of the supply air temperature. The frame of the coil is in painted galvanised steel to ensure the maximum resistance to corrosion.

Electrical panel:

 Power and controls panel unit mounted. Electrical installation for the connection of power and controls, set in tubes or conduits with glands and grommets, IP55 protective rating. Remote panel supplied as standard for the control of all the main functions and display of alarms.

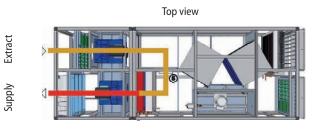
OPERATING SCHEMATICS

The principal operation modes of the unit are shown in the example schematics below.

In all the following schematics the hot water coil is always operating because the external air temperature is below 10°C with a required supply air temperature to compensate for the heat losses from the building.

External air

"START UP" CYCLE



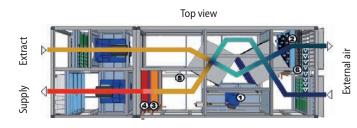
The operating mode is with no external air flow. The whole air flow is recirculated through damper 5 and returned to the pool area.

The hot water coil is operational.

The "start up cycle" is activated for the time necessary to heat up the area

"DEHUMIDIFICATION" CYCLE

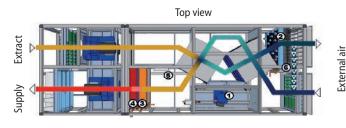
Dehumidification with external air



The operating mode is with external air dehumidifying the space, compensating for evaporation from the pool. The refrigerant circuit (consisting of the compressor 1 and the coils 2 and 3) allows the sensible and latent heat recovery of the extracted air to be transferred to the supply air or the water, through the thermal heat exchange consisting of the double heat exchanger on the water side.

The hot water coil 4 supplements, if necessary, the heating capacity provided by the refrigerant circuit, placed downstream of the entering air flow (condensing coil 3).

Dehumidification with external air and alpha cycle

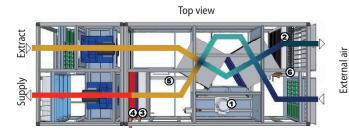


When required the compressor also assists in the dehumidification of the pool area.

The supply air flow is modulated by the fan inverter to reach the required hygrometric conditions.

As a function of the external ambient temperature the unit modifies the operating mode to achieve the best efficiency possible.

Dehumidification with external air (night cycle)



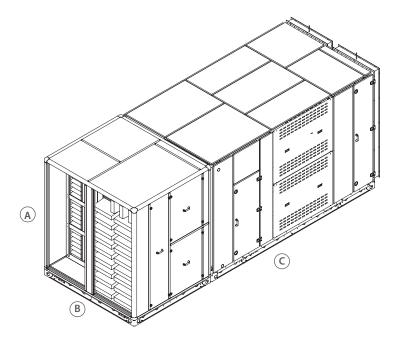
In night time mode the unit modifies the operating settings to adapt to the changes of evaporation from the pool and reduce consumption to the minimum.

TECHNICAL DATA

SPL		160	200	250
Nominal airflow (supply/extract)	m³/h	16000	20000	25000
Available pressure (supply/extract)	Pa	400	400	400
Heat recovery capacity recovered ¹	kW	59,6	68,6	89,2
Max heat recovery efficiency ¹	%	93	86	89
Refrigerant circuit recovered capacity ¹	kW	46,3	53,6	69,4
Total recovered capacity ¹	kW	105,9	122,2	158,6
Compressor power input ¹	kW	8,5	9,2	12,8
COP ¹	=	12,5	13,3	12,4
COP ²	=	4,0	3,9	3,9
Total dehumidification capacity ¹	kg/h	102,2	127,6	159,5
Supply fan power input	kW	10,9	13,7	17,7
Extract fan power input	kW	8,3	9,8	12,4
Type / number of compressors	n°		Scroll / 1	
Hot water heating coil (standard)				
Capacity (without recovery active) ¹	kW	131,9	182,7	205,9
Water flow rate 3	l/h	11300	15700	17700
Water pressure drop ³	kPa	43,7	37,9	42,2
Plate heat exchanger R410A/non aggressive	water (standard)			
Water flow rate nominal ⁴	l/h	5760	6450	8260
Pressure drop ⁴	kPa	33	33	33
Plate heat exchanger accessible non aggres	sive water/pool wa	ater (standard)		
Water flow rate nominal pool ⁵	l/h	7200	8100	10400
Pressure drop pool side ⁵	kPa	34,2	34,7	34,2
Pressure drop intermediate circuit side ⁵	kPa	22,3	22,7	22,2
Electrical data				
Unit power supply			400 V - 3 ph - 50 Hz	
Maximum total current input supply fan	Α	29,2	41	42
Maximum total current input extract fan	Α	22	22,6	30
Unit maximum current input	Α	86,2	99,6	123
Unit starting current	А	209	223	287

External air 0°C,80% RH; internal air 29°C,60% RH.
Values as per conditions of D.M. 7 april 2008 for heating only operation.
Water temperature inlet/outlet 70/60°C; water pressure drop including 3 way valve.
Water temperature inlet/outlet non aggressive 27737°C.
Water temperature inlet/outlet intermediate circuit 37/27°C; water temperature inlet/outlet pool 25/35°C
Preliminary technical data, subject to modification.

DIMENSIONAL DATA



SPL			160	200	250
Height (including base H=120mm) *	Α	mm	2085	2405	2405
Width *	В	mm	2015	2175	2335
Length *	C	mm	5790	5790	6430
Weight		kg	2780	3250	3580

^{*} The dimensions remain unchanged even if the unit, on request, is supplied without a refrigerant circuit.















RTX-N1-N8

Roof-Top for applications in medium crowed

Cooling capacity 12,70 ÷ 49,95 kW Heating capacity 13,50 ÷ 50,79 kW



- For medium crowding applications
- Upgraded thermodynamic heat recovery
- Handling section with plug fan coupled with BRUSHLESS EC motors
- Free-cooling / enthalpic free-cooling / photocatalytic system option



DESCRIPTION

Independent Roof-Top air-cooled air conditioner to treat, filter and renew air based on the selected configuration. Being fitted to function with 30% external and expelled air (MB4 versions), RTX units are designed for medium density applications like shopping malls, shops, offices and production areas.

Based on the version and accessories selected, the units allow you to manage free-cooling mode and, in the MB4 versions, there is thermodynamic recovery of the energy contained in the expelled air, allowing for higher performance and efficiency.

CONFIGURATIONS

MB1: Single ventilating cross-section for recovery air.

Recovery air only configuration where no fresh air is required. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

MB2: Single ventilating cross-section for recovery and external air.

Recovery and external air configuration. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

The presence of the recirculation damper (optional) allows for total free-cooling (100% external air).

If there are no extraction systems, the room will be in overpressure.

MB4: double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, thermodynamic recovery.

Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure. The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.

The double flow and exhaust ventilating cross-section allows for partial free-cooling and has the thermodynamic recovery function.

Advantages of thermodynamic recovery (MB4):

- Energy recovery from the exhaust air flow that would otherwise be lost
- No further components are introduced and, therefore, there are no additional pressure drops
- Cooling circuit functioning with heat sources at more advantageous temperatures

- Reduction of defrosting cycles
- Increase in thermal and cooling efficiency
- Efficiency increase (EER/COP)

FEATURES

- 2 cooling circuits with electronic thermostatic expansion valve;
- High efficiency scroll compressors with low power consumption;
- Finned pack direct expansion internal and external exchangers;
- Plug fan type (EC) flow and exhaust fans (if any). The impellers are facing so as to ensure that the air flows through all the internal components with minimum noise;
- Axial fan unit for extremely silent functioning positioned on the condensing section.
- Filter with 55% COARSE efficiency (according to EN ISO 16890) on the fresh air flow; Also available: compact filter with ePM1 50% efficiency (according to EN ISO 16890). Positioning upstream of the components to be protected to ensure low pressure drops, having a large surface. Air quality control systems are also available (VOC and ${\rm CO_{2\,probe}}$);
- The structure consists of a galvanised sheet metal base, frame in galvanised sheet metal shaped profiles powder coated in RAL9003 (self-bearing structure), pre-painted sheet metal panels (external) insulated with 28kg/mc dense adhesive insulation and sandwich type panels insulated with 25 mm thick 45kg/mc polyurethane, eco-friendly "GWP 0" (Global Warming Potential);
- The casing, designed to allow the internal components to be accessed for routine and extraordinary maintenance.

CONTROL

Microprocessor control able to manage the different functioning modes, ensuring maximum energy savings in any conditions of use. Interfaces to connect to remote supervision and control systems available as options.

FUNCTIONALITY AND TECHNOLOGICAL ADVANTAGES

RTX units are designed with the aim of reducing the energy consumption that subsequently dictated the technological choices made on the unit we will now introduce in brief.

Very high ventilation efficiency

As ventilation is one of the major power consumption factors, we dedicated particular attention to designing and constructing the ventilation system.

State-of-the-art plug fans with EC brushless motors have been used both in flow and in recovery (if any), which enable high performance and reduced consumption. Furthermore, compared to conventional centrifugal fans, they have no belts or pulleys, thus facilitating flow rate adjustment and resulting in compactness, versatility and easy maintenance.

Special adaptive logic allows you to adjust the air flow rate to actual system demand with further resulting advantages in terms of consumption reduction.

Axial fans for the external section of the unit are helical. Electronic condensation control is available as an accessory, which regulates fan speed based on the load required, allowing for noise reduction. As an option, the motors can have electronic control (EC) to reduce consumption even in the condensing part.

Room air quality

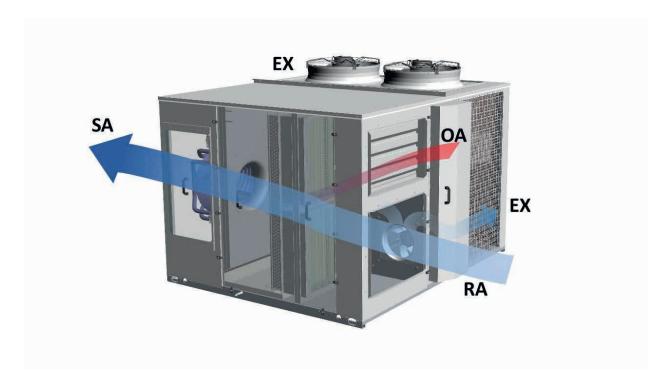
Special attention was paid to the quality of the room air, entrusted to the standard 55% COARSE efficiency filters. F7 filters are also available as optional

Active thermodynamic recovery

In the MB4 configurations, the units have a thermodynamic recovery function to recover the energy contained in the exhaust air, causing the expelled air flow to hit the external finned pack exchanger, allowing for higher performance and efficiency.

All of these technological advantages are controlled by a thermoregulation that is able to manage the different functioning modes, ensuring maximum energy savings in all conditions of use via dedicated software.

MB4 CONFIGURATION WITH DOUBLE VENTILATING SECTION FOR RETURN AIR, EXTERNAL AIR AND EXPELLED AIR. STANDARD FREE-COOLING AND THERMODYNAMIC HEAT RECOVERY FUNCTION



SA Supply air

EX Exhaust air

OA Fresh air

RA Return air

ACCESSORIES

AXEC: Axial fans with EC motors with speed control function according to the pressure of condensation and evaporation.

AXECP: EC axial fans with available useful static pressure.

BAC: Interface card BACnet MS/TP pCOnet.

BE: Electric heating coil 2 stages.

BIP: Interface card Ethernet-pCOweb (BACNET IP)

BPGC: After heating coil with hot gas.

BW: 2-rows-heating coil with hot water.

BWV2V: 2 -rows -heating coil with hot water, with 2-way modulating valve.

BWV3V: 2-rows heating coil with hot water, with 3-way modulating valve.

CA: Waterproof covers on external air intake.

DP: Dehumidification control (humidity probe in recovery) and of after-heating (if present).

FCT: Partial Temperature Free-Cooling for MB2, MB4 versions.

FT7: F7 efficiency pocket filters positioned on the supply air flow.

GP: External coil protection grid.

LW: Interface card LonWorks.

PRT1: Wall/recessed (up to 50 m) remote control panel.

PRT2: Wall/recessed (up to 200 m) remote control panel.

PSF4: Differential pressure switch signalling dirty recovery and renewal filters (if any).

PSTEP: Adjusting constant flow, step flow in function of the modulation of the cooling circuit.

RFC: Smoke detector and damper management.

RS: Serial card BMS RS485.

SCM: Modulating servo-controls (standard on MB3 model or if temperature or enthalpic free-cooling is present).

SCMRM: Modulating Servo-control with spring return.

SCO2: Probe CO2 (not available on MB1 fittings).

STA: Room temperature probe

SUA: Room humidity probe.

SVOC: Probe VOC (not available on MB1 fittings).

VT: Antivibration mounts.

PERFORMANCE SPECIFICATIONS

Size		N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1	'								
Cooling performances (1)									
Cooling capacity	kW	12,70	15,50	19,10	22,20	28,60	33,00	43,00	47,00
Sensible cooling capacity	kW	8,60	10,40	12,80	14,80	19,00	22,40	28,80	32,10
Compressors absorbed power	kW	3,30	4,20	5,00	6,00	7,20	8,70	11,40	12,50
EER compressors		3,87	3,71	3,82	3,69	3,98	3,79	3,75	3,75
Heating performances (2)									
Heating capacity	kW	13,50	16,10	19,90	23,00	29,60	34,00	44,70	48,50
Compressors absorbed power	kW	3,07	3,65	4,28	5,15	6,23	6,86	9,43	10,02
Compressor COP		4,40	4,41	4,64	4,47	4,75	4,96	4,74	4,84

⁽¹⁾ Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Size	'	N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB2									
Cooling performances (1)									
Cooling capacity	kW	13,42	16,34	20,16	23,35	30,21	34,79	45,26	49,44
Sensible cooling capacity	kW	8,92	10,86	13,40	15,40	19,70	23,40	30,00	33,50
Compressors absorbed power	kW	3,33	4,22	5,04	6,07	7,29	8,85	11,65	12,74
EER compressors		4,03	3,87	4,00	3,85	4,14	3,93	3,88	3,88
Heating performances (2)									
Heating capacity	kW	13,65	16,24	20,02	23,18	29,87	34,22	45,17	48,94
Compressors absorbed power	kW	2,77	3,31	3,86	4,65	5,62	6,15	8,58	9,22
Compressor COP		4,92	4,91	5,18	4,99	5,32	5,57	5,26	5,31

⁽¹⁾ Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Size		N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB4									
Cooling performances (1)									
Cooling capacity	kW	13,49	16,49	20,33	23,58	30,45	35,16	45,65	49,95
Sensible cooling capacity	kW	8,93	10,91	13,40	15,50	19,80	23,50	30,20	33,60
Compressors absorbed power	kW	3,27	4,12	4,92	5,90	7,13	8,59	11,39	12,43
EER compressors		4,13	4,00	4,13	4,00	4,27	4,10	4,01	4,02
Heating performances (2)									
Heating capacity	kW	14,00	16,81	20,69	24,05	30,77	35,50	46,63	50,79
Compressors absorbed power	kW	2,81	3,36	3,92	4,73	5,71	6,27	8,74	9,38
Compressor COP		4,98	5,00	5,28	5,08	5,39	5,67	5,33	5,41

⁽¹⁾ Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

ENERGY INDEX

Size			N1	N2	N3	N4	N5	N6	N7	N8
Energy index										
SEER	Н	W/W	3,73	3,60	3,76	3,70	3,86	3,86	3,80	3,77
ηsc	Н	%	146.1%	141.2%	147.5%	144.8%	151.5%	151.5%	148.8%	147.8%
Pdesignh	Н	kW	7	9	11	13	16	19	25	26
SCOP	Н	W/W	3,47	3,34	3,46	3,36	3,29	3,50	3,47	3,44
ηsh	Н	%	135.6%	130.5%	135.4%	131.2%	128.7%	137.1%	135.7%	134.4%

GENERAL TECHNICAL DATA

Size		N1	N2	N3	N4	N5	N6	N7	N8
Power supply									
Power supply		400V~3N 50Hz	400V~3N 50Hz	400V~3N 50Hz	400V~3N 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz	400V~3 50Hz
Compressor									
Туре	type				Sa	oll			
Number	no.	2	2	2	2	2	2	2	2
Circuits	no.	2	2	2	2	2	2	2	2
Refrigerant	type				R41	10A			
Sound data									
Sound power level	dB(A)	73,3	73,7	76,4	76,3	81,2	79,7	82,8	82,9
Sound pressure (1)	dB(A)	65,3	65,8	68,5	68,3	73,2	71,7	74,8	74,9

⁽¹⁾ MB1 configuration sound pressure measured in free field (Q=2), 1m away from the outer surface of the ducted unit, high static pressure 50 Pa (EN ISO 9614-2)...3 dB(A) tolerance on sound power level (Eurovent 8/1).

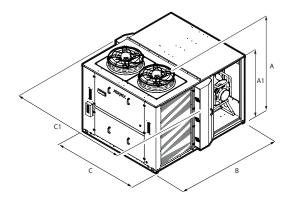
FANS

Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1, MB2	, MB4									
External fans										_
Туре	Н	type	axials							
Number	Н	no.	2	2	2	2	2	2	2	2

Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1, MB2,	MB4									
Internal fans										
Nominal air flow rate	Н	m³/h	2000	2800	3500	4000	5000	6500	8000	9500
Minimum air flow rate	Н	m³/h	1800	1800	2700	2700	4000	4000	6500	6500
Maximum air flow rate	Н	m³/h	2900	2900	4100	4100	6900	6900	10100	10100
Size			09	10	11	12	13	14	15	16
Configuration: MBT										
Exhaust										
Туре	Н	type	RAD EC							
Number	Н	no.	1	1	1	2	2	2	2	2
Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1, MB2										
Delivery										
Туре	Н	type	Brushless EC							
Number	Н	no.	1	1	1	1	1	1	1	1
Maximum useful head (1)	Н	Pa	755	575	460	555	435	460	575	765
High static pressure (EN14511) (1)	Н	Pa	100	100	124	124	124	150	150	200
(1) At the nominal/maximum flow rate w	ith a new, clean air	filter.								
Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB4										
Delivery										
Туре	Н	type	RAD EC							
Number	Н	no.	1	1	1	1	1	1	1	1
Maximum useful head (1)	Н	Pa	755	575	460	555	435	460	575	765
High static pressure (EN14511) (1)	Н	Pa	100	100	124	124	124	150	150	200

⁽¹⁾ At the nominal/maximum flow rate with a new, clean air filter.

DIMENSIONS



Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB1										
Dimensions and weights										
A	Н	mm	1170	1170	1470	1470	1610	1610	1710	1710
A1	Н	mm	910	910	1210	1210	1410	1410	1510	1510
В	Н	mm	1460	1460	1460	1460	1860	1860	2310	2310
C	Н	mm	1560	1560	1560	1560	1910	1910	1910	1910
C1	Н	mm	-	-	-	-	-	-	-	-
Empty weight	Н	kg	335	335	405	405	594	594	745	745
Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB2										
Dimensions and weights										
A	Н	mm	1170	1170	1470	1470	1610	1610	1710	1710
A1	Н	mm	910	910	1210	1210	1410	1410	1510	1510
В	Н	mm	1460	1460	1460	1460	1860	1860	2310	2310
C	Н	mm	1560	1560	1560	1560	1910	1910	1910	1910
C1	Н	mm	-	-	-	-	-	-	-	-
Empty weight	Н	kg	335	335	405	405	594	594	745	745
Size			N1	N2	N3	N4	N5	N6	N7	N8
Configuration: MB4										
Dimensions and weights										
A	Н	mm	1170	1170	1470	1470	1610	1610	1710	1710
A1	Н	mm	910	910	1210	1210	1410	1410	1510	1510
В	Н	mm	1460	1460	1460	1460	1860	1860	2310	2310
C	Н	mm	-	-	-	-	-	-	-	-
C1	Н	mm	1850	1850	1850	1850	2200	2200	2200	2200
Empty weight	Н	kg	345	345	429	429	619	619	775	775

















RTX 09-16

Roof-Top for applications in medium crowed

Cooling capacity 50 ÷ 135 kW Heating capacity 49 ÷ 141 kW



- For medium crowding applications
- Upgraded thermodynamic heat recovery
- Handling section with plug fan coupled with BRUSHLESS EC motors
- Free-cooling / enthalpic free-cooling / photocatalytic system option



DESCRIPTION

Independent Roof -top type air cooled air conditioner, for treatment, filtration and renewal of the air, based on the chosen configuration.

RTX 09-16units are designed fot medium crowding applications, like shopping malls, shops, offices, production areas being designed for operation with 30% external and expelled air (version MB3). The unit based on the version and selected accessories allows the management of the free-cooling operation, and can be equipped with a recuperator to recover the energy contained in the exaust air allowing higher performances and efficiencies.

VERSIONS

F Cooling onlyH Heat pump.

FEATURES

Refrigerant circuit

functioning with R410A refrigerant, consisting of scroll compressors in "uneven" tandem configuration (except for sizes 09, 10 and 14) to ensure maximum energy savings at partial loads and better adaptability to system demands, providing only the energy actually needed. The compressors are equipped with electric resistances on the guards and thermal protection on the exhaust. The compressor compartment is isolated from the air flow.

Ventilation

The air treatment cross-section ventilation, which represents the highest expense in terms of machine operating costs, is entrusted to the plug fans with EC brushless motors which enable high performance, easy flow rate adjustment, compactness, low noise, versatility and easy maintenance. Furthermore, a special adaptive logic allows you to adjust the air flow rate to actual system demand with further advantages in terms of consumption reduction.

Axial fans

The axial fans, located in the condensing section of the unit, are the helical type, statically and dynamically balanced, protected electrically and mechanically by grids. Electronic condensation control is optional in F versions and condensation and evaporation during winter functioning in H versions.

The fans are also available with electronically controlled (EC) permanent magnet synchronous motor.

Exchangers

The internal and external heat exchangers are finned pack direct expansion, made with copper pipes arranged in staggered rows and mechanically expanded to better adhere to the collar of the louvers. The louvers are made of aluminium with a special corrugated surfaces, suitably spaced to ensure maximum heat exchange yield.

Air filtration

Entrusted to a filter with 55% Coarse efficiency (according to EN ISO 16890) on the fresh air flow.

Also available: compact filter with ePM1 50% efficiency or ePM1 80% efficiency (according to EN ISO 16890) and electronic filter on fresh air flow. Positioning upstream of the components to be protected to ensure low pressure drops, having a large surface. Air quality control systems are also available (VOC and CO2 probe).

Cleaning system with photocatalytic lamp

The Photocatalytic Oxidation technology generates natural oxidising ions capable of attracting and destroying the pollutants present in the air and on surfaces, by means of the combined action of UV rays with a catalyst structure composed of a four-metal alloy, mainly consisting of TiO₂ (titanium dioxide).

Thermoregulation

Electronic controller able to manage the different functioning modes, ensuring maximum energy savings in all conditions of use by means of special software. Interfaces to connect to remote supervision and control systems available as options. The electrical panel complete with all devices is easily accessible.

The free-cooling/heating and defrosting logics are particularly sophisticated. As soon as the external conditions allow it, the unit is able to automatically activate the free-cooling or free-heating mode, which cools or heats the served room, while keeping the compressors off and introducing suitably treated external air. This mode significantly reduces both energy consumption and wear of the compressors. These functions are also used when the external air energy content is not enough to cool or heat the room. In this case, the thermal cooling capacity is integrated by the compressors.

CONFIGURATIONS

MB1: Single ventilating cross-section for recovery air.

Recovery air only configuration where no fresh air is required. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

MB2: Single ventilating cross-section for recovery and external air.

Recovery and external air configuration. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

The presence of the recirculation damper (optional) allows for total free-cooling (100% external air).

If there are no extraction systems, the room will be in overpressure.

MB3: double ventilating cross-section (flow and return) for recovery air, external air and exhaust air, thermodynamic recovery.

Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the useful flow static pressure while the recovery ventilating cross-section provides the useful recovery static pressure.

The double flow and recovery ventilating cross-section allows for total free-cooling (100% external air) without the need for a dedicated extraction system. The room overpressure or depression can be obtained by unbalancing the flow rates.

Thermodynamic recovery is performed by conveying expelled air on the external heat exchanger.

MB4: double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, thermodynamic recovery.

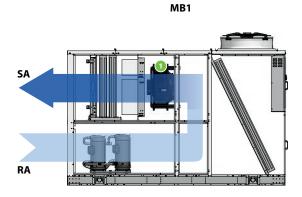
Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure. The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.

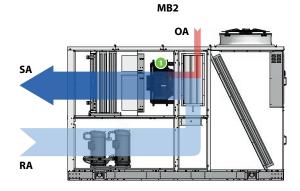
The double flow and exhaust ventilating cross-section allows for partial free-cooling.

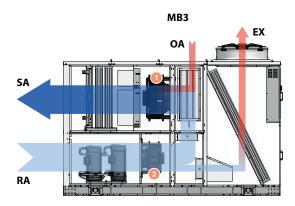
As for the MB3 version, it has the thermodynamic recovery function.

Advantages of thermodynamic recovery (MB3 - MB4 version):

- Energy recovery from the exhaust air flow that would otherwise be lost
- No further components are introduced and, therefore, there are no additional pressure drops
- Cooling circuit functioning with heat sources at more advantageous temperatures
- Reduction of defrosting cycles
- Increase in thermal and cooling efficiency
- Efficiency increase (EER/COP)







MB4
OA
SA
RA

- **SA** supply air **RA** fresh air
- **RA** fresh air
- **OA** fresh air
- **EX** Exhaust air

- 1 Delivery fan
- 2 Return fan
- 3 Expulsion fan

MBT: DOUBLE VENTILATING CROSS-SECTION (FLOW AND EXPULSION) FOR RECOVERY AIR, EXTERNAL AIR AND EXHAUST AIR, UPGRADED THERMODYNAMIC RECOVERY.

Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure.

The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.

The double flow and exhaust ventilating cross-section allows for partial free-cooling.

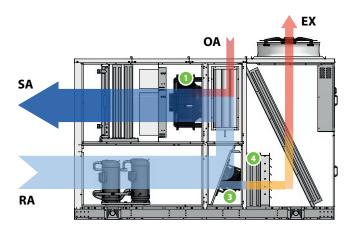
The MBT configuration allows for the upgraded thermodynamic recovery on the exhaust air by fully exploiting the energy content still present in it. The exhaust flow rate, controlled by the dedicated exhaust fan, is conveyed to the innovative finned pack recovery coil, integrated in the cooling circuit of the unit.

The coil, perfectly hit by the air flow, recovers the energy still present in the exhaust flow and transfer it to the cooling circuit, increasing the treatment coil performance without increasing the input power of the compressors. In summer functioning, the coil makes it possible to increase the liquid subcooling, while in winter functioning, the coil takes on part of the evaporation by operating the cooling circuit at more advantageous temperatures.

Advantages of upgraded thermodynamic recovery (MBT version):

- High heat exchange efficiency thanks to the dedicated recovery coil
- Further increase in unit cooling and heating capacity
- Further increase in unit efficiency (EER/COP)
- Reduced additional air side pressure drops (expelled air side only)

- The unit remains compact
- In heating functioning, the defrost cycles are further reduced due to the increase in evaporation temperature. The result is an increase in efficiency and greater room comfort.
- Compared to traditional passive recuperators, in heating functioning it allows for exhaust air recovery even with low temperature difference between external and indoor air (mild winters)
- Compared to traditional passive recuperators, in cooling functioning it allows for exhaust air recovery even with low temperature difference between external and indoor air (continental and temperate climate)
- The presence of the dedicated coil determines the recovery efficiency that can be used in the energy certification calculations.



SA supply air

RA fresh air

OA fresh air

EX Exhaust air

1 Delivery fan

2 Return fan

3 Expulsion fan

4 Dedicated thermodynamic recovery coil

ACCESSORIES

AXEC: Axial fans with EC motors with speed control function according to the pressure of condensation and evaporation.

AXECP: EC axial fans with available useful static pressure.

BAC: Interface card BACnet MS/TP pCOnet.

BE: Electric heating coil 2 stages.

BEM: Modulating electric heating coil.

BIP: Interface card Ethernet-pCOweb (BACNET IP)

BPGC: After heating coil with hot gas.

BW: 2-rows-heating coil with hot water.

BWV2V: 2 -rows -heating coil with hot water, with 2-way modulating valve.

BWV3V: 2-rows heating coil with hot water, with 3-way modulating valve.

CA: Waterproof covers on external air intake.

CF: Flue, only on unit with gas burner module.

CUR: Humidification control (humidity probe in recovery, limit humidity probe in supply, contact ON/OFF and modulating analog output).

DCPR: AC fans with pressure switch device of speed control function of the pressure of condensation and evaporation.

DP: Dehumidification control (humidity probe in recovery) and of after-heating (if present).

FCT: Partial Temperature Free-Cooling for MB2, MB4 versions.

FT7: F7 efficiency pocket filters positioned on the supply air flow.

FT9: Pocket filters F9 efficiency placed on the flow of supply air.

FTE: Electronic filters placed on the flow of supply air.

FTH: Enthalpy free-cooling.

GP: External coil protection grid.

Gx: Heating module with gas burner.

LFX: Device with photocatalytic effect.

LW: Interface card LonWorks.

MAN: High and low pressure gauges.

 $\label{eq:MSSM:Flow} \textbf{MSSM:} \ \text{Flow silencer module, only for rear flow}.$

MSSR: Recovery silencer module, only for rear air recovery.

PRT1: Wall/recessed (up to 50 m) remote control panel. **PRT2:** Wall/recessed (up to 200 m) remote control panel.

PSFT: Differential pressure switch signalling dirty filters.

PSTEP: Adjusting constant flow, step flow in function of the modulation of the cooling circuit.

RF: Smoke detector.

RFC: Smoke detector and damper management.

RS: Serial card BMS RS485.

 $\begin{tabular}{ll} \bf SCM: Modulating servo-controls (standard on MB3 model or if temperature or enthalpic free-cooling is present). \end{tabular}$

 $\textbf{SCMRM:} \ \mathsf{Modulating} \ \mathsf{Servo-control} \ \mathsf{with} \ \mathsf{spring} \ \mathsf{return}.$

SCO2: Probe CO2 (not available on MB1 fittings).

STA: Room temperature probe

SUA: Room humidity probe.

SVOC: Probe VOC (not available on MB1 fittings).

UP: Manufacturer of immersed electrodes supplied and steam ramp installed.

VT: Antivibration mounts.

PERFORMANCE SPECIFICATIONS

MB1

Size		09	10	11	12	13	14	15	16
Configuration: MB1									
Cooling performances (1)									
Cooling capacity	kW	50,00	60,10	68,60	81,00	93,40	103,50	114,00	125,30
Sensible cooling capacity	kW	40,10	46,10	52,70	63,20	70,90	81,80	89,30	97,10
Compressors absorbed power	kW	11,90	14,40	18,80	17,90	23,10	25,60	30,50	35,50
EER compressors		4,20	4,17	3,65	4,53	4,04	4,04	3,74	3,53
Heating performances (2)									
Heating capacity	kW	49,40	61,10	69,30	80,60	93,70	102,20	113,70	126,60
Compressors absorbed power	kW	9,80	12,20	15,50	15,70	20,60	21,00	24,40	28,40
Compressor COP		5,04	5,01	4,47	5,13	4,55	4,87	4,66	4,46

- (1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
 (2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MB2

Size		09	10	11	12	13	14	15	16
Configuration: MB2									
Cooling performances (1)									
Cooling capacity	kW	52,90	63,30	72,30	85,30	98,40	108,80	120,10	131,60
Sensible cooling capacity	kW	42,70	48,80	55,90	67,10	75,00	86,70	94,80	102,80
Compressors absorbed power	kW	12,10	14,60	19,00	18,10	23,30	25,90	30,90	35,90
EER compressors		4,37	4,34	3,81	4,71	4,22	4,20	3,89	3,67
Heating performances (2)									
Heating capacity	kW	50,50	61,90	70,60	82,20	94,90	103,60	115,30	128,10
Compressors absorbed power	kW	9,00	11,20	14,10	14,30	18,90	19,20	22,50	26,00
Compressor COP		5,61	5,53	5,01	5,75	5,02	5,40	5,12	4,93

- (1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
 (2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MB3

Size		09	10	11	12	13	14	15	16
Configuration: MB3									
Cooling performances (1)									
Cooling capacity	kW	53,40	63,70	73,10	86,10	99,30	110,00	121,30	133,30
Sensible cooling capacity	kW	43,00	48,90	56,20	67,40	75,30	87,00	95,10	103,20
Compressors absorbed power	kW	11,80	14,20	18,50	17,70	22,80	25,10	30,10	34,80
EER compressors		4,53	4,49	3,95	4,86	4,36	4,38	4,03	3,83
Heating performances (2)									
Heating capacity	kW	52,10	64,10	74,10	85,00	98,60	107,80	120,60	134,30
Compressors absorbed power	kW	9,20	11,40	14,40	14,60	19,10	19,40	22,90	26,70
Compressor COP		5,66	5,62	5,15	5,82	5,16	5,56	5,27	5,03

- (1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air. (2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

MB4

Size		09	10	11	12	13	14	15	16
		- 09	10		12	13	14		10
Configuration: MB4			-	-					
Cooling performances (1)									
Cooling capacity	kW	53,40	63,70	73,10	86,10	99,30	110,00	121,30	133,30
Sensible cooling capacity	kW	43,00	48,90	56,20	67,40	75,30	87,00	95,10	103,20
Compressors absorbed power	kW	11,80	14,20	18,50	17,70	22,80	25,10	30,10	34,80
EER compressors		4,53	4,49	3,95	4,86	4,36	4,38	4,03	3,83
Heating performances (2)									
Heating capacity	kW	52,10	64,10	74,10	85,00	98,60	107,80	120,60	134,30
Compressors absorbed power	kW	9,20	11,40	14,40	14,60	19,10	19,40	22,90	26,70
Compressor COP		5,66	5,62	5,15	5,82	5,16	5,56	5,27	5,03

- (1) Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.

 (2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Size		09	10	11	12	13	14	15	16
Configuration: MBT									
Cooling performances (1)									
Cooling capacity	kW	57,10	67,80	78,00	90,50	103,70	116,90	128,80	140,60
Sensible cooling capacity	kW	46,60	53,00	61,20	71,90	79,70	94,00	102,60	110,60
Compressors absorbed power	kW	11,80	14,20	18,50	17,70	22,80	25,10	30,10	34,80
EER compressors		4,84	4,77	4,22	5,11	4,55	4,66	4,28	4,04
Heating performances (2)									
Heating capacity	kW	55,40	68,00	78,30	90,10	103,60	114,40	127,50	141,40
Compressors absorbed power	kW	9,20	11,40	14,40	14,60	19,10	19,40	22,90	26,70
Compressor COP		6,02	5,96	5,44	6,17	5,42	5,90	5,57	5,30
Recovery efficiency	%	84%	92%	87%	90%	85%	85%	82%	78%

ENERGY INDEX

Size			09	10	11	12	13	14	15	16
Energy index										
SEER	Н	W/W	4,24	3,94	3,76	3,92	3,89	4,22	4,10	4,05
ηςς	Н	%	166.6%	154.5%	147.2%	153.9%	152.7%	165.7%	161.1%	159.1%
Pdesignh	Н	kW	29	34	38	46	52	57	62	71
SCOP	Н	W/W	3,59	3,50	3,30	3,27	3,22	3,47	3,41	3,38
ηsh	Н	%	140.5%	137.0%	128.8%	127.7%	126.0%	135.9%	133.5%	132.3%

GENERAL TECHNICAL DATA

Size			09	10	11	12	13	14	15	16
Power supply										
Power supply	Н		400V~3 50Hz							
Compressor										
Туре	Н	type	Scroll							
Number	Н	no.	2	2	2	2	2	2	2	2
Circuits	Н	no.	1	1	1	1	1	1	1	1
Refrigerant	Н	type	R410A							
Partialisation step	Н	no.	2	2	3	3	3	2	3	3

FANS

ΕX	ter	'na	ı ta	n

Size			09	10	11	12	13	14	15	16				
Configuration: MB1	Configuration: MB1, MB2, MB3, MB4, MBT													
External fans														
Туре	Н	type	Assiali AC											
Number	Н	no.	2	2	2	2	2	2	2	2				
Internal fans MB1-M	IB2-MB3-MB4-MBT													
Size			09	10	11	12	13	14	15	16				

Size			09	10	11	12	13	14	15	16			
Configuration: MB1, MI	Configuration: MB1, MB2, MB3, MB4, MBT												
Internal fans													
Nominal air flow rate	Н	m³/h	9500	11000	13000	15000	17000	20000	22000	24000			
Minimum air flow rate	Н	m³/h	6650	7700	9100	10850	12600	14000	15400	16800			
Maximum air flow rate	Н	m³/h	9500	11000	13000	15500	18000	20000	22000	24000			

Internal recovery fans										
Size			09	10	11	12	13	14	15	16
Configuration: MB3										
Recovery										
Туре	Н	type	RAD EC							
Number	Н	no.	1	1	1	2	2	2	2	2

Expulsion fan MB4-MBT					
Size	09	10	11	12	13

Configuration: MBT										
Exhaust										
Туре	Н	type	RAD EC							
Number	Н	no.	1	1	1	2	2	2	2	2

14

15

16

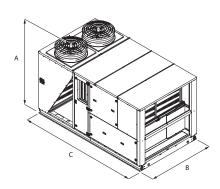
⁽¹⁾ Ambient air 20°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

Internal flow fans

Size			09	10	11	12	13	14	15	16
Configuration: MB1, MB2, I	MB3, MB4,	MBT								
Delivery										
Туре	Н	type	RAD EC							
Number	Н	no.	1	1	1	2	2	2	2	2
Maximum useful head (1)	Н	Pa	770	510	445	555	740	640	525	675
High static pressure (EN14511) (1)	Н	Pa	200	200	200	200	250	250	250	300

⁽¹⁾ At the nominal/maximum flow rate with a new, clean air filter.

DIMENSIONS



Size			09	10	11	12	13	14	15	16
Dimensions and weights										
A	Н	mm	2061	2061	2061	2373	2373	2440	2440	2440
В	Н	mm	1900	1900	1900	2100	2100	2200	2200	2200
C	Н	mm	3400	3400	3400	3400	3400	4000	4000	4000

















RTX-17-23

Roof-Top for applications in medium crowed

Cooling capacity 151 ÷ 307 kW Heating capacity 152 ÷ 310 kW



- For medium crowding applications
- Thermodynamic heat recovery
- Handling section with plug fan coupled with BRUSHLESS EC motors
- · Free cooling / Enthalpy free cooling



DESCRIPTION

Independent Roof -top type air cooled air conditioner, for treatment, filtration and renewal of the air, based on the chosen configuration.

The RTX 09-16 units are designed for installation in places with an average degree of crowding such as shopping centres, shops, offices and production sites, as operation uses 30% outside expelled air (versions MB3 and MB4). Depending on the version and the accessories chosen, the unit can man-

CONFIGURATIONS

MB1: Single ventilating cross-section for recovery air.

Recovery air only configuration where no fresh air is required.

The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

MB2: Single ventilating cross-section for recovery and external air.

Recovery and external air configuration. The useful flow and recovery static pressure is provided by the flow ventilating cross-section.

The presence of the recirculation damper (optional) allows for total free-cooling (100% external air).

If there are no extraction systems, the room will be in overpressure.

MB3: double ventilating cross-section (flow and return) for recovery air, external air and exhaust air, thermodynamic recovery.

Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the useful flow static pressure while the recovery ventilating cross-section provides the useful recovery static pressure.

The double flow and recovery ventilating cross-section allows for total free-cooling (100% external air) without the need for a dedicated extraction system. The room overpressure or depression can be obtained by unbalancing the flow rates.

Thermodynamic recovery is performed by conveying expelled air on the external heat exchanger.

MB4: double ventilating cross-section (flow and expulsion) for recovery air, external air and exhaust air, thermodynamic recovery.

Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the flow and recovery useful static pressure. The exhaust ventilating cross-section only controls the air flow rate to be expelled, with consequent reduction of the installed ventilation power.

age free cooling mode. Versions MB3 and MB4 feature the thermodynamic recovery of the energy contained in the exhaust air, leading to higher performance and efficiency levels.

VERSIONS

F Cooling onlyH Heat pump.

The double flow and exhaust ventilating cross-section allows for partial free-cooling

As for the MB3 version, it has the thermodynamic recovery function.

Advantages of thermodynamic recovery (MB3 - MB4 version):

- Energy recovery from the exhaust air flow that would otherwise be lost
- No further components are introduced and, therefore, there are no additional pressure drops
- Cooling circuit functioning with heat sources at more advantageous temperatures
- Reduction of defrosting cycles
- Increase in thermal and cooling efficiency
- Efficiency increase (EER/COP)

FEATURES

- 2 cooling circuits with electronic thermostatic expansion valve;
- Scroll compressors (UNEVEN tandem) with high capacity and low electrical power consumption;
- Finned pack direct expansion internal and external exchangers;
- Plug fan type (EC) flow and exhaust fans (if any). The impellers are facing so as to ensure that the air flows through all the internal components with minimum noise;
- Axial fan unit for extremely silent functioning positioned on the condensing section.
- Filter with 55% COARSE efficiency (according to EN ISO 16890) on the fresh air flow; Also available: compact filter with ePM1 50% efficiency (according to EN ISO 16890). Positioning upstream of the components to be protected to ensure low pressure drops, having a large surface. Air quality control systems are also available (VOC and CO_{2 probe});
- The structure consists of a galvanised sheet metal base, frame in galvanised sheet metal shaped profiles powder coated in RAL9003

(self-bearing structure), pre-painted sheet metal panels (external) insulated with 28kg/mc dense adhesive insulation and sandwich type panels insulated with 25 mm thick 45kg/mc polyurethane, eco-friendly "GWP 0" (Global Warming Potential);

 The casing, designed to allow the internal components to be accessed for routine and extraordinary maintenance.

CONTROL

Microprocessor control able to manage the different functioning modes, ensuring maximum energy savings in any conditions of use. Interfaces to connect to remote supervision and control systems available as options.

FUNCTIONALITY AND TECHNOLOGICAL ADVANTAGES

RTX units are designed with the aim of reducing the energy consumption that subsequently dictated the technological choices made on the unit we will now introduce in brief.

Very high ventilation efficiency

As ventilation is one of the major power consumption factors, we dedicated particular attention to designing and constructing the ventilation system. State-of-the-art plug fans with EC brushless motors have been used both in flow and in recovery (if any), which enable high performance and reduced consumption. Furthermore, compared to conventional centrifugal fans, they have no belts or pulleys, thus facilitating flow rate adjustment and resulting in compactness, versatility and easy maintenance.

Special adaptive logic allows you to adjust the air flow rate to actual system demand with further resulting advantages in terms of consumption reduction.

Axial fans for the external section of the unit are helical. Electronic condensation control is available as an accessory, which regulates fan speed based on the load required, allowing for noise reduction. As an option, the motors can have electronic control (EC) to reduce consumption even in the condensing part.

Maximum seasonal efficiency

To improve the efficiency of the cooling circuit, tandem scroll compressors of different power levels are used (UNEVEN compressors on all sizes). This distinctive trait, combined with the use of next generation fans, means reduced consumption and enhanced adaptability to system requests (particularly in partial load operation), guaranteeing boosted seasonal efficiency levels.

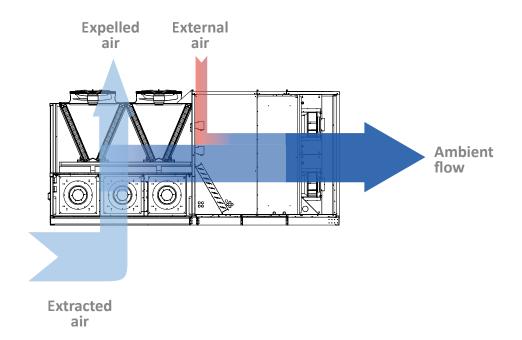
Room air quality

Special attention has been paid to the quality of the air in the room, entrusted to filters that ensure 55% COARSE efficiency as standard. There is also the option of F7, F9 or electronic filters on the fresh air flow.

Active thermodynamic recovery

In the MB3-MB4 configuration, the unit with thermodynamic recovery function also takes advantage of the energy contained in the exhaust air, which would otherwise be lost; this ensures better performance and efficiency. All of these technological advantages are controlled by a thermoregulation that is able to manage the different functioning modes, ensuring maximum energy savings in all conditions of use via dedicated software.

MB3 CONFIGURATION WITH TWIN FAN SECTION FOR RECIRCULATION AIR, OUTSIDE AIR AND EXHAUST AIR. TOTAL FREE COOLING FUNCTION (WITH 100% OUTSIDE AIR) AND THERMODYNAMIC RECOVERY FUNCTION AS STANDARD.



ACCESSORIES

AXEC: Axial fans with EC motors with speed control function according to the pressure of condensation and evaporation.

AXECP: EC axial fans with available useful static pressure.

BAC: Interface card BACnet MS/TP pCOnet.

BE: Electric heating coil 2 stages.

BEM: Modulating electric heating coil. **BIP:** Interface card Ethernet-pCOweb (BACNET IP)

BPGC: After heating coil with hot gas.

BW: 2-rows-heating coil with hot water.

BWV2V: 2 -rows -heating coil with hot water, with 2-way modulating valve.

BWV3V: 2-rows heating coil with hot water, with 3-way modulating valve.

CA: Waterproof covers on external air intake.

CF: Flue, only on unit with gas burner module.

CUR: Humidification control (humidity probe in recovery, limit humidity probe in supply, contact ON/OFF and modulating analog output).

 $\mbox{\bf DCPR:}$ AC fans with pressure switch device of speed control function of the pressure of condensation and evaporation.

DP: Dehumidification control (humidity probe in recovery) and of after-heating (if present).

FCT: Partial Temperature Free-Cooling for MB2, MB4 versions.

FT7: F7 efficiency pocket filters positioned on the supply air flow.

FT9: Pocket filters F9 efficiency placed on the flow of supply air.

FTE: Electronic filters placed on the flow of supply air.

FTH: Enthalpy free-cooling.

GP: External coil protection grid.

Gx: Heating module with gas burner.

LFX: Device with photocatalytic effect.

LW: Interface card LonWorks.

MAN: High and low pressure gauges.

MSSM: Flow silencer module, only for rear flow.

MSSR: Recovery silencer module, only for rear air recovery.

PRT1: Wall/recessed (up to 50 m) remote control panel.

PRT2: Wall/recessed (up to 200 m) remote control panel.

PSFT: Differential pressure switch signalling dirty filters.

PSTEP: Adjusting constant flow, step flow in function of the modulation of the cooling circuit.

RF: Smoke detector.

RFC: Smoke detector and damper management.

RS: Serial card BMS RS485.

SCM: Modulating servo-controls (standard on MB3 model or if temperature or enthalpic free-cooling is present).

SCMRM: Modulating Servo-control with spring return.

SCO2: Probe CO2 (not available on MB1 fittings).

STA: Room temperature probe **SUA:** Room humidity probe.

SVOC: Probe VOC (not available on MB1 fittings).

UP: Manufacturer of immersed electrodes supplied and steam ramp in-

stalled.

VT: Antivibration mounts.

PERFORMANCE SPECIFICATIONS

Size	,	17	18	19	20	21	22	23
Configuration: MB1								
Cooling performances (1)								
Cooling capacity	kW	151,90	170,10	191,70	213,30	231,70	246,10	289,10
Sensible cooling capacity	kW	114,30	125,40	136,10	151,60	164,70	178,50	202,30
Compressors absorbed power	kW	32,70	39,20	45,30	54,00	60,70	69,00	68,90
EER compressors		4,65	4,34	4,23	3,95	3,82	3,57	4,20
Heating performances (2)								
Heating capacity	kW	152,70	170,80	192,80	216,20	230,80	245,50	296,30
Compressors absorbed power	kW	28,20	33,90	39,20	43,90	46,30	51,20	58,60
Compressor COP		5,41	5,04	4,92	4,92	4,98	4,79	5,06

MR2

Size		17	18	19	20	21	22	23
Configuration: MB2	'							
Cooling performances (1)								
Cooling capacity	kW	160,20	179,40	201,80	224,60	243,90	258,90	304,50
Sensible cooling capacity	kW	120,90	132,60	143,20	159,70	173,50	188,30	212,90
Compressors absorbed power	kW	33,10	39,50	45,60	54,60	61,60	69,80	69,70
EER compressors		4,84	4,54	4,43	4,11	3,96	3,71	4,37
Heating performances (2)								
Heating capacity	kW	155,10	174,20	195,50	219,50	234,00	248,60	300,70
Compressors absorbed power	kW	25,80	31,10	35,70	40,40	42,50	47,00	54,10
Compressor COP		6,01	5,60	5,48	5,43	5,51	5,29	5,56

MB3

MDJ								
Size		17	18	19	20	21	22	23
Configuration: MB3	'							
Cooling performances (1)								
Cooling capacity	kW	161,30	181,10	203,70	226,90	246,70	262,10	307,20
Sensible cooling capacity	kW	121,30	133,30	143,80	160,50	174,50	189,20	213,90
Compressors absorbed power	kW	32,50	38,80	44,50	53,20	59,90	67,70	68,30
EER compressors		4,96	4,67	4,58	4,27	4,12	3,87	4,50
Heating performances (2)								
Heating capacity	kW	159,10	179,00	202,30	227,70	243,60	259,90	310,90
Compressors absorbed power	kW	26,20	31,40	36,30	41,00	43,30	47,90	55,00
Compressor COP		6,07	5,70	5,57	5,55	5,63	5,43	5,65

MB4

Size		17	18	19	20	21	22	23
Configuration: MB4	'							_
Cooling performances (1)	,							
Cooling capacity	kW	161,30	181,10	203,70	226,90	246,70	262,10	307,20
Sensible cooling capacity	kW	121,30	133,30	143,80	160,50	174,50	189,20	213,90
Compressors absorbed power	kW	32,50	38,80	44,50	53,20	59,90	67,70	68,30
EER compressors		4,96	4,67	4,58	4,27	4,12	3,87	4,50
Heating performances (2)	,							_
Heating capacity	kW	159,10	179,00	202,30	227,70	243,60	259,90	310,90
Compressors absorbed power	kW	26,20	31,40	36,30	41,00	43,30	47,90	55,00
Compressor COP	-	6,07	5,70	5,57	5,55	5,63	5,43	5,65

⁽¹⁾ Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air. (2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

⁽¹⁾ Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air.
(2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

⁽¹⁾ Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air. (2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

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ENERGY INDEX

Size			17	18	19	20	21	22	23
Energy index									
SEER	Н	W/W	4,01	3,94	4,18	3,92	4,15	3,94	3,85
ηςς	Н	%	157.6%	154.6%	164.3%	153.8%	162.9%	154.5%	150.9%
Pdesignh	Н	kW	89	98	109	123	130	141	168
SCOP	Н	W/W	3,47	3,31	3,45	3,36	3,49	3,43	3,26
nsh	Н	%	135.7%	129.4%	134.8%	131.5%	136.4%	134.2%	127.3%

GENERAL TECHNICAL DATA

Size			17	18	19	20	21	22	23
Power supply			,						
Power supply	Н		400V~3 50Hz						
Compressor									
Туре	Н	type	Scroll						
Number	Н	no.	4	4	4	4	4	4	4
Circuits	Н	no.	2	2	2	2	2	2	2
Refrigerant	Н	type	R410A						
Partialisation sten	Н	no	6	6	6	6	6	6	6

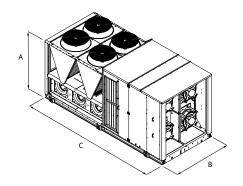
FANS

External fans

External fans									
Size			17	18	19	20	21	22	23
Configuration: MB1, MB2,	MB3, MB4								
External fans									
Туре	Н	type	Assiali AC						
Number	Н	no.	4	4	4	4	4	4	4
Internal fans									
Size			17	18	19	20	21	22	23
Configuration: MB1, MB2,	MB3, MB4								
Internal fans									
Nominal air flow rate	Н	m³/h	26000	29000	33000	37000	40000	44000	48000
Minimum air flow rate	Н	m³/h	18200	20300	23100	25900	28000	30800	33600
Maximum air flow rate	Н	m³/h	36000	36000	44000	44000	53000	53000	53000
Internal recovery fans									
Size			17	18	19	20	21	22	23
Configuration: MB3									
Recovery									
Туре	Н	type	RAD EC						
Number	Н	no.	3	3	3	3	3	3	3
Expulsion fan									
Size			17	18	19	20	21	22	23
Configuration: MB4									
Exhaust									
Туре	Н	type	RAD EC						
Number	Н	no.	2	2	2	2	2	2	2
Internal flow fans									
Size			17	18	19	20	21	22	23
Configuration: MB1									
Delivery									
Туре	Н	type	RAD EC						
Number	Н	no.	2	2	3	3	3	4	4
Maximum useful head (1)	Н	Pa	700	475	520	580	520	690	550
High static pressure (EN14511) (1)	Н	Pa	350	350	350	350	350	350	350
(1) At the nominal/maximum flow rate wi	th a new, clean air	filter.							
Size			17	18	19	20	21	22	23
Configuration: MB2, MB3, I	MB4								
Delivery									
Туре	Н	type	RAD EC						
Number	Н	no.	2	2	3	3	3	4	4
Maximum useful head (1)	Н	Pa	519	341	330	470	460	636	467
High static pressure (EN14511) (1)	Н	Pa	350	350	350	350	350	350	350

⁽¹⁾ At the nominal/maximum flow rate with a new, clean air filter.

DIMENSIONS



Size			17	18	19	20	21	22	23
Dimensions and weights									_
A	Н	mm	2430	2430	2430	2430	2430	2430	2430
В	Н	mm	2200	2200	2200	2200	2200	2200	2200
C	Н	mm	5210	5210	5210	5210	7750	7750	7750

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Roof-Top for high-crowding applications

Cooling capacity 30.2 ÷ 133.6 kW Heating capacity 29.3 ÷ 137.9 kW



- For high-crowding applications
- · Thermodynamic heat recovery
- Handling section with plug fan coupled with BRUSHLESS EC motors
- Free cooling option



DESCRIPTION

Independent Roof -top type air cooled air conditioner, for treatment, filtration and renewal of the air, based on the chosen configuration.

The RTY 01-10 units are designed for highly crowded contexts such as cinemas, conference halls, restaurants and discos, as they work with 80% outside and exhaust air.

CONFIGURATIONS

MB3: double ventilating cross-section (flow and return) for recovery air, external air and exhaust air, thermodynamic recovery.

Recovery, external and exhaust air configuration. The flow ventilating cross-section provides the useful flow static pressure while the recovery ventilating cross-section provides the useful recovery static pressure.

The double flow and recovery ventilating cross-section allows for total free-cooling (100% external air) without the need for a dedicated extraction system. The room overpressure or depression can be obtained by unbalancing the flow rates.

Thermodynamic recovery is performed by conveying expelled air on the external heat exchanger.

FEATURES

- 1 refrigerant circuit;
- Scroll compressors (UNEVEN tandem) with high capacity and low electrical power consumption;
- Finned pack direct expansion internal and external exchangers;
- Plug fan type (EC) flow and exhaust fans (if any). The impellers are facing so as to ensure that the air flows through all the internal components with minimum noise;
- Axial fan unit for extremely silent functioning positioned on the condensing section.
- Filter with 55% COARSE efficiency (according to EN ISO 16890) on the fresh air flow; Also available: compact filter with ePM1 50% efficiency (according to EN ISO 16890). Positioning upstream of the components to be protected to ensure low pressure drops, having a large surface. Air quality control systems are also available (VOC and CO_{2 probe});
- Electronic control of condensation and evaporation as standard, to further extend the operating limits of the unit;

The standard unit permits the use of free cooling mode and the thermodynamic recovery of the energy in the exhaust air, guaranteeing higher output and efficiency levels.

VERSIONS

H Heat pump.

- The structure consists of a galvanised sheet metal base, frame in galvanised sheet metal shaped profiles powder coated in RAL9003 (self-bearing structure), pre-painted sheet metal panels (external) insulated with 28kg/mc dense adhesive insulation and sandwich type panels insulated with 25 mm thick 45kg/mc polyurethane, eco-friendly "GWP 0" (Global Warming Potential);
- The casing, designed to allow the internal components to be accessed for routine and extraordinary maintenance.

CONTROL

Microprocessor control able to manage the different functioning modes, ensuring maximum energy savings in any conditions of use. Interfaces to connect to remote supervision and control systems available as options.

FUNCTIONALITY AND TECHNOLOGICAL ADVANTAGES

RTX units are designed with the aim of reducing the energy consumption that subsequently dictated the technological choices made on the unit we will now introduce in brief.

Very high ventilation efficiency

As ventilation is one of the major power consumption factors, we dedicated particular attention to designing and constructing the ventilation system. State-of-the-art plug fans with EC brushless motors have been used both in flow and in recovery (if any), which enable high performance and reduced consumption. Furthermore, compared to conventional centrifugal fans, they have no belts or pulleys, thus facilitating flow rate adjustment and resulting in compactness, versatility and easy maintenance.

Special adaptive logic allows you to adjust the air flow rate to actual system demand with further resulting advantages in terms of consumption reduction.

Axial fans for the external section of the unit are helical. Electronic condensation control is available as an accessory, which regulates fan speed based on the load required, allowing for noise reduction. As an option, the motors can have electronic control (EC) to reduce consumption even in the condensing part.

Maximum seasonal efficiency

To improve the efficiency of the cooling circuit, tandem scroll compressors of different power levels are used (UNEVEN compressors on all size taglie except size 08). This distinctive trait, combined with the use of next generation fans, means reduced consumption and enhanced adaptability to system requests (particularly in partial load operation), guaranteeing boosted seasonal efficiency levels.

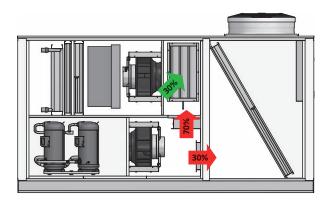
Room air quality

Special attention has been paid to the quality of the air in the room, entrusted to filters that ensure 55% COARSE efficiency as standard. There is also the option of F7, F9 or electronic filters on the fresh air flow.

Active thermodynamic recovery

In the MB3 configuration, the unit with thermodynamic recovery function also takes advantage of the energy contained in the exhaust air, which would otherwise be lost; this ensures better performance and efficiency. All of these technological advantages are controlled by a thermoregulation that is able to manage the different functioning modes, ensuring maximum energy savings in all conditions of use via dedicated software.

MB3 CONFIGURATION WITH TWIN FAN SECTION FOR RECIRCULATION AIR, OUTSIDE AIR AND EXHAUST AIR. TOTAL FREE COOLING FUNCTION (WITH 100% OUTSIDE AIR) AND THERMODYNAMIC RECOVERY FUNCTION AS STANDARD.



ACCESSORIES

AXEC: Axial fans with EC motors with speed control function according to the pressure of condensation and evaporation.

AXECP: EC axial fans with available useful static pressure.

BAC: Interface card BACnet MS/TP pCOnet.

BE: Electric heating coil 2 stages.

BEM: Modulating electric heating coil. **BIP:** Interface card Ethernet-pCOweb (BACNET IP)

BPGC: After heating coil with hot gas.

BW: 2-rows-heating coil with hot water.

BWV2V: 2 -rows -heating coil with hot water, with 2-way modulating valve.

BWV3V: 2-rows heating coil with hot water, with 3-way modulating valve.

CA: Waterproof covers on external air intake.

CF: Flue, only on unit with gas burner module.

DP: Dehumidification control (humidity probe in recovery) and of after-heating (if present).

FT7: F7 efficiency pocket filters positioned on the supply air flow.

FT9: Pocket filters F9 efficiency placed on the flow of supply air.

FTH: Enthalpy free-cooling.

GP: External coil protection grid.

Gx: Heating module with gas burner.

LW: Interface card LonWorks.

MAN: High and low pressure gauges.

MSSM: Flow silencer module, only for rear flow.

MSSR: Recovery silencer module, only for rear air recovery.

PR1: Remote control panel.

PSF2: Differential pressure switch signalling dirty recovery and renewal filters (if any).

PSTEP: Adjusting constant flow, step flow in function of the modulation of the cooling circuit.

RF: Smoke detector.

RFC: Smoke detector and damper management.

RS: Serial card BMS RS485.

SCMRM: Modulating Servo-control with spring return.

SCO2: Probe CO2 (not available on MB1 fittings).

SSV: Supervision systems.

STA: Room temperature probe

SUA: Room humidity probe.

SVOC: Probe VOC (not available on MB1 fittings).

U: Steam ramp installed.

UP: Manufacturer of immersed electrodes supplied and steam ramp in-

stalled

VT: Antivibration mounts.

PERFORMANCE SPECIFICATIONS

MB3

MD3											
Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3	,										
Cooling performances (1)											
Cooling capacity	kW	30,20	39,60	48,70	65,40	75,30	84,30	90,90	107,60	121,40	133,60
Sensible cooling capacity	kW	21,20	27,10	32,60	43,10	48,90	55,20	61,10	70,50	80,60	87,40
Compressors absorbed power	kW	5,30	8,40	9,70	13,10	15,20	17,50	18,50	23,30	27,60	32,60
EER compressors		5,70	4,71	5,00	5,00	4,96	4,82	4,92	4,61	4,39	4,09
Heating performances (2)											
Heating capacity	kW	29,30	39,70	48,50	66,50	76,60	85,80	91,40	110,40	123,40	137,90
Compressors absorbed power	kW	4,40	7,00	8,40	12,40	14,20	15,70	15,50	19,20	21,80	25,50
Compressor COP		6,67	5,68	5,77	5,38	5,39	5,47	5,89	5,73	5,66	5,41

⁽¹⁾ Ambient air 27°C d.b./19°C w.b.; External air 35°C/24°C w.b.; Functioning with 30% of external and expelled air. (2) Ambient air 20°C D.B./15°C W.B.; Outside air 7°C D.B./6°C W.B. (EN14511); Operation with 30% outside and expelled air.

ENERGY INDEX

Size			01	02	03	04	05	06	07	08	09	10
Energy index												
SEER	Н	W/W	4,78	4,68	4,19	3,46	3,37	3,40	3,27	3,46	3,45	3,24
ηςς	Н	%	188,40	184,40	164,60	135,50	131,80	133,00	127,70	135,60	134,90	126,70
Pdesignh	Н	kW	26	35	44	62	70	78	82	99	110	122
SCOP	Н	W/W	4,16	3,97	3,55	2,97	2,95	3,01	2,99	3,15	3,10	2,99
ηsh	Н	%	164	156	139	116	115	117	116	123	121	117

GENERAL TECHNICAL DATA

Size			01	02	03	04	05	06	07	08	09	10
Configuration: MB3												
Power supply												
Power supply	Н						400V 3	~ 50Hz				
Compressor												
Туре	Н	type					Sc	roll				
Number	Н	no.	2	2	2	2	2	2	2	2	2	2
Circuits	Н	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	Н	type					R4	10A				
Partialisation step	Н	no.	3	3	3	3	3	3	3	3	3	3

FANS

External fans

External fans											
Size	'	01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
External fans											
Туре	type	Axial									
Number	no.	1	1	2	2	2	2	2	2	2	2
Size		01	02	03	04	05	06	07	08	09	10
Internal fans											
Configuration: MB3											
Internal fans											
Nominal air flow rate	m³/h	3500	4500	5500	7000	8000	9500	11500	14000	15000	16500
Minimum air flow rate	m³/h	2450	3150	3850	4900	5600	6650	8050	9800	10500	11550
Maximum air flow rate	m³/h	3500	4500	5500	7000	8000	9500	11500	14000	15000	16500

Internal	recovery	fans
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Size			01	02	03	04	05	06	07	08	09	10
Configuration: MB3												
Recovery												
Туре	Н	type	RAD EC									
Number	Н	no.	1	1	1	1	1	1	1	2	2	2

Expulsion fan

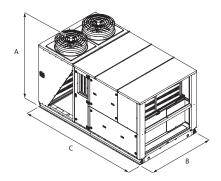
Size			01	02	03	04	05	06	07	08	09	10
Configuration: MB3												
Exhaust												
Туре	Н	type	-	-	-	-	-	-	-	-	-	-
Number	Н	no.	_	_	-	_	_	_	_	_	_	_

Internal flow fans

Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3	'										
Delivery											
Туре	type	RAD EC									
Number	no.	1	1	1	1	1	1	1	1	1	2
Maximum useful head (1)	Pa	150	150	200	200	200	250	250	250	300	300
High static pressure (EN14511) (1)	Pa	-	-	-	-	-	-	-	-	-	-

⁽¹⁾ At the nominal/maximum flow rate with a new, clean air filter.

DIMENSIONS



Size		01	02	03	04	05	06	07	08	09	10
Configuration: MB3											
Dimensions and weights											
A	mm	2061	2061	2061	2373	2373	2373	2373	2373	2373	2373
В	mm	1900	1900	1900	2100	2100	2100	2100	2100	2100	2100
(mm	3400	3400	3400	3400	3400	3400	3400	3400	3400	3400

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AIR/WATER CHILLERS AND HEAT PUMPS

Aermec plant engineering really comes into its own in the field of machines and technology for centralised systems. Aermec offer a full range of chillers and heat pumps from the small domestic system up to that of the large size for the service industry.

The cooling capacity range is extremely wide, and the fittings solutions are equally diverse, for scroll, screw or centrifugal compressor applications.

The careful selection of materials and the close attention paid to every detail of assembly coupled with the huge selection of accessories complete the industry-leading products designed for use in this sector, making Aermec units a real "must" in the world of Italian and European climate control.

	AIR / WATER C	HILLERS AND HEAT PUMPS	Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll comp	ressors				
	ANKI 020-080	Reversible heat pumps inverter		5.8-24.8	6.1-20.8	336
	HMI	Reversible air/water heat pump		3,0-14,5	4,0-15,5	342
	BHP	Air/Water split type reversible heat pump		3,2-11,5	4,0-16,0	348
	HMG			32-60	35-65	
new	HMG P	Reversible air/water heat pump		33-60	36-65	360
	ANLI	Reversible heat pumps inverter		29.0-42.3	31,4-33,3	368
	ANK 020-150	Reversible air/water heat pump optimised for use in heating mode		6,8-39,8	8,0-35,3	374
	SWP	High temperature air cooled heat pumps for production of DHW			1,9	381
new	MIC	Air-water chiller		3		384
	ANL 021-202	Air-water chiller		5.7-43.3		389
	ANL 021H-203H	Reversible air/water heat pump		5,7-49,1	6,2-43,3	395
	NRK 0090-0150	Reversible air/water heat pump optimised for use in heating mode		18,4-31,0	20,8-34,4	406
	NRK 0200-0700	Reversible air/water heat pump optimised for use in heating mode		35,5-148,0	42.3-175.0	410
	NRV 0550	Air-water chiller		108,3		416
	NRB 0282-0754	Air-water chiller		56-202		421
	NRB 0282H-0754H	Reversible air/water heat pump		52-261	57-193	431
	NRG 0282-0804	Air-water chiller		55,8-224,6		439
	NRG 0282H-0804H	Reversible air/water heat pump		52,5-212,0	56,6-214,4	448
	NRGI 151-602	Air-water chiller		31,0-132,2		456
	NRGI 151H-602H	Reversible air/water heat pump		28,9-123,7	31,6-133,9	461
	NRL 0280-0350	Air-water chiller		56,0-82,0		467
	NRL 0280H-0350H	Reversible air/water heat pump		51,0-76,0	58,0-86,0	472
	NRG 0800-2400	Air-water chiller		225,7-725,0		477
	NRG 0800H-3600H	Reversible air/water heat pump		194,9-962,3	209,6-991,9	486
	NRB 0800-2406	Air-water chiller (plate heat exchanger)		216,9-716,9		495
	NRB 0800-2406 Q	Air-water chiller (shell and tube heat exchanger)		216,9-716,9		504
	NRB 0800H-2406H	Reversible air/water heat pump (plate heat exchanger)		196,4-647,7	209,8-683,9	513
	NRB 0800W-2406W	Reversible air/water heat pump (shell and tube heat exchanger)		196,4-647,7	209,8-683,9	522
	CL 025-200	Air-water chiller with Plug Fan		5,8-41,0		530
	CL 025H-200H	Reversible air/water heat pump with Plug Fan		6,5-50,9	7,7-44,8	535
	NLC 0280-1250	Air-water chiller with Plug Fan		53-322		541
	NLC 0280H-1250H	Reversible air/water heat pump with Plug Fan		53-322	55-342	548
	Units with screw comp	ressors				
	NSM 1402-9603	Air-water chiller		302-2100		553
	NSMI 1251-6102	Chiller with Inverter screw compressors		285,6-1342,6		567
	NSH	Reversible air/water heat pump		251-731	281-786	571
	NSG	Air-water chiller (with R1234ze)		228-1580		577
	Units with centrifugal	compressors				
	TBA 1300-4325	Air-water chiller		328-1404		589
	TBG 1230-4310	Air-water chiller		200-1165		594























ANKI 020-080

Reversible air/water heat pump

Cooling capacity 5,8 ÷ 24,8 kW - Heating capacity 6,1 ÷ 20,8 kW



- Production of hot water up to 60 °C
- Production of hot domestic water with outside temperatures from –20 °C up to 42 °C
- · Quick & easy installation





DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.

It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators.

All the units are equipped with inverter scroll compressors, axial fans, external coils with aluminium louvers, a plate heat exchanger on the side. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

X With inverter pump

FEATURES

Operating field

Working at full load up to -20°C outside air temperature in winter, and up to 46°C in summer. Possibility production technical hot water production up to 60°C (for more information see the technical documentation).

Version with Integrated hydronic kit

If a plug&play solution is required, there's also a version with an integrated hydronic unit containing the main hydraulic components including the water filter (supplied).

■ The water filter must be installed to validate the warranty.

CONTROL PCO

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log. The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

ACCESSORIES

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access

point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

MOD485K: RS-485 simplified interface for supervision systems with MODBUS protocol.

MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.

PGD1: Allows you to control the unit at a distance.

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.

SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.

SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/ return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

VT: Anti-vibration supports.

BDX: Condensate drip.

BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

FACTORY FITTED ACCESSORIES

KR: Anti-freeze electric heater for the plate heat exchanger.

KRB: Electric anti-freeze resistance kit for base.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	020	025	040	045	070	075	080
AERLINK	°,X	•	•	•	•	•	•	•
MOD485K	°,X	•	•	•	•	•	•	
MULTICONTROL	°,X	•	•	•	•	•	•	•
PGD1	°,X	•	•	•	•	•	•	•
PR3	°,X	•	•	•	•	•	•	•
SAF (1)	°,X	•	•	•	•	•	•	
SDHW (2)	°,X	•	•	•	•	•	•	•
SGD	°,X	•	•	•	•	•	•	•
SPLW (3)	°,X	•	•	•		•		

- For more information about SAF refer to the dedicated documentation.
 Probe required for MULTICONTROL for managing the domestic hot water system.
 Probe required for MULTICONTROL to manage the secondary circuit system.

Condensation control temperature

Ver	020	025	040	045	070	075	080
°,X,	DCPX71	DCPX71	DCPX71	DCPX71	DCPX71	DCPX71	DCPX7
Antivibration							
Ver	020	025	040	045	070	075	080
°,X	VT9	VT9	VT9	VT9	VT9	VT9	VT9
Condensate drip							
Ver	020	025	040	045	070	075	080
°,Х	BDX30	BDX30	BDX30	BDX30	BDX50	BDX50	BDX50
leater exchanger							
Ver	020	025	040	045	070	075	080
°,X	KR2	KR2	KR2	KR2	KR2	KR2	KR2

Electric heater kit for the base

Ver	020	025	040	045	070	075	080
°,X	KRB1	KRB1	KRB1	KRB1	KRB2	KRB2	KRB2

CONFIGURATOR

CONFIGUE	RATOR
Field	Description
1,2,3,4	ANKI
5,6,7	Size 020, 025, 040, 045, 070, 075, 080
8	Model
Н	Heat pump
9	Version
۰	Standard
Χ	With inverter pump
10	Heat recovery
0	Without heat recovery
11	Coils
۰	Copper-aluminium
V	Copper pieps-Coated aluminium fins
12	Fans
•	Standard
F	Phase cut
J	Inverter
13	Operating field
•	Electronic thermostatic expansion valve
14	Evaporator
۰	Standard - PED
15	Power supply
М	230V ~ 50Hz (1)
T	400V ~ 3N 50Hz (2)
16	Field for future development
٥	Future developments

⁽¹⁾ For sizes from 020 \div 045 (2) For sizes from 070 \div 080

PERFORMANCE SPECIFICATIONS

Version without pump

ANKI - 230V-1-50Hz

Size		020	025	040	045
Power supply: M	'				
Cooling performance 12 °C/7 °C(1)					
Cooling capacity	kW	5,8	7,3	9,4	11,8
Input power	kW	2,0	2,6	3,2	4,2
Cooling total input current	A	8,3	11,0	14,0	18,0
EER	W/W	2,98	2,80	2,98	2,79
Water flow rate system side	l/h	1005	1256	1613	2024
Pressure drop system side	kPa	16	22	13	19
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	6,2	7,7	9,3	12,3
Input power	kW	1,9	2,4	3,0	4,0
Heating total input current	A	8,2	10,0	13,0	18,0
COP	W/W	3,26	3,22	3,08	3,03
Water flow rate system side	l/h	1077	1345	1619	2131
Pressure drop system side	kPa	14	21	10	17
Power supply					
Power supply		230-1-50	230-1-50	230-1-50	230-1-50

ANKI - 400V-3N-50Hz

Size	,	070	075	080
Power supply: T				
Cooling performance 12 °C/7 °C(1)				
Cooling capacity	kW	13,7	16,4	18,6
Input power	kW	4,8	6,2	7,6
Cooling total input current	A	7,3	9,4	11,0
EER	W/W	2,85	2,67	2,44
Water flow rate system side	l/h	2354	2818	3196
Pressure drop system side	kPa	17	25	31
Heating performance 40 °C / 45 °C (2)				
Heating capacity	kW	15,3	17,7	20,2
Input power	kW	4,8	6,0	7,1
Heating total input current	A	7,3	9,1	11,0
COP	W/W	3,21	2,97	2,83
Water flow rate system side	l/h	2660	3072	3507
Pressure drop system side	kPa	17	23	30
Power supply				
Power supply		400-3N-50	400-3N-50	400-3N-50

Version with pump

ANKI - 230V-1-50Hz

Size		020	025	040	045
Power supply: M	'				
Cooling performance 12 °C/7 °C(1)					
Cooling capacity	kW	5,8	7,3	9,4	11,8
Input power	kW	2,0	2,7	3,2	4,3
Cooling total input current	A	8,9	12,0	14,0	19,0
EER	W/W	2,88	2,72	2,90	2,73
Water flow rate system side	l/h	1005	1256	1613	2024
Useful head system side	kPa	75	68	73	60
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	6,2	7,7	9,3	12,3
Input power	kW	2,0	2,5	3,1	4,1
Heating total input current	A	8,7	11,0	14,0	18,0
COP	W/W	3,14	3,11	3,00	2,96
Water flow rate system side	I/h	1077	1345	1619	2131
Useful head system side	kPa	76	67	74	59
Power supply					
Power supply		230-1-50	230-1-50	230-1-50	230-1-50

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

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ANKI - 400V-3N-50Hz

Size		070	075	080
Power supply: T				
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	13,8	16,5	18,7
Input power	kW	4,8	6,2	7,7
Cooling total input current	A	8,3	10,0	12,0
EER	W/W	2,88	2,68	2,44
Water flow rate system side	l/h	2354	2818	3196
Useful head system side	kPa	82	62	43
Heating performance 40 °C / 45 °C (2)				
Heating capacity	kW	15,2	17,6	20,1
Input power	kW	4,8	6,0	7,2
Heating total input current	A	8,3	10,0	12,0
COP	W/W	3,19	2,95	2,80
Water flow rate system side	l/h	2660	3072	3507
Useful head system side	kPa	73	55	33
Power supply				
Power supply		400-3N-50	400-3N-50	400-3N-50

ENERGY DATA

Size			020	025	040	045
Power supply: M			1			
	rage ambient conditions	(average) - 35 °C - Pdesignl	1 ≤ 70 kW (1)			
Power supply: M UE 811/2013 performance in average Efficiency energy class Pedesignh Insh SCOP UE 811/2013 performance in average Efficiency energy class Pedesignh Insh SCOP	0	-	A+	A+	A+	A+
	Χ		A++	A++	A+	A+
Pdesignh	°,X	kW	6,00	7,00	9,00	12,00
	0	%	140,00	139,00	133,00	125,00
וואוו	Х	%	150,00	150,00	141,00	131,00
fficiency energy class — designh sh — COP — IE 811/2013 performance in average ambie fficiency energy class designh — sh —	0	W/W	3,58	3,55	3,40	3,20
	Х	W/W	3,83	3,83	3,60	3,35
UE 811/2013 performance in ave	rage ambient conditions	(average) - 55 °C - Pdesignl	1 ≤ 70 kW (2)			
Efficiency energy class	°,X		A+	A+	-	-
Power supply: M E 811/2013 performance in average an efficiency energy class designh Sch COP E 811/2013 performance in average an efficiency energy class designh Sch COP EER - 12/7 (EN14825: 2018) (3)	0	kW	6,00	7,00	-	-
Pdesignn	Х	kW	5,00	7,00	-	-
	0	%	112,00	113,00	-	-
ηsn	Х	%	113,00	115,00	-	-
CCOD	0	W/W	2,88	2,90	-	-
SCUP	Х	W/W	2,90	2,95	-	-
SEER - 12/7 (EN14825: 2018) (3)						
CEED	0	W/W	3,50	3,54	3,76	3,77
OFFIC	Х	W/W	4,12	4,25	4,38	4,37
C	٥	%	137,10	138,40	147,30	147,70
EER - 12/7 (EN14825: 2018) (3)	х	%	161.70	167,00	172,30	171.90

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)
(3) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

Size			070	075	080
Power supply: T					
UE 811/2013 performance in ave	erage ambient conditions (a	verage) - 35 °C - Pdesignh ≤ 70 k	W (1)		
Efficiency energy class	°,X		A+	A+	A+
Ddocianh	0	kW	14,00	17,00	19,00
Pdesignh	Х	kW	14,00	16,00	19,00
nch	0	%	137,00	130,00	129,00
ηsh	Х	%	141,00	134,00	133,00
CCOD	0	W/W	3,50	3,33	3,30
SCOP	χ	W/W	3,50	3,43	3,40
UE 811/2013 performance in ave	erage ambient conditions (a	verage) - 55 °C - Pdesignh ≤ 70 k	W (2)		
Efficiency energy class	°,X		A+	A+	A+
Distant	0	kW	14,00	16,00	19,00
Pdesignh	Х	kW	13,00	16,00	18,00
	0	%	113,00	112,00	110,00
ηsh	X	%	112,00	112,00	110,00
CCOD	0	W/W	2,90	2,88	2,83
SCOP	X	W/W	2,88	2,88	2,83
SEER - 12/7 (EN14825: 2018) (3)					
CLLD	0	W/W	3,49	3,47	3,44
SEER	X	W/W	3,78	3,81	3,77
C	0	%	136,70	135,60	134,40
Seasonal efficiency	Х	%	148,00	149,40	147,80

ELECTRIC DATA

Size			020	025	040	045	070	075	080
Electric data									
Maximum current (FLA)	0	А	12,1	14,1	20,0	23,6	12,5	13,5	15,0
Maximum current (FLA)	Х	A	12,9	14,9	20,8	24,4	13,6	13,5 14,6 15,0 16,1	16,1
Deele susses (LDA)	0	А	8,0	8,0	10,0	10,0	15,0	15,0	15,0
Peak current (LRA)	Х	А	8,8	8,8	10,8	10,8	16,1	16,1	16,1
Power supply									
Power supply	°,X		230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	400V ~ 3N 50Hz	400V ~ 3N 50Hz	400V ~ 3N 50Hz

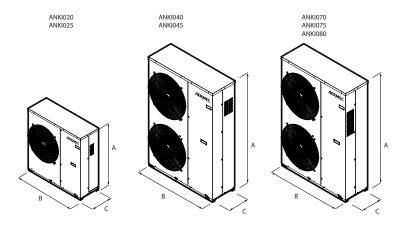
GENERAL TECHNICAL DATA

Size			020	025	040	045	070	075	080
Compressor									
Туре	°,X	type	Rotary	Rotary	Rotary	Rotary	Scroll	Scroll	Scroll
Compressor regulation	°,X	Type				Inverter			
Number	°,X	no.	1	1	1	1	1	1	1
Circuits	°,X	no.	1	1	1	1	1	1	1
Refrigerant	°,X	type				R410A			
Refrigerant charge (1)	°,X	kg	1,4	1,4	2,3	2,3	3,5	3,5	3,5
System side heat exchanger									
Type	°,X	type				Brazed plate			
Number	°,X	no.	1	1	1	1	1	1	1
Hydraulic connections									
Connections (in/out)	°,X	Type				Gas-M			
Size (in)	°,X	Ø				1"			
Size (out)	°,X	Ø				1"			
Fan									
Туре	°,X	type				Axial			
Fan motor	°,X	type				Asynchronous			
Number	°,X	no.	1	1	2	2	2	2	2
Air flow rate	°,X	m³/h	3590	3590	7480	7480	7400	7400	7400
Sound data calculated in cooling mode (2)									
Sound power level	°,X	dB(A)	64,0	65,4	66,7	67,7	67,7	69,0	69,0
Sound pressure level (10 m)	°,X	dB(A)	32,7	34,1	35,4	36,3	36,3	37,6	37,6

⁽¹⁾ Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)
(3) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			020	025	040	045	070	075	080
Dimensions and weights									
A	°,Х	mm	1028	1028	1481	1481	1481	1481	1481
В	°,X	mm	1000	1000	1000	1000	1000	1000	1000
C	°,Х	mm	346	346	346	346	450	450	450
Faratamaiaht	0	kg	80	80	113	113	174	174	174
Empty weight	χ	kg	82	82	115	115	178	178	178





















HMI

Reversible air/water heat pump

Cooling capacity 3,0 ÷ 14,5 kW - Heating capacity 4,0 ÷ 15,5 kW



- New R32 ecological refrigerant gas
- Production of hot water up to 60 °C
- Production of hot domestic water with external temperatures from -25 °C to 48 °C
- Quick & easy installation









DESCRIPTION

Reversible outdoor heat pump for air-conditioning systems where, in addition to cooling rooms, high-temperature hot water is required for heating or for the production of domestic hot water. For the production of DHW it is mandatory to combine it with the Aermec compatible domestic hot water storage tank.

HMI is designed to meet the needs of both the new constructions market and the renovation market, **replacing or working alongside conventional boilers**.

It can be combined with low-temperature emission systems such as floor heating or fan coils, and also with more traditional radiators, **and comes supplied with the main hydraulic components needed, thereby facilitating the final installation**.

FEATURES

Operating limits

Working at full load up to -25 °C outside air temperature in winter, and up to 48 °C in summer. Maximum temperature of water produced in heating mode 60 °C

- Refrigerant circuit with economizer.
- DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
- Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
- Electronic expansion valve.

Main hydraulic components

- Inverter pump.
- Plate heat exchanger.
- Expansion tank
- Safety valve.
- Flow switch.
- Water filter supplied (mandatory installation).

Regulation

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Adjustment via a multi-language touch-screen control panel:

- Management of a 3 way diverting valve (not supplied) for the production of domestic hot water.
- Management of a 2 way valve (not supplied) for shutting off part of the system.
- Weekly programming in time periods.
- Auto-restart function.
- Emergency operation (a supplementary heat source may be activated).
- **Quick hot water** function, for quickly heating domestic hot water.
- Weather dependent mode function for climate control.
- Quiet function for reduced noise operation (programmable with a timer).
- Condensation check
- When the anti-legionella cycle is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70 °C) that weakens the bacteria responsible for the infection.

Special golden fin coil

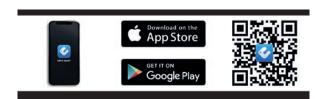
www.aermec.com

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



Smart APP Ewpe

The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.



ACCESSORIES

Aermec compatible DHW storage tank.

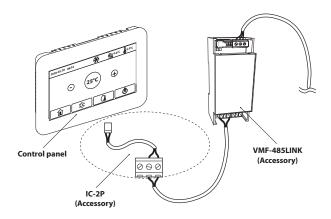
HMICB15: Connection cable for the control panel. Cable length 15m. **IC-2P:** Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.

VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

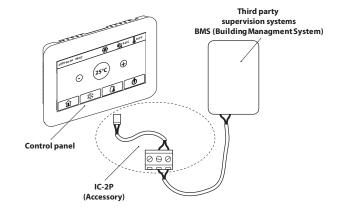
LOGATW: Diagnostic tool for air-water heat pumps.

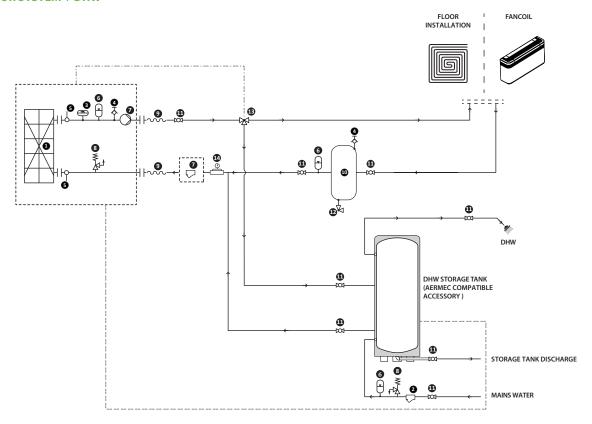
For more information about VMF system, refer to the dedicated documentation.

Connection with VMF-485LINK



Connection with third party supervision systems





COMPONENTS AS STANDARD

- Plate heat exchanger
- Water filter (as standard) 2
- 3 Flow switch
- Air drain valve 4
- Water temperature sensor (IN/OUT)
- Expansion vessel 6
- Pump

8 Pressure relief valve HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

- Air drain valve
- Anti-vibration joints
- System storage tank (recommended installation if the system water content is lower than that indicated in the technical manual). 10
- 11 Flow shut-off valves
- Expansion vessel 6
- 12 Drain valve
- 3 way valve 13
- 14 Loading unit

PERFORMANCE SPECIFICATIONS

EUROVENT TECHNICAL DATA EN 14511:2013

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
Cooling performance 12 °C/7 °C - EN 14511:2013 (1)												
Cooling capacity	kW	3,00	4,00	5,00	7,80	7,80	9,50	9,50	12,00	12,00	13,00	13,00
Input power	kW	0,94	1,29	1,61	2,48	2,64	3,20	3,11	4,14	4,38	4,96	4,91
Input current	А	4,3	5,9	7,7	11,4	4,0	14,7	4,7	19,0	6,7	22,7	7,5
EER	W/W	3,19	3,10	3,11	3,15	2,95	2,97	3,05	2,90	2,74	2,62	2,65
Water flow rate	l/h	516	672	860	1320	1270	1650	1665	2080	2065	2270	2231
Useful head	kPa	75,0	74,0	74,0	71,0	71,0	65,0	64,0	51,0	51,0	45,0	46,0
Heating performance 40 °C / 45 °C - EN 14511:2013 (2)												
Heating capacity	kW	4,00	6,00	7,50	10,00	10,00	12,00	12,00	14,00	14,00	15,50	15,50
Input power	kW	1,00	1,58	2,00	2,70	2,70	3,48	3,48	4,18	4,18	4,70	4,70
Input current	Α	4,6	7,2	9,2	12,4	4,1	15,9	5,3	19,1	6,4	21,5	7,1
COP	W/W	4,00	3,80	3,75	3,70	3,70	3,45	3,45	3,35	3,35	3,30	3,30
Water flow rate	l/h	690	977	1240	1700	1710	2050	2040	2500	2474	2700	2734
Useful head	kPa	74,0	73,0	72,0	63,0	63,0	52,0	52,0	37,0	38,0	30,0	29,0

- (1) Data EN 14511:2013; System side water heat exchanger 12 °C / 7 °C; External air 35 °C (2) Data EN 14511:2013; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
Cooling performance 23 °C / 18 °C - EN 14511:2013 (1)												
Cooling capacity	kW	3,80	5,80	6,80	8,80	8,80	11,00	11,00	12,50	12,50	14,50	14,50
Input power	kW	0,82	1,32	1,55	1,96	1,96	2,56	2,56	3,05	3,05	3,82	3,82
Input current	А	3,8	6,0	7,1	9,0	3,0	11,7	3,9	14,0	4,6	17,5	5,8
EER	W/W	4,63	4,39	4,39	4,49	4,49	4,30	4,30	4,10	4,10	3,80	3,80
Water flow rate	l/h	660	981	1220	1510	1500	1926	1900	2238	2200	2640	2570
Useful head	kPa	74,0	73,0	72,0	69,0	69,0	56,0	57,0	46,0	47,0	32,0	34,0
Heating performance 30 °C/35 °C - EN 14511:2013 (2)											
Heating capacity	kW	4,00	6,00	7,50	10,00	10,00	12,00	12,00	14,00	14,00	15,50	15,50
Input power	kW	0,79	1,20	1,63	2,17	2,17	2,64	2,64	3,22	3,22	3,60	3,60
Input current	А	3,6	5,5	7,5	9,9	3,3	12,1	4,0	14,7	4,9	16,5	5,5
COP	W/W	5,10	5,00	4,60	4,61	4,61	4,55	4,55	4,35	4,35	4,31	4,31
Water flow rate	l/h	690	1030	1247	1736	1720	2137	2100	2524	2400	2703	2626
Useful head	kPa	74,0	73,0	72,0	62,0	62,0	49,0	50,0	36,0	40,0	30,0	32,0

- (1) Data EN 14511:2013; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2013; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

EUROVENT TECHNICAL DATA EN 14511:2018

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	2,98	3,97	4,96	7,75	7,75	9,45	9,45	11,94	11,94	12,95	12,95
Input power	kW	0,94	1,29	1,61	2,48	2,64	3,20	3,11	4,14	4,38	4,96	4,91
Input current	A	4,7	6,4	7,9	12,0	4,6	15,0	5,3	20,0	7,3	23,0	8,1
EER	W/W	3,17	3,08	3,08	3,12	2,94	2,95	3,04	2,88	2,73	2,61	2,64
Water flow rate	l/h	504	673	842	1318	1318	1609	1609	2038	2038	2210	2210
Useful head	kPa	74,0	74,0	74,0	69,0	69,0	64,0	64,0	52,0	52,0	47,0	47,0
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	4,03	6,04	7,55	10,06	10,06	12,06	12,06	14,05	14,05	15,54	15,54
Input power	kW	1,00	1,58	2,00	2,70	2,70	3,48	3,48	4,18	4,18	4,70	4,70
Input current	A	5,1	7,8	9,7	13,0	4,7	17,0	5,9	20,0	6,9	22,0	7,7
COP	W/W	4,03	3,83	3,78	3,72	3,72	3,46	3,46	3,36	3,36	3,31	3,31
Water flow rate	l/h	710	1062	1326	1762	1762	2110	2110	2456	2456	2714	2714
Useful head	kPa	74,0	73,0	71,0	60,0	60,0	50,0	50,0	39,0	39,0	29,0	29,0

- (1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	3,77	5,76	6,75	8,75	8,75	10,94	10,94	12,44	12,44	14,45	14,45
Input power	kW	0,82	1,32	1,55	1,96	1,96	2,56	2,56	3,05	3,05	3,82	3,82
Input current	Α	4,2	6,6	7,6	9,5	3,6	12,0	4,5	15,0	5,2	18,0	6,4
EER	W/W	4,60	4,36	4,36	4,46	4,46	4,27	4,27	4,08	4,08	3,78	3,78
Water flow rate	l/h	641	982	1152	1495	1495	1873	1873	2132	2132	2478	2478
Useful head	kPa	74,0	74,0	73,0	66,0	66,0	57,0	57,0	50,0	50,0	38,0	38,0
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	4,03	6,04	7,55	10,06	10,06	12,06	12,06	14,05	14,05	15,54	15,54
Input power	kW	0,79	1,20	1,63	2,17	2,17	2,64	2,64	3,22	3,22	3,60	3,60
Input current	Α	4,1	6,0	8,0	11,0	3,9	13,0	4,6	15,0	5,5	17,0	6,1
COP	W/W	5,10	5,04	4,63	4,63	4,63	4,57	4,57	4,36	4,36	4,32	4,32
Water flow rate	l/h	708	1058	1321	1756	1756	2102	2102	2447	2447	2704	2704
Useful head	kPa	74,0	73,0	71,0	60,0	60,0	50,0	50,0	39,0	39,0	30,0	30,0

- (1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)												
Pdesignh	kW	5	5	6	9	9	11	11	11	11	13	13
ηsh	%	185,00	185,00	183,00	176,00	176,00	175,00	175,00	168,00	168,00	164,00	164,00
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A++	A++	A++	A++
UE 811/2013 performance in average ambient conditio	ns (averag	e) - 55 °C - Pde	signh ≤ 70 k	W (2)								
Pdesignh	kW	6	6	7	8	8	10	10	11	11	13	13
ηsh	%	126,00	126,00	127,00	128,00	128,00	126,00	126,00	125,00	125,00	125,00	125,00
Efficiency energy class		A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++

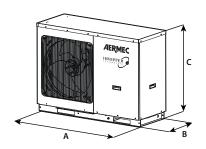
⁽¹⁾ Efficiencies for low temperature applications (35 °C) (2) Efficiencies for average temperature applications (55 °C)

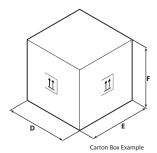
GENERAL TECHNICAL DATA

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
Electric data												
Rated current input (1)	A	10,4	10,4	10,4	23,0	12,0	25,0	12,0	29,0	12,0	29,0	12,0
Compressor												-
Туре	type					Ro	otary DC Inver	ter				
Number	no.	1	1	1	1	1	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type						R32					
Potential global heating	GWP	675 kgCO₂eq										
Refrigerant charge (2)	kg	0,9	0,9	0,9	2,2	2,2	2,2	2,2	2,2	2,2	2,2	2,2
Oil	Туре						FW68DA					
Total oil charge	kg	0,5	0,5	0,5	1,1	1,1	1,1	1,1	1,1	1,1	1,1	1,1
System side heat exchanger												
Туре	type						Brazed plate					
Number	no.	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	Туре						Gas Maschio					
Size (in)	Ø						1″					
Size (out)	Ø						1"					
Fan												
Туре	type						Axial					
Fan motor	type						Inverter					
Number	no.	1	1	1	1	1	1	1	1	1	1	1
Air flow rate	m³/h	2600	2600	2600	4500	4500	4500	4500	4500	4500	4500	4500
Sound data calculated in cooling mode (3)												
Sound pressure level (1 m)	dB(A)	51,0	52,0	53,0	56,0	56,0	56,0	56,0	57,0	57,0	59,0	59,0
Sound data calculated in heating mode (3)												
Sound power level	dB(A)	64,0	64,0	65,0	69,0	69,0	69,0	69,0	70,0	70,0	72,0	72,0
Sound pressure level (1 m)	dB(A)	50,0	50,0	51,0	54,0	54,0	54,0	54,0	55,0	55,0	57,0	57,0
Power supply												
Power supply			220-240	V ~ 50Hz		380-415V 3N	220-240V ~	380-415V 3N	220-240V ~	380-415V 3N	220-240V ~	380-415V 3N
i owei suppiy			220-2 4 0	V JUNZ		~ 50Hz	50Hz	~ 50Hz	50Hz	~ 50Hz	50Hz	~ 50Hz

⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(3) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS





		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
Dimensions and weights		11111010	111111000			1111111001					111111100	
A	mm	1150	1150	1150	1200	1200	1200	1200	1200	1200	1200	1200
В	mm	345	345	345	460	460	460	460	460	460	460	460
(mm	758	758	758	878	878	878	878	878	878	878	878
D	mm	1260	1260	1260	1295	1295	1295	1295	1295	1295	1295	1295
E	mm	490	490	490	595	595	595	595	595	595	595	595
F	mm	900	900	900	1020	1020	1020	1020	1020	1020	1020	1020
Net weight	kg	96,0	96,0	96,0	151,0	151,0	151,0	151,0	151,0	151,0	151,0	151,0
Weight for transport	kg	109,0	109,0	109,0	166,0	166,0	166,0	166,0	166,0	166,0	166,0	166,0























BHP

Reversible air/water split heat pump

Cooling capacity 3,2 ÷ 11,5 kW - Heating capacity 4,0 ÷ 16,0 kW



- Indoor unit available in two versions, with and without DHW
- New R32 ecological refrigerant gas
- Production of hot water up to 60 °C
- · Anti-legionella function
- Multi-language touch-screen control panel





DESCRIPTION

BHP It's the new "split" type inverter heat pump system, more efficient than standard boiler systems as it guarantees sustainable, efficient heating, cooling and domestic hot water supply in every season.

BHP is designed to meet the needs of both the new constructions market and the renovation market, replacing or working alongside conventional boilers.

The system can be installed in systems with any hydronic terminal, and is already supplied with the main hydraulic components, thus facilitating final installation.

The indoor unit comes in two versions:

- BHP_W wall-mounting, without DHW storage tank but complete with a 3-way DHW-system diverting valve. For the production of DHW it is mandatory to combine it with a domestic hot water storage tank Aermec compatibile.
- BHP_F with base, complete with DHW storage tank.

FEATURES

Main hydraulic components

BHP outdoor unit

- inverter compressor,
- finned pack heat exchanger with copper pipes and aluminium louvers, with protective golden fin treatment,
- economizer,
- electronic valve,
- DC axial brushless fan,
- electric heater for the base.

BHP_W wall indoor unit

- plate heat exchanger,
- flow switch,
- inverter pump,
- expansion tank,
- drain valve,
- safety valve,
- Electric resistance system side,
- 3 way valve,
- DHW-system connections,
- water filter supplied (mandatory installation).

BHP Findoor base unit

- plate heat exchanger,
- flow switch,
- inverter pump,
- expansion tank,
- drain valve,safety valve,
- Electric resistance system side,
- 3 way valve,
- DHW-system connections,
- water filter supplied (mandatory installation),
- DHW storage tank of 185 litres with coil and supplementary electric heater, and anti-legionella function.

— tank with Titanium electronic sacrificial anode.

The indoor and outdoor units are connected by means of suitably sized cooling lines (supplied by the installer).

Cooling circuit use R32 (A2L) refrigerant with low GWP.

Operating limits

Full load operation down to -25°C (outside air temperature in winter), and up to 48°C in summer.

Regulations

Adjustment via multi-language touch-screen control panel:

- ganagement of a 3-way diverting valve for the production of domestic hot water.
- management of a 2 way valve (not supplied) for shutting off part of the system,
- weekly programming in time periods,
- auto-restart function,
- emergency operation,
- function **quick water heating** for a quick heating of domestic hot water
- forced operating mode,
- intelligent operation based on weather conditions for climate adjustment
- quiet function for reduced noise operation (programmable with a timer),
- Anti-freeze function,
- condensation check,

- when the anti-legionella cycle is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70 °C) that weakens the bacteria responsible for the infection,
- pre heating function of the floor to pre-heat the floor system before unit commissioning.



Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



Smart APP Ewpe

The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.



ACCESSORIES

Aermec compatible DHW storage tank. For the production of DHW it is mandatory to combine it with BHP_W.

IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.

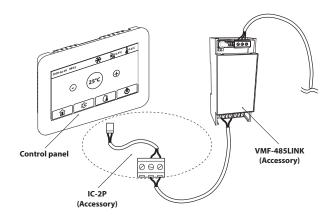
VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

LOGATW: Diagnostic tool for air-water heat pumps.

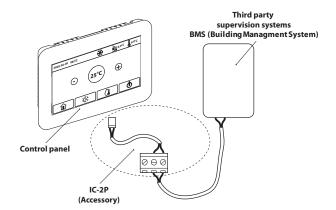
Compatibility with VMF system

For more information about VMF system, refer to the dedicated documentation

Connection with VMF-485LINK

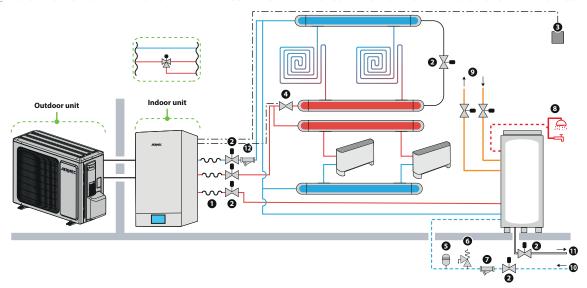


Connection with third party supervision systems



www.aermec.com

BHP_W: DOMESTIC HOT WATER STORAGE TANK CONNECTION AND CONNECTION TO THE FLOOR SYSTEM AND FCU



HYDRAULIC COMPONENTS SUPPLIED AS STANDARD IN THE INDOOR UNIT

- Plate heat exchanger
- Flow switch
- Inverter circulator
- Expansion vessel
- Drain valve
- Pressure relief valve
- Electric resistance system side
- 3 way valve
- DHW-system connections

SUPPLIED HYDRAULIC COMPONENTS

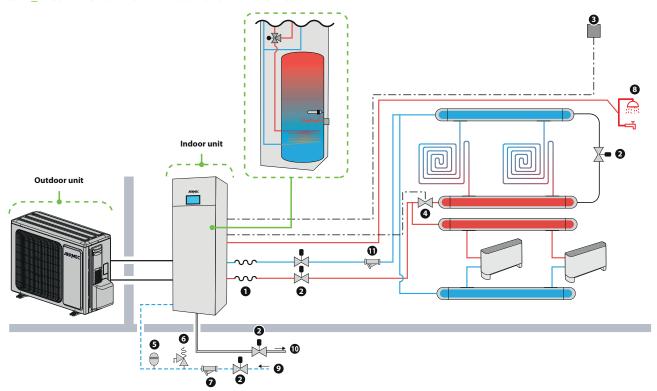
12. Water filter supplied (mandatory installation).

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

- 1. Anti-vibration joints
- 2. Shut-off tap
- 3. Ambient thermostat
- 4. 2 way valve
- 5. Expansion tank NOT supplied
- Safety valve supplied with Aermec DHW storage system compatible (installation is mandatory)

 7. Water filter NOT supplied (installation is mandatory)
- 8. Hot domestic water
- 9. Auxiliary heat sources
- 10. Aqueduct
- **11.** Storage discharge

BHP_F: CONNECTION TO THE FLOOR SYSTEM AND FCU



HYDRAULIC COMPONENTS SUPPLIED AS STANDARD IN THE INDOOR UNIT

- Plate heat exchanger
- Flow switch
- Inverter pump
- Expansion vessel
- Drain valve
- Pressure relief valve
- Electric resistance system side
- 3 way valveDHW-system connections

SUPPLIED HYDRAULIC COMPONENTS

11. Water filter supplied (mandatory installation).

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE

INSTALLER'S RESPONSIBILITY)

- 1. Anti-vibration joints
- 2. Shut-off tap
- 3. Ambient thermostat
- 4. 2 way valve
- Expansion tank **NOT supplied**
- Safety valve **NOT** supplied (installation is mandatory)
 Water filter **NOT** supplied (installation is mandatory)
- 8. Hot domestic water
- **9.** Aqueduct
- **10.** Storage discharge

PERFORMANCE SPECIFICATIONS

Technical data Wall unit

Indoor unit		BHP060W	BHP060W	BHP100W	BHP100W	BHP160W	BHP160W	BHP160W
Outdoor unit		BHP040	BHP060	BHP080	BHP100	BHP120	BHP140	BHP160
Cooling performance 12 °C / 7 °C (1)								
Cooling capacity	kW	3,20	4,10	5,30	6,50	10,07	11,30	11,60
Input power	kW	0,94	1,28	1,73	2,27	3,65	4,04	4,38
EER	W/W	3,42	3,20	3,06	2,86	2,93	2,80	2,65
Water flow rate system side	l/h	550	703	912	1118	1840	1944	1995
Useful head system side	kPa	76	74	70	63	56	54	48
Heating performance 40 °C / 45 °C (2)								
Heating capacity	kW	4,00	5,90	8,00	9,50	12,40	14,50	16,10
Input power	kW	1,02	1,51	2,14	2,64	3,22	3,87	4,41
COP	W/W	3,92	3,91	3,74	3,60	3,85	3,75	3,65
Water flow rate system side	l/h	688	1015	1376	1634	2133	2494	2769
Useful head system side	kPa	74	67	51	36	45	26	11
Cooling performance 23 °C / 18 °C (3)								
Cooling capacity	kW	3,80	5,80	7,00	8,52	11,00	12,60	13,00
Input power	kW	0,82	1,32	1,75	2,25	2,50	3,41	3,60
EER	W/W	4,63	4,40	4,00	3,79	4,40	3,70	3,61
Water flow rate system side	l/h	655	992	1204	1465	1892	2167	2236
Useful head system side	kPa	75	67	60	46	54	40	34
Heating performance 30 °C / 35 °C (4)								
Heating capacity	kW	4,00	6,00	8,00	9,50	12,00	14,00	15,50
Input power	kW	0,78	1,20	1,70	2,07	2,40	2,98	3,44
COP	W/W	5,13	5,00	4,71	4,59	5,00	4,70	4,50
Water flow rate system side	l/h	688	1032	1376	1634	2064	2408	2666
Useful head system side	kPa	74	66	51	36	45	26	15
Heating performance 47 °C / 55 °C								
Heating capacity	kW	3,60	5,40	7,20	8,55	12,00	14,00	16,00
Input power	kW	1,40	2,16	3,05	3,72	3,81	4,52	5,42
COP	W/W	2,57	2,50	2,36	2,30	3,15	3,10	2,95
Useful head system side	kPa	27	19	19	12	65	60	53

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b. (3) Data EN 14511:2022; System side water heat exchanger 23 °C / 18 °C; External air 35 °C (4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Three-phase Wall unit technical data

Indoor unit		BHP100WT	BHP100WT	BHP160WT	BHP160WT	BHP160WT
Outdoor unit		BHP080T	BHP100T	BHP120T	BHP140T	BHP160T
Cooling performance 12 °C / 7 °C (1)						
Cooling capacity	kW	7,60	8,20	10,07	11,30	11,60
Input power	kW	2,35	2,73	3,65	4,04	4,38
EER	W/W	3,23	3,00	2,93	2,80	2,65
Water flow rate system side	l/h	1307	1410	1840	1944	1995
Useful head system side	kPa	66	58	56	54	48
Heating performance 40 °C / 45 °C (2)						
Heating capacity	kW	8,00	10,20	12,40	14,50	16,13
Input power	kW	1,93	2,55	3,22	3,87	4,42
COP	W/W	4,15	4,00	3,85	3,75	3,65
Water flow rate system side	l/h	1376	1720	2133	2494	2774
Useful head system side	kPa	60	45	45	26	11
Cooling performance 23 °C / 18 °C (3)						
Cooling capacity	kW	8,50	10,00	11,00	12,60	13,00
Input power	kW	1,74	2,33	2,50	3,41	3,60
EER	W/W	4,89	4,29	4,40	3,70	3,61
Water flow rate system side	l/h	1462	1720	1892	2167	2236
Useful head system side	kPa	54	41	54	40	34
Heating performance 30 °C / 35 °C (4)						
Heating capacity	kW	8,00	10,00	12,00	14,00	15,54
Input power	kW	1,63	2,15	2,40	2,98	3,45
COP	W/W	4,91	4,65	5,00	4,70	4,50
Water flow rate system side	l/h	1376	1754	2064	2408	2673
Useful head system side	kPa	60	46	46	26	14
Heating performance 47 °C / 55 °C						
Heating capacity	kW	8,00	10,00	12,00	14,00	16,00
Input power	kW	2,78	3,80	3,81	4,52	5,42
COP	W/W	2,88	2,63	3,15	3,10	2,95
Useful head system side	kPa	74	70	65	60	53

- (1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b. (3) Data EN 14511:2022; System side water heat exchanger 23 °C / 18 °C; External air 35 °C (4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Technical data base unit

Indoor unit		BHP060F	BHP060F	BHP100F	BHP100F
Outdoor unit		BHP040	BHP060	BHP080	BHP100
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	3,20	4,09	5,30	6,50
Input power	kW	0,94	1,28	1,73	2,27
EER	W/W	3,42	3,20	3,06	2,86
Water flow rate system side	l/h	550	703	912	1118
Useful head system side	kPa	76	74	70	63
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	4,00	5,90	8,00	9,50
Input power	kW	1,02	1,51	2,14	2,64
COP	W/W	3,92	3,91	3,74	3,60
Water flow rate system side	l/h	688	1015	1376	1634
Useful head system side	kPa	74	67	51	36
Cooling performance 23 °C / 18 °C (3)					
Cooling capacity	kW	3,80	5,80	7,00	8,52
nput power	kW	0,82	1,32	1,75	2,25
EER	W/W	4,63	4,40	4,00	3,79
Water flow rate system side	l/h	655	992	1204	1465
Useful head system side	kPa	74	69	60	46
Heating performance 30 °C / 35 °C (4)					
Heating capacity	kW	4,00	6,00	8,00	9,50
nput power	kW	0,78	1,20	1,70	2,07
COP	W/W	5,13	5,00	4,71	4,59
Water flow rate system side	l/h	688	1032	1376	1634
Useful head system side	kPa	74	66	51	36
Heating performance 47 °C / 55 °C					
Heating capacity	kW	3,60	5,40	7,20	8,55
Input power	kW	1,40	2,16	3,05	3,72
COP	W/W	2,57	2,50	2,36	2,30
Useful head system side	kPa	27	19	19	12

ENERGY DATA

Energy data Wall unit

Indoor unit		BHP060W	BHP060W	BHP100W	BHP100W	BHP160W	BHP160W	BHP160W
Outdoor unit		BHP040	BHP060	BHP080	BHP100	BHP120	BHP140	BHP160
UE 811/2013 performance in average ambient co	nditions (average) - 35 °C - Pdesignh :	≤ 70 kW (1)					
Pdesignh	kW	5	6	7	9	11	12	13
SCOP	W/W	4,66	4,54	4,60	4,60	4,63	4,65	4,61
ηsh	%	184	179	181	181	182	183	181
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient co	nditions (average) - 55 °C - Pdesignh :	≤ 70 kW (2)					
Pdesignh	kW	5	5	7	8	11	13	13
SCOP	W/W	3,28	3,26	3,30	3,25	3,24	3,50	3,50
ηsh	%	128	127	129	127	126	137	137
Efficiency energy class		A++	A++	A++	A++	A++	A++	A++
Performance as combined heat generator								
Bleeding profile		XL	XL	XL	XL	XL	XL	XL
Efficiency energy class		A	A	A	A	A	A	A

(1) Efficiencies for low temperature applications (35 °C)
 (2) Efficiencies for average temperature applications (55 °C)

Indoor unit		BHP060W	BHP060W	BHP100W	BHP100W	BHP160W	BHP160W	BHP160W
Outdoor unit		BHP040	BHP060	BHP080	BHP100	BHP120	BHP140	BHP160
Cooling capacity with low leaving water temp (UE n	° 2016/2281)							
SEER	W/W	4,21	4,12	4,11	4,12	4,90	4,91	4,78
ŋsc	%	165,00	162,00	161,00	162,00	193,00	193,00	188,00

Three-phase Wall unit energy data

Indoor unit		BHP100WT	BHP100WT	BHP160WT	BHP160WT	BHP160WT	
Outdoor unit		BHP080T	BHP100T	BHP120T	BHP140T	BHP160T	
UE 811/2013 performance in average a	mbient conditions (average)	· 35 °C - Pdesignh ≤ 70 kW	(1)				
Pdesignh	kW	8	9	11	12	13	
SCOP	W/W	4,53	4,70	4,48	4,48	4,45	
ηsh	%	178	185	176	176	175	
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	
UE 811/2013 performance in average a	mbient conditions (average)	· 55 °C - Pdesignh ≤ 70 kW	(2)				
Pdesignh	kW	9	10	11	13	13	
SCOP	W/W	3,48	3,49	3,23	3,38	3,38	
ηsh	%	136	137	126	132	132	
Efficiency energy class		A++	A++	A++	A++	A++	
Performance as combined heat general	tor						
Bleeding profile		XL	XL	XL	XL	XL	
Efficiency energy class		A	A	A	A	A	

(1) Efficiencies for low temperature applications (35 °C) (2) Efficiencies for average temperature applications (55 °C)

Indoor unit BHP100WT BHP100WT BHP160WT BHP160WT BHP160WT Outdoor unit BHP080T BHP100T BHP120T BHP140T BHP160T Cooling capacity with low leaving water temp (UE n° 2016/2281) SEER W/W 4,11 4,12 4,74 4,76 4,64 187,00 187,00 183,00 ηςς 161,00 162,00

Energy data base unit

Indoor unit		BHP060F	BHP060F	BHP100F	BHP100F
Outdoor unit		BHP040	BHP060	BHP080	BHP100
UE 811/2013 performance in average amb	ient conditions (average) - 3	5 °C - Pdesignh ≤ 70 kW (1)			
Pdesignh	kW	5	6	7	9
SCOP	W/W	4,66	4,54	4,60	4,60
ηsh	%	184	179	181	181
Efficiency energy class		A+++	A+++	A+++	A+++
UE 811/2013 performance in average amb	ient conditions (average) - 5	5 °C - Pdesignh ≤ 70 kW (2)			
Pdesignh	kW	5	5	7	8
SCOP	W/W	3,28	3,26	3,30	3,25
ηsh	%	128	127	129	127
Efficiency energy class		A++	A++	A++	A++
Performance as combined heat generator					
Bleeding profile		L	L	L	L
Efficiency energy class		A	A	A	A

(1) Efficiencies for low temperature applications (35 °C) (2) Efficiencies for average temperature applications (55 °C)

Indoor unit		BHP060F	BHP060F	BHP100F	BHP100F			
Outdoor unit		BHP040	BHP060	BHP080	BHP100			
Cooling capacity with low leaving water temp (UE n° 2016/2281)								
SEER	W/W	4,21	4,12	4,11	4,12			
nsc	%	165,00	162,00	161,00	162,00			

INDOOR UNIT

BHP_W indoor wall unit

		BHP060W	BHP100W	BHP160W
Electric data				
Rated power input (1)	kW	3,10	6,10	6,10
Electric heater				
Number	no.	2	2	2
Power of the single heater	kW	1,50	3,00	3,00
System side heat exchanger				
Туре	type		Brazed plate	
Number	no.	1	1	1
Unit / system input	type		G1 male	
Unit / system output	type		G1 male	
DHW output	type		G1 male	
Circulator				
Quantity	no.	1	1	1
Motor	type		DC brushless	
Expansion vessel				
Number	no.	1	1	1
Volume	1	10,0	10,0	10,0
Maximum pressure	bar	2,5	2,5	2,5
Sound data calculated in cooling mode (2)				
Sound power level	dB(A)	42,0	42,0	42,0
Sound pressure	dB(A)	14,0	14,0	14,0
Power supply				
Power supply			230V ~ 50Hz	

Three-phase wall unit BHP_WT

		BHP100WT	BHP160WT	
Electric data				
Rated power input (1)	kW	6,10	6,10	
Electric heater				
Number	no.	2	2	
Power of the single heater	kW	3,00	3,00	
System side heat exchanger				
Туре	type		Brazed plate	
Number	no.	1	1	
Unit / system input	type		G1 male	
Unit / system output	type		G1 male	
DHW output	type		G1 male	
Circulator				
Quantity	no.	1	1	
Motor	type	DC brushless		
Expansion vessel				
Number	no.	1	1	
Volume	1	10,0	10,0	
Maximum pressure	bar	2,5	2,5	
Sound data calculated in cooling mode (2)				
Sound power level	dB(A)	42,0	42,0	
Sound pressure	dB(A)	14,0	14,0	
Power supply				
Power supply			400V ~ 3N 50Hz	

⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

BHP_F indoor base unit

		BHP060F	BHP100F	
Electric data			·	
Rated power input (1)	kW	3,10	6,10	
Electric heater				
Number	no.	2	2	
Power of the single heater	kW	1,50	3,00	
System side heat exchanger				
Туре	type		Brazed plate	
Number	no.	1	1	
Unit / system input	type		G1 male	
Mains water input	type		G1 male	
Unit / system output	type		G1 male	
DHW output	type		G1 male	
Circulator				
Quantity	no.	1	1	
Motor	type		DC brushless	
Expansion vessel				
Number	no.	1	1	
Volume	1	10,0	10,0	
Maximum pressure	bar	2,5	2,5	
Storage tank (DHW)				
Volume	I	185	185	
Sound data calculated in cooling mode (2)				
Sound power level	dB(A)	42,0	42,0	-
Sound pressure	dB(A)	14,0	14,0	
Power supply	·			
Power supply			230V ~ 50Hz	

⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

OUTDOOR UNIT

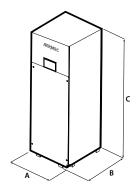
OUTDOOK ONIT		BHP040	BHP060	BHP080	BHP080T	BHP100	BHP100T
Electric data							
Rated current input (1)	A	10,0	10,0	19,0	7,5	22,0	7,5
Compressor							-
Туре	type			Rotativo dop	ppio stadio inverter		
Number	no.	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1
Refrigerant	type	· · · · · · · · · · · · · · · · · · ·			R32		
Refrigerant charge	kg	1,00	1,00	1,60	1,84	1,60	1,84
Potential global heating	GWP	1,00	1,00		'5kgCO₂eq	1,00	1,01
Oil	- UIII			07.	экусолеч		
Туре	tuno				FW68DA		
	type	0,47	0,47	0,84	0,84	0,84	0,84
Quantity Refrigeration pipework	ı	0,47	0,47	0,04	0,04	0,04	0,04
	(:h.)				25 /1 /4//\		
Diameter of liquid refrigerant connections	mm (inch)				35 (1/4")		
Diameter of refrigerant gas connections	mm (inch)			12	2,7 (1/2")		
Exchanger							
Туре	type				inned coil		
Louvers type	type			Go	olden fin		
Number	no.	1	1	1	1	1	1
Expansion vessel							
Туре	type			Electronic	expansion valve		
Number	no.	1	1	1	1	1	1
Fan							
Туре	type			Inv	verter axial		
Fan motor					brushless		
Number	type no.	1	1	1	1	1	1
Air flow rate	m ³ /h	3200	3200	3300	3300	3300	3300
	m·/n	3200	3200	3300	3300	3300	3300
Sound data calculated in cooling mode (2)	10(4)						
Sound power level	dB(A)	62,0	62,0	67,0	68,0	68,0	68,0
Sound pressure level (1 m)	dB(A)	52,0	52,0	55,0	55,0	55,0	55,0
Sound pressure level (10 m)	dB(A)	34,0	34,0	39,0	40,0	40,0	40,0
Power supply							
Power supply			230V ~ 50Hz		400V 3N ~ 50Hz	230V ~ 50Hz	400V 3N ~ 50Hz
		BHP120	BHP120T	BHP140	BHP140T	BHP160	BHP160T
Electric data							
Rated current input (1)	A	25,6	9,2	28,7	11,5	30,3	11,5
		23,0	-/	20//	1.1,5	30/3	,2
Compressor					1 1 1 1		
Compressor	type			Potativo dor			
Туре	type	1	1		ppio stadio inverter	1	1
Type Number	no.	11	1	1	1	1	1
Type Number Circuits	no. no.	1	1		1 1	1	1
Type Number Circuits Refrigerant	no. no. type	1	1	1	1 1 R32	1	1
Type Number Circuits Refrigerant Refrigerant charge	no. no. type kg			1 1,84	1 1 R32 1,84		-
Type Number Circuits Refrigerant Refrigerant charge Potential global heating	no. no. type	1	1	1 1,84	1 1 R32	1	1
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil	no. no. type kg	1	1	1 1,84	1 1 R32 1,84	1	1
Type Number Circuits Refrigerant Refrigerant charge Potential global heating	no. no. type kg	1	1	1 1 1,84	1 1 R32 1,84	1	1
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil	no. no. type kg GWP	1	1	1 1 1,84	1 1 R32 1,84 75kgCO ₂ eq	1	1
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type	no. no. type kg GWP	1,84	1,84	1 1 1,84 67.	1 1 R32 1,84 75kgCO ₂ eq	1,84	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework	no. no. type kg GWP type	1,84	1,84	1 1,84 67:	1 1 R32 1,84 75kgCO ₂ eq FW68DA 1,05	1,84	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections	no. no. type kg GWP type I	1,84	1,84	1 1,84 67:	1 1 832 1,84 15kgCO ₂ eq 1,05 1,05 1,05	1 1,84 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections	no. no. type kg GWP type	1,84	1,84	1 1,84 67:	1 1 R32 1,84 75kgCO ₂ eq FW68DA 1,05	1 1,84 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger	no. no. type kg GWP type l mm (inch) mm (inch)	1,84	1,84	1 1,84 67: F 1,05	1 1 832 1,84 15kgC0,eq 1,05 1,05 15,87 (1,4")	1 1,84 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type	no. no. type kg GWP type l mm (inch) mm (inch)	1,84	1,84	1 1 1,84 67: F1,05	1 1 832 1,84 15kgC0,eq 1 1,05 15,87 (1,4")	1 1,84 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type	no. no. type kg GWP type l mm (inch) mm (inch) type type	1,84	1,84	1 1,84 67. F1,05	1 1 832 1,84 15kgCO ₂ eq 1,05 1,05 15,87 (1,4") 15,87 (1,4")	1,84 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number	no. no. type kg GWP type l mm (inch) mm (inch)	1,84	1,84	1 1 1,84 67: F1,05	1 1 832 1,84 15kgC0,eq 1 1,05 15,87 (1,4")	1 1,84 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel	no. no. type kg GWP type l mm (inch) mm (inch) type type no.	1,84	1,84	1 1,84 67: F1,05	1 1 832 1,84 15kgC0,eq 1 1,05 15,87 (1 inned coil olden fin 1	1,84 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type	no. no. type kg GWP type l mm (inch) mm (inch) type type no.	1,84	1,84 1,05 (1/2")	1 1,84 67: F1,05	1 1 832 1,84 15kgCO2eq 1 1,05 1,05 15,87 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,84 1,05 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Number	no. no. type kg GWP type l mm (inch) mm (inch) type type no.	1,84	1,84	1 1,84 67: F1,05	1 1 832 1,84 15kgC0,eq 1 1,05 15,87 (1 inned coil olden fin 1	1,84 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Number Fan	no. no. type kg GWP type l mm (inch) mm (inch) type type no.	1,84	1,84 1,05 (1/2")	1 1 1,84 67: F1,05 6, Fill G(1 1	1 1 832 1,84 15kgCO2eq 15kgCO2eq 1,05 1,05 15,87 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,84 1,05 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel	no. no. type kg GWP type l mm (inch) mm (inch) type type no.	1,84	1,84 1,05 (1/2")	1 1 1,84 67: F1,05 6,- Fili G(1 Electronic 1	1 1 R32 1,84 '5kgCO ₂ eq FW68DA 1,05 .35 (1/4") 15,87 (inned coil olden fin 1 c expansion valve 1	1,84 1,05 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Number Fan	no. no. type kg GWP type I mm (inch) mm (inch) type type no.	1,84	1,84 1,05 (1/2")	1 1 1,84 67: F1,05 6,- Fili G(1 Electronic 1	1 1 832 1,84 15kgCO2eq 15kgCO2eq 1,05 1,05 15,87 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,84 1,05 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Number Fan Type	no. no. type kg GWP type I mm (inch) mm (inch) type type no. type no.	1,84	1,84 1,05 (1/2")	1 1 1,84 67: F1,05 6,- Fili G(1 Electronic 1	1 1 R32 1,84 '5kgCO ₂ eq FW68DA 1,05 35 (1/4") 15,87 (inned coil olden fin 1 c expansion valve 1	1,84 1,05 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Number Fan Type Fan Type Fan Type Fan motor	no. no. type kg GWP type I mm (inch) mm (inch) type type no. type type no.	1,84	1,84 1,05 (1/2")	1 1 1,84 67: F1,05 6,: I1 Electronic 1	1 1 832 1,84 15kgCO2eq 1 1,05 1,05 1,05 1,05 1,05 1,05 1,05 1,	1,84 1,84 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Lype Louvers type Number Fan Type Fan Type Fan motor Number Fin flow rate	no. no. type kg GWP type I mm (inch) mm (inch) type type no. type no.	1,84 1,05 12,7 1 1	1,84 1,05 1,05 1 1 1	1 1,84 67: F1,05 6,: Fill G(1 1 Electronic 1 Inventor	1 1 832 1,84 1/5kgCO ₂ eq 1,84 1/5kgCO ₂ eq 1/5kgCO ₂ eq 1/5kgCO ₂ eq 1,05 1,05 15,87 (1/4") 15,87 (1/4") 15,87 (1/4") 15,87 (1/4") 1 1,05 1 1	1 1,84 1,05 1,05	1,84
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Type Louvers type Number Fan Type Fan motor Number Fan Type Fan motor Number Air flow rate Sound data calculated in cooling mode (2)	no. no. type kg GWP type I mm (inch) mm (inch) type type no. type no. type no.	1 1,84 1,05 12,7 1	1,84 1,05 1,05 1 1 1 1 1 1 5044	1 1 1,84 67. F1,05 File Gri 1 Electronic 1 Inventor DC 1 5044	1 1 832 1,84 1/5kgCO ₂ eq 1,84 1/5kgCO ₂ eq 1,85 1,05 15,87 (1/4") 15,	1 1,84 1,05 1,05 1 1 1 1 1 5044	1 1,84 1,05 1,05 1 1 1 1 1 5044
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Type Sumber of Fan Type Fan motor Number Air flow rate Sound data calculated in cooling mode (2) Sound power level	no. no. type kg GWP type I mm (inch) mm (inch) type type no. type no. type no. dB(A)	1 1,84 1,05 12,7 1 1 1 1 5044 68,0	1 1,84 1,05 1,05 1 1 1 1 1 5044 68,0	1 1 1,84 67. Fin 1,05 Fin Gu 1 Electronic 1 Invo DC 1 5044 68,0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1,84 1,05 1,05 1 1 1 1 1 5044 68,0	1 1,84 1,05 1,05
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Sumber of Pipework Type Number Air flow rate Sound data calculated in cooling mode (2) Sound power level Sound pressure level (1 m)	no. no. type kg GWP type I mm (inch) mm (inch) type type no. type no. type dB(A) dB(A)	1 1,84 1,05 12,7 1 1 1 1 5044 68,0 60,0 60,0	1,84 1,05 1,05 (1/2") 1 1 1 5044 68,0 60,0	1 1 1,84 67. Fin 1,05 Fin Gu 1 Electronic 1 Invo DC 1 5044 68,0 61,0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1,84 1,05 1,05 1 1 1 1 1 5044 68,0 61,0	1 1,84 1,05 1 1 1 1 5044 68,0 61,0
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Sumber Type Air flow rate Fan Type Fan motor Number Air flow rate Sound data calculated in cooling mode (2) Sound power level Sound pressure level (1 m) Sound pressure level (10 m)	no. no. type kg GWP type I mm (inch) mm (inch) type type no. type no. type no. dB(A)	1 1,84 1,05 12,7 1 1 1 1 5044 68,0	1 1,84 1,05 1,05 1 1 1 1 1 5044 68,0	1 1 1,84 67. Fin 1,05 Fin Gu 1 Electronic 1 Invo DC 1 5044 68,0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1,84 1,05 1,05 1 1 1 1 1 5044 68,0	1 1,84 1,05 1 1 1 1 1 5044 68,0
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Suppe Fan Type Fan Type Fan Type Fan motor Number Air flow rate Sound data calculated in cooling mode (2) Sound pressure level (10 m) Power supply	no. no. type kg GWP type I mm (inch) mm (inch) type type no. type no. type dB(A) dB(A)	1 1,84 1,05 12,7 1 1 1 5044 68,0 60,0 40,0	1,84 1,84 1,05 (1/2") 1 1 1 5044 68,0 60,0 40,0	1 1 1,84 67. F1,05 6, FII Green 1 Electronic 1 Inventor 5044 68,0 61,0 40,0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1,84 1,05 1,05 1,05 1 1 1 1 1 1 5044 68,0 61,0 40,0	1 1,84 1,05 1 1 1 1 1 5044 68,0 61,0 40,0
Type Number Circuits Refrigerant Refrigerant charge Potential global heating Oil Type Quantity Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections Exchanger Type Louvers type Number Expansion vessel Type Sumber Type Air flow rate Fan Type Fan motor Number Air flow rate Sound data calculated in cooling mode (2) Sound power level Sound pressure level (1 m) Sound pressure level (10 m)	no. no. type kg GWP type I mm (inch) mm (inch) type type no. type no. type dB(A) dB(A)	1 1,84 1,05 12,7 1 1 1 1 5044 68,0 60,0 60,0	1,84 1,05 1,05 (1/2") 1 1 1 5044 68,0 60,0	1 1 1,84 67. Fin 1,05 Fin Gu 1 Electronic 1 Invo DC 1 5044 68,0 61,0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1,84 1,05 1,05 1 1 1 1 1 5044 68,0 61,0	1 1,84 1,05 1,05 1 1 1 1 1 5044 68,0 61,0

⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

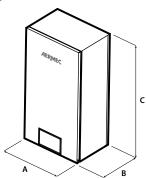
DIMENSIONS AND WEIGHTS

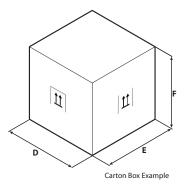
Indoor units

BHP_F



BHP_W





BHP_W

		BHP060W	BHP100W	BHP160W
Indoor unit	,			
A	mm	460	460	460
В	mm	318	318	318
C	mm	860	860	860
D	mm	568	568	568
E	mm	390	390	390
F	mm	1133	1133	1133
Net weight	kg	62,0	62,0	58,0
Weight for transport	kg	71,0	71,0	71,0

BHP_WT

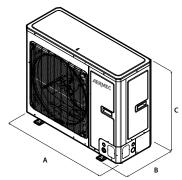
		BHP100WT	BHP160WT
Indoor unit			
A	mm	460	460
В	mm	318	318
C	mm	860	860
D	mm	568	568
E	mm	390	390
F	mm	1133	1133
Net weight	kg	60,0	60,0
Weight for transport	kg	71,0	71,0

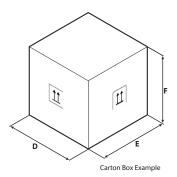
BHP_F

	BHP060F	BHP100F
mm	600	600
mm	600	600
mm	1756	1756
mm	803	803
mm	683	683
mm	2000	2000
kg	210,0	210,0
kg	233,0	233,0
	mm mm mm	mm 600 mm 600 mm 1756 mm 803 mm 683 mm 2000 kg 210,0

Outdoor units

BHP





BHP

		BHP040	BHP060	BHP080	BHP080T	BHP100	BHP100T
Outdoor unit							
A	mm	975	975	982	982	982	982
В	mm	396	396	427	360	427	360
(mm	702	702	787	787	787	787
D	mm	1028	1028	1097	1097	1097	1097
E	mm	458	458	478	478	478	478
F	mm	830	830	937	937	937	937
Net weight	kg	55,0	55,0	82,0	88,0	82,0	88,0
Weight for transport	kg	65,0	65,0	92,0	98,0	92,0	98,0

		BHP120	BHP120T	BHP140	BHP140T	BHP160	BHP160T
Outdoor unit							
A	mm	940	940	940	940	940	940
}	mm	460	460	460	460	460	460
	mm	820	820	820	820	820	820
)	mm	1103	1103	1103	1103	1103	1103
	mm	573	573	573	573	573	573
	mm	973	973	973	973	973	973
Net weight	kg	104,0	110,0	104,0	110,0	104,0	110,0
Veight for transport	kg	114,0	121,0	114,0	121,0	114,0	121,0





















HMG - HMG_P

Reversible air/water heat pump

HMG: Cooling capacity 32 \div 60 kW – Heating capacity 35 \div 65 kW HMG_P: Cooling capacity 33 \div 60 kW – Heating capacity 36 \div 65 kW



- New R32 ecological refrigerant gas
- Touch-screen control panel
- · Easy and quick to install
- · Reliability and compactness
- Modularity





DESCRIPTION

HMG and HMG_P are the new outdoor reversible inverter heat pump system for producing chilled and heated water.

These units are designed to meet the plant engineering needs of residential or commercial contexts, or industrial applications.

HMG and HMG_P Are designed to meet the needs of both the new constructions market and the renovation market, replacing or working along-side conventional boilers.

They can be combined with low-temperature emission systems such as floor heating or fan coils.

They are formed of fully independent modules that can be linked together to create a modular system, with the possibility to connect units of different power levels.

The base, the structure and the panels are made of galvanized steel treated with polyester paint.

HMG_P comes supplied with the main hydraulic components needed, thereby facilitating the final installation and is supplied with Integrated hydronic kit

FEATURES

Operating limits

Operation from -20°C outside air temperature (winter) to 52° C (summer). Production of hot water up to 50° C.

For more information about the operating limits of these units, refer to the specific paragraph on this product data sheet.

Modularity

HMG and HMG_P unit can be installed in a modular system of reversible inverter heat pumps for producing hot and chilled water, with connectable base modules purposely designed to minimise the overall dimensions. Units of different power levels can be connected.

Modularity allows the installation of these units to be adapted to the real system development requirements, so the installed power can be increased over time in a simple and cost effective manner.

On the basis of these requirements, the user can choose either: **homogeneous modularity** or **sequential modularity**.

Homogeneous modularity

Made possible with the use of a control panel **TCP** (mandatory accessory) to be connected to the master unit of the system.

This type of modularity allows the modules to work with a homogeneous capacity control logic whilst still guaranteeing delay switch-on and switch-off to avoid power consumption peaks and intelligent defrosting (the simultaneous defrosting of up to 1/3 of the modules installed).

Up to 16 modules for HMG and 3 modules for HMG_P can be linked together with this operating mode.

For HMG

To take full advantage of the characteristics of this working mode, you are advised to use it in systems with a pump (or a group of pumps) that serves all the units. The control logic manages the switch-on and switch-off of the pump(s) on the basis of the operating conditions of the generation system.

Sequential modularity

Made possible with the use of accessories TCP (mandatory accessory), IC-2P, VMF-485LINK and VMF-E6.

This type of modularity allows the HMG and HMG_P units to be added to the control system of the whole hydraulic/aeraulic system, so DHW can also be managed.

Unit switch-on and switch-off is managed in a sequential manner, according to a selected control logic (free regulation, regulation by load or regulation by temperature difference).

For more information about VMF system, refer to the dedicated documentation.

Up to 4 modules HMG and 3 modules HMG_P can be linked together with this operating mode.

Management is optimised for systems where each unit HMG commands its own pump.

Main components

HMG

- Flow switch.
- DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
- Compressor twin rotary inverter.
- Special coil with fin golden coating.
- High-efficiency shell & tube heat exchanger (system side) for excellent reliability and a long lifespan.
- Electronic expansion valve.
- Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.

HMG P

- DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
- Compressor twin rotary inverter.
- Special coil with fin golden coating.
- High-efficiency plate heat exchanger (system side) for excellent reliability and a long lifespan.
- Electronic expansion valve.
- Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.

Main hydraulic components HMG_P

- Flow switch.
- Inverter pump.
- Expansion tank.
- Drain valve.
- Safety valve.
- Water filter supplied (mandatory installation).

Regulation

 $\label{prop:compulsor} \mbox{Adjustment via } \mbox{ touch-screen control panel (TCP accessory compulsory)::}$

- Only for HMG: management of (up to) two pumps (not supplied) that can work alternately, boosting the reliability of the system,
- management of (up to) two auxiliary electric resistors (not supplied),
- Quiet function for reduced noise operation,
- climatic regulation function,
- unit anti-freeze protection at low temperatures,
- weekly programming in time periods,
- high and low pressure protection,
- smart compressor control, extending the lifespan of the unit and enhancing its reliability,
- alarm history.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



ACCESSORIES

TCP: Touch-screen control panel. (Accessory compulsory).

IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.

VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

VMF-E6: White flush-mounting panel with 4.3 inch colour touchscreen. For the centralised command/control of a complete hydronic/aeraulic system consisting of: fan coils (up to 64 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (up to 4), MZC accessories (up to 5) for the management of radiant panels (using a suitable number of VMF-REB accessories, up to 64 radiant panels associated with the fan coil zones and up to 32 radiant panels associated with the zones served by MZC), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/Os, control of heat recovery units and VOC probes (up to 4).

LOGATW: Diagnostic tool for air-water heat pumps.

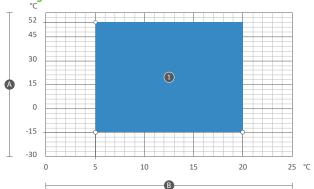
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

COMPATIBILITY WITH VMF SYSTEM

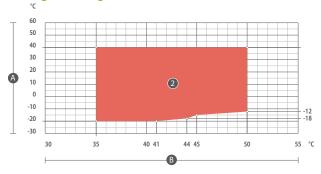
For more information about VMF system, refer to the dedicated documentation.

OPERATING LIMITS

Cooling mode



Heating mode range



KEY 2

Α

В

heating mode

outdoor air temperature (°C) water produced temperature (°C)

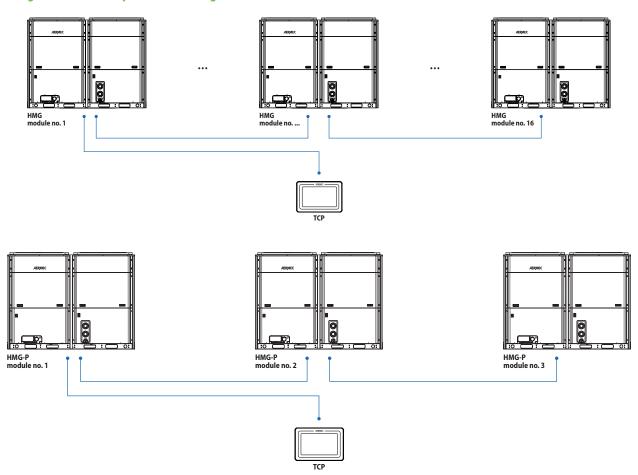
KEY

1 cooling mode

A outdoor air temperature (°C)
B water produced temperature (°C)

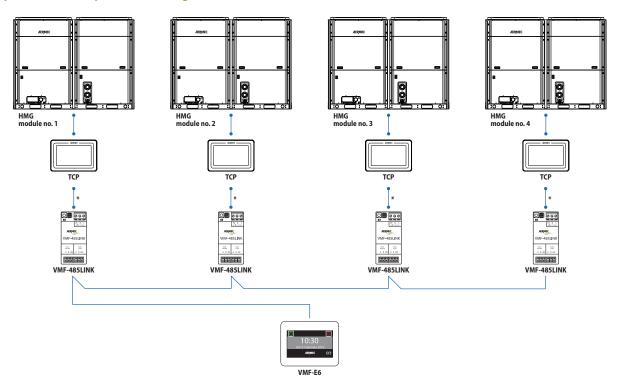
MODULARITY

Homogeneous modularity - connection diagram

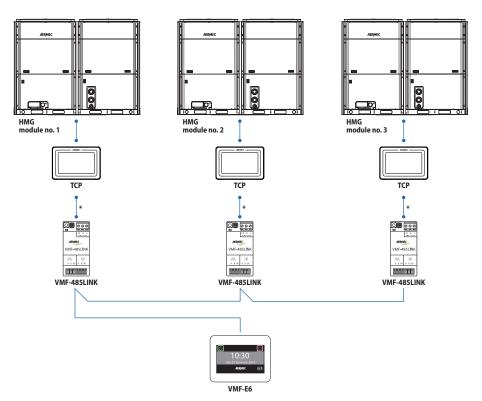


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Sequential modularity - connection diagram



st Connection to be made with the aid of the accessory IC-2P.



 $[\]mbox{\ensuremath{^{\ast}}}$ Connection to be made with the aid of the accessory IC-2P.

PERFORMANCE SPECIFICATIONS

		HMG0350	HMG0600
Cooling performance 12 °C/7 °C(1)			
Cooling capacity	kW	32,0	60,0
Input power	kW	11,7	20,8
Water flow rate system side	l/h	5528	10346
Pressure drop system side	kPa	80	55
Cooling total input current	A	19,2	32,9
EER	W/W	2,74	2,88
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	35,0	65,0
Input power	kW	10,6	19,9
Water flow rate system side	I/h	6039	11249
Heating total input current	A	17,5	30,7
COP	W/W	3,30	3,27
Cooling performance 23 °C / 18 °C (3)			
Cooling capacity	kW	41,4	72,5
Input power	kW	10,5	19,1
Water flow rate system side	l/h	7198	12574
Cooling total input current	A	16,2	31,0
EER	W/W	3,94	3,80
Heating performance 30 °C / 35 °C (4)			
Heating capacity	kW	36,0	62,6
Input power	kW	8,8	15,1
Water flow rate system side	l/h	6191	10798
Heating total input current	A	12,4	24,2
COP	W/W	4,09	4,15

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b. (3) Data EN 14511:2022; System side water heat exchanger 23 °C / 18 °C; External air 35 °C (4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

		HMG0350P	HMG0600P
Cooling performance 12 °C/7 °C(1)			
Cooling capacity	kW	33,0	60,0
Input power	kW	11,4	21,1
Water flow rate system side	l/h	5680	10320
Pressure drop system side	kPa	-	-
Cooling total input current	A	18,7	33,2
EER	W/W	2,89	2,84
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	36,0	65,0
Input power	kW	10,9	19,7
Water flow rate system side	l/h	6190	11180
Heating total input current	A	18,1	32,3
COP	W/W	3,30	3,30
Cooling performance 23 °C / 18 °C (3)			
Cooling capacity	kW	32,8	64,0
Input power	kW	8,0	18,0
Water flow rate system side	l/h	5648	11015
Cooling total input current	A	13,3	28,4
EER	W/W	4,10	3,57
Heating performance 30 °C / 35 °C (4)			
Heating capacity	kW	33,4	61,6
Input power	kW	8,4	16,0
Water flow rate system side	l/h	5729	10650
Heating total input current	A	13,8	25,4
COP	W/W	4,00	3,86

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b. (3) Data EN 14511:2022; System side water heat exchanger 23 °C / 18 °C; External air 35 °C (4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

		HMG0350	HMG0600	
E 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)				
Pdesignh	kW	24	51	
SCOP	W/W	3,90	3,90	
ηsh	%	153	153	
Efficiency energy class		A++	A++	
Cooling capacity with low leaving wat	er temp (UE n° 2016/2281)			
ηςς	%	173,00	181,00	
SEER	W/W	4,40	4,60	

(1) Efficiencies for low temperature applications (35 °C)

		HMG0350P	HMG0600P	
IE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)				
Pdesignh	kW	24	52	
SCOP	W/W	4,00	4,01	
ηsh	%	157	158	
Efficiency energy class		A++	A++	
Cooling capacity with low leaving wa	ter temp (UE n° 2016/2281)			
ηςς	%	183,00	186,60	
SEER	W/W	4,65	4,74	

⁽¹⁾ Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

		HMG0350	HMG0600
Electric data	'		
Rated current input (1)	A	22,0	52,0
Power supply			
Power supply		380-415V 3N ~ 50Hz	380-415V 3N ~ 50Hz
(1) The rated power input (rated current	input) is the maximum input electrical pov	ver (maximum current input) from the system, in accordance with	
	input) is the maximum input electrical pov	ver (maximum current input) from the system, in accordance with HMG0350P	the Standards EN 60335-1 and EN 60335-2-40. HMG0600P
	input) is the maximum input electrical pov		
Electric data	input) is the maximum input electrical pov		
(1) The rated power input (rated current Electric data Rated current input (1) Power supply	input) is the maximum input electrical pov	HMG0350P	HMG0600P

⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

GENERAL TECHNICAL DATA

		HMG0350	HMG0600
Compressor			
Туре	type	Inv	erter rotary
Number	no.	1	2
Circuits	no.	1	2
Refrigerant	type		R32
Refrigerant load circuit 1 (1)	kg	5,5	5,5
Refrigerant load circuit 2 (1)	kg	-	5,5
System side heat exchanger			
Туре	type	She	ell and tube
Number	no.	1	1
Connections (in/out)	Туре	G1" 1/2 (male)	G2" (male)
Fan			
Туре	type		Axial
Fan motor	type		Inverter
Number	no.	2	2
Air flow rate	m³/h	12600	24000
Sound data calculated in cooling mode (2)		
Sound power level	dB(A)	81,0	86,0
Sound pressure level (10 m)	dB(A)	49,5	54,3
Sound pressure level (1 m)	dB(A)	65,0	69,0

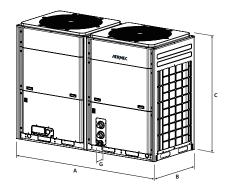
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

		HMG0350P		HMG0600P	
Compressor			'		
Туре	type		Inverter rotary		
Number	no.	1		2	
Circuits	no.	1		2	
Refrigerant	type		R32		
Compressor					
Refrigerant load circuit 1	kg	5,20		5,35	
Refrigerant load circuit 2	kg	-		5,35	
System side heat exchanger					
Туре	type		Brazed plate		
Number	no.	1		1	
Connections (in/out)	Туре		Gas maschio		
Fan					
Туре	type		Axial		
Fan motor	type		Inverter		
Number	no.	2		2	
Air flow rate	m³/h	12600		24000	
Sound data calculated in cooling mode (1)					
Sound power level	dB(A)	81,0		86,0	
Sound pressure level (10 m)	dB(A)	-		-	
Sound pressure level (1 m)	dB(A)	-		-	

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

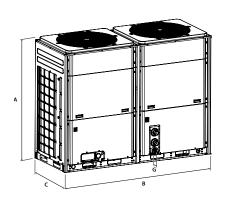
HMG



		HMG0350	HMG0600
Dimensions and weights			·
A	mm	1340	2200
В	mm	765	880
C	mm	1605	1675
G	mm	80	85
D	mm	1420	2267
E	mm	920	1030
F	mm	1775	1867
Net weight	kg	405,0	686,0
Weight for transport	kg	422,0	722,0

G: tap protrusion

HMG_P



		HMG0350P	HMG0600P
Discouries and anti-let-	,	пичаозог	niwdoooor
Dimensions and weights			
A	mm	1605	1675
В	mm	1340	2200
C	mm	765	880
G	mm	37	57
D	mm	1775	1867
E	mm	1420	2267
F	mm	905	1030
Net weight	kg	323,0	609,0
Weight for transport	kg	340,0	645,0

G: tap protrusion





















ANLI

Reversible air/water heat pump

Cooling capacity 29,0 ÷ 42,3 kW - Heating capacity 31,4 ÷ 33,3 kW



- Version with built-in hydronic kit inverter
- · High efficiency also at partial loads
- Production of hot domestic water (d.H.W.)





DESCRIPTION

Reversible inverter heat pump for outdoor use suitable for responding to heating / cooling requests and the production of domestic hot water. Equipped with inverter compressor, axial fans, external copper coils with aluminum fins, plate heat exchanger on the system side.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

It can be combined in systems with hydronic terminals or even with traditional radiators and perfectly meets the needs of the residential market: low noise, easy installation.

VERSIONS

° Standard

P With on/off pump

X With inverter pump

FEATURES

Operating field

Work at full load up to 42 $^{\circ}$ C outside air temperature in the summer season with the possibility of producing hot water up to 60 $^{\circ}$ C (for more details refer to the technical documentation).

Components

- High efficiency scroll and Twin rotary compressors with permanent magnet DC motors of "high side" type (with high pressure casing), designed for variable speed operation
- Differential pressure switch / flow switch as standard
- Water filter
- High efficiency heat exchangers
- Axial flow fan units for extremely quiet operation
- Fitted with EMC filters

Integrated hydronic kit

The built-in hydraulic kit includes:

- Expansion vessel
- Safety valve water side
- Air vent valve

Inverter pumps variable speed pump with water side pressure transducer installed and unit mounted microprocessor, capable of controlling various operating modes:

- ΔP constant: the differential pressure between pump inlet and outlet is kept constant, the number of revolutions is reduced with the progressive closing of the terminals;
- ΔP variable: the differential pressure is reduced as the flow rate decreases, to take into account the lower pressure drops along the supply pipes to the terminals (recommended if the development of these pipes is bigh)

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

- Capable of variable water flow rates on primary circuit (terminals with 2-way valves);
- Perfect water temperature control even in systems with low water content:
- Suitable for heat pump mode summer operation to provide domestic hot water (DHW) with the DCPX fan speed controller accessory (when provided).

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol

MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.

SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.

SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/ return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

VT: Anti-vibration supports.

BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

NB: if the SAF thermo-accumulator is used, the MOD485-BL accessory is not required.

FACTORY FITTED ACCESSORIES

KR: Anti-freeze electric heater for the plate heat exchanger.

KRB: Electric anti-freeze resistance kit for base.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	101	
AERBAC-MODU	°,P,X	•	
AERLINK	°,P,X	•	
AERSET	°,P,X	•	
MODU-485BL	°,P,X	•	
MULTICONTROL	°,P,X	•	
PR3	°,P,X	•	
SAF (1)	°,P,X	•	
SDHW (2)	°,P,X	•	
SGD	°,P,X	•	
SPLW (3)	°,P,X	•	
VMF-CRP	°,P,X	•	

- (1) For more information about SAF refer to the dedicated documentation.
- (2) Probe required for MULTICONTROL for managing the domestic hot water system.
 (3) Probe required for MULTICONTROL to manage the secondary circuit system.

BSKW: Electric heater kit

Ver

Model	Ver	101
BS6KW400T	°,P,X	•
BS9KW400T	°.P.X	•

DCPX: Condensation control temperature

,۲,۸	DCFA33	
VT: Antivibration		
Ver	101	
°.P.X	VT15	

101

KR: electric heater for the heat exchanger

- 1		9
	Ver	101
	°,P,X	KR100

A grey background indicates the accessory must be assembled in the factory

KRB: Electric heater for the base

Ver	101	
°,P,X	KRB3 (1)	

⁽¹⁾ Incompatible with the condensate collection basin accessory with integrated resistance.

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	ANLI
5,6,7	Size 101
8	Model
Н	Heat pump
9	Version
0	Standard
Р	With on/off pump
Χ	With inverter pump
10	Heat recovery
٥	Without heat recovery
11	Coils
0	Alluminium
R	Copper pipes-copper fins
S	Tinned copper
V	Copper pieps-Coated aluminium fins
12	Operating field (1)
0	Electronic thermostatic expansion valve
13	Evaporator
0	Standard
14	Power supply
T	400V 3N ~ 50Hz

⁽¹⁾ Water produced up to $+4\,^{\circ}\text{C}$. For different temperature please contact the factory.

PERFORMANCE SPECIFICATIONS 12 °C/7 °C - 40 °C/45 °C

ANLI - (H°)

Size		101
Cooling performance 12 °C/7 °C(1)		
Cooling capacity	kW	28,9
Input power	kW	11,7
Cooling total input current	A	16,0
EER	W/W	2,48
Water flow rate system side	l/h	4986
Pressure drop system side	kPa	50
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	31,5
Input power	kW	11,3
Heating total input current	A	16,0
COP	W/W	2,78
Water flow rate system side	l/h	5458
Pressure drop system side	kPa	59

ANLI - (HX)

Size		101
Cooling performance 12 °C/7 °C (1)		
Cooling capacity	kW	29,3
Input power	kW	11,9
Cooling total input current	A	18,0
EER	W/W	2,47
Water flow rate system side	l/h	4986
Useful head system side	kPa	175
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	31,2
Input power	kW	11,5
Heating total input current	A	17,0
COP	W/W	2,70
Water flow rate system side	l/h	5458
Useful head system side	kPa	158

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANLI - (HP)

Size		101
Cooling performance 12 °C/7 °C(1)		
Cooling capacity	kW	29,2
Input power	kW	11,7
Cooling total input current	A	17,0
EER	W/W	2,49
Water flow rate system side	l/h	4986
Useful head system side	kPa	92
Heating performance 40 °C/45 °C (2)		
Heating capacity	kW	31,2
Input power	kW	11,4
Heating total input current	A	17,0
COP	W/W	2,74
Water flow rate system side	l/h	5458
Useful head system side	kPa	76

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

ANLI - (H°)

Size		101
Cooling performance 23 °C / 18 °C (1)		
Cooling capacity	kW	42,3
Input power	kW	13,1
Cooling total input current	A	19,0
EER	W/W	3,22
Water flow rate system side	l/h	7301
Pressure drop system side	kPa	107
Heating performance 30 °C/35 °C(2)		
Heating capacity	kW	33,3
Input power	kW	9,5
Heating total input current	A	13,0
COP	W/W	3,51
Water flow rate system side	I/h	5763
Pressure drop system side	kPa	66
(1) D. FN 14511 2022 C		

ANLI - (HX)

Size		101
Cooling performance 23 °C / 18 °C (1)		
Cooling capacity	kW	42,3
Input power	kW	14,3
Cooling total input current	A	21,0
EER	W/W	2,96
Water flow rate system side	I/h	7301
Useful head system side	kPa	81
Heating performance 30 °C/35 °C (2)		
Heating capacity	kW	33,3
Input power	kW	10,5
Heating total input current	A	15,0
COP	W/W	3,17
Water flow rate system side	I/h	5763
Useful head system side	kPa	147

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANLI - (HP)

Size		101
Cooling performance 23 °C/18 °C(1)		
Cooling capacity	kW	42,3
Input power	kW	14,3
Cooling total input current	A	21,0
EER	W/W	2,96
Water flow rate system side	I/h	7301
Useful head system side	kPa	81
Heating performance 30 °C / 35 °C (2)		
Heating capacity	kW	33,3
Input power	kW	10,5
Heating total input current	A	15,0
COP	W/W	3,17
Water flow rate system side	I/h	5763
Useful head system side	kPa	147

ENERGY DATA

Size			101
Cooling capacity with low leaving	ng water temp (UE n° 2016/2281)		
SEER	0	W/W	3,81
SEEN	P,X	W/W	3,57
nce	0	%	149,20
ηςς	P,X	%	139,80
UE 811/2013 performance in ave	erage ambient conditions (average) -	35 °C - Pdesignh ≤ 70 kW (1)	
Pdesignh	°,P,X	kW	-
SCOP	°,X	W/W	3,23
	Р	W/W	3,25
	°,X	%	126,00
ηsh	Р	%	127,00
Efficiency energy class	°,P,X		A+

⁽¹⁾ Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			101
Electric data			
	0	A	21,0
Maximum current (FLA)	Р	A	24,4
	χ	A	25,5
Peak current (LRA)	°.P.X	A	-

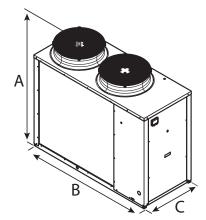
GENERAL TECHNICAL DATA

Size			101
Compressor			
Туре	°,P,X	type	Scroll
Number	°,P,X	no.	1
Compressor regulation	°,P,X	Туре	Inverter
Circuits	°,P,X	no.	1
Refrigerant	°,P,X	type	R410A
Refrigerant charge (1)	°,P,X	kg	4,5
System side heat exchanger			
Туре	°,P,X	type	Brazed plate
Number	°,P,X	no.	1
Hydraulic connections			
Connections (in/out)	°,P,X	Туре	Gas - F
Sizes (in/out)	°,P,X	Ø	1″1/4
Fan			
Туре	°,P,X	type	Axial
Fan motor	°,P,X	type	On/Off
Number	°,P,X	no.	2
Air flow rate	°,P,X	m³/h	13200
Sound data calculated in cooling r	mode (2)		
Sound power level	°,P,X	dB(A)	76,0
Sound pressure level (10 m)	°,P,X	dB(A)	44,5

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			101
Dimensions and weights			
A	°,P,X	mm	1450
В	°,P,X	mm	1750
C	°,P,X	mm	750
Empty weight	0	kg	293
	P,X	kg	308

























ANK 020-150

Reversible air/water heat pump

Cooling capacity 6,8 ÷ 39,8 kW - Heating capacity 8,0 ÷ 35,3 kW



- Production of hot water up to 60 °C
- Production of hot domestic water with external temperatures from -20 °C up to 42 °C
- Compact dimensions
- · Quick & easy installation





DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.

It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators.

Equipped with scroll compressors, axial fans, external coil with aluminium louvers, plate heat exchanger on the side.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A With storage tank and pump

P With pump

FEATURES

Operating field

Working at full load up to -20°C outside air temperature in winter, and up to 46°C in summer. Possibility production technical hot water production up to 60°C (for more information see the technical documentation).

Soft-start

Version with Integrated hydronic kit

To have a Plug & Play solution is also available the version with the integrated Hydronic group that contains the main hydraulic components including the water filter.

Inverter fan

Inverter fans as standard in size up 020 to 085 in all versions.

■ The DCPX accessory is not required for these sizes.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the

visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol

MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.

SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/ return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

VT: Anti-vibration supports.

BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

KRB: Electric anti-freeze resistance kit for base.

BDX: Condensate drip with resistance

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

ACCESSORIES COMPATIBILITY

Model	Ver	020	030	040	045	050	085	100	150
AERBAC-MODU	°,A,P	•		•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•
AERSET	°,A,P	•	•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	
SDHW (1)	°,A,P	•	•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	
SPLW (2)	°,A,P	•	•	•	•	•	•	•	
/MF-CRP	°,A,P	•	•	•	•	•	•	•	

(1) Probe required for MULTICONTROL for managing the domestic hot water system.
(2) Probe required for MULTICONTROL to manage the secondary circuit system.

Ver	020	030	040	045	050	085	100	150
°,A,P	-	-	-	-	-	-	DCPX53	DCPX53
								,

The accessory cannot be fitted on the configurations indicated with -

Ver	020	030	040	045	050	085	100	150
Power supply: °								
0 A D	BS6KW400T,	BS6KW400T,	BS6KW400T,	BS6KW400T,	BS6KW400T,	BS6KW400T,	BS6KW400T,	BS6KW400T,
°,A,P	BS9KW400T	BS9KW400T	BS9KW400T	BS9KW400T	BS9KW400T	BS9KW400T	BS9KW400T	BS9KW400T
Power supply: M								
0 A D	BS4KW230M,	BS4KW230M,	BS4KW230M,	BS4KW230M,				
°,A,P	BS6KW230M	BS6KW230M	BS6KW230M	BS6KW230M	-	-	-	
Ver	020	030	040	045	050	085	100	150
°,P	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15
A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15	VT15
Ver	020	030	040	045	050	085	100	150
Power supply: °								
°,A,P	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)					

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.

A grey background indicates the accessory must be assembled in the factory

Ver	020	030	040	045	050	085	100	150
°,A,P	KRB1 (1)	KRB2 (1)	KRB3 (1)	KRB3 (1)				

(1) Incompatible with the condensate collection basin accessory with integrated resistance.

A grey background indicates the accessory must be assembled in the factory											
Ver	020	030	040	045	050	085	100	150			
°,A,P	BDX8	BDX9	BDX9	BDX9	BDX9	BDX9	-	-			

The accessory cannot be fitted on the configurations indicated with -A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	ANK
4,5,6	Size 020, 030, 040, 045, 050, 085, 100, 150
7	Model
Н	Heat pump
8	Version
٥	Standard
Α	With storage tank and pump
Р	With pump
9	Execution
0	Standard
10	Coils
0	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
11	Operating field
٥	Standard mechanic thermostatic valve (1)
Υ	Low temperature mechanic thermostatic valve (2)
Z	Low temperature electronic thermostatic valve (3)
12	Evaporator
0	Standard
13	Power supply
0	400V 3N ∼ 50Hz (4)
М	230V ~ 50Hz (5)

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

ANK - (°) / 12/7 °C - 40/45 °C

Heating performance 40 °C / 45 °C (2)

Heating capacity

Heating total input current

Water flow rate system side

Input power

COP

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,8	8,2	10,5	11,6	13,1	15,5	25,3	29,3
Input power	kW	2,3	2,8	3,5	4,0	4,3	5,2	8,1	10,0
Cooling total input current	А	4,3	5,6	7,1	7,7	8,7	11,0	17,0	20,0
EER	W/W	2,93	2,91	2,98	2,93	3,03	3,00	3,12	2,92
Water flow rate system side	l/h	1169	1406	1811	1997	2253	2677	4362	5056
Pressure drop system side	kPa	16	9	16	14	18	24	32	36
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	8,0	10,0	12,2	14,0	15,3	17,4	27,1	33,3
nput power	kW	2,5	3,1	3,8	4,2	4,4	5,0	8,3	10,5
Heating total input current	A	4,7	6,2	7,6	8,0	9,0	10,0	18,0	21,0
COP	W/W	3,21	3,24	3,25	3,38	3,48	3,46	3,24	3,19
Nater flow rate system side	I/h	1376	1738	2117	2430	2656	3021	4689	5774
Pressure drop system side	kPa	22	14	22	21	25	31	37	47
(1) Data EN 14511:2022; Heat exchanger water (services s (2) Data EN 14511:2022; System side water heat exchang			w.b.						
Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,8	8,2	9,6	11,7	-	-	-	-
nput power	kW	2,3	2,8	3,2	3,7	-	-	-	-
Cooling total input current	A	11,0	13,0	16,0	19,0	-	-	-	-
ER	W/W	2,92	2,91	2,97	3,16	-	-	-	-
Vater flow rate system side	l/h	1179	1406	1649	2018	-	-	-	-
Pressure drop system side	kPa	16	9	14	14	-	-	-	-

kW

kW

Α

W/W

I/h

kPa

8,0

2,5

12,0

3,16

1376

22

10,0

3,1

15,0

3,24

1738

14

10,9

3,4

17,0

3,15

1881

18

13,5

3,8

19,0

3,50

2332

19

⁽¹⁾ Water produced up to $+4\,^{\circ}\text{C}$ (2) Water produced from 0 $^{\circ}\text{C} \div -8\,^{\circ}\text{C}$ (3) Water produced from $+4\,^{\circ}\text{C}$ up to $+0\,^{\circ}\text{C}$

⁽⁴⁾ For ANK 020 \div 045 sizes (5) Only for ANK 020 \div 045 sizes

Pressure drop system side

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANK - (A/P) / 12/7 °C - 40/45 °C

Size		020	030	040	045	050	085	100	150
Power supply: °	,								
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,9	8,2	10,6	11,7	13,2	15,7	25,6	29,7
Input power	kW	2,3	2,8	3,5	4,0	4,3	5,2	8,2	10,4
Cooling total input current	A	4,6	6,0	7,5	8,3	9,3	11,0	18,0	22,0
EER	W/W	3,00	2,97	3,05	2,95	3,06	3,03	3,12	2,87
Water flow rate system side	l/h	1169	1406	1811	1997	2253	2677	4362	5056
Useful head system side	kPa	78	82	70	81	74	63	115	144
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	7,9	9,9	12,1	13,9	15,2	17,3	26,8	33,0
Input power	kW	2,4	3,0	3,7	4,2	4,4	5,0	8,4	10,8
Heating total input current	A	5,0	6,6	8,0	8,6	9,6	11,0	19,0	23,0
COP	W/W	3,22	3,26	3,27	3,35	3,46	3,44	3,18	3,05
Water flow rate system side	I/h	1376	1738	2117	2430	2656	3021	4689	5774
Useful head system side	kPa	72	76	61	68	59	50	105	109
(1) Data EN 14511:2022; Heat exchanger water (servi (2) Data EN 14511:2022; System side water heat exch	ices side) 12°C / 7°C; outside nanger 40 °C / 45 °C; Outside	e air 35°C e air 7 °C d.b. / 6 °C	w.b.						
Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,9	8,2	9,7	11,8	-	-	-	-
Input power	kW	2,3	2,8	3,2	3,7	-	-	-	-
Cooling total input current	A	12,0	14,0	16,0	20,0	-	-	-	-
EER	W/W	2,99	2,96	3,02	3,17	-	-	-	-
Water flow rate system side	l/h	1179	1406	1649	2018	-	-	-	-
Useful head system side	kPa	78	71	62	70	-	-	-	-
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	7,9	9,9	10,8	13,4	-	-	-	-
Input power	kW	2,5	3,1	3,4	3,9	-	-	-	-

15,0

3,25

1738

58

13,0

3,17

1376

72

Α

W/W

l/h

kPa

18,0

3,16

1881

52

20,0

3,45

2332

57

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

ANK - (°) / 23/18 °C - 30/35 °C

Heating total input current

Water flow rate system side

Useful head system side

COP

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,5	11,4	14,7	16,2	18,2	21,7	34,0	39,4
Input power	kW	2,4	2,9	3,7	4,2	4,5	5,5	8,8	10,9
Cooling total input current	А	4,5	5,8	7,4	8,0	9,1	11,0	18,0	22,0
EER	W/W	3,88	3,86	3,95	3,89	4,02	3,96	3,86	3,61
Water flow rate system side	l/h	1637	1969	2536	2797	3155	3749	5889	6826
Pressure drop system side	kPa	31	18	31	27	35	47	58	66
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,5	10,6	13,0	14,6	16,2	18,2	29,2	35,6
Input power	kW	2,1	2,6	3,1	3,5	3,8	4,3	6,9	8,8
Heating total input current	А	4,0	5,2	6,2	6,8	7,7	8,9	15,0	18,0
COP	W/W	4,03	4,04	4,20	4,15	4,31	4,18	4,21	4,07
Water flow rate system side	l/h	1473	1830	2253	2525	2799	3137	5041	6147
Pressure drop system side	kPa	25	15	25	22	28	33	43	53

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,5	11,4	13,3	16,3	-	-	-	-
Input power	kW	2,5	2,9	3,4	3,9	-	-	-	-
Cooling total input current	A	12,0	14,0	17,0	19,0	-	-	-	-
EER	W/W	3,86	3,86	3,94	4,19	-	-	-	-
Water flow rate system side	l/h	1652	1969	2310	2826	-	-	-	-
Pressure drop system side	kPa	31	18	27	27	-	-	-	-
Heating performance 30 °C/35 °C(2)									
Heating capacity	kW	8,5	10,6	11,6	14,0	-	-	-	-
Input power	kW	2,2	2,6	2,8	3,3	-	-	-	-
Heating total input current	A	10,0	12,0	14,0	16,0	-	-	-	-
COP	W/W	3,96	4,04	4,08	4,30	-	-	-	-
Water flow rate system side	I/h	1473	1830	2001	2424	-	-	-	-
Pressure drop system side	kPa	25	15	21	20	-	-	-	-

ANK - (A/P) / 23/18 °C - 30/35 °C

Size

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,5	11,5	14,8	16,3	18,4	21,8	34,3	39,8
Input power	kW	2,4	2,9	3,6	4,2	4,5	5,5	8,9	11,4
Cooling total input current	A	5,1	6,5	8,1	9,2	10,0	12,0	19,0	24,0
EER	W/W	4,00	3,98	4,06	3,92	4,05	3,99	3,85	3,48
Water flow rate system side	l/h	1637	1969	2536	2797	3155	3749	5889	6826
Useful head system side	kPa	62	70	45	55	38	16	66	51
Heating performance 30 °C/35 °C(2)									
Heating capacity	kW	8,4	10,5	12,9	14,5	16,1	18,0	28,9	35,3
Input power	kW	2,1	2,6	3,0	3,5	3,8	4,3	7,0	9,2
Heating total input current	A	4,6	5,9	6,9	7,9	8,8	10,0	16,0	20,0
COP	W/W	4,07	4,08	4,26	4,12	4,28	4,16	4,11	3,85
Water flow rate system side	l/h	1473	1830	2253	2525	2799	3137	5041	6147
Useful head system side	kPa	69	73	56	65	54	45	95	90

⁽²⁾ Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Power supply: M									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,6	11,5	13,4	16,4	-	-	-	-
Input power	kW	2,4	2,9	3,4	3,9	-	-	-	-
Cooling total input current	A	12,0	14,0	17,0	20,0	-	-	-	-
EER	W/W	3,99	3,93	4,00	4,18	-	-	-	-
Water flow rate system side	l/h	1652	1969	2310	2826	-	-	-	-
Useful head system side	kPa	62	47	29	32	-	-	-	-
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,6	10,8	11,9	13,8	-	-	-	-
Input power	kW	2,2	2,6	2,9	3,4	-	-	-	-
Heating total input current	A	11,0	13,0	15,0	17,0	-	-	-	-
COP	W/W	3,88	4,11	4,10	4,11	-	-	-	-
Water flow rate system side	l/h	1486	1877	2061	2397	-	-	-	-
Useful head system side	kPa	58	65	58	79	-	-	-	-

030

020

040

045

050

085

150

100

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/35 °C; External air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Energy index ANK - 400V

Size			020	030	040	045	050	085	100	150
Power supply: °			1							
SEER - 12/7 (EN14825: 2018) (1)										
C	0	%	119,80	124,10	129,80	129,80	135,00	135,00	149,40	142,30
Seasonal efficiency	A,P	%	120,70	125,00	132,50	130,10	135,40	137,10	146,60	137,00
CLED	0	W/W	3,07	3,18	3,32	3,32	3,45	3,45	3,81	3,63
SEER	A,P	W/W	3,09	3,20	3,59	3,33	3,46	3,50	3,74	3,50
JE 811/2013 performance in average	ambient conditio	ns (average) - 35	°C - Pdesignh ≤ 7	0 kW (2)						
r.c	0		A+	A+	A+	A+	A+	A+	A++	A++
Efficiency energy class	A,P		A+	A+	A+	A+	A+	A+	A++	A+
D.J:l.	0	kW	7	9	11	13	14	16	26	32
Pdesignh	A,P	kW	7	9	11	13	14	15	25	30
1	0	%	132,00	133,00	137,00	136,00	141,00	133,00	153,00	153,00
ηsh	A,P	%	135,00	137,00	140,00	138,00	143,00	135,00	150,00	145,00
COD	0	W/W	3,38	3,40	3,50	3,48	3,60	3,40	3,90	3,90
SCOP	A,P	W/W	3,45	3,50	3,58	3,53	3,65	3,45	3,83	3,70

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Efficiencies for low temperature applications (35 °C)

Energy index ANK - 230V

Size			020	030	040	045
Power supply: M						
SEER - 12/7 (EN14825: 2018) (1)						
C	0	%	119,60	124,10	127,80	139,00
Seasonal efficiency	A,P	%	121,10	125,00	130,70	138,40
CLLD	0	W/W	3,07	3,18	3,27	3,55
SEER	A,P	W/W	3,10	3,20	3,34	3,54
UE 811/2013 performance in ave	rage ambient conditions (average) - 35 °C - Pdesignl	1 ≤ 70 kW (2)			
Efficiency energy class	°,A,P		A+	A+	A+	A+
Pdesignh	°,A,P	kW	7	9	10	12
l.	0	%	130,00	133,00	134,00	139,00
ηsh	A,P	%	133,00	137,00	137,00	141,00
CCOD	0	W/W	3,33	3,40	3,43	3,55
SCOP	A,P	W/W	3,40	3,50	3,50	3,60

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Efficiencies for low temperature applications (35 °C)

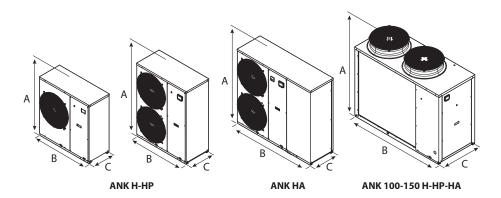
ELECTRIC DATA

ELECTRIC DATA										
Size			020	030	040	045	050	085	100	150
Power supply: °										
Electric data										
Marrian compant (FLA)	0	A	6,0	8,0	9,0	11,0	12,0	12,0	22,0	26,0
Maximum current (FLA)	A,P	A	6,8	8,4	9,8	11,9	13,1	13,6	23,6	28,9
Deals assessed (LDA)	0	A	40,0	40,0	54,0	61,0	71,0	91,0	73,0	105,0
Peak current (LRA)	A,P	A	40,4	41,0	55,0	62,6	72,6	92,6	74,6	107,8
Peak current with Soft-start	°,A,P	A	=	-	-	-	-	-	-	-
Size			020	030	040	045	050	085	100	150
Power supply: M										
Electric data										
	0	A	14,0	19,0	22,0	25,0	-	-	-	-
Maximum current (FLA)	A	A	14,6	20,1	22,9	26,3	-	-	-	-
	P	A	14,6	20,1	22,9	26,3	-	-	-	-
Deels assessed (LDA)	°,P	A	-	-	-	-	-	-	-	-
Peak current (LRA)	A	A	-	-	-	-	-	-	-	-
	0	A	45,0	45,0	45,0	45,0	-	_	-	-
Peak current with Soft-start	A	A	45,7	45,7	45,7	46,3	-	-	-	-
	P	A	45,7	45,7	45,7	46,3	-	-	-	-

GENERAL TECHNICAL DATA

Size			020	030	040	045	050	085	100	150
Compressor										
Туре	°,A,P	type				Sc	roll			
Compressor regulation	°,A,P	Туре				On-	-off			
Number	°,A,P	no.	1	1	1	1	1	1	2	2
Circuits	°,A,P	no.	1	1	1	1	1	1	1	1
Refrigerant	°,A,P	type				R4	10A			
Refrigerant charge (1)	°,A,P	kg	2,9	4,3	4,3	5,5	6,0	6,0	12,0	12,6
System side heat exchanger										
Туре	°,A,P	type				Braze	d plate			
Number	°,A,P	no.	1	1	1	1	1	1	1	1
Hydraulic connections										
Connections (in/out)	°,A,P	Туре				Gas	5 - F			
Size (in)	°,A,P	Ø				1′	11/4			
Size (out)	°,A,P	Ø				1′	11/4			
Fan										
Туре	°,A,P	type				A	ial			
Fan motor	°,A,P	type	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Asynchronous	Asynchronous
Number	°,A,P	no.	1	1	2	2	2	2	2	2
Air flow rate	°,A,P	m³/h	3500	8000	8000	7500	7500	7500	14500	14500
Sound data calculated in cooling										
Sound power level	°,A,P	dB(A)	68,0	70,5	70,5	70,5	70,5	70,5	77,0	78,0
Sound pressure level (10 m)	°,A,P	dB(A)	36,7	39,2	39,1	39,1	39,1	39,1	72,6	73,6

DIMENSIONS



Size			020	030	040	045	050	085	100	150
Dimensions and weights										
A	°,A,P	mm	1028	1281	1281	1281	1281	1281	1450	1450
P	°,P	mm	1000	1000	1000	1000	1000	1000	1750	1750
D	A	mm	1358	1450	1450	1450	1450	1450	1750	1750
C	°,A,P	mm	400	400	450	450	450	450	750	750
	0	kg	118	149	152	165	172	174	296	341
Empty weight	A	kg	160	211	214	232	238	241	364	412
	Р	kg	123	154	157	175	182	184	314	362

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).















SWP



- Production of hot water up to 60°C (70°C with the electric heater)
- Operation with suction air from 8°C to 35°C (extended to -15°C to 45°C with the electric heater)
- Versions with standard storage tank or with 1 or 2 coils to be used in combination with several additional sources





DESCRIPTION

The SWP heat pumps use the thermal energy of air for production of domestic hot water. The process occurs in the most efficient and profitable way with average COPs > 3. The energy advantage of the SWP heat pumps also safeguards the environment, using most of its energy from solar radiation.

Easy installation, silent and reliable functioning and very low maintenance requirements complete the benefits of this highly ecological and economic system.

FEATURES

- Steel tank with a double vitrification.
- Condenser wrapped externally to the boiler with no scales and refrigerant-water fluid contamination
- Auxiliary coil to be used together with a boiler or solar panels
- Integrated NTC sensor to control the water temperature
- External air sensor for automatic connection of the electric heater with unfavourable temperatures in heat pump mode
- Anti-corrosion magnesium anode
- Hydraulic connections located at rear of unit
- Thermal insulation made of very thick expanded polyurethane foam with a silver grey RAL 2006 external covering (ABS)
- Adjustable support feet
- Gas R134a
- Electric heater 1500 W 230V
- High pressure safety devices

- Rotary compressor
- Radial fan with an adjustment of 40 % of the nominal flow rate

Electronic controller:

- water set point adjustment
- external air temperature sensing
- auto-diagnostic with display of the high/low pressure alarm, water overheating alarm and disconnected sensors alarm
- record of run hours
- control of minimum time between successive compressor starts
- setting of parameters from the keyboard
- control of electric heater in manual mode or in supplementary automatic mode for low external temperatures
- periodic antibacterial treatment cycle to eliminate and prevent Legionella from developing
- user display to set the operating mode and various parameters with different levels of accessibility by means of passwords

VERSIONS

SWP301: Standard where the heat pump and the electric heater are the source of heat.

SWP 30151: With auxiliary coil to be used together with a boiler or solar panels.

SWP301S2: With double auxiliary coils for simultaneous use of three heat sources.

ACCESSORIES

SWPTA: Titanium electronic sacrificial anode.

ACCESSORIES COMPATIBILITY

Accessory	SWP301	SWP301S1	SWP301S2
SWPTA	•	•	•

PERFORMANCE SPECIFICATIONS

		SWP301	SWP301S1	SWP301S2
Performance in heating mode from 10°C to	o 54°C (1)			
Heating capacity	W	1950	1950	1950
Electric input power (average)	W	488	488	488
Electric input power (maximum)	W	700	700	700
Input power in standby (Pes)	W	43	43	43
COP (2)	W/W	2,91	2,91	2,91
Heating time	hh:mm	07:22	07:22	07:22

⁽¹⁾ Values measured when heating the water from 10°C to 54°C with 15°C inlet air temperature and 71% relative humidity (2) Value obtained on the entire L-type withdrawal cycle, at the reference temperature of 54°C (as required by EN 16147)

ELECTRIC DATA

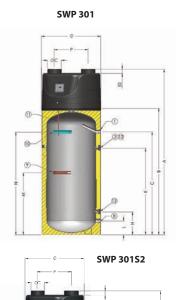
		SWP301	SWP301S1	SWP301S2
Power supply				
Power supply		230V~50Hz	230V~50Hz	230V~50Hz
Electric heater				
Number	no.	1	1	1
Input power	W	1500	1500	1500
Maximum current	A	10,00	10,00	10,00

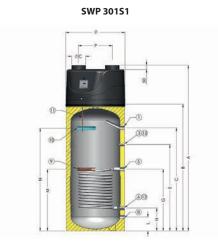
GENERAL TECHNICAL DATA

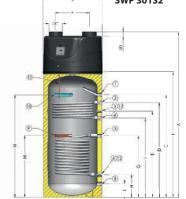
		SWP301	SWP301S1	SWP301S2
Accumulation inertial				
Storage tank capacity	I	273	268	265
Insulation thickness	mm	50	50	50
Type of corrosion protection	type		Anodo sacrificale in magnesio	
Maximum operating pressure	bar	6	6	6
Maximum working pressure of auxiliary coil (inf./sup.)	bar	10,0	10,0	10,0
Auxiliary serpentine surface (inf./sup.)		-	1,5	1,5/0,6
Capacity required for the coil 80/60 ° C (inf./sup.)		-	1,6	1,6/0,6
Domestic hot water production 80/60 $^{\circ}$ C - 10/45 $^{\circ}$ C			0,9	0,9/0,3
(DIN 4708)			0,5	0,7/0,3
Maximum volume of DHW usable at 40 ° C (Vmax)	I	370	370	370
Max DHW temperature with heat pump	°C		60 (55 di fabbrica)	
Fan				
Туре	type		Radiale	
Number	no.	1	1	1
Air flow rate	m³/h	450	450	450
High static pressure	Pa	80	80	80
Sound data				
Sound power level	dB(A)	60,0	60,0	60,0
Sound pressure level (L _D A at 1 metre) (1)	dB(A)	49,0	49,0	49,0

⁽¹⁾ In free field, with non-ducted inlets/outlets

DIMENSIONS









Key:

- 1 Hot water withdrawal - Rp 1"
- 2 Heating delivery - Rp 1"
- 3 Recirculation - Rp 1/2"
- 4
- Heating return Rp 1" Solar delivery Rp 1" Solar return Rp 1" 5
- 6
- Condensate drainage Rp 1/2" Chilled water inlet Rp 1"
- 8
- 9 Electric heater Rp 1" 1/4
- Anode Rp 1" 1/4 10
- Control probe sump L = 700 mm Rp11 1/2"
- 12 Probe sump L = 70 mm, Ø 12 mm

	,	SWP301	SWP301S1	SWP301S2
Dimensions and weig	hts			
A	mm	1845	1845	1845
В	mm	1410	1410	1410
C	mm	1150	1150	1150
D	mm	-	-	1060
E	mm	965	965	965
F	mm	-	-	890
G	mm	-	690	690
Н	mm	-	255	255
I	mm	965	965	965
L	mm	155	155	155
M	mm	690	690	690
N	mm	1145	1145	1145
Ø	mm	660	660	660
Øc	mm	160	160	160
Weight for transport	kg	112,0	127,0	145,0

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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MIC

Air-water chiller

Cooling capacity 3 kW



- Easy and guick to install compact
- Separable hydraulic circuit and refrigerant
- AISI304 stainless steel tank and pump impeller
- R513A refrigerant gas in A1 class with **low GWP**



DESCRIPTION

Air-cooled modular refrigerant to produce chilled water, designed and created to satisfy the cooling needs of industrial buildings.

Unit with alternative hermetic compressor and coaxial heat exchanger positioned in a 20-litre AISI304 stainless steel tank.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FEATURES

Operating field

Operation at full load up to 45 °C external air temperature. Unit can produce chilled water 20 °C up to -10 °C.

Refrigerant circuit

The refrigerant circuit is in the upper part of the machine and can be lifted up to be cleaned, or completely removed if a broken module needs to be replaced, leaving the hydronic part in place to ensure the system works properly.

Hydraulic components

Standard configuration: is fitted as standard

- One differential pressure switch
- An interception tap on the heat exchanger, used to remove the upper part of the machine or to balance the load.
- An AISI304 STAINLESS steel tank
- Connection pipes made of copper
- Brass valves
- 4 STAINLESS steel grooved joints and 2 caps. The water input and output can only be defined in a unit without pumps by the client at the installation stage.

In the configuration with pumps, as well as the components supplied as standard, there is a choice between two pumps with different head.

Modularity

Thanks to its modular construction, the installation can be adapted to suit specific system development needs whilst guaranteeing improved safety and reliability.

As a result, the cooling capacity can be easily increased over time, at a limited cost.

The modules are easy to install and link together from the hydronic point of view, thanks to the connections with grooved joints.

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Modularity

There are 3 solutions for dealing with several modules:

Solution 1: no interconnection between modules

Each module works independently on its own set point.

If it is necessary to switch all the machines on or off, each module must be operated.

Solution 2: through remote ON-OFF contact (Master/Slave)

With this solution, several modules can be connected in parallel and, where necessary, the start-up and switch-off of all modules can be coordinated with a single command.

The electrical panel has a contact for remote ON/OFF, which can be used to connect several modules in parallel, so that the start-up of the first unit (Master) results in the cascade start-up of all subsequent connected units (Slaves).

Each module works independently on its own set point.

Solution 3: via an external supervisor (BMS)

The modules can be controlled with an external supervisor with this solution using a ModBus (accessory) communication module.

ACCESSORIES

ETHERNET-RS485: Gateway to change a Modbus RS485 serial into a

FB_MIC: Air filter to protect the coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.

MIC_RUE: Swivel wheels with locking system

385

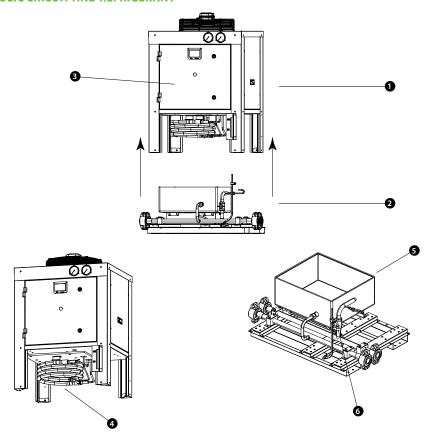
MODBUSMICS: This accessory allows you to manage up to multiple units, making available a serial in ModBus RTU protocol on RS485, for supervision with an external BMS.

DCPXMICS: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

ACCESSORIES COMPATIBILITY

Accessory	MIC01°	MICO1P1	MIC01P2
ETHERNET-RS485	•	•	•
FB_MIC	•	•	•
MODBUSMICS	•	•	•
Accessory	MICO1°	MIC01P1	MICO1P2
DCPXMICS	•	•	•

SEPARABLE HYDRAULIC CIRCUIT AND REFRIGERANT

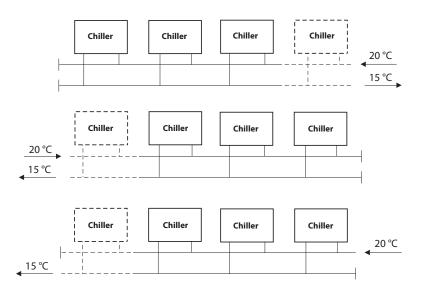


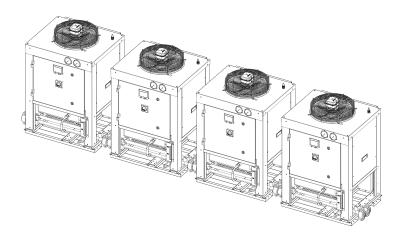
Key:

- Refrigerant circuit Hydraulic circuit 1
- Electric power board 3
- Conduit pipe evaporator AISI304 stainless steel tank
- Shut-off tap

MODULARITY OPTIONS

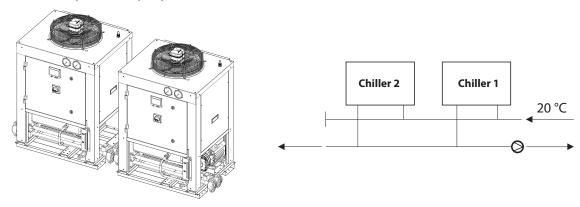
Units without pumps





■ Each machine is supplied with 4 grooved joints and two caps (machine input and output defined by the user depending on where the caps are positioned).

Several units and only one with a pump



■ The chiller with pump needs to be the first in the «chain» and the water entry position is secured.

CONFIGURATOR

Field	Description
1,2,3	MIC
4,5	Size 01
6	Version
0	Cooling only
7	Coils
0	Copper-aluminium
V	Copper pieps-Coated aluminium fins
8	Fans
0	Standard
F	Phase cut
9,10	Integrated hydronic kit
00	With storage tank without pumps
P1	With storage tank and low head pump
P2	With storage tank and high head pump
11	Power supply
M	230V ~ 50Hz (without Schuko plug)
N	230V ~ 50Hz (with Schuko plug)

PERFORMANCE SPECIFICATIONS

		MICO1°	MICO1P1	MICO1P2
Cooling performances 20 °C / 15 °C - (14511	:2022) (1)			
Cooling capacity	kW	3,0	2,9	2,9
Input power	kW	1,3	1,5	1,6
Input current	A	5,8	7,7	8,7
EER	W/W	2,31	2,01	1,83
Water flow rate system side	I/h	516	483	469
Pressure drop system side	kPa	10	-	-
Useful head system side	kPa	-	328	529

(1) Data EN 14511:2022; System side water heat exchanger 20 °C / 15 °C;; External air 32 °C

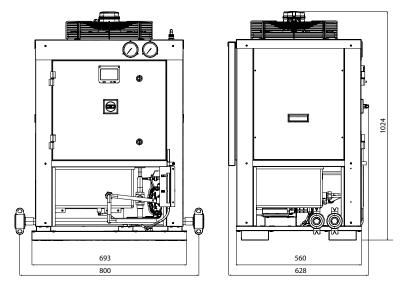
ELECTRIC DATA

		MIC01°	MICO1P1	MICO1P2
Cooling only mode	,			
Maximum current (FLA)	A	9,0	12,1	13,4
Peak current (LRA)	A	30,0	33,0	34,3

GENERAL TECHNICAL DATA

		MICO1°	MICO1P1	MICO1P2
System side hydraulic connections				
Sizes (in/out)	Ø		1"	
System side heat exchanger				
Туре	type		Coassiale	
Number	no.	1	1	1
Water content	[0,8	0,8	0,8
Minimum water flow rate	I/h	100	100	100
Maximum water flow rate	I/h	1200	1200	1200
Hydronic kit				
Storage tank capacity	[20	20	20
Fan				
Туре	type		Axial	
Fan motor	type		Asynchronous	
Number	no.	1	1	1
Air flow rate	m³/h	1500	1500	1500
Total fan input power	W	120	120	120
Total fan input current	A	0,4	0,4	0,4

DIMENSIONS



		MICO1°	MICO1P1	MICO1P2
Dimensions and weights				
A	mm	1024	1024	1024
В	mm	628	628	628
(mm	800	800	800





















ANL 021-202

Air-water chiller

Cooling capacity 5,7 ÷ 43,3 kW



- Standard version
- Version with Integrated hydronic kit system side





DESCRIPTION

Chillers for external installation for chilled water production with scroll compressors, axial fans, external copper coils with aluminum louvers from size 020 to 090, microchannel from size 102 to 202.

The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A With storage tank and pump

N With increased pump

P With pump

Q With storage tank and increased pump

FEATURES

Operating field

Operation at full load up to 46° C external air temperature. Unit can produce chilled water up to -10° C.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to facilitate installation.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

Double mechanical thermostat

On the configurator it is also possible to select the option "W" double mechanical thermostatic valve for low temperatures.

Using two electronic valves in parallel guarantees a precise and efficient control in a wide operating range. This allows them to produce chilled water from -10 $^{\circ}$ C to +18 $^{\circ}$ C.

The option is only available for sizes from 050 to 090 in the °-A-Q versions and from size 102 to 202 in all versions.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.

MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the

VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

VT: Anti-vibration supports.

RA: Anti-freeze electric heater for the buffer tank. **KR:** Anti-freeze electric heater for the plate heat exchanger.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	021	026	031	041	050	070	080	090	102	152	202
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
AERBAC-MODU	N					-						•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
AERLINK	N									•	•	•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
MODU-485BL	N									•	•	•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
MULTICONTROL	N									•	•	•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
PR3	N									•	•	•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
SGD	N									•	•	•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
SPLW (1)	N									•	•	•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
VMF-CRP	N									•	•	•
	Q						•					

 $^{(1) \ \} Probe\ required\ for\ MULTICONTROL\ to\ manage\ the\ secondary\ circuit\ system.$

DCPX: Condensation control temperature

Ver	021	026	031	041	050	070	080	090	102	152	202
°,A,P	DCPX50	DCPX52	DCPX52	DCPX52							
N	-	-	-	-	-	-	-	-	DCPX52	DCPX52	DCPX52
Q	-	-	-	-	DCPX50	DCPX50	DCPX50	DCPX50	DCPX52	DCPX52	DCPX52

VT: Antivibration

Ver	021	026	031	041	050	070	080	090	102	152	202
°,P	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT9	VT9	VT9	VT9	VT15						
N	-	-	-	-	-	-	-	-	VT15	VT15	VT15
Q	-	-	-	-	VT15						

DRE: Device for peak current reduction

Ver	050	070	080	090	102	152	202
Power supply: °							
°,A,P,Q	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)
N	-	-	-	-	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

KR: electric heater for the plate heat exchanger

Ver	021	026	031	041	050	070	080	090	102	152	202
°,P	KR2	KR100	KR100	KR100							
A,Q	-	-	-	-	KR2	KR2	KR2	KR2	KR100	KR100	KR100
N	-	-	-	-	-	-	-	-	KR100	KR100	KR100

A grey background indicates the accessory must be assembled in the factory

RA: electric heater for the buffer tank

Ver	021	026	031	041	050	070	080	090	102	152	202
A	RA	RA100	RA100	RA100							
Q	-	-	-	-	RA	RA	RA	RA	RA100	RA100	RA100

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	ANL
4,5,6	Size
	021, 026, 031, 041, 050, 070, 080, 090, 102, 152, 202 Model
7 .	
	Cooling only
8	Version
	Standard
A	With storage tank and pump
N	With increased pump (1)
P	With pump
Q	With storage tank and increased pump (2)
9	Heat recovery
•	Without heat recovery
D	With desuperheater (3)
10	Coils
٥	Copper-aluminium (4)
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
11	Operating field
0	Standard mechanic thermostatic valve (5)
W	Double mechanical thermostat for low temperature (6)
Y	Low temperature mechanic thermostatic valve (7)
Z	Low temperatures mechanic thermostatic valve (8)
12	Evaporator
0	Standard
13	Power supply
0	400V 3N ~ 50Hz (9)
M	230V ~ 50Hz (10)

PERFORMANCE SPECIFICATIONS

ANL - $^{\circ}$ (400V 3N \sim 50Hz / 230V \sim 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Power supply: °												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,4	16,4	20,4	22,2	26,5	32,9	42,8
Input power	kW	1,9	2,0	2,5	3,3	4,1	4,9	6,4	6,8	8,0	10,2	13,5
Cooling total input current	A	3,7	4,2	4,7	6,2	8,7	9,7	12,0	13,0	16,0	19,0	25,0
EER	W/W	3,03	3,04	2,99	2,90	3,26	3,33	3,18	3,28	3,32	3,21	3,18
Water flow rate system side	l/h	979	1065	1289	1649	2302	2835	3522	3831	4570	5670	7388
Pressure drop system side	kPa	21	21	22	24	30	30	36	50	58	61	68
(1) D. J. FN 14511 2022 H. J. L.	-:J-\ 120C / 70C		F0C									
(1) Data EN 14511:2022; Heat exchanger water (services	s side) 12 C// C	; outside air 3	5°C									
Size	s side) 12 C// C	021	026	031	041	050	070	080	090	102	152	202
	s side) 12 C / / C			031	041	050	070	080	090	102	152	202
Size	s side) 12 C / / C			031	041	050	070	080	090	102	152	202
Size Power supply: M	kW			7,5	9,6	050	070	080	090	102	152	202
Size Power supply: M Cooling performance 12 °C/7 °C(1)		021	026				070 - -			- -	- -	
Size Power supply: M Cooling performance 12 °C/7 °C(1) Cooling capacity	kW	5,7	6,2	7,5	9,6		- - -		- - -	- - -		-
Size Power supply: M Cooling performance 12 °C/7 °C(1) Cooling capacity Input power	kW kW	5,7 1,9	6,2 2,0	7,5 2,5	9,6 3,3		- - - -		- - -	- - - -	- - -	-
Size Power supply: M Cooling performance 12 °C/7 °C(1) Cooling capacity Input power Cooling total input current	kW kW	5,7 1,9 6,4	6,2 2,0 7,3	7,5 2,5 8,2	9,6 3,3 11,0		- - - -		- - - -	- - - - -	- - - -	-

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - P (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Power supply: °												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	13,5	16,6	20,6	22,4	26,8	33,2	43,2
Input power	kW	1,8	2,0	2,5	3,2	4,1	4,9	6,4	6,7	8,1	10,5	13,8
Cooling total input current	A	4,0	4,5	5,0	6,6	9,3	10,0	13,0	13,0	17,0	21,0	27,0
EER	W/W	3,11	3,12	3,07	2,97	3,31	3,38	3,23	3,35	3,32	3,15	3,13
Water flow rate system side	l/h	979	1065	1289	1649	2302	2835	3522	3831	4570	5670	7388
Useful head system side	kPa	73	73	71	65	76	72	57	52	84	115	90

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

⁽¹⁾ Only for ANL 102 ÷ 202 sizes
(2) Only for ANL 050 ÷ 202 sizes
(3) If the unit is also fitted with one of the low temperature valves in addition to the desuperheater, it is necessary to always guarantee a water temperature of 35°C at the inlet of the heat exchanger. The desuperheater is only available in sizes from 050 to 090 in the version with storage tank "A", and from size 102 to 202 in all versions.

(4) Sizes from 102 to 202 have a micro-channel coil

⁽⁵⁾ Water produced up to +4 °C
(6) Water produced from -10 °C to 18 °C; Option available only for sizes starting from 050 to 090 in the °-A-Q versions and from 102 to 202 in all versions
(7) Water produced from 0 °C up to -10 °C
(8) Water produced from +4 °C up to +0 °C
(9) For all sizes
(10) Only for ANL 021 ÷ 041 sizes

Size		021	026	031	041	050	070	080	090	102	152	202
Power supply: M												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	-	-	-	-	-	-	-
Input power	kW	1,8	2,0	2,5	3,2	-	-	-	-	-	-	-
Cooling total input current	A	7,0	7,9	8,8	11,0	-	-	-	-	-	-	-
EER	W/W	3,11	3,12	3,07	2,97	-	-	-	-	-	-	-
Water flow rate system side	l/h	979	1065	1289	1649	-	-	-	-	-	-	-
Useful head system side	kPa	73	73	71	65	-	-	-	-	-	-	-

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - N (400V 3N ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	-	-	-	-	26,8	33,3	43,3
Input power	kW	-	-	-	-	-	-	-	-	8,5	10,6	13,8
Cooling total input current	A	-	-	-	-	-	-	-	-	18,0	21,0	27,0
EER	W/W	-	-	-	-	-	-	-	-	3,17	3,15	3,13
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4570	5669	7387
Useful head system side	kPa	-	-	-	-	-	-	-	-	140	185	159

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - A (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Power supply: °	'											
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	13,5	16,6	20,6	22,4	26,8	33,2	43,2
Input power	kW	1,8	2,0	2,5	3,2	4,1	4,9	6,4	6,7	8,1	10,5	13,8
Cooling total input current	А	4,0	5,0	5,0	7,0	10,0	11,0	13,0	14,0	17,0	21,0	27,0
EER	W/W	3,11	3,12	3,07	2,97	3,31	3,38	3,23	3,35	3,32	3,15	3,13
Water flow rate system side	l/h	979	1065	1288	1649	2302	2834	3522	3831	4570	5669	7387
Useful head system side	kPa	73	73	71	65	76	72	57	52	84	115	91
(1) Data EN 14511:2022; Heat exchanger water	(services side) 12°C / 7°C	; outside air 3	5°C									
Size		021	026	031	041	050	070	080	090	102	152	202
Power supply: M												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	-	-	-	-	-	-	-
Input power	kW	1,8	2,0	2,5	3,2	-	-	-	-	-	-	-
Cooling total input current	A	7,0	7,9	8,8	11,0	-	-	-	-	-	-	-
EER	W/W	3,11	3,12	3,07	2,97	-	-	-	-	-	-	-
Water flow rate system side	l/h	979	1065	1289	1649	-	-	-	-	-	-	-
Useful head system side	kPa	73	73	71	65						_	_

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - Q (400V 3N ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	-	-	-	-	13,6	16,7	20,7	22,5	26,8	33,3	43,3
Input power	kW	-	-	-	-	4,2	5,0	6,5	6,8	8,5	10,6	13,8
Cooling total input current	А	-	-	-	-	10,0	11,0	13,0	14,0	18,0	21,0	27,0
EER	W/W	-	-	-	-	3,24	3,33	3,19	3,31	3,17	3,15	3,13
Water flow rate system side	l/h	-	-	-	-	2302	2834	3522	3831	4570	5669	7387
Useful head system side	kPa	-	-	-	-	160	159	144	140	140	185	159

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			021	026	031	041	050	070	080	090	102	152	202
SEER - 12/7 (EN14825:2018) with st	andard fans (1)												
	0	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEER	A,P	W/W	4,18	4,20	4,17	4,10	4,16	4,34	4,19	4,31	4,11	4,11	4,10
DEEK	N	W/W	-	-	-	-	-	-	-	-	- (2)	- (2)	- (2)
	Q	W/W	-	-	-	-	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	0	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Concornal officionary	A,P	%	164,00	164,80	163,60	161,00	163,40	170,70	164,60	169,40	161,30	161,20	161,10
Seasonal efficiency	N	%	-	-	-	-	-	-	-	-	- (2)	- (2)	- (2)
	Q	%	-	-	-	-	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEER - 23/18 (EN14825: 2018) with	standard fans (3)			-						-			
	0	W/W	4,34	4,35	4,31	4,21	4,55	4,68	4,49	4,61	4,83	4,73	4,69
SEER	A,P	W/W	4,49	4,51	4,48	4,47	4,55	4,64	4,57	4,66	4,49	4,25	4,28
DEEK	N	W/W	-	-	-	-	-	-	-	-	4,15	4,18	4,23
	Q	W/W	-	-	-	-	4,18	4,44	4,35	4,49	4,15	4,18	4,23
	0	%	170,40	170,90	169,20	165,20	179,10	184,30	176,60	181,50	190,30	186,00	184,70
C	A,P	%	176,70	177,50	176,00	175,60	179,00	182,40	179,80	183,50	176,60	167,00	168,00
Seasonal efficiency	N	%	-	-	-	-	-	-	-	-	163,10	164,20	166,00
	Q	%	-	-	-	-	164,30	174,50	171,10	176,70	163,10	164,20	166,00
SEPR - (EN14825: 2018) High tempe	erature with standa	rd fans (3)											
	0	W/W	5,92	5,92	5,85	5,69	6,36	6,50	6,21	6,43	6,79	6,58	6,49
CEDD	A,P	W/W	6,56	6,57	6,45	6,21	6,74	6,90	6,55	6,78	6,68	6,18	6,17
SEPR	N	W/W	-	-	-	-	-	-	-	-	5,91	6,09	6,10
	Q	W/W	-	-	-	-	6,03	6,28	6,08	6,30	5,91	6,09	6,10

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

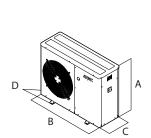
Size			021	026	031	041	050	070	080	090	102	152	202
Power supply: °													
Electric data													
	0	A	5,0	6,0	6,0	9,0	11,0	14,0	16,0	17,0	22,0	26,0	32,0
M (FLA)	A,P	A	6,0	7,0	7,0	10,0	13,0	15,0	18,0	19,0	23,0	28,0	34,0
Maximum current (FLA)	N	A	-	-	-	-	-	-	-	-	24,0	28,0	34,0
	Q	A	-	-	-	-	12,0	14,0	17,0	18,0	24,0	28,0	34,0
	0	A	28,0	38,0	39,0	44,0	65,0	75,0	102,0	96,0	76,0	87,0	117,0
Deals assessed (LDA)	A,P	Α	29,0	39,0	40,0	45,0	67,0	77,0	104,0	98,0	77,0	89,0	119,0
Peak current (LRA)	N	A	-	-	-	-	-	-	-	-	78,0	89,0	119,0
	Q	Α	-	-	_	-	66,0	76,0	103,0	97,0	78,0	89,0	119,0
Size			021	026	031	041	050	070	080	090	102	152	202
Power supply: M													
Electric data													
	0	A	13,0	16,0	18,0	22,0	-	-	-	-	-	-	-
Maximum current (FLA)	A,P	A	14,0	17,0	19,0	23,0	-	-	-	-	-	-	-
	N,Q	A	-	-	-	-	-	-	-	-	-	-	-
	0	A	64,0	68,0	69,0	100,0	-	-	-	-	-	-	-
Peak current (LRA)	A,P	A	62,0	69,0	70,0	101,0	-	-	-	-	-	-	-
	N,Q	A	-	-	-	-	-	-	-	-	-	-	-

GENERAL TECHNICAL DATA

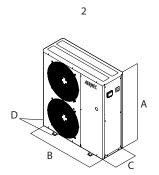
		ANL021	ANL026	ANL031	ANL041	ANL050	ANL070	ANL080	ANL090	ANL102	ANL152	ANL202
Compressor												
Туре	type						Scroll					
Compressor regulation	Туре						0n-0ff					
Number	no.	1	1	1	1	1	1	1	1	2	2	2
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type						R410A					
Refrigerant charge (1)	kg	1,2	1,2	1,2	1,3	2,8	2,8	3,0	3,9	5,9	5,9	5,9
System side heat exchanger												
Туре	type						Brazed plate					
Number	no.	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections												
Sizes (in/out)	Ø						1″1/4					
Fan												
Туре	type						Axial					
Fan motor	type					Asynch	ronous with p	hase cut				
Number	no.	1	1	1	1	1	1	1	1	2	2	2
Air flow rate	m³/h	2500	2500	3500	3500	7200	7200	7300	7200	14000	13500	13500
Sound data calculated in cooling mode (2)												

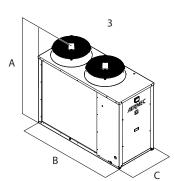
		ANL021	ANL026	ANL031	ANL041	ANL050	ANL070	ANL080	ANL090	ANL102	ANL152	ANL202
Sound power level	dB(A)	61,0	61,0	68,0	68,0	69,0	69,0	69,0	68,0	76,0	77,0	78,0
Sound pressure level (1 m)	dB(A)	29,8	29,8	36,8	36,8	37,6	37,6	37,6	36,6	44,5	45,5	46,5

DIMENSIONS



1





- ANL 021-041 1 ANL 050-070 2
- 3 ANL 102-202

Size			021	026	031	041	050	070	080	090	102	152	202
Dimensions and weights													
A	°,P	mm	1000	1000	1000	1000	1252	1252	1252	1252	1450	1450	1450
	Α	mm	1015	1015	1015	1015	1281	1281	1281	1281	1450	1450	1450
	N	mm	-	-	-	-	-	-	-	-	1450	1450	1450
	Q	mm	-	-	-	-	1281	1281	1281	1281	1450	1450	1450
В	°,P	mm	900	900	900	900	1124	1124	1124	1124	1750	1750	1750
	A	mm	1124	1124	1124	1124	1165	1165	1165	1165	1750	1750	1750
	N	mm	-	-	-	-	-	-	-	-	1750	1750	1750
	Q	mm	-	-	-	-	1165	1165	1165	1165	1750	1750	1750
(°,P	mm	310	310	310	310	384	384	384	384	750	750	750
	A	mm	384	384	384	384	550	550	550	550	750	750	750
	N	mm	-	-	-	-	-	-	-	-	750	750	750
	Q	mm	-	-	-	-	550	550	550	550	750	750	750
D	°,P	mm	354	354	354	354	428	428	428	428	-	-	-
	A	mm	428	428	428	428	-	-	-	-	-	-	-
	N	mm	-	-	-	-	-	-	-	-	-	-	-
	Q	mm	-	-	-	-	-	-	-	-	-	-	-
Empty weight	0	kg	86	86	86	86	120	120	120	156	270	293	329
	A	kg	103	103	103	103	147	147	147	183	338	364	400
	N	kg	-	-	-	-	-	-	-	-	338	364	400
	P	kg	91	91	91	91	127	127	163	163	288	314	350
	Q	kg	-	-	-	-	151	151	151	187	338	364	400

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).



















ANL 021H -203H

Reversible air/water heat pump

Cooling capacity 5,7 ÷ 49,1 kW - Heating capacity 6,2 ÷ 43,3 kW



- It is possible to produce hot domestic water
- Compact dimensions
- Quick & easy installation





DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.

Equipped with scroll compressors, axial fans, external coil with aluminium louvers, plate heat exchanger on the side.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A With storage tank and pump

N With increased pump

P With pump

Q With storage tank and increased pump

FEATURES

Operating field

Full load up to 46 ° C ambient air temperature with the possibility to produce chilled water down to -10° C in cooling mode (for more details refer to the technical documentation).

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to facilitate installation.

Inverter fans

Inverter fans from size 031 to 091 for all sizes.

■ The DCPX accessory is not required for these sizes.

Double mechanical thermostat

On the configurator it is also possible to select the option "W" double mechanical thermostatic valve for low temperatures.

Using two electronic valves in parallel guarantees a precise and efficient control in a wide operating range. This allows them to produce chilled water from -10 $^{\circ}$ C to +18 $^{\circ}$ C.

The option is available only for sizes starting from 051 to 091 in the °-A-Q versions and from size 103 to 203 in all versions.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.

MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.

SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/ return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

VT: Anti-vibration supports.

BDX: Condensate drip.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction. **RA:** Anti-freeze electric heater for the buffer tank.

KR: Anti-freeze electric heater for the plate heat exchanger.

KRB: Electric anti-freeze resistance kit for base.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	021	026	031	041	051	071	081	091	103	153	203
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
AERBAC-MODU	N	,				-				•		•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•			•	•	•	•			•
AERLINK	N											•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•			•	•	•	•			•
MODU-485BL	N									•	•	•
	Q					•	•	•	•			•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
MULTICONTROL	N									•		•
	Q					•	•	•	•			•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
PR3	N									•	•	•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•	•	•	•	•	•	•	•		•
SDHW (1)	N									•		•
	Q					•	•	•	•	•	•	•
	°,A,P	•	•	•	•	•	•	•	•	•	•	•
SGD	N									•	•	•
	Q					•		•	•	•		
	°,A,P			•	•	•		•	•	•	•	•
SPLW (2)	N									•	•	•
	Q											
	°,A,P	•		•	•	•	•	•	•	•	•	•
VMF-CRP	N										•	•
	Q						•					•

⁽¹⁾ Probe required for MULTICONTROL for managing the domestic hot water system.
(2) Probe required for MULTICONTROL to manage the secondary circuit system.

DCPX: Condensation control temperature

Ver	021	026	031	041	051	071	081	091	103	153	203
°,A,P	DCPX51	DCPX51	-	-	-	-	-	-	DCPX53	DCPX53	DCPX53
Q	-	-	-	-	-	-	-	-	DCPX53	DCPX53	DCPX53

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	021	026	031	041	051	071	081	091	103	153	203
°,P	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT9	VT9	VT9	VT9	VT15						
N	-	-	-	-	-	-	-	-	VT15	VT15	VT15
Q	-	-	-	-	VT15						

Condensate drip

conachisate any											
Ver	021	026	031	041	051	071	081	091	103	153	203
°,P	BDX5	-	-	-							
A	BDX5	BDX5	BDX5	BDX5	BDX6	BDX6	BDX6	BDX6	-	-	-
0	-	-	-	-	BDX6	BDX6	BDX6	BDX6	-	-	_

The accessory cannot be fitted on the configurations indicated with -

DRE: Device for peak current reduction

Ver	021	026	031	041	051	071	081	091	103	153	203
°,A,P,Q	-	-	-	-	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)
N	-	-	-	-	-	-	-	-	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

KR: electric heater for the heat exchanger

Ver	021	026	031	041	051	071	081	091	103	153	203
°,P	KR2	KR100	KR100	KR100							
A	-	-	-	-	KR2	KR2	KR2	KR2	KR100	KR100	KR100
N,Q	-	-	-	-	-	-	-	-	KR100	KR100	KR100

The accessory cannot be fitted on the configurations indicated with -

A grey background indicates the accessory must be assembled in the factory

RA: Anti-freeze electric heater for the buffer tank

Ver	021	026	031	041	051	071	081	091	103	153	203
A	RA	RA100	RA100	RA100							
Q	-	-	-	-	RA	RA	RA	RA	RA100	RA100	RA100

A grey background indicates the accessory must be assembled in the factory

KRB: Electric heater for the base

Ver	021	026	031	041	051	071	081	091	103	153	203
°,A,N,P,Q	-	-	-	-	-	-	-	-	KRB3 (1)	KRB3 (1)	KRB3 (1)

⁽¹⁾ Incompatible with the condensate collection basin accessory with integrated resistance.

CONFIGURATOR

Field	Description
1,2,3	ANL
4,5,6	Size 021, 026, 031, 041, 051, 071, 081, 091, 103, 153, 203
7	Model
Н	Heat pump
8	Version
0	Standard
A	With storage tank and pump
N	With increased pump (1)
Р	With pump
Q	With storage tank and increased pump (2)
9	Heat recovery
0	Without heat recovery
D	With desuperheater (3)
10	Coils
٥	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
٧	Copper pieps-Coated aluminium fins
11	Operating field
0	Standard mechanic thermostatic valve
W	Double mechanical thermostat for low temperature (4)
12	Evaporator
0	Standard
13	Power supply
0	400V 3N ~ 50Hz (5)
М	230V ~ 50Hz (6)

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

⁽¹⁾ Only for ANL 103 ÷ 203 sizes
(2) Only for ANL 051 ÷ 203 sizes
(3) The desuperheater must be intercepted during heating mode. If the unit is also fitted with one of the low temperature valves in addition to the desuperheater, during cold operation, it is necessary to always guarantee a water temperature of 35°C at the inlet of the heat exchanger. It is only available in sizes from 051 to 091 in the version with storage tank "A", and from size 103 to 203 in all versions.

(4) Water produced from -10 °C to 18 °C; Option available only for sizes starting from 051 to 091 in the °-A-Q versions and from 103 to 203 in all versions
(5) Only for ANL 021 ÷ 203 sizes
(6) Only for ANL 021 ÷ 041 sizes

PERFORMANCE SPECIFICATIONS 12 °C/7 °C - 40 °C/45 °C

ANL - (°) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,3	16,3	20,0	21,5	25,5	31,7	40,2
Input power	kW	1,9	2,0	2,5	3,3	4,4	5,9	6,7	6,7	9,2	11,0	14,1
Cooling total input current	A	3,7	4,2	4,7	6,2	8,7	9,7	12,0	13,0	16,0	19,0	25,0
EER	W/W	3,02	3,02	2,98	2,90	3,06	2,77	3,01	3,21	2,79	2,87	2,85
Water flow rate system side	l/h	979	1065	1289	1649	2294	2807	3452	3713	4398	5467	6929
Pressure drop system side	kPa	30	31	32	30	34	35	44	60	55	57	62
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,4	9,8	13,3	17,4	21,0	22,1	26,2	35,5	42,0
Input power	kW	1,9	2,2	2,7	3,1	4,1	5,2	6,0	6,4	8,8	11,1	12,7
Heating total input current	A	3,8	4,4	5,4	6,8	9,5	10,0	13,0	14,0	17,0	19,0	25,0
COP	W/W	3,21	3,27	3,17	3,22	3,21	3,32	3,49	3,47	2,99	3,21	3,32
Water flow rate system side	l/h	1078	1217	1460	1700	2294	3007	3638	3827	4529	6137	7265
Pressure drop system side	kPa	36	40	41	37	38	39	53	72	70	70	78
(1) Data EN 14511:2022; Heat exchanger water (se (2) Data EN 14511:2022; System side water heat ex	rvices side) 12°C / 7°C cchanger 40 °C / 45 °C	C; outside air 3 C; Outside air 7	5℃ ℃ d.b. / 6℃	w.b.								
Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: M												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	-	-	-	-	-	-	-
Input power	kW	1,9	2,0	2,5	3,3	-	-	-	-	-	-	-
Cooling total input current	A	6,4	7,3	8,1	11,0	-	-	-	-	-	-	-
EER	W/W	3,02	3,02	2,98	2,90	-	-	-	-	-	-	-
Water flow rate system side	l/h	979	1065	1289	1649	-	-	-	-	-	-	-
Pressure drop system side	kPa	30	31	32	30	-	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,4	9,8	-	-	-	-	-	-	-
	1144	4.0										

Input power

COP

Heating total input current

Water flow rate system side

Pressure drop system side

kW

Α

W/W

I/h

kPa

1,9

6,6

3,21

1078

36

2,2

7,6

3,27

1217

40

2,7

9,3

3,17

1460

41

3,1

12.0

3,22

1700

37

ANL - (A) / 12/7 °C - 40/45 °C (400V 3N \sim 50Hz / 230V \sim 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 12 °C/7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	13,4	16,4	20,2	21,7	25,8	32,0	40,6
Input power	kW	1,8	2,0	2,5	3,2	4,3	5,8	6,6	6,6	9,2	11,3	14,4
Cooling total input current	A	4,0	4,5	5,0	6,6	9,3	10,0	13,0	13,0	17,0	21,0	27,0
EER	W/W	3,11	3,12	3,07	2,97	3,11	2,82	3,06	3,29	2,79	2,83	2,82
Water flow rate system side	l/h	979	1065	1289	1649	2294	2807	3452	3713	4398	5467	6929
Useful head system side	kPa	73	73	71	65	76	72	57	52	88	125	111
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,3	9,7	13,1	17,2	20,9	21,9	25,9	35,1	41,6
Input power	kW	1,9	2,1	2,6	3,0	4,1	5,2	5,9	6,3	8,9	11,4	13,0
Heating total input current	A	4,1	4,7	5,8	7,2	10,0	11,0	14,0	14,0	18,0	21,0	27,0
COP	W/W	3,23	3,30	3,21	3,25	3,20	3,33	3,51	3,51	2,92	3,08	3,19
Water flow rate system side	I/h	1078	1217	1460	1700	2294	3007	3638	3827	4529	6137	7265
Useful head system side	kPa	68	67	65	58	72	65	46	40	64	94	68

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: M												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	-	-	-	-	-	-	-
Input power	kW	1,8	2,0	2,5	3,2	-	-	-	-	-	-	-
Cooling total input current	A	6,9	7,9	8,7	11,0	-	-	-	-	-	-	-
EER	W/W	3,11	3,12	3,07	2,97	-	-	-	-	-	-	-
Water flow rate system side	l/h	979	1065	1289	1649	-	-	-	-	-	-	-
Useful head system side	kPa	73	73	71	65	-	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,3	9,7	-	-	-	-	-	-	-
Input power	kW	1,9	2,1	2,6	3,0	-	-	-	-	-	-	-
Heating total input current	A	7,2	8,2	9,9	12,0	-	-	-	-	-	-	-
COP	W/W	3,23	3,30	3,21	3,25	-	-	-	-	-	-	-
Water flow rate system side	l/h	1078	1217	1460	1700	-	-	-	-	-	-	-
Useful head system side	kPa	68	67	65	58	-	-	-	-	-	-	-

ANL - (P) / 12/7 °C - 40/45 °C (400V 3N \sim 50Hz / 230V \sim 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 12 °C/7 °C (1)			-	-								
Cooling capacity	kW	5,7	6,2	7,6	9,7	13,4	16,4	20,2	21,7	25,8	32,0	40,6
Input power	kW	1,8	2,0	2,5	3,2	4,3	5,8	6,6	6,6	9,2	11,3	14,4
Cooling total input current	A	4,0	4,5	5,0	6,6	9,3	10,0	13,0	13,0	17,0	21,0	27,0
EER	W/W	3,11	3,12	3,07	2,97	3,11	2,82	3,06	3,29	2,79	2,83	2,82
Water flow rate system side	l/h	979	1065	1289	1649	2294	2807	3452	3713	4398	5467	6929
Useful head system side	kPa	73	73	71	65	76	72	57	52	88	125	111
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,3	9,7	13,1	17,2	20,9	21,9	25,9	35,1	41,6
Input power	kW	1,9	2,1	2,6	3,0	4,1	5,2	5,9	6,3	8,9	11,4	13,0
Heating total input current	A	4,1	4,7	5,8	7,2	10,0	11,0	14,0	14,0	18,0	21,0	27,0
СОР	W/W	3,23	3,30	3,21	3,25	3,20	3,33	3,51	3,51	2,92	3,08	3,19
Water flow rate system side	l/h	1078	1217	1460	1700	2294	3007	3638	3827	4529	6137	7265
Useful head system side	kPa	68	67	65	58	72	65	46	40	64	94	68

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C /7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: M												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	-	-	-	-	-	-	-
Input power	kW	1,8	2,0	2,5	3,2	-	-	-	-	-	-	-
Cooling total input current	A	6,9	7,9	8,7	11,0	-	-	-	-	-	-	-
EER	W/W	3,11	3,12	3,07	2,97	-	-	-	-	-	-	-
Water flow rate system side	l/h	979	1065	1289	1649	-	-	-	-	-	-	-
Useful head system side	kPa	73	73	71	65	-	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,3	9,7	-	-	-	-	-	-	-
Input power	kW	1,9	2,1	2,6	3,0	-	-	-	-	-	-	-
Heating total input current	A	7,2	8,2	9,9	12,0	-	-	-	-	-	-	-
COP	W/W	3,23	3,30	3,21	3,25	-	-	-	-	-	-	-
Water flow rate system side	l/h	1078	1217	1460	1700	-	-	-	-	-	-	-
Useful head system side	kPa	68	67	65	58	-	-	-	-	-	-	-

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANL - (Q) / 12/7 °C - 40/45 °C (400V 3N $\sim 50Hz$)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	13,5	16,5	20,3	21,8	25,8	32,1	40,6
Input power	kW	-	-	-	-	4,4	5,9	6,7	6,7	9,6	11,4	14,5
Cooling total input current	А	-	-	-	-	9,7	11,0	13,0	14,0	18,0	21,0	27,0
EER	W/W	-	-	-	-	3,05	2,78	3,03	3,25	2,68	2,82	2,81
Water flow rate system side	l/h	-	-	-	-	2294	2807	3452	3713	4398	5467	6929
Useful head system side	kPa	-	-	-	-	160	159	144	140	147	192	170
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	-	-	-	-	13,0	17,1	20,8	21,8	25,9	35,0	41,5
Input power	kW	-	-	-	-	4,2	5,3	6,1	6,4	9,3	11,4	13,0
Heating total input current	A	-	-	-	-	10,0	11,0	14,0	15,0	19,0	21,0	28,0
COP	W/W	-	-	-	-	3,10	3,24	3,42	3,43	2,78	3,07	3,19
Water flow rate system side	I/h	-	-	-	-	2294	3007	3638	3827	4529	6137	7265
Useful head system side	kPa	-	-	-	-	154	151	131	126	107	169	141

ANL - (N) / 12/7 °C - 40/45 °C (400V 3N \sim 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 12 °C/7 °C(1)			-		-							
Cooling capacity	kW	-	-	-	-	-	-	-	-	25,8	32,1	40,6
Input power	kW	-	-	-	-	-	-	-	-	9,6	11,4	14,5
Cooling total input current	A	-	-	-	-	-	-	-	-	18,0	21,0	27,0
EER	W/W	-	-	-	-	-	-	-	-	2,68	2,82	2,81
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4398	5467	6929
Useful head system side	kPa	-	-	-	-	-	-	-	-	147	192	170
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	-	-	-	-	-	-	-	-	25,9	35,0	41,5
Input power	kW	-	-	-	-	-	-	-	-	9,3	11,4	13,0
Heating total input current	A	-	-	-	-	-	-	-	-	19,0	21,0	28,0
COP	W/W	-	-	-	-	-	-	-	-	2,78	3,07	3,19
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4529	6137	7265
Useful head system side	kPa	-	-	-	-	-	-	-	-	107	169	141

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

ANL - (°) / 23/18 °C - 30/35 °C (400V 3N \sim 50Hz / 230V \sim 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 23 °C / 18 °C (1)				-		-						
Cooling capacity	kW	6,9	7,5	9,0	11,6	16,1	19,7	24,2	26,0	30,8	38,3	48,5
Input power	kW	2,0	2,1	2,6	3,4	4,5	6,1	7,0	7,0	9,6	11,6	14,8
Cooling total input current	A	3,8	4,3	4,9	6,4	9,0	10,0	13,0	13,0	16,0	19,0	26,0
EER	W/W	3,50	3,50	3,45	3,36	3,54	3,21	3,47	3,68	3,21	3,31	3,27
Water flow rate system side	l/h	1189	1293	1564	2002	2784	3407	4189	4506	5338	6636	8410
Pressure drop system side	kPa	44	46	47	44	50	52	65	88	81	84	92
Heating performance 30 °C/35 °C(2)												
Heating capacity	kW	6,5	7,3	8,8	10,3	13,8	18,1	21,9	23,1	27,3	37,0	43,9
Input power	kW	1,7	1,9	2,3	2,7	3,5	4,7	5,4	5,7	7,8	9,9	11,3
Heating total input current	A	3,3	3,8	4,6	6,0	8,1	9,1	11,0	12,0	15,0	17,0	22,0
COP	W/W	3,88	3,96	3,85	3,77	3,90	3,89	4,08	4,05	3,49	3,74	3,87
Water flow rate system side	l/h	1120	1265	1518	1767	2385	3126	3782	3979	4709	6381	7553
Pressure drop system side	kPa	39	43	44	40	41	42	57	78	76	76	84

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40°C / 45°C; Outside air 7°C d.b. / 6°C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: M												
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,0	11,6	-	-	-	-	-	-	-
Input power	kW	2,0	2,1	2,6	3,4	-	-	-	-	-	-	-
Cooling total input current	A	6,6	7,6	8,4	11,0	-	-	-	-	-	-	-
EER	W/W	3,50	3,50	3,45	3,36	-	-	-	-	-	-	-
Water flow rate system side	l/h	1189	1293	1564	2002	-	-	-	-	-	-	-
Pressure drop system side	kPa	44	46	47	44	-	-	-	-	-	-	-
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	6,5	7,3	8,8	10,3	-	-	-	-	-	-	-
Input power	kW	1,7	1,9	2,3	2,7	-	-	-	-	-	-	-
Heating total input current	A	5,6	6,5	8,0	10,0	-	-	-	-	-	-	-
COP	W/W	3,88	3,96	3,85	3,77	-	-	-	-	-	-	-
Water flow rate system side	I/h	1120	1265	1518	1767	-	-	-	-	-	-	-
Pressure drop system side	kPa	39	43	44	40	-	-	-	-	-	-	-

ANL - (A) / 23/18 °C - 30/35 °C (400V 3N \sim 50Hz / 230V \sim 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,7	16,2	19,8	24,4	26,2	31,1	38,7	48,9
Input power	kW	1,9	2,1	2,6	3,4	4,5	6,0	6,9	6,9	9,7	11,9	15,2
Cooling total input current	A	4,2	4,7	5,2	6,8	9,7	11,0	13,0	14,0	17,0	21,0	28,0
EER	W/W	3,63	3,63	3,58	3,46	3,62	3,28	3,55	3,81	3,21	3,24	3,21
Water flow rate system side	l/h	1189	1293	1564	2002	2784	3407	4189	4506	5338	6636	8410
Useful head system side	kPa	63	63	60	51	60	53	31	24	47	63	41
Heating performance 30 °C/35 °C(2)												
Heating capacity	kW	6,4	7,3	8,7	10,2	13,7	18,0	21,8	22,9	27,1	36,6	43,4
Input power	kW	1,6	1,8	2,2	2,7	3,5	4,6	5,3	5,6	8,0	10,2	11,7
Heating total input current	A	3,6	4,1	5,0	6,4	8,8	9,8	12,0	13,0	16,0	19,0	24,0
COP	W/W	3,93	4,02	3,91	3,81	3,90	3,91	4,11	4,11	3,40	3,58	3,71
Water flow rate system side	l/h	1120	1265	1518	1767	2385	3126	3782	3979	4709	6381	7553
Useful head system side	kPa	67	64	62	55	69	61	41	34	55	81	53

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 188 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: M	,											
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,7	-	-	-	-	-	-	-
Input power	kW	1,9	2,1	2,6	3,4	-	-	-	-	-	-	-
Cooling total input current	A	7,2	8,2	9,0	12,0	-	-	-	-	-	-	-
EER	W/W	3,63	3,63	3,58	3,46	-	-	-	-	-	-	-
Water flow rate system side	l/h	1189	1293	1564	2002	-	-	-	-	-	-	-
Useful head system side	kPa	63	63	60	51	-	-	-	-	-	-	-
Heating performance 30 °C / 35 °C (2)												

Heating performance 30 °C / 35 °C (2)													
Heating capacity	kW	6,4	7,3	8,7	10,2	-	-	-	-	-	-	-	İ
Input power	kW	1,6	1,8	2,2	2,7	-	-	-	-	-	-	-	
Heating total input current	A	6,2	7,1	8,6	11,0	-	-	-	-	-	-	-	
COP	W/W	3,93	4,02	3,91	3,81	-	-	-	-	-	-	-	
Water flow rate system side	l/h	1120	1265	1518	1767	-	-	-	-	-	-	-	ĺ
Useful head system side	kPa	67	64	62	55	-	-	-	_	-	-	-	

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (P) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,7	16,2	19,8	24,4	26,2	31,1	38,7	48,9
Input power	kW	1,9	2,1	2,6	3,4	4,5	6,0	6,9	6,9	9,7	11,9	15,2
Cooling total input current	A	4,2	4,7	5,2	6,8	9,7	11,0	13,0	14,0	17,0	21,0	28,0
EER	W/W	3,63	3,63	3,58	3,46	3,62	3,28	3,55	3,81	3,21	3,24	3,21
Water flow rate system side	l/h	1189	1293	1564	2002	2784	3407	4189	4506	5338	6636	8410
Useful head system side	kPa	63	63	60	51	60	53	31	24	47	63	41
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	6,4	7,3	8,7	10,2	13,7	18,0	21,8	22,9	27,1	36,6	43,4
Input power	kW	1,6	1,8	2,2	2,7	3,5	4,6	5,3	5,6	8,0	10,2	11,7
Heating total input current	A	3,6	4,1	5,0	6,4	8,8	9,8	12,0	13,0	16,0	19,0	24,0
COP	W/W	3,93	4,02	3,91	3,81	3,90	3,91	4,11	4,11	3,40	3,58	3,71
Water flow rate system side	l/h	1120	1265	1518	1767	2385	3126	3782	3979	4709	6381	7553
Useful head system side	kPa	67	64	62	55	69	61	41	34	55	81	53

⁽²⁾ Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: M												
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,7	-	-	-	-	-	-	-
Input power	kW	1,9	2,1	2,6	3,4	-	-	-	-	-	-	-
Cooling total input current	А	7,2	8,2	9,0	12,0	-	-	-	-	-	-	-
EER	W/W	3,63	3,63	3,58	3,46	-	-	-	-	-	-	-
Water flow rate system side	l/h	1189	1293	1564	2002	-	-	-	-	-	-	-
Useful head system side	kPa	63	63	60	51	-	-	-	-	-	-	-
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	6,4	7,3	8,7	10,2	-	-	-	-	-	-	-
Input power	kW	1,6	1,8	2,2	2,7	-	-	-	-	-	-	-
Heating total input current	A	6,2	7,1	8,6	11,0	-	-	-	-	-	-	-
COP	W/W	3,93	4,02	3,91	3,81	-	-	-	-	-	-	-
Water flow rate system side	l/h	1120	1265	1518	1767	-	-	-	-	-	-	-
Useful head system side	kPa	67	64	62	55	-	-	-	-	-	-	-

ANL - (Q) / 23/18 °C - 30/35 °C (400V 3N \sim 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	-	-	-	-	16,3	19,9	24,5	26,3	31,1	38,7	49,0
Input power	kW	-	-	-	-	4,6	6,2	7,0	7,0	10,2	11,9	15,2
Cooling total input current	A	-	-	-	-	10,0	11,0	14,0	14,0	18,0	22,0	28,0
EER	W/W	-	-	-	-	3,54	3,23	3,51	3,76	3,07	3,25	3,23
Water flow rate system side	l/h	-	-	-	-	2784	3407	4189	4506	5338	6636	8410
Useful head system side	kPa	-	-	-	-	136	135	114	108	79	146	114
Heating performance 30 °C/35 °C(2)												
Heating capacity	kW	-	-	-	-	13,6	17,9	21,7	22,8	27,0	36,6	43,4
Input power	kW	-	-	-	-	3,6	4,7	5,4	5,7	8,4	10,2	11,7
Heating total input current	A	-	-	-	-	9,1	10,0	13,0	13,0	17,0	19,0	25,0
COP	W/W	-	-	-	-	3,75	3,79	4,00	4,01	3,22	3,57	3,71
Water flow rate system side	l/h	-	-	-	-	2385	3126	3782	3979	4709	6381	7553
Useful head system side	kPa	-	-	-	-	149	146	125	119	92	159	129

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (N) / 23/18 °C - 30/35 °C (400V 3N \sim 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Power supply: °												
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	-	-	-	-	-	-	-	-	31,1	38,7	49,0
Input power	kW	-	-	-	-	-	-	-	-	10,2	11,9	15,2
Cooling total input current	A	-	-	-	-	-	-	-	-	18,0	22,0	28,0
EER	W/W	-	-	-	-	-	-	-	-	3,07	3,25	3,23
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	5338	6636	8410
Useful head system side	kPa	-	-	-	-	-	-	-	-	79	146	114
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	-	-	-	-	-	-	-	-	27,0	36,6	43,4
Input power	kW	-	-	-	-	-	-	-	-	8,4	10,2	11,7
Heating total input current	A	-	-	-	-	-	-	-	-	17,0	19,0	25,0
COP	W/W	-	-	-	-	-	-	-	-	3,22	3,57	3,71
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4709	6381	7553
Useful head system side	kPa	-	-	-	-	-	-	-	-	92	159	129

ENERGY DATA

Size			021	026	031	041	051	071	081	091	103	153	203
Power supply: °													
Cooling capacity with low leaving wa	ter temp (UE n° 2	016/2281)											
	0	W/W	3,13	3,19	3,28	3,34	3,76	3,49	3,80	3,91	3,58	3,74	3,73
SEER	A,P	W/W	3,29	3,36	3,45	3,50	3,89	3,69	3,99	4,16	3,55	3,53	3,55
SECK	N	W/W	-	-	-	-	-	-	-	-	3,14	3,48	3,53
	Q	W/W	-	-	-	-	3,30	3,24	3,53	3,75	3,14	3,48	3,53
	0	%	122,00	125,00	128,00	131,00	147,00	137,00	149,00	153,00	140,00	146,00	146,00
nee	A,P	%	129,00	131,00	135,00	137,00	153,00	145,00	157,00	163,00	139,00	138,00	139,00
ηςς	N	%	-	-	-	-	-	-	-	-	123,00	136,00	138,00
	Q	%	-	-	-	-	129,00	127,00	138,00	147,00	123,00	136,00	138,00
UE 811/2013 performance in average	ambient conditi	ons (average)	- 35 °C - Pdes	ignh ≤ 70 k\	V (1)								
	0	kW	6,00	6,00	8,00	9,00	13,00	16,00	20,00	21,00	25,00	33,00	40,00
Distant	A,P	kW	6,00	6,00	8,00	9,00	12,00	16,00	20,00	21,00	24,00	33,00	39,00
Pdesignh	N	kW	-	-	-	-	-	-	-	-	24,00	33,00	39,00
	Q	kW	-	-	-	-	12,00	16,00	19,00	21,00	24,00	33,00	39,00
	0	W/W	3,31	3,39	3,33	3,26	3,44	3,43	3,56	3,50	3,53	3,57	3,69
	A	W/W	3,40	3,48	3,41	3,34	3,48	3,48	3,61	3,52	3,45	3,45	3,61
SCOP	N	W/W	-	-	-	-	-	-	-	-	3,22	3,35	3,52
	P	W/W	3,40	3,40	3,40	3,35	3,48	3,48	3,60	3,53	3,45	3,45	3,60
	Q	W/W	-	-	-	-	3,22	3,28	3,43	3,39	3,22	3,35	3,52
	0	%	129,47	132,68	130,12	127,57	134,49	134,10	139,54	137,05	138,02	139,67	144,75
	A	%	133,10	136,35	133,49	130,79	136,32	136,18	141,46	137,92	135,05	134,98	141,49
ηsh	N	%	-	-	-	-	-	-	-	-	125,60	131,07	137,69
•	P	%	133,00	133,00	133,00	131,00	136,00	136,00	141,00	138,00	135,00	135,00	141,00
	Q	%	-	-	-	-	125,80	128,03	134,25	132,80	125,60	131,07	137,69
	0		A+	A+	A+	A+	A+	A+	A+	A+	A+	A++	A++
F#C -:	A,P		A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+
Efficiency energy class	N		-	-	-	-	-	-	-	-	A+	A+	A+
	Q		-	-	-	-	A+						

⁽¹⁾ Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

ELLCTRIC DATA													
Size			021	026	031	041	051	071	081	091	103	153	203
Power supply: °													
Electric data													
	0	A	7,0	7,0	7,7	9,7	11,3	13,5	16,3	17,3	22,0	26,0	32,0
Maximovina avionant (FLA)	A,P	А	7,7	7,7	8,4	10,4	13,3	15,5	18,3	19,3	23,9	29,1	35,1
Maximum current (FLA)	N	Α	-	-	-	-	-	-	-	-	26,2	30,2	36,2
	Q	Α	-	-	-	-	14,0	13,5	19,0	20,0	26,2	30,2	36,2
	0	A	27,5	33,5	36,7	49,7	65,3	75,3	102,3	96,3	76,0	87,0	117,0
Deals surrent (LDA)	A,P	А	28,2	34,2	37,4	50,4	67,3	75,3	104,3	98,3	77,9	90,1	120,1
Peak current (LRA)	N	A	-	-	-	-	-	-	-	-	80,2	91,2	121,2
	Q	А	-	-	-	-	68,0	75,3	105,0	99,0	80,2	91,2	121,2

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/35 °C; External air 7 °C d.b. /6 °C w.b.

Size			021	026	031	041	051	071	081	091	103	153	203
Power supply: M													
Electric data													
	0	Α	17,5	17,5	20,7	24,7	-	-	-	-	-	-	-
Maximum current (FLA)	A,P	Α	18,5	18,5	20,5	25,6	-	-	-	-	-	-	-
	N,Q	A	-	-	-	-	-	-	-	-	-	-	-
	0	Α	59,5	62,5	83,7	98,7	-	-	-	-	-	-	-
Peak current (LRA)	A,P	A	60,5	63,5	84,5	99,6	-	-	-	-	-	-	-
	N,Q	A	-	-	-	-	-	-	-	-	-	-	-

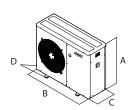
GENERAL TECHNICAL DATA

Size		021	026	031	041	051	071	081	091	103	153	203
Compressor												
Туре	type						Scroll					
Compressor regulation	Туре						On-Off					
Number	no.	1	1	1	1	1	1	1	1	2	2	2
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type						R410A					
Refrigerant charge (1)	kg	1,8	1,8	2,0	2,0	2,9	2,9	3,1	3,9	4,6	5,4	5,7
System side heat exchanger												
Туре	type						Brazed plate					
Number	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	Туре						Gas - F					
Sizes (in/out)	Ø						1"1/4					
Fan												
Туре	type						Axial					
Fan motor	type	Asynchronous	Asynchronous	Asynchronous	Inverter	Inverter	Inverter	Inverter	Inverter	Asynchronous	Asynchronous	Asynchronous
Number	no.	1	1	1	1	1	2	2	2	2	2	2
Air flow rate	m³/h	2500	2500	3500	3500	7200	7200	7300	7200	14000	13500	13500
Sound data calculated in cooling n	node (2)											
Sound power level	dB(A)	61,0	61,0	68,0	68,0	69,0	69,0	69,0	68,0	76,0	77,0	78,0
Sound pressure level (10 m)	dB(A)	29,8	29,8	36,8	36,8	37,6	37,6	37,6	36,6	44,5	45,5	46,5

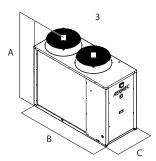
⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



2



ANL 021 - 041 ANL 051 - 091 2 ANL 103 - 203

Size	·		021	026	031	041	051	071	081	091	103	153	203
Dimensions and weights													
	°,P	mm	1000	1000	1000	1000	1252	1252	1252	1252	1450	1450	1450
Λ.	A	mm	1015	1015	1015	1015	1281	1281	1281	1281	1450	1450	1450
A	N	mm	-	-	-	-	-	-	-	-	1450	1450	1450
	Q	mm	-	-	-	-	1281	1281	1281	1281	1450	1450	1450
	°,P	mm	900	900	900	900	1124	1124	1124	1124	1750	1750	1750
D	A	mm	1124	1124	1124	1124	1165	1165	1165	1165	1750	1750	1750
В	N	mm	-	-	-	-	-	-	-	-	1750	1750	1750
	Q	mm	-	-	-	-	1165	1165	1165	1165	1750	1750	1750
	°,P	mm	310	310	310	310	384	384	384	384	750	750	750
r	A	mm	384	384	384	384	550	550	550	550	750	750	750
· ·	N	mm	-	-	-	-	-	-	-	-	750	750	750
	Q	mm	-	-	-	-	550	550	550	550	750	750	750
	°,P	mm	354	354	354	354	428	428	428	428	-	-	-
D	A	mm	428	428	428	428	-	-	-	-	-	-	-
D	N	mm	-	-	-	-	-	-	-	-	-	-	-
	Q	mm	-	-	-	-	-	-	-	-	-	-	-
	0	kg	86	86	86	86	120	120	120	156	270	293	329
	A	kg	103	103	103	103	147	147	183	183	338	364	400
Empty weight	N	kg	-	-	-	-	-	-	-	-	338	364	400
	Р	kg	91	91	91	91	127	127	163	163	288	314	350
	Q	kg	-	-	-	-	147	147	183	183	338	364	400





















NRK 0090-0150

Reversible air/water heat pump

Cooling capacity 18,4 ÷ 31,0 kW - Heating capacity 20,8 ÷ 34,4 kW



- Cooling / heating / high-temperature water production even for DHW production.
- Water produced up to +65 °C
- Heating operations with external temperatures down to -20 °C
- Optimised for heating mode





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential, commercial complexes or industrial applications.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° High efficiency

FEATURES

Operating field

Working at full load up to -20 °C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 65 °C.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one pumps or storage tank to obtain a solution that allows you to save money and to facilitate installation.

Components

Water filter, flow switch, low and high pressure transducers as standard supply on all units.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

DCPX as standard

Phase-cut device that regulates the fan speed to ensure optimum unit operation in all conditions.

CONTROL

MODUCONTROL control type.

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.

MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.

MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.

SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.

SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/

return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

VT: Anti-vibration supports.

BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

Refer to the specific "SAF" datasheet for more information about correct system operation, and about the required or recommended accessories. Please consult the VMF system for the production of DHW with a thermal storage tank not supplied by Aermec.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0090	0100	0150
AERBAC-MODU	0	•	•	•
AERLINK	0	•	•	•
AERNET	0	•	•	•
BMConverter	0	•	•	•
MODU-485BL	0	•	•	•
MULTICONTROL	0	•	•	•
PR3	0	•	•	•
SAF (1)	0	•	•	•
SDHW (2)	0	•	•	•
SGD	0	•	•	•
SPLW (3)	0	•	•	•
VMF-CRP	0	•	•	•

- For more information about SAF refer to the dedicated documentation.
 Probe required for MULTICONTROL for managing the domestic hot water system.
 Probe required for MULTICONTROL to manage the secondary circuit system.

BSKW: Electric heater kit

Model	Ver	0090	0100	0150
BS6KW400T	۰	•	•	•
BS9KW400T	0	•	•	•

BS6KW400T (6kW, 400V 3); BS9KW400T (9kW, 400V 3)

VT: Antivibration

Ver	0090	0100	0150
Integrated hydronic kit: 00, 01, 03, P1, P3			
0	VT15	VT15	VT15

DRE: Device for peak current reduction

Ver	0090	0100	0150
٥	DRE10 (1)	DRE10 (1)	DRE15 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	NRK
4,5,6,7	Size 0090, 0100, 0150
8	Operating field (1)
0	Standard mechanic thermostatic valve
9	Model
Н	Heat pump
10	Heat recovery
0	Without heat recovery
D	With desuperheater (2)
11	Version
0	High efficiency
12	Coils
0	Alluminium

Field	Description
R	Copper pipes-copper fins
S	Tinned copper
V	Copper pieps-Coated aluminium fins
13	Fans
0	Standard
14	Power supply
0	400V ~ 3N 50Hz
15,16	Integrated hydronic kit
00	Without hydronic kit
01	Storage tank with low head pump
03	Storage tank with high head pump
P1	Single pump low head
P3	Single pump high head

⁽¹⁾ Water produced up to $+4\,^{\circ}\text{C}$. (2) The desuperheater can only be used with cold running.

PERFORMANCE SPECIFICATIONS

NRK - (°) / 12/7 °C - 40/45 °C

Size		0090	0100	0150
Cooling performance 12 °C/7 °C(1)	'			
Cooling capacity	kW	18,4	26,4	31,0
Input power	kW	5,8	8,4	9,8
Cooling total input current	A	13,0	18,0	20,0
EER	W/W	3,19	3,15	3,15
Water flow rate system side	l/h	3172	4546	5338
Pressure drop system side	kPa	19	39	54
Heating performance 40 °C / 45 °C (2)				
Heating capacity	kW	20,8	28,7	34,4
Input power	kW	6,1	8,3	10,3
Heating total input current	A	14,0	17,0	21,0
COP	W/W	3,40	3,45	3,34
Water flow rate system side	l/h	3601	4965	5953
Pressure drop system side	kPa	24	45	65

NRK - (°) / 23/18 °C - 30/35 °C

Size		0090	0100	0150
Cooling performance 23 °C / 18 °C (1)				
Cooling capacity	kW	24,5	34,9	40,9
Input power	kW	6,1	9,0	10,6
Cooling total input current	A	14,0	18,0	22,0
EER	W/W	4,03	3,88	3,86
Water flow rate system side	l/h	4236	6040	7093
Pressure drop system side	kPa	34	69	95
Heating performance 30 °C / 35 °C (2)				
Heating capacity	kW	20,4	28,2	33,8
nput power	kW	5,0	6,7	8,3
Heating total input current	A	11,0	14,0	17,0
TOP TOP	W/W	4,11	4,22	4,09
Vater flow rate system side	l/h	3521	4866	5833
Pressure drop system side	kPa	23	43	-

ENERGY DATA

Size			0090	0100	0150
Cooling capacity with low leaving	g water temp (UE n° 2016/2	2281)			
SEER	0	W/W	3,35	3,39	3,42
ηςς	0	%	131,10	132,60	133,80
Size			0090	0100	0150
ntegrated hydronic ki	t: 00				
JE 811/2013 performance in ave	rage ambient conditions (a	overage) - 55 °C - Pdesignh ≤ 70 k\	W (1)		
Efficiency energy class	0		A+	A+	A+
Pdesignh	0	kW	22,00	28,00	34,00
5COP	0	W/W	3,03	2,98	2,90
ηsh	0	%	118,00	116,00	113,00
JE 811/2013 performance in ave	rage ambient conditions (a	overage) - 35 °C - Pdesignh ≤ 70 k\	W (2)		
Efficiency energy class	0	<u> </u>	A+	A+	A+
Pdesignh	0	kW	21,00	27,00	32,00
SCOP	0	W/W	3,70	3,68	3,60
nsh	0	%	145,00	144,00	141,00

⁽¹⁾ Efficiencies for average temperature applications (55 °C) (2) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			0090	0100	0150
Electric data					
Maximum current (FLA)	0	A	19,1	24,6	29,5
Peak current (LRA)	0	A	104,2	121,2	143,2

NRK-0090-0150-HP_Y_UN50_08 408 www.aermec.com

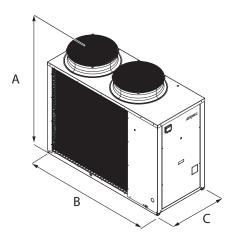
⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

GENERAL TECHNICAL DATA

Size			0090	0100	0150
Compressor					
Туре	0	type		Scroll	
Compressor regulation	ġ.	Туре		On-Off	
Number	0	no.	1	1	1
Circuits	o o	no.	1	1	1
Refrigerant	ō.	type		R410A	
Refrigerant charge (1)	0	kg	13,0	14,0	16,0
System side heat exchanger					
Туре	0	type		Brazed plate	
Number	o o	no.	1	1	1
Hydraulic connections					
Connections (in/out)	o o	Туре		Gas-F	
Size (in)	0	Ø		11/2"	
Size (out)	0	Ø		11/2"	
Fan					
Туре	0	type		axials	
Fan motor	o o	type		Asynchronous	
Number	0	no.	2	2	2
Air flow rate	0	m³/h	14200	14200	13700
Sound data calculated in cooling mo	ode (2)				
Sound power level	0	dB(A)	78,0	78,0	78,0
Sound pressure level (10 m)	0	dB(A)	46,5	46,5	46,5

DIMENSIONS



Size			0090	0100	0150
Dimensions and weights					
A	0	mm	1450	1450	1450
В	0	mm	1750	1750	1750
C	0	mm	750	750	750
Empty weight	0	ka	289	328	372

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).





















Reversible air/water heat pump

Cooling capacity 35,5 ÷ 148 kW - Heating capacity 42,31 ÷ 175 kW



- Water produced up to +65 °C
- Heating operations with external temperatures down to -20 °C
- Optimized for operation in heating mode
- Night mode





DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.

It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators.

Equipped with scroll compressors, axial fans, external coil with aluminium louvers, plate heat exchanger on the side.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -20 $^{\circ}$ C outside air temperature in winter, and up to 48 $^{\circ}$ C in summer. Hot water production up to 65 $^{\circ}$ C.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to facilitate installation.

Components

Water filter, flow switch, low and high pressure transducers as standard supply on all units.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

CONTROL

pCO⁵ control type

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log.

Possibility to control two units in a Master-Slave configuration

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

GP: Anti-intrusion grid.

VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

PRM1: It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

AERCALM: The aim of the accessory installed in the electric box of the unit is to provide a clean contact for commanding - on the basis of the outside air temperature - a boiler to replace the heat pump. Aercalm must be requested at the time of ordering, as it is installed in the factory.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
AER485P1	A					•	•	•	•	•	•
AEK483PT	E	•	•	•	•	•	•	•	•	•	•
AERBACP	A					•	•	•	•	•	•
AENDACY	E		•	•	•	•	•	•	•	•	
AERLINK	A					•	•	•	•	•	•
AERLINK	E	•	•	•	•	•	•	•	•	•	
AERNET	A					•	•	•	•	•	•
AEKNET	E	•	•	•	•	•	•	•	•	•	•
BMConverter	A					•	•	•	•	•	
BMConverter	E	•	•	•	•	•	•	•	•	•	•
MULTICULUED EVO	A					•	•		•	•	
MULTICHILLER_EVO	E	•	•	•	•	•	•	•	•	•	•
PGD1	A					•					
ועטי	E	•	•	•	•	•	•	•	•	•	
SGD	A					•					
עטכ	E	•				•					

GP: anti-intrusion grid

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)			
E	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)			

(1) x _ indicates the quantity to buy

VT: Antivibration

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Integrated hydronic kit: 00, P1, P2, P	3, P4									
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22
E	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT22	VT22
Integrated hydronic kit: 01, 02, 03, 0	4, 05, 06, 07, 08									
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT22	VT22

DRE: Device for peak current reduction

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	DRE351 (1)	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)
E	DRE201 (1)	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

RIF: Power factor correction

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	RIF65	RIF58	RIF59	RIF60	RIF61	RIF61
E	RIF55	RIF56	RIF54	RIF57	RIF65	RIF58	RIF59	RIF60	RIF61	RIF61

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	T6NRK1	T6NRK2	T6NRK3	T6NRK3	T6NRK3	T6NRK3
E	T6NRK1	T6NRK1	T6NRK1	T6NRK1	T6NRK1	T6NRK2	T6NRK3	T6NRK3	T6NRK3	T6NRK3

A grey background indicates the accessory must be assembled in the factory

PRM1: Manually reset pressure switch

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1
E	PRM1									

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

7", touch screen keyboard

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
C-TOUCH	A					•	•	•	•	•	•
C-100CH	E	•	•	•			•	•	•		

Clean contact for controlling a boiler.

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
AERCALM	A					•	•	•	•	•	•
AERCALIN	F										

CONFIGURATOR

Field	Description
1,2,3	NRK
4,5,6,7	Size 0200, 0280, 0300, 0330, 0350, 0500, 0550, 0600, 0650, 0700
8	Operating field (1)
0	Standard mechanic thermostatic valve
9	Model
Н	Heat pump
10	Heat recovery
0	Without heat recovery
D	With desuperheater (2)
11	Version
A	High efficiency
Е	Silenced high efficiency
12	Coils
0	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
٧	Copper pieps-Coated aluminium fins
13	Fans
0	Standard (3)
J	Inverter (4)
М	Oversized (5)
14	Power supply

Field	Description
0	400V 3N ~ 50Hz
15,16	Integrated hydronic kit
00	Without hydronic kit
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
05	Storage tank with holes for heaters and single low head pump (6)
06	Storage tank with holes for heaters and pump low head + stand-by pump (6)
07	Storage tank with holes for heaters and single high head pump (6)
08	Storage tank with holes for heaters and pump high head + stand-by pump (6)
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump

- (1) Water produced up to +4 °C
 (2) The desuperheater must be isolated in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.

 (3) As standard in sizes fom 0350÷0700.

 (4) Standard for size 0200÷0330, without useful static pressure. Option for size 0350÷0700 with useful
- static pressure.
 (5) Option available only for size 0200÷0330.
- (5) Option available only for size 2000-2030.
 (6) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS 12 °C/7 °C - 40 °C/45 °C

NRK - A / 12/7 °C - 40/45 °C

Size	'	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	-	-	-	-	75,4	88,8	101,6	117,4	133,4	148,1
Input power	kW	-	-	-	-	25,4	29,5	34,4	41,0	45,0	52,6
Cooling total input current	А	-	-	-	-	55,0	61,0	66,0	72,0	87,0	107,0
EER	W/W	-	-	-	-	2,97	3,01	2,95	2,86	2,97	2,82
Water flow rate system side	I/h	-	-	-	-	12983	15278	17488	20211	22975	25516
Pressure drop system side	kPa	-	-	-	-	23	26	32	28	34	42
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	-	-	-	-	87,9	103,9	118,9	136,6	155,6	174,4
Input power	kW	-	-	-	-	25,5	30,2	34,7	39,9	45,6	51,7
Heating total input current	A	-	-	-	-	54,0	59,0	64,0	70,0	85,0	106,0
СОР	W/W	-	-	-	-	3,45	3,44	3,42	3,42	3,41	3,37
Water flow rate system side	l/h	-	-	-	-	15236	18010	20602	23680	26988	30254
Pressure drop system side	kPa	-	-	-	-	32	36	44	37	45	57

NRK - E / 12/7 °C - 40/45 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	35,6	50,4	59,5	66,1	74,4	87,4	99,8	114,5	130,8	145,3
Input power	kW	11,7	17,4	19,5	22,3	27,6	32,4	38,1	45,8	49,5	58,1
Cooling total input current	Α	28,0	38,0	42,0	49,0	60,0	67,0	73,0	72,0	95,0	119,0
EER	W/W	3,05	2,90	3,05	2,96	2,69	2,70	2,62	2,50	2,64	2,50
Water flow rate system side	l/h	6131	8670	10235	11379	12801	15035	17175	19713	22512	25033
Pressure drop system side	kPa	18	17	23	19	22	25	30	27	32	41
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	42,2	59,7	69,4	78,2	87,9	103,9	118,9	136,6	155,6	174,4
Input power	kW	12,0	17,0	19,9	22,4	25,5	30,2	34,7	39,9	45,6	51,7
COP	W/W	3,50	3,50	3,49	3,49	3,45	3,44	3,42	3,42	3,41	3,37
Heating total input current	A	24,0	34,0	38,0	44,0	54,0	59,0	64,0	70,0	85,0	106,0
Water flow rate system side	l/h	7318	10355	12032	13569	15236	18010	20602	23680	26988	30254
Pressure drop system side	kPa	24	22	30	25	32	36	44	37	45	57

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C /7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

NRK - A / 23/18 °C - 30/35 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	-	-	-	-	93,2	108,2	122,7	143,0	165,0	181,0
Input power	kW	-	-	-	-	26,4	30,7	35,9	43,3	47,0	55,1
Cooling total input current	A	-	-	-	-	57,0	63,0	69,0	75,0	90,0	112,0
EER	W/W	-	-	-	-	3,54	3,53	3,42	3,30	3,51	3,28
Water flow rate system side	I/h	-	-	-	-	16111	18705	21231	24719	28513	31266
Pressure drop system side	kPa	-	-	-	-	35	39	47	42	52	63
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	-	-	-	-	86,4	101,5	114,6	132,6	150,2	170,5
Input power	kW	-	-	-	-	20,6	24,5	27,8	31,7	37,0	41,9
Heating total input current	A	-	-	-	-	44,0	48,0	51,0	55,0	68,0	85,0
COP	W/W	-	-	-	-	4,19	4,15	4,13	4,19	4,06	4,06
Water flow rate system side	l/h	-	-	-	-	14931	17533	19787	22919	25938	29467
Pressure drop system side	kPa	-	-	-	-	31	34	41	35	42	54

NRK - E / 23/18 °C - 30/35 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	44,2	61,5	72,1	80,9	91,9	106,5	120,6	139,5	161,7	177,5
Input power	kW	12,2	18,2	20,4	23,5	28,7	33,6	39,7	48,3	51,7	60,8
Cooling total input current	A	29,0	40,0	44,0	51,0	62,0	69,0	76,0	75,0	99,0	124,0
EER	W/W	3,64	3,37	3,53	3,44	3,20	3,16	3,04	2,89	3,13	2,92
Water flow rate system side	I/h	7643	10631	12470	13977	15886	18408	20850	24110	27939	30673
Pressure drop system side	kPa	28	26	34	29	34	37	44	40	49	62
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	41,4	57,2	67,2	75,7	86,4	101,5	114,6	132,6	150,2	170,5
Input power	kW	9,4	13,3	15,8	18,1	20,6	24,5	27,8	31,7	37,0	41,9
Heating total input current	A	19,0	26,0	30,0	35,0	44,0	48,0	51,0	55,0	68,0	85,0
COP	W/W	4,41	4,31	4,26	4,18	4,19	4,15	4,13	4,19	4,06	4,06
Water flow rate system side	l/h	7156	9895	11628	13083	14931	17533	19787	22919	25938	29467
Pressure drop system side	kPa	23	20	28	23	31	34	41	35	42	54

ELECTRIC DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Electric data												
Maximum aumant (FLA)	A	А	-	-	-	-	75,0	85,0	94,0	114,0	144,0	147,0
Maximum current (FLA)	E	А	40,0	49,0	61,0	74,0	75,0	85,0	94,0	114,0	144,0	147,0
D I	A	А	-	-	-	-	216,0	226,0	191,0	228,0	285,0	288,0
Peak current (LRA)	E	A	124,0	146,0	175,0	215,0	216,0	226,0	191,0	228,0	285,0	288,0

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/35 °C; External air 7 °C d.b. /6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling capacity with low leaving w	ater temp (UE n° 2	016/2281)										
CLLD	A	W/W	-	-	-	-	3,45	3,52	3,46	3,42	3,44	3,33
SEER	E	W/W	3,40	3,30	3,48	3,39	3,35	3,42	3,34	3,29	3,35	3,27
	A	%	-	-	-	-	134,80	137,60	135,20	133,70	134,60	130,00
ηςς	E	%	133,00	128,80	136,10	132,50	130,90	133,70	130,60	128,70	130,90	127,90

Size			0200	0280	0300
UE 811/2013 performance in avera	ge ambient conditions (a	verage) - 35 °C - Pdesignh ≤ 70	kW (1)		
Efficiency energy class	A		-	-	-
Efficiency energy class	E		A++	A+	A+
Pdesignh	A	kW	-	-	-
ruesigiiii	E	kW	42,00	58,00	67,00
SCOP	A	W/W	-	-	-
SCUP	E	W/W	3,88	3,75	3,70
	A	%	-	-	-
ηsh	E	%	152,00	147,00	145,00
UE 811/2013 performance in avera	ge ambient conditions (a	verage) - 55 °C - Pdesignh ≤ 70	kW (2)		
Fee sian an annual dans	A		-	-	-
Efficiency energy class	E		A+	A+	A+
Ddaeianh	A	kW	-	-	-
Pdesignh	E	kW	44,00	62,00	70,00
CCOD	A	W/W	-	-	-
SCOP	E	W/W	3,08	3,03	3,00
nch	A	%	-	-	-
ηsh	E	%	120,00	118,00	117,00

(1) Efficiencies for low temperature applications (35 °C) (2) Efficiencies for average temperature applications (55 °C)

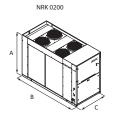
(-,	,								
Size			0330	0350	0500	0550	0600	0650	0700
UE 813/2013 performance in average an	nbient conditio	ns (average) - 55 °(: - Pdesignh ≤ 400 k	(W (1)					
Ddaeianh	A	kW	-	89,00	106,00	121,00	137,00	157,00	178,00
Pdesignh	E	kW	80,00	89,00	106,00	121,00	137,00	157,00	178,00
SCOP	А	W/W	-	2,88	2,90	3,03	3,03	2,93	2,90
SCUP	E	W/W	3,03	2,88	2,90	3,03	3,03	2,93	2,90
mak.	А	%	-	112,00	113,00	118,00	118,00	114,00	113,00
ηsh	E	%	118,00	112,00	113,00	118,00	118,00	114,00	113,00
UE 813/2013 performance in average an	nbient conditio	ns (average) - 35 °(C - Pdesignh ≤ 400 k	(W (2)					
Dalarianh	А	kW	-	84,00	99,00	113,00	131,00	149,00	168,00
Pdesignh	E	kW	75,00	84,00	99,00	113,00	131,00	149,00	168,00
ccop	А	W/W	-	3,43	3,40	3,70	3,70	3,38	3,33
SCOP	E	W/W	3,68	3,43	3,40	3,70	3,70	3,38	3,33
l	А	%	-	134,00	133,00	145,00	145,00	132,00	130,00
ηsh	E	%	144,00	134,00	133,00	145,00	145,00	132,00	130,00

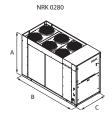
⁽¹⁾ Efficiencies for average temperature applications (55 °C) (2) Efficiencies for low temperature applications (35 °C)

GENERAL TECHNICAL DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Compressor												
Туре	A,E	type					Sc	roll				
Compressor regulation	A,E	Туре					0n	-Off				
Number	A,E	no.	2	2	2	2	2	3	4	4	4	4
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type					R4	10A				
Definement shares (1)	A	kg	-	-	-	-	23,0	28,0	29,0	29,0	39,0	40,0
Refrigerant charge (1)	E	kg	14,0	16,0	16,0	16,0	23,0	28,0	29,0	29,0	39,0	40,0
System side heat exchanger												
Туре	A,E	type	-				Braze	d plate				
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E	Туре	-				Groove	d joints				
Sizes (in/out)	A,E	Ø					2	1/2"				
Fan			-									
Туре	A,E	type					ax	ials				
Number	A	no.	-	-	-	-	2	2	2	2	3	3
Nulliber	E	no.	4	6	8	8	2	2	2	2	3	3
A: 4	A	m³/h	-	-	-	-	37000	36500	36500	36500	58000	58000
Air flow rate	E	m³/h	14000	20000	26000	26000	21100	21400	22400	22400	31900	31900
Sound data calculated in cooling mode	(2)											
Cound neuror lovel	A	dB(A)	-	-	-	-	82,0	82,0	82,0	83,0	85,0	85,0
Sound power level	E	dB(A)	74,0	74,0	75,0	75,0	74,0	74,0	74,0	75,0	77,0	77,0
Cound procesure level (10 m)	A	dB(A)	-	-	-	-	50,1	50,1	50,1	51,1	53,0	53,0
Sound pressure level (10 m)	E	dB(A)	42,3	42,3	43,2	43,2	42,1	42,1	42,1	43,1	45,0	45,0

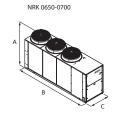
DIMENSIONS











Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Dimensions and weights												
A	Α	mm	-	-	-	-	1875	1875	1875	1875	1875	1875
Α –	E	mm	1606	1606	1606	1606	1875	1875	1875	1875	1875	1875
D.	A	mm	-	-	-	-	3330	3330	3330	3330	4330	4330
В —	E	mm	2700	2700	3200	3200	3330	3330	3330	3330	4330	4330
	Α	mm	-	-	-	-	1100	1100	1100	1100	1100	1100
_	E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Dimensions and weights for transport												
	A	mm	-	-	-	-	2027	2027	2027	2027	2039	2039
Α –	E	mm	1735	1735	1758	1758	2027	2027	2027	2027	2039	2039
D.	A	mm	-	-	-	-	3395	3395	3395	3395	4387	4387
В —	E	mm	2760	2760	3260	3260	3395	3395	3395	3395	4387	4387
	Α	mm	-	-	-	-	1170	1170	1170	1170	1170	1170
	E	mm	1160	1160	1160	1160	1170	1170	1170	1170	1170	1170
Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Integrated hydronic kit: 00												
Weights												
	Α	kg	-	-	-	-	1067	1213	1274	1316	1495	1530
Empty weight —	E	kg	761	833	913	920	1067	1213	1274	1316	1495	1530

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).





















NRV 0550

Air-water chiller

Cooling capacity 108,3 kW



- · Easy and quick to install compact
- · Reliability and modularity
- Microchannel coils





DESCRIPTION

NRV is made up of independent 108kW modules that can be connected to each other up to a power of 970kW. Every single module is an outdoor chiller to produce chilled water.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency **E** Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 47°C external air temperature. Unit can produce chilled water up to $4\,^{\circ}\text{C}$.

Maximum yield at full load but even partial load, thanks to the partialisation steps that increase as the number of connected modules increases this ensures continuous adaptation to the actual system requirements.

Modularity

It is possible to couple up to 9 chillers designed to reduce the overall unit dimensions to a minimum.

The combination of the various chillers allows all the strengths of the individual module to be maintained.

Modularity allows you to adapt installation to the actual development needs of the system. This way the cooling capacity can be increased over time simply and affordably.

Modularity is essential when component redundancy is required, as it allows for a safer system design and increased reliability.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

Microchannel coils

Microchannel heat exchanger that guarantees higher thermal exchange yield. Circuit that optimises the liquid distribution in the coil, which is arranged with V beam geometry with open angle.

Components

Unit is already equipped with a water filter, differential pressure switch and butterfly check valves, useful to cut off the hydraulic circuit for maintenance; for instance, to clean the filter.

In the event of variable flow rate, the motorised hydronic valves can intercept one or more modules to reduce the flow rate in low heat load conditions.

CONTROL PCO₅

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log.

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

Night Mode: it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

Night Mode is standard in the unit with J inverter fan and in the E silenced version. Either a DCPX or inverter fan is necessary for the high efficiency version.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI

(Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

GPNY_BACK: kit with 1 anti-intrusion grid for the short side of the unit. **GPNYB_SIDE:** kit with 2 anti-intrusion grids for the long side of the unit.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

KNYB: Pair of caps with grooved joints assembled on the unit manifold. **KREC:** Accessory kit to remote the electric power supply input to the

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0550
AER485P1	A,E	•
AERBACP	A,E	•
AERLINK	A,E	•
GPNYB_SIDE	A,E	•
GPNY_BACK	A,E	•
MULTICHILLER_EVO	A,E	•
PGD1	A,E	•

Condensation control temperature

Ver	0550
Fans: M	
A	DCPXNRV0550
E	As standard

DRE: electronic device for peak current reduction

Ver	0550	
A,E	DRE (1)	

⁽¹⁾ Contact the factory

A grey background indicates the accessory must be assembled in the factory

KNYB: Pair of caps with grooved joints assembled on the unit manifold

	 •
Ver	0550
A,E	KNYB

A grey background indicates the accessory must be assembled in the factory

KREC: kit to remote the electric power supply input to the back

Ver	0550	
A,E	KREC	

A grey background indicates the accessory must be assembled in the factory

RIF: Power factor correction

Ver	0550
A,E	RIF (1)

⁽¹⁾ Contact the factory

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	NRV
4,5,6,7	Size 0550
8	Operating field
0	Standard mechanic thermostatic valve (1)
Х	Electronic thermostatic expansion valve
9	Model
0	Cooling only
10	Heat recovery
0	Without heat recovery
D	With desuperheater
11	Version
Α	High efficiency
E	Silenced high efficiency
12	Coils
0	Aluminium microchannel
I	Copper-aluminium
0	Coated aluminium microchannel
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
13	Fans
J	Inverter (2)
M	Oversized
14	Power supply (3)
۰	400V 3 ~ 50Hz
15,16	Integrated hydronic kit
00	Without hydronic kit

PERFORMANCE SPECIFICATIONS

Size			0550
Fans: J, M			
Cooling performance 12 °C / 7 °C (1)			
Cooling canacity	A	kW	108,3
Cooling capacity	E	kW	103,8
Innut nower	A	kW	34,8
Input power	E	kW	36,2
Cooling total input current	A,E	A	62,0
EED	A	W/W	3,11
EER	E	W/W	2,86
Material and another side	A	l/h	18646
Water flow rate system side	E	l/h	17862
Pressure drop system side	Α	kPa	32
	E	kPa	30

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

ENERGY INDICES (NEG. 2010/2201 E0)					
Size			0550		
Fans: J					
SEER - 12/7 (EN14825: 2018) (1)					
SEER	A	W/W	4,51		
SEEN	E	W/W	4,45		
C 1 (C)	A	%	177,20		
Seasonal efficiency	E	%	174,80		
SEPR - (EN 14825: 2018) (2)					
SEPR	A,E	W/W	5,60		

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

⁽¹⁾ Water produced up to +4 °C (2) With "J" fan is unnecessary DCPX accessory

⁽³⁾ With magnet circuit breakers

Size			0550
Fans: M			
SEER - 12/7 (EN14825: 2018) (1)			
CEED	A	W/W	4,39
EER	E	W/W	4,33
Casanal officiana	A	%	172,60
Seasonal efficiency	E	%	170,30
SEPR - (EN 14825: 2018) (2)			
SEPR	A,E	W/W	5,62

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0550
Electric data			
Maximum current (FLA)	A,E	A	95,6
Peak current (LRA)	A,E	A	280,6

GENERAL TECHNICAL DATA

Size			0550
Compressor			
Туре	A,E	type	Scroll
Number	A,E	no.	2
Circuits	A,E	no.	1
Refrigerant	A,E	type	R410A
System side heat exchanger			
Туре	A,E	type	Brazed plate
Number	A,E	no.	1
System side hydraulic connection	ons		
Connections (in/out)	A,E	Туре	Grooved joints
Sizes (in/out)	A,E	Ø	6"
		·	<u> </u>

Fan

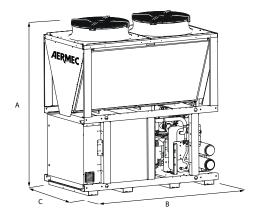
Size			0550
Fans: J			
Fan			
Туре	A,E	type	axials
Fan motor	A,E	type	On-Off
Number	A,E	no.	2
A: ()	A	m³/h	32000
Air flow rate	E	m³/h	24000
High static pressure	A,E	Pa	0
Sound data calculated in coolin	g mode (1)		
Sound power level	A	dB(A)	85,0
	E	dB(A)	81,8

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

•		•	
Size			0550
Fans: M			
Fan			
Туре	A,E	type	axials
Fan motor	A,E	type	Asynchronous
Number	A,E	no.	2
Air flow rate	A	m³/h	36000
AIT HOW Tale	E	m³/h	24000
High static pressure	A,E	Pa	0
Sound data calculated in coolin	ng mode (1)		
Cound namer lavel	A	dB(A)	86,9
Sound power level	E	dB(A)	81,8

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0550
Dimensions and weights			
A	A,E	mm	2480
В	A,E	mm	2200
C	A,E	mm	1190
Empty weight	A,E	kg	1105

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NRB 0282-0754

Air-water chiller

Cooling capacity 56 ÷ 202 kW



- · High seasonal efficiency
- Night mode
- · Reduced amount of refrigerant
- Compact dimensions





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to 51°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: available for all models with inverter fans or with DCPX. Allows, with continuous fan modulation, to optimize the operation of the unit in any operating point, ensuring an increase in the enerqy efficiency at partial load.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load. Night Mode
 for standard versions is mandatory DCPX accessory (standard on
 all low noise versions) or "J" inverter fan

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **MULTICHILLER_EVO:** Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring

constant flow rate to the evaporators. **PGD1:** Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

GP: Anti-intrusion grid.

VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
_	°,A					•	•	•	•	•	•	•	•	•	•	•
AER485P1	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•		•	•			•
_	°,A					•	•	•					•			•
AERBACP	E,L,N	•	•	•	•	•	•	•	•	•		•	•	•	•	•
	U				•	•	•	•	•	•			•			•
	°,A						•	•	•	•			•			•
AERLINK	E,L,N	•														
	U					•	•	•				•		•	•	
	°,A						•	•	•	•		•	•	•	•	•
AERNET	E,L,N															
	U				•		•		•	•			•			•
	°,A					•	•	•	•	•			•	•	•	•
MULTICHILLER_EVO	E,L,N		•		•	•	•	•				•	•	•	•	•
	U				•		•	•	•	•	•	•	•	•	•	•
	°,A													•	•	•
PGD1	E,L,N		•		•		•	•	•	•		•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
SCD.	E,L,N	•	•													
SGD -	U				•											

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0602	0604
Fans: °								
E,L	DCPX140	DCPX140	DCPX140	DCPX140	-	-	-	-
N	DCPX140	DCPX140	DCPX140	-	-	-	-	-
Fans: M								
°,A	-	-	-	-	DCPX142	DCPX142	DCPX142	DCPX142
E,L	DCPX141	DCPX141	DCPX141	DCPX141	As standard	As standard	As standard	As standard
N	DCPX141	DCPX141	DCPX141	As standard				
U	-	-	-	DCPX142	DCPX142	DCPX142	DCPX143	DCPX143
Ver	0652	0654	0682		0702	0704	0752	0754
Fans: M		'				'		
0	DCPX142	DCPX142	DCPX143	D	CPX143	DCPX143	DCPX143	DCPX143
A	DCPX142	DCPX143	DCPX143	D	CPX143	DCPX143	DCPX143	DCPX143
E,L,N	As standard	As standard	As standard	As	standard	As standard	As standard	As standard
U	DCPX143	DCPX143	DCPX143	D	CPX143	DCPX143	DCPX143	DCPX143

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Integrated hydronic kit: 00, I1, I2,	13, 14, P1, P2, P3,	P4													
0	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
N	VT17	VT17	VT17	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23
U	-	-	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23
Integrated hydronic kit: 01, 02, 03	, 04, 05, 06, 07, 0	8, 09, K1, K	2, K3, K4												
0	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
N	VT13	VT13	VT13	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23
U	-	_	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
0	-	-	-	-	GP2 x 2 (1)	GP2 x 3 (1)									
A	-	-	-	-	GP2 x 2 (1)	GP2 x 3 (1)									

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)				
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)					
N	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)				
				CD2 2 (4)	CD2 2 (4)	CD2 2 (4)	CD2 2 (4)	CD2 2 (4)	CD2 2 (4)	CD2 2 (4)	CD2 2 (4)	GP14 x	GP14 x	GP14 x	GP14 x
U	-		-	GP2 x 2 (1) GP2 x 2 (1)		GP2 X 2 (1)	GP2 x 3 (1)	4(1)	4(1)	4 (1)	4(1)				

(1) $\,x_{-}$ indicates the quantity to buy The accessory cannot be fitted on the configurations indicated with -

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0602	0604
°,A	-	-	-	-	RIF0502	RIF0552	RIF0602	RIF0604
E,L,N	RIF0282	RIF0302	RIF0332	RIF0352	RIF0502	RIF0552	RIF0602	RIF0604
U	-	-	-	RIF0352	RIF0502	RIF0552	RIF0602	RIF0604

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754
°,A,E,L,N,U	RIF0652	RIF0652	RIF0682	RIF0702	RIF0704	RIF0752	RIF0754

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0602	0604
°,A	-	-	-	-	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)
E,L,N	DRENRB282 (1)	DRENRB302 (1)	DRENRB332 (1)	DRENRB352 (1)	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)
U	-	-	-	DRENRB352 (1)	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. The accessory cannot be fitted on the configurations indicated with – A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754
°,A,E,L,N,U	DRENRB652 (1)	DRENRB654 (1)	DRENRB682 (1)	DRENRB702 (1)	DRENRB704 (1)	DRENRB752 (1)	DRENRB754 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°,A	-	-	-	-	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12
E,L	T6NRB6	T6NRB6	T6NRB6	T6NRB6	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12
N	T6NRB6	T6NRB6	T6NRB6	T6NRB8	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12
U	-	-	-	T6NRB8	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Touch screen keyboard

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°,A,E,L,N,U	C-TOUCH														

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		NRB
4,5,6	,7	Size 0282, 0302, 0332, 0352, 0502, 0552, 0602, 0604, 0652, 0654, 0682, 0702, 0704 0752, 0754
8		Operating field
	0	Standard mechanic thermostatic valve (1)
	Χ	Electronic thermostatic expansion valve (1)
	Υ	Double mechanical thermostat for low temperature (2)
	Z	Low temperature electronic thermostatic valve (3)
9		Model
	0	Cooling only
	C	Motocondensing unit
10		Heat recovery
	0	Without heat recovery
	D	With desuperheater (4)
	T	With total recovery (4)
11		Version
	0	Standard
	Α	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		Coils
	0	Copper-aluminium
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
13		Fans
	0	Standard (5)
	J	Inverter
	М	Oversized (6)
14		Power supply
	0	400V ~ 3N 50Hz with magnet circuit breakers
15,16	5	Integrated hydronic kit
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump

Field	Description
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (7)
06	Storage tank with holes for heaters and pump low head + stand-by pump (7)
07	Storage tank with holes for heaters and single high head pump (7)
08	Storage tank with holes for heaters and pump high head + stand-by pump (7)
	Double loop
09	Double loop
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
I1	Single low head pump + fixed speed inverter
12	Single low head pump with fixed speed inverter + stand-by pump
13	Single high head pump + fixed speed inverter
14	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K1	Single low head pump + storage tank + fixed speed inverter
K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
K3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and variable speed inverter pump/s
W1	Single low head pump + Storage tank + variable speed inverter (8)
W2	Double low head pump + Storage tank + variable speed inverter (8)
W3	Single high head pump + Storage tank + variable speed inverter (8)
W4	Double high head pump + Storage tank + variable speed inverter (8)

- (1) Water produced from 4 °C ÷ 18 °C (2) Water produced from +0 °C ÷ 18 °C (3) Water produced from -10 °C ÷ 18 °C (3) Water produced from +0 °C ÷ 18 °C (3) Water produced from +0 °C ÷ 18 °C (3) Water produced from +0 °C ÷ 18 °C for °version; -10 °C for the others versions (4) For "YT" "TZ" "YD" and "ZD" recovery versions, contact the headquarters; Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program (5) As standard in sizes from 0282 to 0352 versions E L and in size from 0282 to 0332 version N (6) As standard in sizes from 0502 to 0754 version ° A E L, in sizes from 0352 to 0754 version N U (7) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

 (8) L'opzione Y e Z non è compatibile con W1/W2/W3/W4

PERFORMANCE SPECIFICATIONS

Included units with 'o' fans.

NRB - L

Size		0282	0302	0332	0352
Fans: °					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	56,5	64,3	73,9	85,5
Input power	kW	19,8	22,2	24,8	29,6
Cooling total input current	A	35,0	41,0	46,0	54,0
EER	W/W	2,85	2,90	2,98	2,89
Water flow rate system side	l/h	9734	11090	12722	14734
Pressure drop system side	kPa	37	48	39	52

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

11110 2					
Size	·	0282	0302	0332	0352
Fans: °	,				
Cooling performance 12 °C/7 °C(1)					
Cooling capacity	kW	60,6	68,4	77,0	89,2
Input power	kW	18,6	21,1	23,8	28,3
Cooling total input current	A	32,0	36,0	41,0	46,0
EER	W/W	3,26	3,24	3,23	3,16
Water flow rate system side	l/h	10429	11774	13258	15372
Pressure drop system side	kPa	26	33	30	40

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0282	0302	0332
Fans: °				
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	60,8	69,0	76,9
Input power	kW	17,8	20,5	22,9
Cooling total input current	A	33,0	39,0	44,0
EER	W/W	3,42	3,37	3,36
Water flow rate system side	l/h	10460	11884	13249
Pressure drop system side	kPa	27	25	31

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Included units with 'M' fans.

NRB - °

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M	'															
Cooling performance 12 °C/7 °C(1)																
Cooling capacity	kW	-	-	-	-	98,4	107,0	125,9	125,5	135,1	141,0	159,7	178,9	170,7	195,7	193,5
Input power	kW	-	-	-	-	33,2	37,5	41,6	45,6	47,4	52,2	54,8	60,8	58,3	71,8	67,2
Cooling total input current	A	-	-	-	-	59,0	65,0	71,0	80,0	81,0	92,0	93,0	102,0	104,0	117,0	117,0
EER	W/W	-	-	-	-	2,96	2,85	3,03	2,75	2,85	2,70	2,92	2,95	2,93	2,73	2,88
Water flow rate system side	l/h	-	-	-	-	16941	18444	21694	21620	23270	24282	27502	30805	29385	33700	33309
Pressure drop system side	kPa	-	-	-	-	39	46	42	50	49	48	52	66	71	78	65

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - L

Size		0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	96,3	104,5	122,6	121,5	131,1	134,8	156,1	174,3	166,4	189,9	187,4
Input power	kW	34,0	38,6	42,9	47,6	49,2	55,0	56,0	62,5	60,0	74,7	69,5
Cooling total input current	A	59,0	65,0	72,0	82,0	82,0	95,0	93,0	102,0	105,0	119,0	119,0
EER	W/W	2,83	2,71	2,86	2,55	2,67	2,45	2,79	2,79	2,78	2,54	2,70
Water flow rate system side	l/h	16583	18007	21114	20937	22592	23230	26870	30010	28645	32685	32255
Pressure drop system side	kPa	37	43	40	46	45	44	50	62	66	73	61

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - A

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	103,9	114,8	130,1	129,7	140,0	150,2	167,9	186,9	176,8	207,6	198,8
Input power	kW	-	-	-	-	31,4	35,4	40,3	43,5	45,0	47,6	51,9	59,2	56,6	69,6	63,8
Cooling total input current	Α	-	-	-	-	55,0	59,0	68,0	73,0	74,0	77,0	86,0	94,0	98,0	103,0	107,0
EER	W/W	-	-	-	-	3,31	3,24	3,23	2,98	3,11	3,16	3,24	3,16	3,12	2,98	3,11
Water flow rate system side	l/h	-	-	-	-	17889	19764	22404	22344	24116	25867	28897	32172	30430	35736	34210
Pressure drop system side	kPa	-	-	-	-	30	36	35	42	40	57	46	56	55	60	58

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	100,4	110,5	123,9	122,2	132,4	144,8	161,4	178,0	168,2	195,9	187,7
Input power	kW	32,5	36,9	42,7	46,6	48,2	49,4	54,0	62,6	59,7	74,7	68,0
Cooling total input current	А	54,0	59,0	69,0	75,0	77,0	77,0	86,0	95,0	100,0	107,0	110,0
EER	W/W	3,09	3,00	2,90	2,62	2,75	2,93	2,99	2,84	2,82	2,62	2,76
Water flow rate system side	l/h	17275	19020	21329	21052	22807	24939	27779	30648	28950	33719	32307
Pressure drop system side	kPa	27	33	32	36	36	52	42	51	49	53	52

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - U

11110																
Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																
Cooling performance 12 °C/7 °C(1)																
Cooling capacity	kW	-	-	-	92,7	104,5	117,2	132,1	137,9	146,8	152,9	171,6	191,4	180,5	209,6	202,9
Input power	kW	-	-	-	27,1	30,8	34,5	38,8	41,3	44,2	45,5	50,7	59,3	56,2	67,2	63,1
Cooling total input current	Α	-	-	-	51,0	56,0	61,0	68,0	76,0	76,0	86,0	88,0	101,0	104,0	116,0	115,0
EER	W/W	-	-	-	3,42	3,39	3,40	3,40	3,34	3,32	3,36	3,39	3,23	3,21	3,12	3,21
Water flow rate system side	l/h	-	-	-	15945	17984	20172	22745	23741	25275	26327	29532	32945	31067	36076	34915
Pressure drop system side	kPa	-	-	-	24	30	29	38	34	36	42	41	51	48	61	56

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M	ı	0332	0302	0332	0002	0001	0032	0054	0002	0702	0704	0732	- 0754
Cooling performance 12 °C/7 °C(1)													
Cooling capacity	kW	89,7	100,8	112,4	128,6	133,5	142,2	147,1	164,5	185,1	174,5	201,1	195,1
Input power	kW	27,8	31,9	36,1	39,4	42,4	45,3	47,2	52,9	60,9	57,5	70,2	65,3
Cooling total input current	A	50,0	55,0	62,0	66,0	74,0	75,0	85,0	88,0	100,0	102,0	116,0	114,0
EER	W/W	3,23	3,16	3,12	3,26	3,15	3,14	3,11	3,11	3,04	3,03	2,87	2,99
Water flow rate system side	l/h	15444	17352	19347	22150	22978	24481	25334	28325	31856	30031	34611	33586
Pressure drop system side	kPa	22	28	27	36	32	34	39	38	48	45	56	52

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: °																	
SEER - 12/7 (EN14825: 2018) (1)																	
	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-		-
SEER	E	W/W	4,48	4,58	4,49	4,42	-	-	-	-	-	-	-	-	-	-	-
tk	L	W/W	4,28	4,27	4,35	4,25	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	4,68	4,72	4,62	-	-	-	-	-	-	-	-	-	-	-	-
	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	E	%	176,20	180,20	176,40	173,60	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	L	%	168,10	167,80	171,10	167,00	-	-	-	-	-	-	-	-	-	-	-
	N	%	184,00	185,70	181,70	-	-	-	-	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																	
	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CEED	E	W/W	5,36	5,48	5,40	5,44	-	-	-	-	-	-	-	-	-	-	-
SEER	L	W/W	5,05	5,10	5,21	5,09	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	5,61	5,67	5,59	-	-	-	-	-	-	-	-	-	-	-	-
	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Casanal afficiency	E	%	211,40	216,30	213,10	214,70	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	L	%	199,00	201,10	205,30	200,70	-	-	-	-	-	-	-	-	-	-	-
	N	%	221,40	223,80	220,60	-	-	-	-	-	-	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Calculation performed with FIXED water flow rate.

[·]

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
SEPR - (EN 14825: 2018) (2)																	
	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEPR	E	W/W	6,46	6,42	6,13	6,36	-	-	-	-	-	-	-	-	-	-	-
SELK	L	W/W	6,15	6,00	5,97	6,07	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	6.71	6,53	6.23	-	-	-	-	-	-	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: J																	
SEER - 12/7 (EN14825: 2018) (1)																	
	0	W/W	-	-	-	-	4,34	4,23	4,39	4,12	4,26	4,11	4,28	4,26	4,13	4,24	4,12
	A	W/W	-	-	-	-	4,48	4,48	4,59	4,20	4,48	4,13	4,49	4,40	4,34	4,44	4,16
CEED	E	W/W	4,59	4,69	4,60	4,52	4,48	4,46	4,53	4,16	4,34	4,18	4,51	4,32	4,13	4,33	4,11
SEER	L	W/W	4,38	4,37	4,46	4,35	4,36	4,24	4,38	4,11	4,18	4,12	4,32	4,23	4,13	4,19	4,11
	N	W/W	4,79	4,84	4,73	4,81	4,68	4,76	4,84	4,53	4,72	4,39	4,77	4,60	4,35	4,56	4,31
	U	W/W	-	-	-	4,74	4,71	4,82	4,65	4,33	4,66	4,31	4,76	4,53	4,22	4,52	4,29
	0	%	-	-	-	-	170,60	166,20	172,60	161,80	167,30	161,40	168,20	167,40	162,20	166,60	161,80
	Α	%	-	-	-	-	176,20	176,20	180,60	165,00	176,20	162,20	176,60	173,00	170,60	174,60	163,40
Casanal officians	E	%	180,60	184,60	181,00	177,80	176,20	175,40	178,20	163,40	170,60	164,20	177,40	169,80	162,20	170,20	161,40
Seasonal efficiency	L	%	172,20	171,80	175,40	171,00	171,40	166,60	172,20	161,40	164,20	161,80	169,80	166,20	162,20	164,60	161,40
	N	%	188,60	190,60	186,20	189,40	184,20	187,40	190,60	178,20	185,80	172,60	187,80	181,00	171,00	179,40	169,40
	U	%	-	-	-	186,80	185,40	189,80	183,00	170,20	183,40	169,40	187,40	178,20	165,80	177,80	168,60
SEER - 23/18 (EN14825: 2018) (2)																	
	0	W/W	-	-	-	-	5,31	5,07	5,29	4,89	5,04	4,93	5,13	5,12	5,01	4,99	4,95
	A	W/W	-	-	-	-	5,55	5,42	5,54	5,06	5,36	5,11	5,43	5,23	5,30	5,24	5,03
SEER	E	W/W	5,50	5,62	5,55	5,58	5,47	5,41	5,37	4,88	5,10	5,05	5,37	5,06	4,93	5,02	4,88
SEEN	L	W/W	5,17	5,22	5,34	5,22	5,27	5,00	5,12	4,81	4,89	4,82	5,13	4,92	4,91	4,83	4,84
	N	W/W	5,75	5,82	5,73	5,91	5,72	5,68	5,88	5,49	5,67	5,29	5,71	5,46	5,27	5,38	5,21
	U	W/W	-	-	-	5,92	5,86	5,85	5,72	5,32	5,68	5,30	5,79	5,45	5,22	5,41	5,21
	0	%	-	-	-	-	209,30	199,60	208,40	192,70	198,50	194,20	202,20	201,60	197,50	196,50	194,80
	Α	%	-	-	-	-	219,00	213,90	218,60	199,50	211,30	201,30	214,10	206,30	208,80	206,60	198,20
Cassand off sian as	E	%	216,80	221,60	218,80	220,00	215,70	213,30	211,80	192,00	200,80	199,10	211,60	199,30	194,00	197,90	192,20
Seasonal efficiency	L	%	203,80	205,90	210,60	205,60	207,70	197,10	201,70	189,40	192,70	189,70	202,00	193,60	193,20	190,00	190,40
	N	%	227,00	229,80	226,30	233,30	225,80	224,10	232,30	216,40	223,70	208,50	225,30	215,30	207,60	212,10	205,20
	U	%	-	-	-	233,80	231,40	231,10	225,80	209,60	224,00	209,00	228,70	214,90	205,70	213,40	205,40
SEPR - (EN 14825: 2018) (2)																	
	0	W/W	-	-	-	-	5,79	5,61	5,74	5,62	5,66	5,57	5,59	5,84	5,94	5,45	5,76
	A	W/W	-	-	-	-	6,10	5,97	6,00	5,73	5,97	5,74	5,92	5,79	5,89	5,75	5,78
CEDD	Е	W/W	6,46	6,42	6,13	6,36	5,98	5,95	5,79	5,41	5,72	5,68	5,83	5,67	5,69	5,51	5,47
SEPR	L	W/W	6,15	6,00	5,97	6,07	5,79	5,65	5,61	5,31	5,55	5,28	5,58	5,60	5,77	5,37	5,53
	N	W/W	6,71	6,53	6,23	6,54	6,22	6,21	6,16	6,12	6,14	5,93	6,09	5,97	6,08	5,83	5,90
	U	W/W	-	-	-	6,43	6,30	6,31	6,01	6,15	6,09	5,88	6,19	5,88	6,05	5,85	6,07

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																	
SEER - 12/7 (EN14825: 2018) (1)																	
	0	W/W	-	-	-	-	4,23	4,13	4,29	- (2)	4,16	- (2)	4,18	4,16	- (2)	4,14	- (2)
	Α	W/W	-	-	-	-	4,37	4,37	4,48	- (2)	4,37	- (2)	4,38	4,29	- (2)	4,33	- (2)
SEER	E	W/W	4,48	4,58	4,49	4,42	4,37	4,35	4,42	- (2)	4,24	- (2)	4,40	4,21	- (2)	4,23	- (2)
SEER	L	W/W	4,28	4,27	4,35	4,27	4,25	4,14	4,27	- (2)	4,11	- (2)	4,22	4,13	- (2)	4,11	- (2)
	N	W/W	4,68	4,72	4,62	4,69	4,56	4,65	4,72	4,42	4,61	4,28	4,65	4,49	4,24	4,45	4,20
	U	W/W	-	-	-	4,62	4,59	4,71	4,54	4,22	4,54	4,20	4,64	4,42	4,11	4,41	4,18
	•	%	-	-	-	-	166,20	162,20	168,40	- (2)	163,40	- (2)	164,10	163,40	- (2)	162,50	- (2)
	Α	%	-	-	-	-	171,90	171,60	176,10	- (2)	171,70	- (2)	172,20	168,70	- (2)	170,20	- (2)
Concernal officiency	E	%	176,20	180,20	176,40	173,60	171,70	171,00	173,80	- (2)	166,50	- (2)	172,80	165,50	- (2)	166,00	- (2)
Seasonal efficiency	L	%	168,10	167,80	171,10	167,00	167,00	162,50	167,80	- (2)	161,20	- (2)	165,70	162,10	- (2)	161,30	- (2)
	N	%	184,00	185,70	181,70	184,70	179,50	182,90	185,90	173,70	181,20	168,20	182,90	176,40	166,70	174,90	165,10
	U	%	-	-	-	181,70	180,60	185,20	178,50	165,60	178,70	165,10	182,50	173,80	161,40	173,30	164,30
SEER - 23/18 (EN14825: 2018) (3)																	
	0	W/W	-	-	-	-	5,17	4,95	5,16	4,77	4,95	4,80	5,01	4,99	4,86	4,82	4,90
	A	W/W	-	-	-	-	5,42	5,28	5,40	4,91	5,22	4,94	5,29	5,10	4,95	5,11	4,99
CLLD	E	W/W	5,36	5,48	5,40	5,44	5,33	5,27	5,24	4,68	4,97	4,93	5,23	4,93	4,81	4,90	4,74
SEER	L	W/W	5,05	5,10	5,21	5,09	5,13	4,88	4,99	4,65	4,77	4,52	5,00	4,79	4,78	4,67	4,74
	N	W/W	5,61	5,67	5,59	5,76	5,58	5,54	5,74	5,35	5,53	5,12	5,56	5,32	5,13	5,24	5,07
	U	W/W	-	-	-	5,77	5,71	5,71	5,58	5,18	5,53	5,17	5,64	5,32	5,08	5,27	5,07

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Non-compliant with 2016/2281 EU regulation for comfort applications $12^{\circ}\text{C}/7^{\circ}\text{C}$ (3) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
	0	%	-	-	-	-	203,90	194,80	203,30	187,70	195,10	189,00	197,30	196,70	191,50	189,90	193,00
	Α	%	-	-	-	-	213,60	208,30	213,10	193,50	205,80	194,60	208,70	201,10	194,90	201,30	196,70
Seasonal efficiency	E	%	211,40	216,30	213,10	214,70	210,20	207,90	206,50	184,00	195,90	194,00	206,10	194,20	189,20	193,00	186,50
Seasonal eniciency	L	%	199,00	201,10	205,30	200,70	202,30	192,30	196,60	183,10	187,90	177,60	197,10	188,70	188,10	183,80	186,40
	N	%	221,40	223,80	220,60	227,50	220,00	218,70	226,60	210,90	218,20	203,00	219,50	209,70	202,20	206,70	199,90
	U	%	-	-	-	227,60	225,50	225,40	220,30	204,00	218,30	203,60	222,70	209,60	200,00	207,90	199,90
SEPR - (EN 14825: 2018) (3)																	
	0	W/W	-	-	-	-	5,79	5,61	5,74	5,62	5,66	5,57	5,59	5,84	5,94	5,45	5,76
	Α	W/W	-	-	-	-	6,10	5,97	6,00	5,73	5,97	5,74	5,92	5,79	5,89	5,75	5,78
SEPR	E	W/W	6,46	6,42	6,13	6,36	5,98	5,95	5,79	5,41	5,72	5,68	5,83	5,67	5,69	5,51	5,47
SERK	L	W/W	6,15	6,00	5,97	6,07	5,79	5,65	5,61	5,31	5,55	5,28	5,58	5,60	5,77	5,37	5,53
	N	W/W	6,71	6,53	6,23	6,54	6,22	6,12	6,16	6,12	6,14	5,93	6,09	5,97	6,08	5,83	5,90
	U	W/W	-	-	-	6,43	6,30	6,31	6,01	6,15	6,09	5,88	6,19	5,88	6,05	5,85	6,07

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

ELECTRIC DATA																	
Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Electric data																	
	0	А	-	-	-	-	72,2	77,1	86,0	98,2	94,9	111,3	112,7	127,3	131,4	144,0	141,2
	A	Α	-	-	-	-	72,2	77,1	86,0	98,2	94,9	114,5	112,7	127,3	131,4	144,0	141,2
Marrian arrant (FLA)	E	А	42,6	49,2	56,9	65,3	72,2	77,1	86,0	98,2	94,9	114,5	112,7	127,3	131,4	144,0	141,2
Maximum current (FLA)	L	А	41,5	49,2	55,8	65,3	72,2	77,1	86,0	98,2	94,9	111,3	112,7	127,3	131,4	144,0	141,2
	N	А	42,6	50,3	56,9	67,3	72,2	77,1	89,2	101,3	98,1	114,5	112,7	130,5	134,6	147,2	144,4
	U	Α	-	-	-	67,3	72,2	77,1	89,2	101,3	98,1	114,5	112,7	130,5	134,6	147,2	144,4
	0	А	-	-	-	-	277,6	282,5	329,2	211,9	338,1	225,1	363,8	378,4	274,9	476,4	346,6
	A	Α	-	-	-	-	277,6	282,5	329,2	211,9	338,1	228,3	363,8	378,4	274,9	476,4	346,6
DI	E	А	148,0	163,0	170,6	208,9	277,6	282,5	329,2	211,9	338,1	228,3	363,8	378,4	274,9	476,4	346,6
Peak current (LRA)	L	Α	146,9	163,0	169,5	208,9	277,6	282,5	329,2	211,9	338,1	225,1	363,8	378,4	274,9	476,4	346,6
	N	А	148,0	164,1	170,6	210,8	277,6	282,5	332,4	215,1	341,3	228,3	363,8	381,6	278,1	479,6	349,8
	U	Α	-	-	-	210,8	277,6	282,5	332,4	215,1	341,3	228,3	363,8	381,6	278,1	479,6	349,8

GENERAL TECHNICAL DATA

Size		•	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Compressor																	
Туре	°,A,E,L,N,U	type								Scroll							
	°,A	no.	-	-	-	-	2	2	2	4	2	4	2	2	4	2	4
Number	E,L,N	no.	2	2	2	2	2	2	2	4	2	4	2	2	4	2	4
	U	no.	-	-	-	2	2	2	2	4	2	4	2	2	4	2	4
	°,A	no.	-	-	-	-	1	1	1	2	1	2	1	1	2	1	2
Circuits	E,L,N	no.	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2
	U	no.	-	-	-	1	1	1	1	2	1	2	1	1	2	1	2
Refrigerant	°,A,E,L,N,U	type								R410A							
System side heat	exchanger																
Туре	°,A,E,L,N,U	type								Brazed plate	2						
	°,A	no.	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1
Number	E,L,N	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	U	no.	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connec	tions																
	°,A	Ø	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	2" 1/2	2"1/2	2" 1/2
Sizes (in/out)	E,L,N	Ø								2"1/2							
	U	Ø	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2

 $G.s. = Grooved\ joints$

Fans								05		0.000			0.000				
Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fan																	
Туре	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axia
		no.	-	-	-	-	2	2	2	2	3	3	3	2	2	3	3
	A	no.	-	-	-	-	2	2	2	2	3	3	3	2	3	3	3
Number	E	no.	6	6	8	8	2	2	2	2	3	3	3	2	3	3	3
	L	no.	4	6	6	8	2	2	2	2	3	3	3	2	2	3	3
	N U	no.	6	8	8	2	2	2	3	3	3	4	4	3	3	4	4
	U	no.			-		2	2	3	3		4	4	3	3	4	4
Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	075
Fans: °																	
Fan																	
Fan motor	°,A,U	type							A	synchrono	us						
Tun motor	E,L,N	type							Asynchro	nous with	phase cut						
	°,A,U	m³/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Air flow rate	E	m³/h	20700	22200	27500	24800	-	-		-	-	-	-	-	-	-	-
	L	m³/h	15200	20700	22200	27500	-	-	-	-	-	-	-	-	-	-	-
A 11: 17: 19 19	N N	m³/h	22200	27500	24800	-	-	-	-	-	-	-	-	-	-	-	-
Sound data calculated in cooling m		le ()															
	°,A,U	dB(A)	- 72.4	- 72.0	-	- 72.0	-	-	-	-	-	-	-	-	-	-	-
Sound power level	E	dB(A)	72,4	72,9	73,7	73,9	-	-	-	-	-	-	-	-	-	-	
·	L	dB(A)	71,8	72,9	73,3	73,9	-	-	-	-	-	-	-	-	-	-	-
(4) 6 1 1 1 1	N N	dB(A)	72,4	73,3	73,7	-	-	-	-	-	-	- 1: (- 6.11.0	-		-	-
(1) Sound power: calculated on the ba	sis of measurements i	made in ac	cordance v	vith UNI EI	N ISO 9614	-2, as requ	ired for Eu	rovent cert	ification.	Sound pres	ssure meas	ured in fre	e field (in	complianc	e with UNI	EN ISO 37	44).
Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	075
Fans: M			_														
Increased fan																	
Fan motor	°,A,U	type							A	synchrono	US						
Tall filotoi	E,L,N	type							Asynchro	nous with	phase cut						
With static pressure																	
		m³/h	-	-	-	-	36600	36600	35100	35100	35100	33700	55200	53100	53100	53100	5310
	A	m³/h	-	-	-	-	35100	35100	33800	33800	33700	53100	53100	51100	51100	51100	5110
Air flow rate	E	m³/h	20700	22200	27500	24800	26800	26800	25600	25600	25600	40500	40500	38800	38800	38800	3880
7th now race	L	m³/h	15200	20700	22200	27500	30900	30900	29500	29500	46500	44600	44600	29500	28300	44600	4460
	N	m³/h	22200	27500	24800	26800	25600	25600	40500	40500	40500	38800	38800	54600	54600	54600	5460
	U	m³/h	-	-	-	35100	33700	33700	53100	53100	53100	51100	51100	71200	71200	71200	7120
	°,A,U	Pa	-	-	-		50	50	50	50	50	50	50	50	50	50	50
High static pressure	E,L	Pa	80	80	80	80	50	50	50	50	50	50	50	50	50	50	50
	N	Pa	80	80	80	50	50	50	50	50	50	50	50	50	50	50	50
	0	dB(A)	-	-	-	-	84,5	85,0	85,3	84,2	85,5	84,3	86,9	87,0	85,9	87,7	87,5
	A	dB(A)	-	-	-	-	84,5	85,0	85,3	84,2	85,5	85,9	86,9	87,0	85,9	87,7	87,.
Sound power level	E	dB(A)	72,4	72,9	73,7	73,9	80,7	81,5	82,1	76,1	82,5	77,2	83,6	83,8	77,4	85,0	83,
Journa power rever	L	dB(A)	71,8	72,9	73,3	73,9	80,7	81,5	82,1	76,1	82,5	76,5	83,6	83,8	77,4	85,0	83,5
	N	dB(A)	72,4	73,3	73,7	79,7	80,7	81,5	83,0	76,9	83,4	77,2	83,6	84,5	77,9	85,5	83,
	U	dB(A)	-	-	-	84,0	84,5	85,0	86,6	85,8	86,8	85,9	86,9	87,9	87,0	88,5	88,
Without Static pressure																	
	•	m³/h	-	-	-	-	42300	42300	40400	40400	40400	38700	63700	61000	61000	61000	6100
	A	m³/h	-		-	-	40400	40400	38600	38600	38600	61100	61000	58500	58500	58500	5850
Air flow rate	E	m³/h	-	-	-	-	26800	26800	25600	25600	25600	40500	40500	38800	38800	38800	3880
THE HOTE TURE	L	m³/h	-	-	-	-	30900	30900	29500	29500	29500	28300	46500	44600	44600	44600	4460
	N	m³/h	-	-	-	26800	25600	25600	40500	40500	40500	38800	38800	54600	54600	54600	5460
	U	m³/h	-	-	-	45700	44000	44000	69000	69000	69000	66500	69000	66500	66500	66500	6650
High static prossure	°,A,E,L	Pa	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0
High static pressure	N,U	Pa	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
	0	dB(A)	-	-	-	-	86,6	86,8	87,0	86,0	87,1	86,0	88,2	88,3	87,7	88,6	88,
	A	dB(A)	-	-	-	-	86,6	86,8	87,0	86,0	87,1	87,7	88,2	88,3	87,7	88,6	88,
County normal and	A E	dB(A)	-	-	-	-	86,6 80,7	86,8 81,5	87,0 82,1	86,0 76,1	87,1 82,5	87,7 77,2	88,2 83,6	88,3 83,8	87,7 77,4	88,6 85,0	88,5
Sound power level																	

79,7

86,4

80,7

86,6

81,5

86,8

N

U

dB(A)

dB(A)

83,0 88,5 76,9 87,7 83,4 88,6 77,2

87,7

83,6

88,2

84,5

89,3

77,9

88,9

85,5

89,6

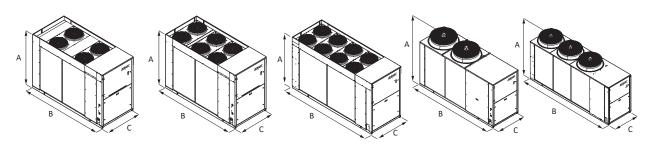
83,3

89,6

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: J																	
Inverter fan																	
Fan motor	°,A,E,L,N,U	type								Inverter							
Air flow rate	0	m³/h	-	-	-	-	36600	36600	35100	35100	35100	33700	55200	53100	53100	53100	53100
	Α	m³/h	-	-	-	-	35100	35100	33800	33800	33700	53100	53100	51100	51100	51100	51100
	E	m³/h	20700	22200	27500	24800	26800	26800	25600	25600	25600	40500	40500	38800	38800	38800	38800
	L	m³/h	15200	20700	22200	27500	30900	30900	29500	29500	29500	28300	46500	44600	44600	44600	44600
	N	m³/h	22200	27500	24800	26800	25600	25600	40500	40500	40500	38800	38800	54600	54600	54600	54600
	U	m³/h	-	-	-	35100	33700	33700	53100	53100	51100	71200	71200	53100	51100	71200	71200
High static pressure	°,A	Pa	-	-	-	-	120	120	120	120	120	120	120	120	120	120	120
	E,L	Pa	20	20	20	20	120	120	120	120	120	120	120	120	120	120	120
	N	Pa	20	20	20	120	120	120	120	120	120	120	120	120	120	120	120
	U	Pa	-	-	-	120	120	120	120	120	120	120	120	120	120	120	120
Sound data calculated in cooling mode (1)																
Sound power level	0	dB(A)	-	-	-	-	84,5	85,0	85,3	85,5	86,9	87,0	87,7	84,2	84,3	85,9	87,5
	A	dB(A)	-	-	-	-	84,5	85,0	85,3	85,5	86,9	87,0	87,7	84,2	85,9	85,9	87,5
	E	dB(A)	72,4	72,9	73,7	73,9	80,7	81,5	82,1	82,5	83,6	83,8	85,0	76,1	77,2	77,4	83,0
	L	dB(A)	71,8	72,9	73,3	73,9	80,7	81,5	82,1	82,5	83,6	83,8	85,0	76,1	76,5	77,4	83,5
	N	dB(A)	72,4	73,3	73,7	79,7	80,7	81,5	83,0	83,4	83,6	84,5	85,5	76,9	77,2	77,9	83,3
	U	dB(A)	-	-	-	84,0	84,5	85,0	86,6	86,8	86,9	87,9	88,5	85,8	85,9	87,0	88,5

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Dimensions and weights																	
A	°,A	mm	-	-	-	-	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	E,L	mm	1680	1680	1680	1680	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	N	mm	1680	1680	1680	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	U	mm	-	-	-	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
В	0	mm	-	-	-	-	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
	A	mm	-	-	-	-	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	E	mm	2450	2950	2950	2950	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	L	mm	2450	2450	2950	2950	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
	N	mm	2950	2950	2950	3200	3200	3200	4010	4010	4010	4010	4010	5200	5200	5200	5200
	U	mm	-	-	-	3200	3200	3200	4010	4010	4010	4010	4010	5200	5200	5200	5200
(°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,L,N	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	U	mm	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Weights																	
Without hydronic kit	0	kg	-	-	-	-	993	1018	1075	1160	1075	1210	1267	1427	1331	1440	1392
	A	kg	-	-	-	-	1046	1072	1116	1200	1116	1325	1347	1507	1410	1531	1471
	E	kg	828	889	912	962	1046	1072	1116	1116	1347	1507	1531	1200	1325	1410	1471
	L	kg	810	828	894	907	993	1018	1075	1160	1075	1210	1267	1427	1331	1440	1392
	N	kg	884	907	957	1020	1076	1109	1232	1243	1426	1647	1660	1327	1415	1549	1607
	U	kg	-	-	-	1020	1076	1109	1232	1243	1426	1647	1660	1327	1415	1549	1607

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRB 0282H-0754H

Reversible air/water heat pump

Cooling capacity 52 ÷ 261 kW Heating capacity 57 ÷ 193 kW



- · High efficiency also at partial loads
- Components redundancy for greater safety
- · Reduced amount of refrigerant
- Compact dimensions





DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

FEATURES

Operating field

Working at full load up to -15°C outside air temperature in winter, and up to 48°C in summer. Hot water production up to 55°C (for more information see the technical documentation).

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.

It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

 VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.

CONTRO

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
- Night Mode: it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.
 Night Mode for standard versions is mandatory DCPX accessory (standard on all low noise versions) or "J" inverter fan

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using

Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

GP: Anti-intrusion grid. VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

AERCALM: The aim of the accessory installed in the electric box of the unit is to provide a clean contact for commanding - on the basis of the outside air temperature - a boiler to replace the heat pump. Aercalm must be requested at the time of ordering, as it is installed in the fac-

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	·
AEK483PT	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•		•			•
AERDACP	E,L	•	•	•	•	•	•	•	•	•	•	•		•	•	•
AERLINK	°,A					•	•	•	•	•	•	•	•	•	•	•
ACRLINK	E,L	•	•	•	•	•	•	•		•	•	•		•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•
AERNEI	E,L	•	•	•	•	•			•	•			•			•
MULTICHILLER_EVO	°,A					•	•	•		•	•	•		•	•	•
MULTICHILLER_EVU	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A						•	•	•			•	•	•	•	•
PGDT	E,L	•	•	•	•		•	•	•	•		•	•	•	•	•
SGD	E,L				•											

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: °															
0	-	-	-	-	DCPX142	DCPX142	DCPX142	DCPX142	DCPX142	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
A	-	-	-	-	DCPX142	DCPX142	DCPX142	DCPX142	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
E,L	DCPX140	DCPX140	DCPX140	DCPX140	As standard										
Fans: M															
E,L	DCPX141	DCPX141	DCPX141	DCPX141	-	-	-	-	-	-	-	-	-	-	-

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Integrated hydronic kit: 00, I1, I2, I	egrated hydronic kit: 00, 11, 12, 13, 14, P1, P2, P3, P4														
0	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
tegrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, K1, K2, K3, K4, W1, W2, W3, W4															
0	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
0	-	-	-	-	GP2 x 2 (1)	GP2 x 3 (1)									
A	-	-	-	-	GP2 x 2 (1)	GP2 x 3 (1)									
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 3 (1)									
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 3 (1)									

(1) $\,x_{-}$ indicates the quantity to buy The accessory cannot be fitted on the configurations indicated with -

Device for peak current reduction

_	•								
	Ver	0282	0302	0332	0352	0502	0552	0602	0604
	°,A	-	-	-	-	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)
	E.L.	DRENRB282 (1)	DRENRB302 (1)	DRENRB332 (1)	DRENRB352 (1)	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754
°,A,E,L	DRENRB652 (1)	DRENRB654 (1)	DRENRB682 (1)	DRENRB702 (1)	DRENRB704 (1)	DRENRB752 (1)	DRENRB754 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°,A	-	-	-	-	RIF0502	RIF0552	RIF0602	RIF0604	RIF0652	RIF0654	RIF0682	RIF0702	RIF0704	RIF0752	RIF0754
E.L	RIF0282	RIF0302	RIF0332	RIF0352	RIF0502	RIF0552	RIF0602	RIF0604	RIF0652	RIF0654	RIF0682	RIF0702	RIF0704	RIF0752	RIF0754

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Touch screen keyboard

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°,A,E,L	C-TOUCH														

A grey background indicates the accessory must be assembled in the factory

Clean contact for controlling a boiler.

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
AERCALM	°,A,E,L															

CONFIGURATOR

Fiel	d	Description
1,2,	.3	NRB
4,5,	6,7	Size 0282, 0302, 0332, 0352, 0502, 0552, 0602, 0604, 0652, 0654, 0682, 0702, 0704 0752, 0754
8		Operating field
	0	Standard mechanic thermostatic valve (1)
	Χ	Electronic thermostatic expansion valve (1)
	Υ	Double mechanical thermostat for low temperature (2)
	Z	Low temperature electronic thermostatic valve (3)
9		Model
	Н	Heat pump
10		Heat recovery
	0	Without heat recovery
	D	With desuperheater (4)
11		Version
	0	Standard
	Α	High efficiency
	Е	Silenced high efficiency (5)
	L	Standard silenced (5)
12		Coils
	0	Copper-aluminium
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	٧	Copper pieps-Coated aluminium fins
13		Fans
	0	Standard
	J	Inverter
	М	Oversized (6)
14		Power supply
	0	400V ~ 3N 50Hz with magnet circuit breakers
15,1	16	Integrated hydronic kit
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump

Field	Description
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (7)
06	Storage tank with holes for heaters and pump low head + stand-by pump (7)
07	Storage tank with holes for heaters and single high head pump (7)
08	Storage tank with holes for heaters and pump high head + stand-by pump (7)
	Double loop
09	Double loop
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
I1	Single low head pump + fixed speed inverter
12	Single low head pump with fixed speed inverter + stand-by pump
13	Single high head pump + fixed speed inverter
14	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K1	Single low head pump + storage tank + fixed speed inverter
K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
К3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and variable speed inverter pump/s
W1	Single low head pump + Storage tank + variable speed inverter
W2	Double low head pump + Storage tank + variable speed inverter
W3	Single high head pump + Storage tank + variable speed inverter
W4	Double high head pump + Storage tank + variable speed inverter

- (1) Water produced from 4 °C ÷ 18 °C
 (2) Water produced from +10 °C ÷ 18 °C
 (3) Water produced from +10 °C ÷ 18 °C
 (4) Water produced from 4 °C ÷ 18 °C
 (5) Water produced from 4 °C ÷ 18 °C
 (6) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
 (6) The size 0282-0302-0332-0352 are only available in the silenced versions "HL/HE"
 (6) Only for 0282 ÷ 0352 sizes
 (7) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS 12 °C/7 °C - 40 °C/45 °C

NRB H°

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	91,2	99,7	116,0	115,4	124,7	133,4	151,0	169,9	159,9	187,2	180,8
Input power	kW	-	-	-	-	33,5	37,5	42,6	46,2	47,8	51,2	51,7	60,0	58,0	69,8	65,7
Cooling total input current	А	-	-	-	-	61,0	67,0	74,0	83,0	83,0	92,0	90,0	102,0	105,0	116,0	116,0
EER	W/W	-	-	-	-	2,72	2,66	2,72	2,50	2,61	2,60	2,92	2,83	2,76	2,68	2,75
Water flow rate system side	l/h	-	-	-	-	15705	17177	19972	19876	21484	22988	25997	29247	27534	32236	31116
Pressure drop system side	kPa	-	-	-	-	35	42	37	44	43	44	50	61	65	74	59
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	-	-	-	-	96,8	105,8	123,7	129,0	136,1	143,4	158,7	178,4	171,8	198,7	188,6
Input power	kW	-	-	-	-	31,0	33,8	38,7	42,7	43,3	47,7	51,2	58,2	57,3	66,0	61,8
Heating total input current	A	-	-	-	-	56,0	60,0	68,0	77,0	76,0	87,0	89,0	99,0	104,0	110,0	111,0
COP	W/W	-	-	-	-	3,12	3,13	3,20	3,03	3,15	3,01	3,10	3,07	3,00	3,01	3,05
Water flow rate system side	l/h	-	-	-	-	16773	18334	21443	22371	23594	24863	27527	30948	29797	34460	32710
Pressure drop system side	kPa	-	-	-	-	40	48	43	56	52	52	56	69	76	84	65

NRB HL

IND IIL																
Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C/7 °C (1)																
Cooling capacity	kW	52,1	59,2	67,3	78,1	88,5	96,5	111,5	110,4	119,3	126,4	147,0	164,5	154,9	180,5	174,0
Input power	kW	19,5	22,0	24,8	29,5	34,1	38,3	44,1	48,4	49,9	54,2	52,3	61,5	59,2	72,5	67,8
Cooling total input current	А	35,0	41,0	47,0	55,0	59,0	66,0	74,0	84,0	84,0	94,0	87,0	100,0	103,0	116,0	116,0
EER	W/W	2,67	2,69	2,71	2,65	2,60	2,52	2,53	2,28	2,39	2,33	2,81	2,68	2,62	2,49	2,57
Water flow rate system side	l/h	8974	10197	11584	13455	15234	16630	19200	19020	20540	21776	25312	28324	26677	31068	29958
Pressure drop system side	kPa	33	42	33	45	33	39	34	40	39	40	48	58	60	69	55
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	57,5	65,7	75,3	84,9	96,8	105,8	123,7	129,0	136,1	143,4	158,7	178,4	171,8	198,7	188,6
Input power	kW	17,6	20,7	23,1	26,9	31,0	33,8	38,7	42,6	43,3	47,7	51,2	58,2	57,3	66,0	61,8
Heating total input current	A	32,0	38,0	43,0	51,0	56,0	60,0	68,0	77,0	76,0	87,0	89,0	99,0	104,0	110,0	111,0
COP	W/W	3,27	3,17	3,26	3,16	3,12	3,13	3,20	3,03	3,15	3,01	3,10	3,07	3,00	3,01	3,05
Water flow rate system side	l/h	9973	11376	13056	14711	16773	18334	21443	22371	23594	24863	27527	30948	29797	34460	32710
Pressure drop system side	kPa	41	53	42	54	40	47	43	55	52	52	56	69	75	84	65

NRB HA

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	96,9	106,5	123,6	123,1	133,6	142,1	163,9	178,5	168,0	199,9	190,0
Input power	kW	-	-	-	-	32,3	36,1	39,5	43,3	45,0	47,2	50,7	57,0	55,4	66,5	62,8
Cooling total input current	А	-	-	-	-	57,0	61,0	68,0	73,0	74,0	79,0	85,0	94,0	99,0	102,0	106,0
EER	W/W	-	-	-	-	3,00	2,95	3,13	2,84	2,97	3,01	3,23	3,13	3,03	3,01	3,03
Water flow rate system side	l/h	-	-	-	-	16684	18331	21277	21205	23007	24462	28216	30726	28924	34406	32698
Pressure drop system side	kPa	-	-	-	-	26	31	32	38	38	50	44	52	50	56	54
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	-	-	-	-	100,3	110,9	124,3	129,7	138,2	149,4	164,1	179,7	172,3	200,6	190,0
Input power	kW	-	-	-	-	30,7	33,5	37,6	40,5	42,0	46,7	50,2	56,3	54,3	62,9	59,5
Heating total input current	Α	-	-	-	-	56,0	60,0	67,0	73,0	74,0	86,0	87,0	96,0	99,0	106,0	107,0
COP	W/W	-	-	-	-	3,27	3,31	3,31	3,20	3,29	3,20	3,27	3,19	3,17	3,19	3,19
Water flow rate system side	l/h	-	-	-	-	17406	19230	21553	22489	23953	25914	28469	31171	29889	34800	32956
Pressure drop system side	kPa	-	-	-	-	28	34	33	42	41	56	45	54	54	57	55

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C/7 °C (1)																
Cooling capacity	kW	55,4	62,1	70,0	81,2	94,0	103,0	119,1	117,6	128,0	138,3	159,4	172,5	162,3	191,7	182,6
Input power	kW	18,5	21,0	23,7	28,3	32,8	36,9	40,7	44,7	46,9	47,7	51,4	58,5	56,7	69,3	64,9
Cooling total input current	Α	32,0	37,0	42,0	47,0	56,0	61,0	68,0	74,0	75,0	76,0	83,0	93,0	98,0	102,0	106,0
EER	W/W	3,00	2,96	2,95	2,86	2,86	2,79	2,92	2,63	2,73	2,90	3,10	2,95	2,87	2,77	2,81
Water flow rate system side	I/h	9530	10696	12052	13983	16181	17722	20498	20255	22037	23819	27431	29692	27947	33000	31425
Pressure drop system side	kPa	23	29	26	35	24	29	30	34	34	48	41	49	47	51	50
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	59,0	68,2	76,6	87,1	100,3	110,9	124,3	129,7	138,2	149,4	164,1	179,7	172,3	200,6	190,0
Input power	kW	17,5	20,3	22,9	26,4	30,7	33,5	37,6	40,5	42,0	46,7	50,2	56,3	54,3	62,9	59,5
Heating total input current	Α	33,0	38,0	44,0	50,0	56,0	60,0	67,0	73,0	74,0	86,0	87,0	96,0	99,0	106,0	107,0
COP	W/W	3,37	3,36	3,35	3,30	3,27	3,31	3,31	3,20	3,29	3,20	3,27	3,19	3,17	3,19	3,19
Water flow rate system side	l/h	10227	11816	13289	15100	17406	19230	21553	22489	23953	25914	28469	31171	29889	34800	32956
Pressure drop system side	kPa	26	35	31	41	28	34	33	42	41	56	45	54	54	57	55

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

NRB H°

MINDII																
Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	-	-	-	-	122,6	133,3	155,1	154,9	165,6	183,4	203,5	227,9	218,9	248,3	247,3
Input power	kW	-	-	-	-	36,3	41,0	46,5	50,2	52,2	55,9	55,8	65,6	62,6	77,0	72,2
Cooling total input current	А	-	-	-	-	65,0	72,0	80,0	89,0	90,0	99,0	96,0	110,0	112,0	126,0	126,0
EER	W/W	-	-	-	-	3,38	3,25	3,33	3,08	3,17	3,28	3,65	3,48	3,50	3,23	3,42
Water flow rate system side	l/h	-	-	-	-	21190	23054	26805	26775	28622	31700	35175	39395	37837	42931	42743
Pressure drop system side	kPa	-	-	-	-	63	75	67	81	76	84	92	111	123	131	112
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	-	-	-	-	98,8	107,2	127,4	132,8	139,6	146,7	163,5	182,9	176,8	201,7	192,4
Input power	kW	-	-	-	-	25,4	27,7	31,8	34,3	35,5	38,4	42,0	47,3	46,5	53,2	50,4
Heating total input current	А	-	-	-	-	46,0	49,0	56,0	61,0	62,0	70,0	72,0	80,0	84,0	88,0	90,0
COP	W/W	-	-	-	-	3,89	3,87	4,01	3,87	3,93	3,82	3,90	3,87	3,80	3,79	3,82
Water flow rate system side	l/h	-	-	-	-	17058	18508	21998	22936	24118	25357	28248	31616	30551	34851	33261
Pressure drop system side	kPa	-	-	-	-	41	49	45	59	54	54	59	72	80	86	68

NRB HL

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	69,6	79,3	92,2	105,6	118,1	128,2	147,6	146,8	156,6	170,9	196,8	218,8	210,1	237,3	235,3
Input power	kW	21,9	24,2	27,3	32,5	37,3	42,4	48,9	53,8	55,5	60,7	57,2	68,1	64,8	81,0	75,7
Cooling total input current	Α	39,0	44,0	51,0	60,0	64,0	72,0	81,0	92,0	93,0	104,0	94,0	110,0	111,0	128,0	128,0
EER	W/W	3,18	3,27	3,37	3,25	3,17	3,02	3,02	2,73	2,82	2,82	3,44	3,22	3,24	2,93	3,11
Water flow rate system side	l/h	12041	13740	15960	18270	20427	22163	25508	25376	27064	29542	34006	37824	36327	41017	40668
Pressure drop system side	kPa	59	77	63	83	59	69	61	70	68	73	86	103	112	120	101
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	58,9	66,7	77,1	86,8	98,8	107,2	127,4	132,8	139,6	146,7	163,5	182,9	176,8	201,7	192,4
Input power	kW	13,9	16,5	18,4	21,5	25,4	27,7	31,8	34,3	35,5	38,4	42,0	47,3	46,5	53,2	50,4
Heating total input current	Α	25,0	30,0	34,0	40,0	46,0	49,0	56,0	61,0	62,0	70,0	72,0	80,0	84,0	88,0	90,0
COP	W/W	4,25	4,06	4,19	4,03	3,89	3,87	4,01	3,87	3,93	3,82	3,90	3,87	3,80	3,79	3,82
Water flow rate system side	l/h	10168	11516	13317	14972	17058	18508	21998	22936	24118	25357	28248	31616	30551	34851	33261
Pressure drop system side	kPa	42	54	44	56	41	48	45	57	54	54	59	72	79	86	68

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	-	-	-	-	131,3	143,6	166,5	170,4	178,7	198,2	222,3	241,2	231,6	268,1	261,3
Input power	kW	-	-	-	-	34,9	39,4	42,9	47,2	49,0	50,3	54,8	62,4	59,6	73,6	68,8
Cooling total input current	Α	-	-	-	-	61,0	66,0	74,0	79,0	80,0	82,0	91,0	101,0	105,0	112,0	115,0
EER	W/W	-	-	-	-	3,77	3,65	3,88	3,61	3,65	3,94	4,06	3,86	3,88	3,65	3,80
Water flow rate system side	l/h	-	-	-	-	22699	24821	28771	29452	30874	34255	38412	41683	40019	46336	45163
Pressure drop system side	kPa	-	-	-	-	48	57	59	73	68	98	81	97	96	102	103
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	-	-	-	-	104,2	114,6	128,1	133,6	141,8	154,4	169,0	184,0	177,3	203,5	193,6
Input power	kW	-	-	-	-	25,2	27,6	30,9	32,6	34,4	38,0	41,2	45,8	44,1	50,7	48,5
Heating total input current	Α	-	-	-	-	46,0	49,0	54,0	59,0	60,0	69,0	71,0	78,0	80,0	85,0	87,0
COP	W/W	-	-	-	-	4,14	4,16	4,15	4,10	4,12	4,07	4,10	4,02	4,02	4,01	3,99
Water flow rate system side	l/h	-	-	-	-	18004	19795	22128	23077	24492	26674	29206	31801	30649	35173	33469
Pressure drop system side	kPa	-	-	-	-	30	36	35	45	43	60	47	56	56	58	57

NRB HE

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	76,4	85,7	96,8	111,4	126,2	137,5	158,5	160,4	168,9	191,5	214,3	230,5	221,2	253,2	247,4
Input power	kW	20,4	23,1	25,7	31,2	35,9	41,0	45,2	49,8	52,2	51,4	56,4	65,1	62,1	78,2	72,6
Cooling total input current	Α	35,0	40,0	45,0	51,0	61,0	66,0	75,0	81,0	82,0	81,0	90,0	102,0	106,0	114,0	117,0
EER	W/W	3,74	3,72	3,77	3,57	3,51	3,36	3,51	3,22	3,24	3,72	3,80	3,54	3,56	3,24	3,41
Water flow rate system side	I/h	13219	14836	16740	19268	21829	23767	27392	27721	29185	33098	37025	39827	38232	43759	42750
Pressure drop system side	kPa	43	55	50	66	44	52	53	64	60	92	75	88	88	91	92
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	60,5	70,2	78,9	90,4	104,2	114,6	128,1	133,6	141,8	154,4	169,0	184,0	177,3	203,5	193,6
Input power	kW	13,8	16,1	18,2	21,1	25,2	27,6	30,9	32,6	34,4	38,0	41,2	45,8	44,1	50,7	48,5
Heating total input current	Α	26,0	30,0	35,0	40,0	46,0	49,0	54,0	59,0	60,0	69,0	71,0	78,0	80,0	85,0	87,0
COP	W/W	4,38	4,36	4,34	4,28	4,14	4,16	4,15	4,10	4,12	4,07	4,10	4,02	4,02	4,01	3,99
Water flow rate system side	l/h	10456	12125	13636	15617	18004	19795	22128	23077	24492	26674	29206	31801	30649	35173	33469
Pressure drop system side	kPa	27	37	33	43	30	36	35	45	43	60	47	56	56	58	57

ENERGY DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling capacity with low lea	ving water temp (UE n° 2	016/2281)															
	0	W/W	-	-	-	-	3,92	3,83	3,99	3,70	3,91	3,67	4,14	3,97	3,73	3,88	3,76
CEED	A	W/W	-	-	-	-	4,21	4,14	4,39	3,93	4,20	3,92	4,38	4,27	3,99	4,24	4,06
SEER	E	W/W	4,28	4,32	4,22	4,24	4,17	4,10	4,33	3,86	4,12	3,93	4,35	4,21	3,98	4,16	3,92
	L	W/W	4,10	4,11	4,11	4,00	3,88	3,83	3,93	3,68	3,89	3,64	4,08	3,89	3,70	3,81	3,71
	0	%	-	-	-	-	154,00	150,00	157,00	145,00	153,00	144,00	163,00	156,00	146,00	152,00	147,00
nce	A	%	-	-	-	-	165,00	163,00	173,00	154,00	165,00	154,00	172,00	168,00	157,00	167,00	160,00
ηςς	E	%	168,00	170,00	166,00	167,00	164,00	161,00	170,00	151,00	162,00	154,00	171,00	165,00	156,00	163,00	154,00
	L	%	161,00	161,00	161,00	157,00	152,00	150,00	154,00	144,00	153,00	143,00	160,00	153,00	145,00	149,00	145,00
UE 813/2013 performance in	average ambient conditi	ons (avera	ge) - 35 °C	- Pdesign	h ≤ 400 k	W (1)											
	0	kW	-	-	-	-	88,80	97,30	112,20	116,80	124,50	129,90	144,90	162,80	157,50	182,70	172,10
Ddocianh	A	kW	-	-	-	-	90,20	99,60	112,20	116,80	125,80	135,00	149,00	164,10	157,00	183,30	173,60
Pdesignh	E	kW	53,46	53,46	53,46	78,80	90,20	99,60	112,20	116,80	125,80	135,00	149,00	164,10	157,00	183,30	173,60
	L	kW	52,20	60,22	68,44	78,20	88,80	97,30	112,20	116,80	124,50	129,90	144,90	162,80	157,50	182,70	172,10
	0	%	-	-	-	-	135,90	139,50	140,40	130,40	140,30	129,50	134,00	137,30	126,30	138,40	128,50
nch	A	%	-	-	-	-	138,00	142,80	143,20	133,00	143,10	132,10	139,80	141,30	128,00	142,00	133,00
ηsh	E	%	158,26	158,26	158,26	152,70	138,50	142,80	143,20	133,00	143,10	132,10	139,80	141,30	128,40	142,00	133,00
	L	%	156,16	152,79	152,22	150,00	135,90	139,50	140,40	130,50	140,30	129,50	134,00	137,30	126,30	138,40	128,50
	0	W/W	-	-	-	-	3,47	3,56	3,58	3,34	3,58	3,31	3,43	3,51	3,23	3,54	3,29
ccon	A	W/W	-	-	-	-	3,53	3,65	3,66	3,40	3,65	3,38	3,57	3,61	3,29	3,63	3,40
SCOP	E	W/W	4,03	4,04	4,03	3,89	3,54	3,65	3,65	3,40	3,66	3,38	3,57	3,61	3,29	3,62	3,40
	L	W/W	3,98	3,89	3,88	3,83	3,47	3,56	3,59	3,34	3,58	3,31	3,43	3.51	3,23	3,54	3,29

⁽¹⁾ Efficiencies for low temperature applications (35 °C)

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

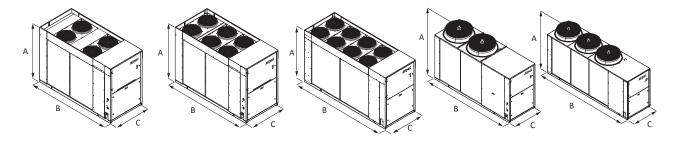
ELECTRIC DATA

ELECTRIC DATA																	
Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Electric data																	
	0	А	-	-	-	-	74,3	79,2	88,1	100,3	97,0	113,5	115,9	130,5	134,6	147,2	144,4
Maximum current (FLA)	A	А	-	-	-	-	74,3	79,2	88,1	100,3	97,0	117,7	115,9	130,5	134,6	147,2	144,4
Maximum current (FLA)	E	А	42,6	49,2	56,9	65,3	74,3	79,2	88,1	100,3	97,0	117,7	115,9	130,5	134,6	147,2	144,4
	L	Α	41,5	49,2	55,8	65,3	74,3	79,2	88,1	100,3	97,0	113,5	115,9	130,5	134,6	147,2	144,4
		Α	-	-	-	-	279,8	284,7	331,4	214,1	340,3	227,2	367,0	381,6	278,1	479,6	349,8
Peak current (LRA)	A	А	-	-	-	-	279,8	284,7	331,4	214,1	340,3	231,5	367,0	381,6	278,1	479,6	349,8
reak culletit (LNA)	E	Α	148,0	163,0	170,6	208,9	279,8	284,7	331,4	214,1	340,3	231,5	367,0	381,6	278,1	479,6	349,8
	L	Α	146,9	163,0	169,5	208,9	279,8	284,7	331,4	214,1	340,3	227,2	367,0	381,6	278,1	479,6	349,8

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Compressor																	
Туре	°,A,E,L	type								Scroll							
Compressor regulation	°,A,E,L	Туре								On-Off							
Number —	°,A	no.	-		-	-	2	2	2	4	2	4	2	2	4	2	4
Nullibei	E,L	no.	2	2	2	2	2	2	2	4	2	4	2	2	4	2	4
Circuits —	°,A	no.	-	-	-	-	1	1	1	2	1	2	1	1	2	1	2
circuits	E,L	no.	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2
Refrigerant	°,A,E,L	type								R410A							
_	0	kg	-		-	-	12,2	12,2	16,8	17,6	16,8	20,0	24,5	24,5	23,0	24,5	23,0
Refrigerant charge (1) —	Α	kg	-		-	-	15,9	15,8	17,8	19,8	18,4	21,6	28,6	28,6	27,0	28,6	27,0
henryeranic charge (1)	E	kg	9,1	10,7	11,1	12,5	15,9	15,8	17,8	19,8	18,4	21,6	28,6	28,6	27,0	28,6	27,0
	L	kg	8,8	9,4	10,3	11,0	12,2	12,2	16,8	17,6	16,8	20,0	24,5	24,5	23,0	24,5	23,0
System side heat exchanger																	
Туре	°,A,E,L	type							E	Brazed plat	e						
Number —	°,A	no.	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1
Nullipei —	E,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Connections (in/out)	°,A,E,L	Туре							Gı	rooved join	ts						
Sizes (in/out)	°,A,E,L	Ø								2"1/2							
Fan																	
Туре	°,A,E,L	type								Axial							
	0	no.	-	-	-	-	2	2	2	2	2	2	3	3	3	3	3
Mountain	Α	no.	-	-	-	-	2	2	2	2	3	3	3	2	3	3	3
Number —	Е	no.	6	6	8	8	2	2	2	2	2	3	3	3	3	3	3
_	L	no.	4	6	6	8	2	2	2	2	2	2	3	3	3	3	3
	0	m³/h	-	-	-		42785	42785	41094	41065	41094	39542	62015	61936	61936	61936	6193
A:- 4	Α	m³/h	-	-	-	-	41080	41080	39461	39461	39461	59684	59701	59684	59684	59684	5968
Air flow rate —	E	m³/h	21230	22746	28176	25787	31149	31149	29855	29855	29855	47085	45202	45187	45187	45187	4518
_	L	m³/h	15574	21226	22732	28156	32650	32650	31613	31169	31161	29823	47087	47125	47125	47125	4712
Sound data calculated in cooling mode (2)																	
	0	dB(A)	-	-	-	-	86,6	86,9	87,1	86,5	87,3	86,5	88,8	88,9	88,2	89,4	89,5
	Α	dB(A)	-	-	-	-	86,6	86,9	87,1	86,5	87,3	88,2	88,8	88,9	88,2	89,4	89,5
Sound power level —	E	dB(A)	73,0	73,5	74,3	74,5	82,2	82,9	83,3	76,7	83,7	77,8	84,9	85,0	78,0	86,1	84,0
_	L	dB(A)	72,4	73,5	73,9	74,5	82,2	82,9	83,3	76,7	83,7	77,1	84,9	85,0	78,0	86,1	84,0
	0	dB(A)		-	-	-	54,8	55,0	55,2	54,6	55,4	54,6	56,8	56,9	56,2	57,4	57,5
-	A	dB(A)	-	-	-	-	54,8	55,0	55,2	54,6	55,4	56,2	56,8	56,9	56,2	57,4	57,5
Sound pressure level (10 m)	E	dB(A)	41,3	41,7	42,5	42,7	50,3	51,0	51,4	44,8	51,8	45,8	52,9	53,1	46,0	54,1	52,0
_		dB(A)	40,7	41.7	42,1	42.7	50,3	51,0	51,4	44,8	51,8	45,3	52,9	53,1	46,0	54,1	52,0
(1) The load indicated in the table is an estima	-	- ()													10,0	21/1	22,1

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Dimensions and weights																	
٨	°,A	mm	-	-	-	-	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
A	E,L	mm	1680	1680	1680	1680	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	0	mm	-	-	-	-	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
D	Α	mm	-	-	-	-	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
D .	E	mm	2450	2950	2950	2950	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	L	mm	2450	2450	2950	2950	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
(°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,L	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100

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NRG 0282-0804

Air-water chiller

Cooling capacity 55,8 ÷ 224,6 kW



- · High efficiency also at partial loads
- · Reduced amount of refrigerant
- Compact dimensions





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

These are outdoor units with streamlined scroll compressors used with R32 gas (A2L).

Condensing coil with copper pipes and aluminium louvers, plate heat exchanger.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50°C external air temperature. Unit can produce chilled water up to -10 $^{\circ}\text{C}$.

For more information refer to the selection program and to to the dedicated documentation.

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO₂ values.

■ The leak detector is supplied as per standard.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.

It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption and to guarantee operation of the unit even in critical conditions.

CONTROL

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP. SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **MULTICHILLER_EVO:** Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring

gle chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

VT: Anti-vibration supports.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

GP: Anti-intrusion grid.

FACTORY FITTED ACCESSORIES

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
AFD40CD1	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AER485P1	L	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
AFDDACD	E,N	•	•				•		•	•		•	•	•	•	•		•	•
AERBACP	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U							•	•		•								
	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
AFRAIFT	E,N																		
AERNET	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U																		
	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICUULED ENO	E,N						•					•		•	•	•			
MULTICHILLER_EVO	L					•	•		•	•		•	•	•	•	•	•		
	U								•			•	•	•	•	•		•	•
	°,A												•				•	•	•
0.004	E,N		•				•		•	•		•	•	•	•	•		•	•
PGD1	L																		
	U				•	•	•				•	•		•	•	•	•		•
CCD	E,L,N	•																	
SGD																			

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
Fans: °									
E,L	DCPX145	DCPX145	DCPX145	DCPX145	-	-	-	-	-
N	DCPX145	DCPX145	DCPX145	-	-	-	-	-	-
Fans: M									
°,A	-	-	-	-	DCPX146	DCPX146	DCPX147	DCPX146	DCPX147
E,L	-	-	-	-	As standard				
N	-	-	-	As standard					
U	-	-	<u>-</u>	DCPX146	DCPX146	DCPX146	DCPX147	DCPX147	DCPX147
Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: M									
°,A	DCPX146	DCPX147							
E	As standard								
L	As standard	-	-						
N	As standard	As standard	As standard	-	-	-	-	-	-
U	DCPX147	DCPX147	DCPX147	-	-	-	-	-	-

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Integrated hydronic kit: 00, I1, I2, I3	, I4, P1, P2, P3	3, P4																
0	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22						
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22							
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22							
L	VT17	VT17	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	-	-
N	VT13	VT13	VT13	VT11	VT11	VT11	VT22											
U	-	-	-	VT11	VT11	VT11	VT22											
Integrated hydronic kit: 01, 02, 03,	04, 05, 06, 07,	08, K1, K	2, K3, K4,	W1, W2, \	N3, W4													
0	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22						
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22							

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22							
L	VT13	VT13	VT13	VT13	VT11	VT22	VT22	VT22	VT22	VT22	-	-						
N	VT13	VT13	VT13	VT11	VT11	VT11	VT22											
U	-	-	-	VT11	VT11	VT11	VT22											

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°,A	-	-	-	-	GP2 x 2 (1)				
E,L	GP3	GP3	GP4	GP4	GP2 x 2 (1)				
N	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)			
U	-	-	-	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)			

(1) $\,x_{-}$ indicates the quantity to buy The accessory cannot be fitted on the configurations indicated with -

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
0	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)						
A,E	GP2 x 2 (1)	GP2 x 3 (1)							
L	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	-	-				
N,U	GP2 x 3 (1)								

(1) x_i indicates the quantity to buy

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652
°,A	-	-	DRENRG332N	-	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604	DRENRG652
E,L,N	DRENRG282	DRENRG302	DRENRG332N	DRENRG352	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604	DRENRG652
U	-	-	DRENRG332N	DRENRG352	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604	DRENRG652

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	0654	0682	0702	0704	0752	0754	0802	0804
°,A,E,N,U	DRENRG654N	DRENRG682	DRENRG702	DRENRG704	DRENRG752	DRENRG754	DRENRG802	DRENRG804
L	DRENRG654N	DRENRG682	DRENRG702	DRENRG704	DRENRG752	DRENRG754	-	-

A grey background indicates the accessory must be assembled in the factory

Power factor correction

_											
	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652
	°,A	-	-	RIFNRG332N	-	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604	RIFNRG652
	E,L,N	RIFNRG282	RIFNRG302	RIFNRG332N	RIFNRG352	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604	RIFNRG652
	U	-	-	RIFNRG332N	RIFNRG352	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604	RIFNRG652

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	0654	0682	0702	0704	0752	0754	0802	0804
°,A,E,N,U	RIFNRG654N	RIFNRG682	RIFNRG702	RIFNRG704	RIFNRG752	RIFNRG754	RIFNRG802	RIFNRG804
	RIFNRG654N	RIFNRG682	RIFNRG702	RIFNRG704	RIFNRG752	RIFNRG754	_	_

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
°,A,E,N,U	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2
L	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	-	-

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

CONFIGURATOR

Field 1 2 2	Description
1,2,3	NRG Size
1,5,6,7	0282, 0302, 0332, 0352, 0502, 0552, 0554, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754, 0802, 0804
3	Operating field
Χ	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
)	Model
0	Cooling only
10	Heat recovery
0	Without heat recovery
D	With desuperheater (3)
T	With total recovery
11	Version
0	Standard
A	High efficiency
E	Silenced high efficiency (4)
L	Standard silenced (4)
N	Silenced very high efficiency (4)
U	Very high efficiency
<u>12</u>	Coils
	Copper-aluminium
R S	Copper pipes-copper fins Copper pipes-Tinned copper fins
V V	Copper pipes-Tinned Copper Tins Copper pieps-Coated aluminium fins
v 13	Copper pieps-coated aluminium mis Fans
0	Standard (5)
1	Inverter (6)
M	Oversized (7)
14	Power supply
0	400V ~ 3N 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (8)
06	Storage tank with holes for heaters and pump low head + stand-by pump (8)
07	Storage tank with holes for heaters and single high head pump (8)
08	Storage tank with holes for heaters and pump high head + stand-by pump (8)
	Double loop
09	Double loop
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
11	Kit with inverter pump/s to fixed speed
11	Single low head pump + fixed speed inverter
12	Single low head pump with fixed speed inverter + stand-by pump
13 14	Single high head pump + fixed speed inverter Single high head pump with fixed speed inverter + stand-by pump
14	
K1	Kit with storage tank and inverter pump/s to fixed speed Single low head pump + storage tank + fixed speed inverter
K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
K3	Storage tank and row nead pump with rixed speed inverter Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter Storage tank and low head pump with fixed speed inverter + stand-by pump
1/4	Storage tank and row nead pump with rised speed inverter + stand-by pump Kit with storage tank and variable speed inverter pump/s
	Single low head pump + Storage tank + variable speed inverter
W1	
W1 W2	
W1 W2 W3	Double low head pump + Storage tank + variable speed inverter Single high head pump + Storage tank + variable speed inverter

Water produced from 4 °C ÷ 20 °C
 Water produced from 8 °C to -10 °C. The option is not compatible with hydronic kits W1-W2-W3-W4.
 Warning: on the recovery side, a minimum input temperature of 35 °C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program.

rogram

(4) The size 0282-0302-0332-0352 only available in low noise versions.

(5) As standard in sizes from 0282 to 0352 versions E - L and in size from 0282 to 0332 version N

(6) As standard in size 0702-0704-0752-0754-0802-0804 in the version U and N.

 ⁽⁷⁾ As standard in sizes from 0502 to 0804 version ° - L - A - E and in sizes from 0352 to 0682 and in sizes from 0554 to 0654 version N - U.
 (8) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRG - °

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	100,8	110,6	117,6	127,1	130,0	138,5	143,5	161,9	182,0	171,7	203,9	194,0	222,4	212,3
Input power	kW	-	-	-	-	33,4	37,8	37,8	39,7	44,2	45,1	50,7	52,5	59,4	57,4	69,6	66,5	80,4	74,8
Cooling total input current	Α	-	-	-	-	59,0	64,0	59,0	68,0	79,0	77,0	91,0	88,0	95,0	108,0	111,0	117,0	127,0	126,0
EER	W/W	-	-	-	-	3,02	2,92	3,11	3,20	2,94	3,07	2,83	3,08	3,06	2,99	2,93	2,92	2,77	2,84
Water flow rate system side	I/h	-	-	-	-	17363	19059	20268	21893	22383	23841	24712	27874	31338	29554	35100	33389	38287	36547
Pressure drop system side	kPa	-	-	-	-	40	49	46	44	56	53	50	54	69	71	68	67	81	80

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - L

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																	
Cooling capacity	kW	55,8	63,8	73,3	84,5	98,9	108,2	113,4	123,5	123,9	132,9	139,3	159,0	178,5	168,5	198,8	189,6
Input power	kW	19,7	22,1	24,4	28,6	33,9	38,6	38,5	40,9	45,2	46,7	53,6	53,5	60,3	59,0	71,8	68,2
Cooling total input current	Α	32,0	41,0	45,0	55,0	58,0	63,0	59,0	68,0	79,0	77,0	92,0	88,0	96,0	107,0	112,0	117,0
EER	W/W	2,83	2,88	3,01	2,95	2,92	2,80	2,95	3,02	2,74	2,85	2,60	2,97	2,96	2,85	2,77	2,78
Water flow rate system side	l/h	9604	10989	12618	14572	17043	18647	19537	21269	21332	22880	23984	27367	30726	29004	34224	32640
Pressure drop system side	kPa	35	46	37	50	39	46	45	43	54	50	47	52	66	69	65	64

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - A

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	105,3	116,3	118,7	129,7	132,2	141,2	151,3	167,9	186,4	177,0	208,8	199,2	228,6	218,5
Input power	kW	-	-	-	-	31,0	34,9	37,7	40,1	43,8	45,6	47,8	51,1	57,3	56,2	67,0	64,9	77,2	73,6
Cooling total input current	Α	-	-	-	-	56,0	60,0	60,0	69,0	80,0	78,0	88,0	85,0	93,0	106,0	108,0	115,0	124,0	123,0
EER	W/W	-	-	-	-	3,39	3,33	3,14	3,23	3,02	3,09	3,16	3,29	3,25	3,15	3,12	3,07	2,96	2,97
Water flow rate system side	l/h	-	-	-	-	18133	20029	20437	22332	22778	24316	26053	28900	32076	30475	35940	34279	39342	37605
Pressure drop system side	kPa	-	-	-	-	30	36	34	34	42	41	56	45	57	56	62	59	74	72

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - E

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	58,7	64,8	74,8	88,1	101,0	112,1	115,3	124,8	126,8	134,9	147,6	161,6	180,1	171,4	201,8	191,5	216,6	208,9
Input power	kW	18,7	21,5	23,3	27,6	31,6	35,8	38,6	40,7	45,6	46,8	49,3	52,1	59,4	58,0	70,9	67,4	81,8	77,1
Cooling total input current	Α	31,0	41,0	45,0	54,0	55,0	60,0	61,0	70,0	81,0	79,0	87,0	85,0	95,0	106,0	111,0	116,0	129,0	126,0
EER	W/W	3,14	3,02	3,21	3,19	3,20	3,13	2,98	3,07	2,78	2,88	2,99	3,10	3,03	2,96	2,85	2,84	2,65	2,71
Water flow rate system side	l/h	10097	11156	12874	15166	17382	19311	19858	21482	21840	23238	25406	27822	31004	29499	34739	32965	37282	35953
Pressure drop system side	kPa	24	29	28	37	28	34	32	32	38	37	53	43	53	52	57	55	67	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - U

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	94,0	105,1	116,7	122,4	134,4	135,9	148,2	154,1	170,1	192,0	179,4	215,0	203,9	236,8	224,6
Input power	kW	-	-	-	26,8	30,6	34,4	36,1	38,2	41,9	42,9	46,5	49,5	57,5	56,2	66,4	63,6	75,7	72,1
Cooling total input current	Α	-	-	-	53,0	57,0	61,0	58,0	68,0	78,0	76,0	87,0	83,0	92,0	106,0	106,0	114,0	120,0	121,0
EER	W/W	-	-	-	3,51	3,43	3,39	3,39	3,52	3,24	3,45	3,32	3,44	3,34	3,19	3,24	3,20	3,13	3,11
Water flow rate system side	l/h	-	-	-	16172	18095	20096	21081	23146	23408	25528	26524	29288	33054	30884	37012	35090	40762	38655
Pressure drop system side	kPa	-	-	-	24	30	28	37	38	46	36	43	47	53	58	66	59	80	72

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - N

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	59,7	66,0	76,0	92,0	103,0	114,9	120,1	131,5	132,9	144,6	148,5	163,6	188,0	175,9	209,5	199,0	227,4	218,5
Input power	kW	18,1	20,8	23,3	27,9	31,8	36,1	37,0	39,2	43,2	44,5	48,5	52,1	57,9	56,8	67,6	65,1	78,0	74,5
Cooling total input current	Α	30,0	41,0	45,0	52,0	57,0	62,0	57,0	67,0	78,0	75,0	88,0	85,0	92,0	106,0	107,0	114,0	123,0	123,0
EER	W/W	3,29	3,17	3,26	3,30	3,24	3,18	3,25	3,35	3,07	3,25	3,06	3,14	3,25	3,10	3,10	3,06	2,92	2,93
Water flow rate system side	l/h	10270	11372	13087	15837	17726	19768	20680	22650	22893	24895	25579	28156	32351	30273	36062	34256	39138	37603
Pressure drop system side	kPa	25	31	29	23	28	26	36	36	44	34	41	44	50	56	63	57	75	68

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
SEER - 12/7 (EN14825: 2018) (1)																				
	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEER	E	W/W	4,52	4,35	4,51	4,43	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEER	L	W/W	4,25	4,17	4,39	4,28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	4,69	4,62	4,65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concornal officioness	E	%	177,70	171,11	177,59	174,38	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	L	%	166,98	163,66	172,63	168,23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	%	184,57	181,62	183,16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																				
	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEER	E	W/W	5,30	5,05	5,28	5,14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DEEK	L	W/W	4,85	4,73	5,05	4,94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	5,50	5,36	5,44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	E	%	208,80	199,00	208,00	202,60	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	L	%	190,90	186,10	198,90	194,70	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	%	217,10	211,30	214,40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN 14825: 2018) (2)																				
	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CEDD	E	W/W	6,66	6,39	6,59	6,52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEPR	L	W/W	6,34	6,26	6,43	6,30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	6,87	6,70	6,81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
SEER - 12/7 (EN14825: 2018) (1)																				
	0	W/W	-	-	-	-	4,30	4,30	4,36	4,44	4,33	4,32	4,31	4,37	4,38	4,28	4,32	4,29	4,23	4,26
_	Α	W/W	-	-	-	-	4,50	4,55	4,43	4,61	4,38	4,55	4,35	4,60	4,56	4,42	4,53	4,37	4,34	4,27
	Е	W/W	4,56	4,40	4,56	4,48	4,54	4,46	4,44	4,53	4,40	4,33	4,37	4,55	4,38	4,40	4,37	4,39	4,25	4,27
SEER —	L	W/W	4,29	4,21	4,43	4,32	4,32	4,24	4,35	4,30	4,33	4,23	4,31	4,28	4,24	4,30	4,23	4,30	-	-
	N	W/W	4,74	4,66	4,70	4,78	4,71	4,59	4,54	4,77	4,46	4,69	4,49	4,75	4,63	4,48	4,59	4,48	4,37	4,33
_	U	W/W	-	-	-	4,77	4,73	4,77	4,51	4,68	4,44	4,72	4,51	4,82	4,66	4,44	4,64	4,42	4,50	4,30
	0	%	-	-	-	-	169,07	169,11	171,47	174,48	170,14	169,96	169,32	171,68	172,37	168,37	169,62	168,51	166,33	167,34
_	Α	%	-	-	-	-	176,81	179,08	174,25	181,27	172,29	179,03	170,93	181,13	179,44	173,98	178,17	171,94	170,64	167,83
	E	%	179,42	172,83	179,43	176,18	178,57	175,52	174,63	178,28	173,17	170,02	171,96	179,14	172,39	172,91	171,65	172,46	166,80	167,89
Seasonal efficiency —	L	%	168,77	165,30	174,27	169,95	169,78	166,72	171,12	168,86	170,11	166,28	169,22	168,35	166,67	169,00	166,22	169,06	-	-
	N	%	186,54	183,37	185,00	188,02	185,24	180,46	178,48	187,81	175,31	184,43	176,70	186,89	182,33	176,32	180,67	176,26	171,95	170,07
_	U	%	-	-	-	187,91	186,30	188,00	177,39	184,10	174,64	185,66	177,42	189,79	183,53	174,64	182,68	173,97	177,05	169,03
SEER - 23/18 (EN14825: 2018) (2)															-					
	0	W/W	-	-	-	-	4,99	4,86	5,09	5,02	5,00	4,85	5,02	4,90	4,97	4,91	4,88	4,88	4,78	4,71
_	A	W/W	-	-	-	-	5,27	5,18	5,28	5,27	5,23	4,92	5,10	5,22	5,20	5,15	5,12	5,02	4,90	4,74
	Е	W/W	5,34	5,10	5,33	5,19	5,20	4,92	5,24	4,99	5,22	4,69	5,10	5,07	4,82	5,09	4,61	4,99	4,74	4,68
SEER —	L	W/W	4,90	4,77	5,09	4,99	4,85	4,59	5,09	4,73	5,03	4,56	5,05	4,81	4,61	4,89	4,58	4,86	-	-
	N	W/W	5,56	5,41	5,49	5,52	5,40	5,07	5,34	5,39	5,23	5,26	5,29	5,28	5,23	5,17	5,10	5,11	4,84	4,94
_	U	W/W	-	-	-	5,64	5,56	5,44	5,39	5,33	5,29	5,12	5,37	5,47	5,35	5,16	5,24	5,08	5,07	4,80
	0	%	-	-	-	-	196,60	191,50	200,50	197,80	197,10	190,80	197,70	193,00	195,90	193,20	192,10	192,30	188,00	185,20
	Α	%	-	-	-	-	207,80	204,10	208,30	207,60	206,20	193,90	200,90	205,60	205,00	202,90	201,80	197,80	193,10	186,50
	Е	%	210,70	200,80	210,00	204,60	204,90	193,60	206,70	196,40	205,70	184,70	201,00	199,60	189,90	200,40	181,20	196,50	186,70	184,10
Seasonal efficiency —	L	%	192,90	187,90	200,70	196,60	191,10	180,50	200,70	186,30	198,30	179,40	199,10	189,20	181,20	192,50	180,20	191,50	-	-
_	N	%	219,30	213,20	216,50	217,80	212,90	199,70	210,60	212,40	206,20	207,30	208,70	208,10	206,00	203,70	201,10	201,30	190,40	194,50
	U	%	-	-	-	222,70	219,50	214,60	212,60	210,30	208,40	201,80	211,60	215,60	210,80	203,50	206,70	200,30	199,60	189,00
SEPR - (EN 14825: 2018) (2)																				
	0	W/W	-	-	-	-	5,78	5,60	6,35	5,79	6,38	5,73	6,34	5,66	6,07	6,34	5,81	6,03	5,78	5,94
	Α	W/W	-	-	-	-	6,23	5,98	6,61	5,93	6,60	6,14	6,51	5,98	6,27	6,54	6,05	6,08	5,90	5,90
	E	W/W	6,66	6,39	6,59	6,52	6,30	6,03	6,47	5,93	6,55	5,79	6,41	6,01	6,13	6,44	5,85	6,06	5,21	5,87
SEPR —	L	W/W	6,34	6,26	6,43	6,30	5,86	5,68	6,35	5,73	6,47	5,69	6,47	5,64	5,95	6,28	5,72	5,92		-
_	N	W/W	6,87	6,70	6,81	6,88	6,47	6,14	6,58	6,20	6,54	6,21	6,57	6,17	6,54	6,56	6,25	6,19	5,93	6,35
_		W/W	.,		-,	6,73	6,43	6,14	6,73	6,18	6,68	6,51	6,73	6,26	6,34	6,68	6,18	6,30	6,10	5,99

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: M																				
SEER - 12/7 (EN14825: 2018) (1)																				
	0	W/W	-	-	-	-	4,18	4,18	4,23	4,31	4,20	4,20	4,18	4,24	4,26	4,16	4,19	4,16	4,11	4,14
	A	W/W	-	-	-	-	4,36	4,42	4,30	4,47	4,26	4,42	4,22	4,47	4,43	4,30	4,40	4,25	4,22	4,15
CLLD	E	W/W	-	-	-	-	4,41	4,34	4,31	4,40	4,27	4,20	4,25	4,42	4,26	4,27	4,24	4,26	4,12	4,15
SEER	L	W/W	-	-	-	-	4,19	4,12	4,22	4,17	4,20	4,11	4,18	4,16	4,12	4,18	4,11	4,18	-	-
	N	W/W	-	-	-	4,64	4,57	4,45	4,40	4,63	4,33	4,55	4,36	4,61	-	-	-	-	-	-
	U	W/W	-	-	-	4,63	4,60	4,64	4,38	4,54	4,31	4,58	4,38	4,68	-	-	-	-	-	-
	0	%	-	-	-	-	164,19	164,24	166,29	169,41	164,99	165,02	164,13	166,59	167,36	163,42	164,59	163,49	161,43	162,48
	Α	%	-	-	-	-	171,56	173,79	169,11	175,81	167,34	173,76	166,00	175,82	174,24	168,98	173,01	166,92	165,82	162,95
Seasonal efficiency	E	%	-	-	-	-	173,34	170,47	169,31	173,05	167,98	165,00	166,82	173,83	167,44	167,75	166,62	167,42	161,90	163,00
Seasonal efficiency	L	%	-	-	-	-	164,75	161,78	165,90	163,73	165,02	161,37	164,21	163,40	161,82	164,05	161,39	164,10	-	-
	N	%	-	-	-	182,41	179,82	175,17	173,00	182,25	170,09	178,97	171,51	181,37	-	-	-	-	-	-
	U	%	-	-	-	182,34	180,84	182,53	172,00	178,62	169,50	180,31	172,13	184,18	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																				
	0	W/W	-	-	-	-	4,86	4,73	4,94	4,89	4,86	4,71	4,87	4,77	4,84	4,77	4,74	4,75	4,64	4,58
	A	W/W	-	-	-	-	5,13	5,04	5,13	5,12	5,09	4,79	4,96	5,08	5,06	5,01	4,98	4,88	4,78	4,61
SEER	E	W/W	-	-	-	-	5,06	4,79	5,09	4,85	5,07	4,56	4,95	4,93	4,70	4,94	4,62	4,85	4,48	4,55
SEEN	L	W/W	-	-	-	-	4,72	4,46	4,94	4,60	4,89	4,44	4,91	4,68	4,48	4,75	4,45	4,73	-	-
	N	W/W	-	-	-	5,37	5,25	4,93	5,19	5,24	5,08	5,12	5,14	5,14	-	-	-	-	-	-
	U	W/W	-	-	-	5,49	5,41	5,29	5,23	5,19	5,14	4,98	5,21	5,31	-	-	-	-	-	-
		%	-	-	-	-	191,30	186,20	194,50	192,40	191,20	185,50	191,70	187,60	190,40	187,70	186,60	186,80	182,70	180,00
	Α	%	-	-	-	-	202,10	198,50	202,20	201,70	200,40	188,50	195,30	200,00	199,40	197,20	196,30	192,20	188,00	181,20
Seasonal efficiency	E	%	-	-	-	-	199,30	188,40	200,50	191,00	199,60	179,50	195,10	194,00	184,80	194,60	181,60	190,90	176,30	178,80
Seasonal eniciency	L	%	-	-	-	-	185,80	175,40	194,70	181,00	192,50	174,40	193,30	184,00	176,20	187,00	175,10	186,10	-	-
	N	%	-	-	-	211,70	207,10	194,20	204,40	206,50	200,30	201,60	202,70	202,40	-	-	-	-	-	-
	U	%	-	-	-	216,60	213,50	208,70	206,30	204,40	202,40	196,20	205,50	209,50	-	-	-	-	-	-
SEPR - (EN 14825: 2018) (2)																				
	•	W/W	-	-	-	-	5,78	5,60	6,35	5,79	6,38	5,73	6,34	5,66	6,07	6,34	5,81	6,03	5,78	5,94
	A	W/W	-	-	-	-	6,23	5,98	6,61	5,93	6,60	6,14	6,51	5,98	6,27	6,54	6,05	6,08	5,90	5,90
SEPR	E	W/W	-	-	-	-	6,30	6,03	6,47	5,93	6,55	5,79	6,41	6,01	6,13	6,44	5,85	6,06	5,21	5,87
JEFN	L	W/W	-	-	-	-	5,86	5,68	6,35	5,73	6,47	5,69	6,47	5,64	5,95	6,28	5,72	5,92	-	-
	N	W/W	-	-	-	6,88	6,47	6,14	6,58	6,20	6,54	6,21	6,57	6,17	-	-	-	-	-	-
	U	W/W	-	-	-	6,73	6,43	6,14	6,73	6,18	6,68	6,51	6,73	6,26	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Electric data																				
	0	Α	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	A	Α	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	111,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
Maximum current (FLA)	E	Α	41,6	49,9	51,3	67,6	73,5	79,1	80,5	88,3	97,2	97,4	111,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
Maximum current (FLA)	L	Α	40,2	49,9	53,9	67,6	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	-	-
	N	Α	41,6	49,9	51,3	67,6	73,5	79,1	83,4	91,2	100,1	100,3	111,4	111,5	125,6	135,7	142,4	147,0	159,1	158,3
	U	Α	-	-	-	67,6	73,5	79,1	83,4	91,2	100,1	100,3	111,4	111,5	125,6	135,7	142,4	147,0	159,1	158,3
	٥	Α	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	A	Α	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	226,7	396,5	407,7	287,7	601,7	347,4	618,4	358,7
Peak current (LRA)	E	Α	161,9	174,0	172,3	222,6	276,8	282,5	200,8	329,5	221,3	338,6	226,7	396,5	407,7	287,7	601,7	347,4	618,4	358,7
reak current (LNA)	L	Α	160,5	174,0	213,0	222,6	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	-	-
	N	Α	161,9	174,0	172,3	222,6	276,8	282,5	203,7	332,4	224,2	341,5	226,7	396,5	410,7	290,7	604,7	350,4	621,4	361,7
	U	Α	-	-	-	222,6	276,8	282,5	203,7	332,4	224,2	341,5	226,7	396,5	410,7	290,7	604,7	350,4	621,4	361,7

[■] Data calculated without hydronic kit and accessories.

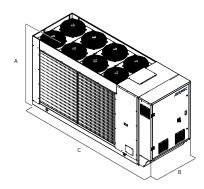
GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Compressor																				
T	°,A,E,N,U	type									Sa	roll								
Туре	L	type	Scroll	-	-															
Communication	°,A,E,N,U	Туре									On-	-Off								
Compressor regulation	L	Туре	0n-0ff	On-Off	0n-0ff	0n-0ff	0n-0ff	On-Off	0n-0ff	0n-0ff	On-Off	0n-0ff	-	-						
Number	°,A,E,N,U	no.	2	2	2	2	2	2	4	2	4	2	4	2	2	4	2	4	2	4
Number	L	no.	2	2	2	2	2	2	4	2	4	2	4	2	2	4	2	4	-	-
Cinneite	°,A,E,N,U	no.	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	1	2
Circuits	L	no.	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	-	-
Deficience	°,A,E,N,U	type									R	32								
Refrigerant	L	type	R32	-	-															

Size					0282	0302	0332	0352	0502	0552 0	54 060	2 0604	0652	0654	0682	0702	0704	0752	2 0754	0802	0804
System side heat excha	anger																				
System side near exem	unger		°,A,E,N,U	type								Rraz	ed plate					-			
Tuno		_	,,,,,,,,,,,	турс	Brazed	Brazed	Brazed	Brazed	Brazed E	Brazed Br	zed Braz			Brazed	Brazed	Brazed	Brazed	Braze	d Brazec	4	
Туре			L	type																-	-
			O A F M II		plate	plate	plate	plate			ate plat		plate	plate	plate	plate	plate	plate			
Number		_	°,A,E,N,U	no.	1	1	_1_	_1_	1		1 1	1	1	1	1	1	1	1	1	1	1_
			L	no.	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	-	-
System side hydraulic	connections	i																			
Sizes (in/out)			°,A,E,N,U	Ø									″ 1/2								
- In out			L	Ø	2"1/2	2" 1/2	2" 1/2	2"1/2	2″1/2	2"1/2 2"	1/2 2″1	2 2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	2" 1/2	2 2"1/2	<u>-</u>	
Fans																					
Size					0282	0302	0332	0352	0502	0552 0	54 060	2 0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fan																					
_			°,A,E,N,U	type								ŀ	xial								
Туре		_	L	type	Axial	Axial	Axial	Axial	Axial	Axial A	cial Axi	al Axial	Axial	Axial	Axial	Axial	Axial	Axial	l Axial	_	-
			0	no.	-	-	-	-	2		2 2	2	2	2	3	3	3	3	3	3	3
		_	A	no.					2		2 2	2	2	3	3	3	3	3	3	3	3
		_	E	no.	6	6	8	8	2		2 2	2	2	3	3	3	3	3	3	3	3
Number		_			4	6	6	8	2		2 2	2	2	2	3	3	3	3	3		
		_	L N	no.													3		3	- 1	-
		_	N N	no.	6	6	8	2	2		3 3	3	3	3	3	3		3		3	3
			U	no.	-	-		2	2	2	3 3	3	3	3	3	3	3	3	3	3	3
Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	070	4 07	752	0754	0802	0804
Fans: °																					
Fan																					
	°,A,U	m³/h	-	-	-	-	_	_	_	_	-	-	-	-	_	_		-	-	-	-
_	E	m³/h	20469	20469	27112	24667												_			
Air flow rate —	i	m³/h	15291	20474	22212	27150												_			
_	N	m ³ /h				-												-			
Carred data calculated			22189	22189	24655																
Sound data calculated																					
_	°,A,U	dB(A)	-	-	-		-	-	-		-	-	-	-	-	-		-	-	-	
Sound power level —	E	dB(A)	73,0	73,5	74,3	74,5	-	-	-	-	-	-	-	-	-	-		-	-	-	
— — —	L	dB(A)	72,4	73,5	73,9	74,5	-	-	-	-	-	-	-	-	-	-		-	-	-	-
	L N	dB(A)	73,0	73,5 73,9	73,9 74,3	74,5 -	_	-	_	-	-	-	_	-	-	-		-	-	-	-
(1) Sound power: calcula		dB(A)	73,0	73,5 73,9	73,9 74,3	74,5 -	_	-	_	-	-	-	_	- re measu	-	-	n compli	-	-	-	-
		dB(A)	73,0	73,5 73,9	73,9 74,3	74,5 -	_	-	as require	- d for Eurov	-	-	_	re measu	-	e field (ir		-	-	-	-
(1) Sound power: calcula		dB(A)	73,0 easurement	73,5 73,9 s made in	73,9 74,3 accordan	74,5 - ce with U	- NI EN ISC	-) 9614-2,	as require	- d for Eurov	ent certific	- ation. Sou	- nd pressu		red in fre	e field (ir		- iance w	- vith UNI El	- N ISO 374	4).
(1) Sound power: calcula Size Fans: M	ated on the b	dB(A)	73,0 easurement	73,5 73,9 s made in	73,9 74,3 accordan	74,5 - ce with U	- NI EN ISC	-) 9614-2,	as require	- d for Eurov	ent certific	- ation. Sou	- nd pressu		red in fre	e field (ir		- iance w	- vith UNI El	- N ISO 374	4).
(1) Sound power: calcula	ated on the b	dB(A) dB(A) assis of me	73,0 easurement	73,5 73,9 s made in	73,9 74,3 accordan	74,5 - ce with U	- NI EN ISC 0502	- 9614-2, 0552	as require	d for Eurov	ent certific	- ation. Sou 0652	nd pressu	0682	- red in fre 0702	e field (ir	4 0	- iance w 752	- vith UNI El 0754	- N ISO 374 0802	4). 0804
(1) Sound power: calcula Size Fans: M	ated on the b	dB(A) dB(A) asis of me	73,0 easurement 0282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 - ce with U 0352	- NI EN ISC 0502 40400	9614-2, 0552 40400	- as require 2 0554	d for Eurov 0602	- ent certific 0604 40400	- ation. Sou 0652 40400	- nd pressu 0654 40400	60600	- red in fre 0702 60600	- e field (ir 070	00 60	- iance w 752	- vith UNI EI 0754 60600	- N ISO 374 0802 60600	4). 0804 60600
(1) Sound power: calcula Size Fans: M	e A	dB(A) dB(A) assis of me m ³ /h m ³ /h	73,0 easurement 0282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 	- 0502 0502 40400 40400	9614-2, 0552 40400 40400	- as require - 0554 0 40400 0 40400	- d for Eurov - 0602 0 40400 0 40400	- ent certific 0604 40400 40400	- ation. Sou 0652 40400 40400	- nd pressu 0654 40400 60600	0682 60600 60600	- red in fre 0702 60600 60600	- e field (ir 070 070 0 6060 0 606000 0 60600 0 60600 0 606000 0 606000 0 606000 0 60600 0 606000 0 60600 0 60600 0 60600 0 60	00 60	- 7 52 0600	- vith UNI E	- N ISO 374 0802 60600 60600	- 4). 0804 60600 60600
(1) Sound power: calcula Size Fans: M	ated on the b	dB(A) dB(A) assis of me m ³ /h m ³ /h m ³ /h	73,0 easurement 0282 - - -	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 	40400 40400 26625	9614-2, 0552 40400 40400 2662	as require 0554 040400 40400 40400 525488	- d for Eurov - 0602 0 40400 0 40400 0 40400 3 25497	- ent certific 0604 40400 40400 25488	- ation. Sou 0652 40400 40400 25497	- nd pressu 0654 40400 60600 40270	60600 60600 40267	- red in fre 0702 60600 60600 38638	- e field (ir 070 0 6060 0 6060 3 3864	00 60 00 60 40 38	- iance w 752 0600 0600 8638	- vith UNI El 0754 60600 60600 38640	- N ISO 374 0802 60600 60600 38638	- 4). 0804 60600 60600 38640
(1) Sound power: calcula Size Fans: M Without Static pressure	re A E	dB(A) dB(A) assis of me m ³ /h m ³ /h m ³ /h	73,0 Pasurement 0282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 	40400 40400 26625 30672	9614-2, 0552 40400 40400 26622 30672	- as require - 0554 0 40400 0 40400 5 25488 2 29318	- d for Eurov - 0602 0 40400 0 40400 3 25497 3 29318	- ent certific 0604 40400 40400 25488 29318	- ation. Sou 0652 40400 40400 25497 29318	- nd pressu 0654 40400 60600 40270 28069	60600 60600 40267 46243	60600 60600 38638 44312	- e field (ir 070 0 6060 0 6060 3 3864	00 60 00 60 40 38	- iance w 752 0600 0600 8638	- vith UNI El 0754 60600 60600 38640 44307	- N ISO 374 0802 60600 60600	- 4). 0804 60600 60600 38640
(1) Sound power: calcula Size Fans: M Without Static pressure	e A E L	dB(A) dB(A) assis of me m ³ /h m ³ /h m ³ /h m ³ /h	73,0 easurement 0282 - - -	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 - ce with U 0352 26623	40400 40400 26625 30672 25495	9614-2, 0552 40400 40400 2662: 3067: 2549:	- as require 0 0554 0 40400 0 40400 5 25488 2 29318 5 40269	0 40400 0 40400 0 40400 3 25497 3 29318 9 40274	- ent certifice 0604 40400 40400 25488 29318 40269	40400 40400 25497 29318 40274	- nd pressu 0654 40400 60600 40270 28069 38640	60600 60600 40267 46243 38634	- red in free 0702 60600 60600 38638 44312	- e field (ir 070 0 6060 0 6060 3 3864	00 60 00 60 40 38	- iance w 752 0600 0600 8638	- 0754 0754 60600 60600 38640 44307	- N ISO 374 0802 60600 60600 38638	- 4). 0804 60600 60600 38640
(1) Sound power: calcula Size Fans: M Without Static pressure	e e A E L N U	dB(A) dB(A) assis of me m ³ /h m ³ /h m ³ /h m ³ /h m ³ /h	73,0 easurement 0282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 	40400 40400 26625 30672 25495 40400	9614-2, 0552 40400 40400 2662: 3067: 2549: 40400	as require 0 40400 0 40400 0 25488 2 29318 5 40269 0 60600	d for Eurov 0 40400 0 40400 0 40400 3 25497 3 29318 9 40274 0 60600	- ent certific 0604 40400 40400 25488 29318 40269 60600	40400 40400 25497 29318 40274 60600	- nd pressu 0654 40400 60600 40270 28069 38640 60600	60600 60600 40267 46243 38634 60600	60600 60600 38638 44312	070 070 0 6060 0 6060 3 3864 2 4430	00 60 00 60 40 38 07 44	- iance w 752 0600 0600 6638 1312 -	60600 60600 38640 44307	- N ISO 374 0802 60600 60600 38638 	60600 60600 38640
(1) Sound power: calcula Size Fans: M Without Static pressure	e e e C L N U c	dB(A) dB(A) assis of me m³/h m³/h m³/h m³/h m³/h dB(A)	73,0 73,0 0282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 - ce with U 0352 26623	40400 40400 26625 30672 25495 40400 86,8	9614-2, 0552 40400 40400 2662: 3067: 2549: 40400 87,1	as require 0 40400 0 40400 5 25488 2 29318 5 40269 0 60600 86,2	d for Eurov 4 0602 0 40400 0 40400 3 25497 3 29318 9 40274 0 60600 87,3	40400 40400 25488 29318 40269 60600 86,6	40400 40400 25497 29318 40274 60600 87,5	- nd pressu 0654 40400 60600 40270 28069 38640 60600 86,7	60600 60600 40267 46243 38634 60600 89,0	- red in free 0702 60600 60600 38638 44312 89,1	070 070 0 6060 0 6060 3 3864 2 4430 -	000 60 000 60 40 38 30 8	- iance w 752 0600 0600 0638 1312 - - - 9,6	- 0754 0754 60600 60600 38640 44307 89,5	- N ISO 374 0802 60600 60600 38638 91,0	60600 60600 38640 - - 90,4
(1) Sound power: calcula Size Fans: M Without Static pressure	re A E L N U A	dB(A) dB(A) assis of me m ³ /h m ³ /h m ³ /h m ³ /h dB(A)	73,0 282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 - ce with U 0352 26623 40400	40400 40400 26625 30672 25495 40400 86,8 86,8	40400 40400 40400 2662 3067 2549 40400 87,1 87,1	as require 0 40400 0 40400 5 25488 2 29318 5 40269 0 60600 86,2 86,2	0 40400 0 40400 0 40400 3 25497 8 29318 9 40274 0 60600 87,3 87,3	40400 40400 25488 29318 40269 60600 86,6	40400 40400 25497 29318 40274 60600 87,5	- nd pressu 0654 40400 60600 40270 28069 38640 60600 86,7 88,3	60600 60600 40267 46243 38634 60600 89,0	- red in free 0702 60600 60600 38638 44312 - 89,1 89,1	- e field (ir 070 0 6060 0 6060 3 3864 2 4430 88, 88,	000 600 000 600 40 38 007 44	- iance w 752 0600 0600 0638 1312 9,6	- vith UNI El 0754 60600 60600 38640 44307 - - 89,5 89,5	- N ISO 374 0802 60600 60600 38638 91,0 91,0	
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate	e e e C L N U c	m³/h m³/h m³/h m³/h m³/h dB(A) dB(A)	73,0 73,0 0282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 - ce with U 0352 26623 40400	40400 40400 26625 30672 25495 40400 86,8 86,8 81,3	40400 40400 40400 2662: 3067: 2549: 40400 87,1 87,1 82,1	as require 0 40400 0 40400 0 40400 5 25488 2 29318 5 40269 6 60600 86,2 86,2 76,1	d for Eurov 0 40400 0 40400 3 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7	40400 40400 25488 29318 40269 60600 86,6 86,6 76,7	40400 40400 25497 29318 40274 60600 87,5 87,5	40400 60600 40270 28069 38640 60600 86,7 88,3 77,8	60600 60600 40267 46243 38634 60600 89,0 89,0 84,2	- red in free 0702 60600 60600 38638 44312 89,1 89,1 84,4	- e field (ir 070 0 6060 0 6060 3 3864 2 4430 88,, 78,	00 60 00 60 00 60 40 38 07 44	- iance w 1600 1600 1600 1638 1312 99,6 199,6 155,6	- vith UNI El 0754 60600 60600 38640 44307 - 89,5 89,5 89,5 83,6	- N ISO 374 0802 60600 60600 38638 91,0	60600 60600 38640 - - 90,4
(1) Sound power: calcula Size Fans: M Without Static pressure	re A E L N U A	dB(A) dB(A) assis of me m ³ /h m ³ /h m ³ /h m ³ /h dB(A)	73,0 282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5	40400 40400 26625 30672 25495 40400 86,8 86,8	40400 40400 40400 2662: 3067: 2549: 40400 87,1 87,1 82,1	as require 0 40400 0 40400 5 25488 2 29318 5 40269 0 60600 86,2 86,2	d for Eurov 0602 0 40400 0 40400 3 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7	40400 40400 25488 29318 40269 60600 86,6 86,6 76,7 76,7	40400 40400 25497 29318 40274 60600 87,5	- nd pressu 0654 40400 60600 40270 28069 38640 60600 86,7 88,3	60600 60600 40267 46243 38634 60600 89,0 89,0 84,2	- red in free 0702 60600 60600 38638 44312 - 89,1 89,1	- e field (ir 070 0 6060 0 6060 3 3864 2 4430 88,, 78,	00 60 00 60 00 60 40 38 07 44	- iance w 752 0600 0600 0638 1312 9,6	- vith UNI El 0754 60600 60600 38640 44307 - - 89,5 89,5	- N ISO 374 0802 60600 60600 38638 91,0 91,0	
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate	re A E L N U A	m³/h m³/h m³/h m³/h m³/h dB(A) dB(A)	73,0 easurement 0282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5	40400 40400 26625 30672 25495 40400 86,8 86,8 81,3	40400 40400 40400 2662: 3067: 2549: 40400 87,1 87,1 82,1	as require 0 40400 0 40400 0 40400 5 25488 2 29318 5 40269 6 60600 86,2 86,2 76,1	d for Eurov 0 40400 0 40400 3 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7 82,7	40400 40400 25488 29318 40269 60600 86,6 86,6 76,7	40400 40400 25497 29318 40274 60600 87,5 87,5	40400 60600 40270 28069 38640 60600 86,7 88,3 77,8	60600 60600 40267 46243 38634 60600 89,0 89,0 84,2	- red in free 0702 60600 60600 38638 44312 89,1 89,1 84,4	- e field (ir 070 0 6060 0 6060 3 3864 2 4430 88,, 78,	00 60 00 60 40 38 07 44 33 8 30 8 00 8	- iance w 1600 1600 1600 1638 1312 99,6 199,6 155,6	- vith UNI El 0754 60600 60600 38640 44307 - 89,5 89,5 89,5 83,6	- N ISO 374 0802 60600 60600 38638 91,0 91,0 87,3	60600 60600 38640 - - 90,4 90,4 86,7
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate	e A E L N U A E L L L L L L L L L L L L L L L L L L	m³/h m³/h m³/h m³/h dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)	73,0 easurement 0282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 	40400 40400 26625 30672 25495 40400 86,8 86,8 81,3 81,3	40400 40400 40400 2662: 3067: 2549: 40400 87,1 87,1 82,1	as require 0554 040400 040400 040400 0554 0554 0656 06600	d for Eurov 4 0602 0 40400 0 40400 3 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7 82,7 83,6	40400 40400 25488 29318 40269 60600 86,6 86,6 76,7 76,7	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1	40400 60600 40270 28069 38640 60600 86,7 88,3 77,8	60600 60600 40267 46243 38634 60600 89,0 89,0 84,2	- red in free 0702 60600 60600 38638 44312 - 89,1 89,1 84,4 84,4	0 6060 0 6060 3 3864 2 4430 88,, 88,, 78,	00 60 00 60 40 38 07 44 33 8 30 8 00 8	- 1000 -	- vith UNI El 0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1	- N ISO 374 0802 60600 60600 38638 91,0 91,0 87,3	60600 60600 38640 - - 90,4 90,4 86,7
(1) Sound power: calcular Size Fans: M Without Static pressure Air flow rate Sound power level	e A E L N U A E L N N U N N N N N N N N N N N N N N N N	m³/h m³/h m³/h m³/h m³/h dB(A) dB(A) dB(A)	73,0 easurement 0282	73,5 73,9 s made in 0302	73,9 74,3 74,3 accordan 0332	74,5 - ce with U 0352 26623 40400 80,3 86,5	40400 40400 40400 26625 30672 25495 40400 86,8 86,8 81,3 81,3 81,3 86,8	40400 40400 40400 2662: 25499 40400 87,11 82,1 82,1 82,7 87,1	as require 0 40400 0 40400 0 25488 2 29318 5 40269 0 60600 86,2 86,2 76,1 76,1 76,9 88,4	d for Eurov 0002 0 40400 0 40400 3 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7 82,7 83,6 88,8	40400 40400 25488 29318 40269 60600 86,6 76,7 76,7 77,5 88,3	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0	- nd pressu 0654 40400 60600 40270 28069 38640 60600 86,7 88,3 77,1 77,8 88,3	60600 60600 40267 46243 38634 60600 89,0 84,2 84,2 84,2 89,0			000 000 6000 6000 6000 6000 6000 6000		- vith UNI El 0754 60600 60600 38640 44307 - 89,5 89,5 83,6 84,1	- N ISO 374 0802 60600 60600 38638 91,0 91,0 87,3	
(1) Sound power: calcula Size Fans: M Without Static pressure Air flow rate Sound power level Size	e A E L N U A E L N N U N N N N N N N N N N N N N N N N	m³/h m³/h m³/h m³/h m³/h dB(A) dB(A) dB(A)	73,0 easurement 0282	73,5 73,9 s made in 0302	73,9 74,3 accordance 0332	74,5 - ce with U 0352 26623 40400 80,3	40400 40400 40400 26625 30672 25495 40400 86,8 86,8 81,3 81,3	40400 40400 2662: 3067. 2549: 40400 87,1 87,1 82,1 82,1	as require 0 40400 0 40400 0 25488 2 29318 5 40269 0 60600 86,2 86,2 76,1 76,1 76,9 88,4	d for Eurov 0002 0 40400 0 40400 3 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7 82,7 83,6 88,8	40400 40400 25488 29318 40269 60600 86,6 86,6 76,7 76,7 77,5	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0		60600 60600 40267 46243 38634 60600 89,0 89,0 84,2 84,2 84,2	60600 60600 38638 44312 - - 89,1 89,1 84,4 84,4		000 000 6000 6000 6000 6000 6000 6000		- vith UNI El 0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1	- N ISO 374 0802 60600 60600 38638 91,0 91,0 87,3	60600 60600 38640 - - 90,4 90,4 86,7
(1) Sound power: calcula Size Fans: M Without Static pressure Air flow rate Sound power level Size Fans: J	e A E L N U A E L N N U N N N N N N N N N N N N N N N N	m³/h m³/h m³/h m³/h m³/h dB(A) dB(A) dB(A)	73,0 easurement 0282	73,5 73,9 s made in 0302	73,9 74,3 74,3 accordan 0332	74,5 - ce with U 0352 26623 40400 80,3 86,5	40400 40400 40400 26625 30672 25495 40400 86,8 86,8 81,3 81,3 81,3 86,8	40400 40400 40400 2662: 25499 40400 87,11 82,1 82,1 82,7 87,1	as require 0 40400 0 40400 0 25488 2 29318 5 40269 0 60600 86,2 86,2 76,1 76,1 76,9 88,4	d for Eurov 0002 0 40400 0 40400 3 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7 82,7 83,6 88,8	40400 40400 25488 29318 40269 60600 86,6 76,7 76,7 77,5 88,3	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0	- nd pressu 0654 40400 60600 40270 28069 38640 60600 86,7 88,3 77,1 77,8 88,3	60600 60600 40267 46243 38634 60600 89,0 84,2 84,2 84,2 89,0			000 000 6000 6000 6000 6000 6000 6000		- vith UNI El 0754 60600 60600 38640 44307 - 89,5 89,5 83,6 84,1	- N ISO 374 0802 60600 60600 38638 91,0 91,0 87,3	-04). 0804 60600 60600 38640 90,4 90,4 86,7
(1) Sound power: calcula Size Fans: M Without Static pressure Air flow rate Sound power level Size	e A E L N U A E L N U U U U U U U U U U U U U U U U U U	dB(A) dB(A) assis of me m³/h m³/h m³/h m³/h dB(A) dB(A) dB(A) dB(A)	73,0 easurement 0282	73,5 73,9 s made in 0302	73,9 74,3 accordan 0332 0332	74,5 ce with U 0352 26623 40400 80,3 86,5 0352	40400 40400 40400 26625 30672 25495 40400 86,8 81,3 81,3 81,3 86,8	40400 40400 40400 2662: 2549: 40400 87,1 82,1 82,1 82,1 87,1	3 as require 0554 40400 0 40400 0 4026 1 4026 1 4026 1 60600 86,2,2 76,1 76,1 76,1 76,9 88,4	d for Eurov 404000 404000 3 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7 82,7 83,6 88,8	40400 40400 25488 29318 40269 60600 86,6 76,7 76,7 77,5 88,3	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 84,0 88,9		0682 60600 60600 402677 46243 38634 60600 89,0 84,2 84,2 84,2 84,2 0682		070 070 0 6060 0 6060 0 6060 0 88, 78, 78, 78, 78, 070	33 8 8 3 8 8 0 0 8 8 0 0 8 8 0 0 8 8 0 0 8 8 0 0 8 8 0 0 8 8 0 0 8 1 0 0 0 0	752 752 1600 1600 1638 1312 - - - 9,6 9,6 5,6 - -	- 0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 0754	60600 60600 38638 - - 91,0 91,0 87,3 - -	60600 60600 38640 - 90,4 86,7 - 0804
(1) Sound power: calcula Size Fans: M Without Static pressure Air flow rate Sound power level Size Fans: J	e A E L N U A E L N U O O O O O O O O O O O O O O O O O O	dB(A) dB(A) assis of me m³/h m³/h m³/h m³/h dB(A) dB(A) dB(A) dB(A) dB(A)	73,0 easurement 0282	73,5 73,9 s made in 0302 	73,9 74,3 accordan 0332 0332	74,5 ce with U 0352	40400 40400 40400 26625 30672 25495 40400 86,8 81,3 81,3 86,8		3 as require 3 as require 404040 404040 5 25488 6,2 2 29318 6,6,2 76,1 76,1 76,9 88,4 0554	d for Eurov 4 0602 0 40400 0 40400 3 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7 83,6 88,8 4 0602	40400 40400 25488 29318 40269 60600 86,6 76,7 76,7 77,5 88,3 0604	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0 88,9 0652		60600 60600 40267 46243 38634 60600 89,0 84,2 84,2 89,0 0682			000 600 600 600 600 600 600 600 600 600		- 0754 -	60600 60600 38638 - - 91,0 91,0 87,3 - - -	60600 60600 38640 - 90,4 86,7 - 0804
(1) Sound power: calcula Size Fans: M Without Static pressure Air flow rate Sound power level Size Fans: J	e A B L N U A E L N U A A A A A A A A A A A A A A A A A A	dB(A) dB(A) assis of me m³/h m³/h m³/h dB(A) dB(A) dB(A) dB(A)	73,0 easurement 0282	73,5 73,9 s made in 0302 	73,9 74,3 accordan 0332 0332	74,5 - ce with U 0352	40400 40400 40400 26625 30672 25495 40400 86,8 81,3 81,3 86,8 0502	40400 40400 40400 2662: 2549: 4040 87,1 82,1 82,1 87,1 82,1 87,1 83,1 83,1 83,1 83,1 83,1 83,1 83,1 83	as require 0554 404001 4040401 5254888 66,2 76,1 76,1 76,9 88,4 0554	d for Eurov 0 404000 0 404000 3 25497 8 29318 9 40274 0 606000 87,3 82,7 82,7 83,6 88,8 4 0602	40400 40400 25488 29318 40269 60600 86,6 76,7 77,5 88,3 0604	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0 88,9 0652		606000 606000 40267 46243 386344 60600 89,0 89,0 84,2 84,2 89,0 0682			000 600 600 600 600 600 600 600 600 600	752 1600 1600 1638 1312 - - - - - - - - - - - - -	- 0754 60600 60600 38640 44307 89,5 89,5 89,5 84,1 0754	60600 60600 38638 - - 91,0 91,0 87,3 - - 0802	60600 60600 38640 - 90,4 86,7 - 0804
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate Sound power level Size Fans: J Inverter fan	e A E L N U A E L N U O O O O O O O O O O O O O O O O O O	m³/h m³/h m³/h m³/h m³/h m³/h m³/h m³/h	73,0 easurement 0282	73,5 73,9 s made in 0302 	73,9 74,3 accordan 0332 0332	74,5 - ce with U 0352 24800	- NI EN ISC 0502 404000 404000 26625 30672 25495 40400 86,8 86,8 81,3 81,3 81,3 86,8 0502			d for Eurov 0 404000 0 404000 3 25497 8 29318 9 40274 0 606000 87,3 82,7 82,7 83,6 88,8 4 0602	40400 40400 25488 29318 40269 60600 86,6 76,7 77,5 88,3 0604	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0 88,9 0652	- nd pressu 0654 40400 60600 40270 28069 38640 60600 86,7 77,1 77,8 88,3 77,1 77,8 88,3 0654	0682 606000 40267 46243 386344 60600 89,0 89,0 84,2 84,2 89,0 0682 55200 40500			000 600 600 600 600 600 600 600 600 600		0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 51100 51100 38800	60600 60600 38638 - - 91,0 91,0 87,3 - - -	60600 60600 38640 - 90,4 86,7 - 0804
(1) Sound power: calcula Size Fans: M Without Static pressure Air flow rate Sound power level Size Fans: J	e A B L N U A E L N U A A A A A A A A A A A A A A A A A A	m³/h m³/h dB(A) dB(A) asis of me m³/h m³/h m³/h dB(A) dB(A) dB(A) dB(A) m³/h m³/h m³/h m³/h m³/h m³/h m³/h m³/h	73,0 easurement 0282	73,5 73,9 s made in 0302 	73,9 74,3 accordan 0332 0332	74,5 - ce with U 0352	- NI EN ISC 0502 404000 404000 26625 25495 40400 86,8 86,8 81,3 81,3 81,3 86,8 80,8 81,3			d for Eurov 0 404000 0 404000 3 25497 8 29318 9 40274 0 606000 87,3 82,7 82,7 83,6 88,8 4 0602	40400 40400 25488 29318 40269 60600 86,6 76,7 77,5 88,3 0604	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0 88,9 0652		606000 606000 40267 46243 386344 60600 89,0 89,0 84,2 84,2 89,0 0682			000 600 600 600 600 600 600 600 600 600		- 0754 60600 60600 38640 44307 89,5 89,5 89,5 84,1 0754	60600 60600 38638 - - 91,0 91,0 87,3 - - 0802	90,4 90,4 86,7 0804 53100 51100 38800
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate Sound power level Size Fans: J Inverter fan	e A B L N U A E L N U A A A A A A A A A A A A A A A A A A	m³/h m³/h m³/h m³/h m³/h m³/h m³/h m³/h	73,0 easurement 0282	73,5 73,9 s made in 0302 	73,9 74,3 accordan 0332 0332	74,5 - ce with U 0352 24800	- NI EN ISC 0502 404000 404000 26625 30672 25495 40400 86,8 86,8 81,3 81,3 81,3 86,8 0502			9 404000 8 25497 8 29318 9 40274 0 60600 87,3 87,3 82,7 83,6 88,8 9 40602	40400 40400 25488 29318 40269 60600 86,6 76,7 77,5 88,3 0604	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0 88,9 0652	- nd pressu 0654 40400 60600 40270 28069 38640 60600 86,7 77,1 77,8 88,3 77,1 77,8 88,3 0654	0682 606000 40267 46243 386344 60600 89,0 89,0 84,2 84,2 89,0 0682 55200 40500			000 600 600 600 600 600 600 600 600 600	- 100 1100 11800 11600 11600 11600 1100 11	0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 51100 51100 38800	60600 60600 38638 - - 91,0 91,0 87,3 - - 0802	90,4 86,7 - 0804 53100 53100 53100 53100 53100 53100 53100
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate Sound power level Size Fans: J Inverter fan	e A E L N U A E L N U A E L N U A E L N U	m³/h m³/h dB(A) dB(A) asis of me m³/h m³/h m³/h dB(A) dB(A) dB(A) dB(A) m³/h m³/h m³/h m³/h m³/h m³/h m³/h m³/h	73,0 easurement 0282	73,5 73,9 s made in 0302 	73,9 74,3 accordan 0332 0332 27500 22200	74,5 - ce with U 0352 80,3 86,5 0352 24800 27500	- NI EN ISC 0502 404000 404000 26625 25495 40400 86,8 86,8 81,3 81,3 81,3 86,8 80,8 81,3		as require: 0554 40400 40400 86,2 29314 76,1 76,7 76,9 88,4 0554	9 404000 8 25497 8 29318 9 40274 0 606000 87,3 82,7 82,7 83,6 88,8 9 4028 9 40274 0 606000 3 35100 0 35100 0 33800 0 25600 0 29500 0 40500 0 40500	40400 40400 25488 29318 40269 60600 86,6 76,7 77,5 88,3 0604 35100 33800 25600 29500 40500	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0 88,9 0652	- nd pressu 0654 40400 60600 40270 28069 38640 60600 86,7 77,1 77,8 88,3 77,1 77,8 88,3 0654 33700 40500 28300	0682 606000 40267 46243 386344 606000 89,0 84,2 84,2 84,2 89,0 0682 55200 40500 46500			000 600 600 600 600 600 600 600 600 600	- 1600 1600 1600 1600 1600 1600 1600 160	0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 5100 51100 38800 44600	0802 0802 60600 60600 38638 - - - 91,0 91,0 87,3 - - - 0802 53100 51100 38800 -	90,4 90,4 86,7 0804 53100 51100 38800
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate Sound power level Size Fans: J Inverter fan	e A E L N U A E L N U A E L N U U	m³/h m³/h m³/h m³/h m³/h m³/h m³/h m³/h	73,0 easurement 0282	73,5 73,9 s made in 0302 22200 20700 27500	73,9 74,3 accordan 0332 0332 27500 22200 24800	74,5 - ce with U 0352 26623 40400 24800 27500 26800 0 26800	- NI EN ISC 0502 404000 404000 26625 25495 40400 86,8 86,8 81,3 81,3 81,3 86,8 0502 36600 35100 26800 30900 25600 25600		as require: 0554 40400 40400 86,2 29314 76,1 76,7 76,9 88,4 0554	9 404000 8 25497 8 29318 9 40274 0 606000 87,3 82,7 82,7 83,6 88,8 9 4028 9 40274 0 606000 3 35100 0 35100 0 33800 0 25600 0 29500 0 40500 0 40500	40400 40400 25488 29318 40269 60600 86,6 76,7 77,5 88,3 0604 35100 33800 25600 29500 40500	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0 88,9 0652 35100 33700 25600 29500 40500		0682 606000 40267 46243 38634 606000 89,0 84,2 84,2 84,2 89,0 0682 55200 40500 46500 38800			000 600 600 600 600 600 600 600 600 600	- 1600 1600 1600 1600 1600 1600 1600 160	0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 0754 53100 51100 38800 44600 52324	91,0 91,0 91,0 91,0 91,0 87,3 	90,4 90,4 86,7 0804 53100 51100 38800 52324
(1) Sound power: calcula Size Fans: M Without Static pressure Air flow rate Sound power level Size Fans: J Inverter fan Air flow rate	e A E L N U A E L N U A E L N U U	m³/h m³/h m³/h m³/h m³/h m³/h m³/h m³/h	73,0 easurement 0282	73,5 73,9 s made in 0302 22200 20700 27500	73,9 74,3 accordan 0332 0332 27500 22200 24800	74,5 - ce with U 0352 26623 40400 24800 27500 26800 0 26800	- NI EN ISC 0502 404000 404000 26625 25495 40400 86,8 86,8 81,3 81,3 81,3 86,8 0502 36600 35100 26800 30900 25600 25600		as require 0554 40400 40400 40400 86,2 29318 60600 86,2 76,1 76,9 88,4 0554	- d for Eurov - 0602 0 404000 0 404000 3 25497 8 29318 9 40274 0 606000 87,3 82,7 82,7 83,6 88,8 1 0602 0 35100 0 35800 0 25600 0 29500 0 40500 0 53100	40400 40400 25488 29318 40269 60600 86,6 76,7 77,5 88,3 0604 35100 33800 25600 29500 40500 53100	40400 40400 25497 29318 40274 60600 87,5 87,5 83,1 83,1 84,0 88,9 0652 35100 33700 25600 29500 40500		0682 606000 40267 46243 38634 606000 89,0 84,2 84,2 84,2 89,0 0682 55200 40500 46500 38800			000 600 600 600 600 600 600 600 600 600	- 1600 1600 1600 1600 1600 1600 1600 160	0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 0754 53100 51100 38800 44600 52324	91,0 91,0 91,0 91,0 91,0 87,3 	90,4 90,4 86,7 0804 53100 51100 38800 52324 66361
(1) Sound power: calcula Size Fans: M Without Static pressure Air flow rate Sound power level Size Fans: J Inverter fan Air flow rate	e A E L N U A E L N U A E L N U in cooling r	m³/h m³/h m³/h m³/h m³/h m³/h m³/h m³/h	73,0 easurement 0282 20700 15200 22200 -	73,5 73,9 s made in 0302 22200 20700 27500 -	73,9 74,3 accordan 0332 27500 22200 24800	74,5 ce with U 0352 26623 40400 24800 27500 26800 35100			as require 0554 40400 40400 40400 86,2 29311 76,1 76,9 88,4 0554 33800 25600 25500 24500 255	- d for Eurov - 0602 0 404000 0 404000 3 25497 8 29318 9 40274 0 606000 87,3 82,7 83,6 88,8 4 0602 0 35100 0 33800 0 25600 0 29500 0 40500 0 53100 85,9	40400 40400 25488 29318 40269 60600 86,6 76,7 77,5 88,3 0604 35100 33800 25600 29500 40500 53100	40400 40400 25497 29318 40274 60600 87,5 83,1 83,1 84,0 88,9 0652 35100 33700 25600 29500 40500 53100		0682 606000 40267 46243 386344 606000 89,0 84,2 84,2 84,2 39,0 40500 40500 40500 51100 87,5	- red in free 0702 606000 606000 38638 44312		000 600 600 600 600 600 600 600 600 600	- 1600 1600 1600 1600 1600 1600 1600 160	0754 60600 60600 38640 44307 89,5 89,5 88,6 84,1 0754 53100 51100 38800 44600 52324 66361	91,0 9802 60600 60600 38638 - - 91,0 91,0 87,3 - - - 0802 53100 51100 38800 - 52317 66361	90,4 90,4 86,7
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate Sound power level Size Fans: J Inverter fan Air flow rate Sound data calculated	e A E L N U A E L N U I I I I I I I I I A A E A A A A A A A A	m³/h m³/h m³/h m³/h m³/h m³/h m³/h m³/h	73,0 easurement 0282 20700 15200 22200	73,5 73,9 s made in 0302 22200 20700 27500	73,9 74,3 accordan 0332 27500 22200 24800	74,5 - ce with U 0352 - ce with U 0352 26623 40400 24800 27500 26800	- NI EN ISC 0502 404000 404000 404000 266255 404000 86,8 86,8 81,3 81,3 81,3 86,8 80,8 81,3 8		as require: 0554 40400 40400 40400 86,2 29311 76,1 76,9 88,4 0554 35100 25600 29500 40500 84,2 84,2 84,2	- d for Eurov 4 0602 0 404000 0 404000 87,3 82,7 82,7 83,6 88,8 0 256000 0 256000 0 53100 85,9 85,9 85,9	40400 40400 25488 29318 40269 60600 86,6 76,7 77,5 88,3 0604 35100 33800 25600 29500 40500 53100	40400 40400 25497 29318 40274 60600 87,5 83,1 83,1 84,0 88,9 0652 35100 33700 25600 29500 40500 53100		0682 606000 606000 40267 46243 38634 606000 89,0 84,2 84,2 84,2 84,2 38,0 0682 55200 40500 40500 40500 51100 87,5 87,5 87,5	- red in free 0702 606000 606000 38638 44312		144 0; 144 0; 155 8 8 5 5 8 8	- 1600 1600 1600 1600 1600 1600 1600 160	0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 - 0754 53100 51100 38800 44600 52324 66361	91,0 9802 91,0 91,0 91,0 91,0 87,3 - - 0802 53100 51100 38800 - 52317 66361 90,1	90,4 90,4 86,7
(1) Sound power: calcula Size Fans: M Without Static pressure Air flow rate Sound power level Size Fans: J Inverter fan Air flow rate	e A E L N U A E L N U A E L N U in cooling r	m³/h m³/h m³/h m³/h m³/h m³/h m³/h dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)	73,0 easurement 0282 20700 15200 22200 73,0	73,5 73,9 s made in 0302 22200 20700 27500 73,5	73,9 74,3 accordan 0332	74,5 - ce with U 0352 -	- NI EN ISC 0502 404000 404000 404000 266255 404000 86,8 86,8 81,3 81,3 81,3 86,8 80,8 81,3 8		as require:	- d for Eurov 4 0602 0 404000 0 404000 87,3 82,7 82,7 83,6 88,8 0 256000 0 29500 0 40500 0 53100 85,9 85,9 82,7	- ent certifice - 40400 - 40400 - 25488 - 29318 - 40269 - 60600 - 86,6 - 76,7 - 77,5 - 88,3 - 0604 - 35100 - 33800 - 25600 - 29500 - 40500 - 53100 - 84,8 - 84,8 - 76,7	40400 40400 25497 29318 40274 60600 87,5 83,1 83,1 84,0 88,9 0652 35100 33700 25600 29500 40500 53100 86,1 86,1 83,1		0682 606000 40267 46243 386344 60600 89,0 84,2 84,2 84,2 89,0 0682 55200 40500 40500 51100 87,5 87,5 84,2	- red in free 0702 606000 606000 38638 44312		14 0; 14 0; 15 1 66 16 1 66	- 1600 1600 1600 1600 16138 1312 19,6 19,6 15,6 15,6 100 100 100 100 100 100 100 100 100 10	0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 - 0754 53100 51100 38800 44600 52324 66361 88,1 88,1 88,1 88,1 83,6	91,0 9802 91,0 91,0 91,0 91,0 87,3 - - 0802 53100 51100 38800 - 52317 66361 90,1 87,3	90,4 90,4 86,7
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate Sound power level Size Fans: J Inverter fan Air flow rate Sound data calculated	ee A E L N U A E L N U I O A E L N U O A E L N U O A E L N U O A E L N U O A E L N U O A E L N U O A E L N U O A E L N U O A E L N U O A E L N U O A E L N U O A E L N U O A E L N U D O A E L N L N U D O A E L N L N L D O A E D O A E D	m³/h m³/h m³/h dB(A) dB(A) m³/h m³/h m³/h dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)	73,0 easurement 0282 20700 15200 22200 73,0 72,4	73,5 73,9 s made in 0302 0302 22200 20700 27500 73,5 73,5	73,9 74,3 accordan 0332	74,5 - ce with U 0352 - ce with U 0400 -	- NI EN ISC 0502 404000 404000 404000 266255 404000 86,8 86,8 81,3 81,3 81,3 86,8 85,1 85,1 85,1 85,1 81,3 8		as require:	- d for Eurov 4 0602 0 404000 0 404000 3 25497 8 29318 9 40274 0 606000 87,3 82,7 83,6 88,8 4 0602 0 351000 0 295000 0 40500 0 531000 85,9 85,9 82,7 82,7	- ent certifice - 0604 - 40400 - 40400 - 25488 - 29318 - 40269 - 60600 - 86,6 - 76,7 - 77,5 - 88,3 - 0604 - 35100 - 33800 - 29500 - 40500 - 53100 - 84,8 - 84,8 - 76,7 - 76,7 - 76,7	40400 40400 25497 29318 40274 60600 87,5 83,1 83,1 84,0 88,9 0652 35100 33700 25600 29500 40500 53100 86,1 86,1 83,1 83,1		0682 606000 40267 46243 386344 606000 89,0 84,2 84,2 84,2 84,2 552000 40500 40500 51100 87,5 87,5 84,2	- red in free 0702 606000 606000 38638 44312		144 0; 144 0; 144 0; 144 0; 144 0; 144 0; 144 0; 144 0; 144 0; 145 0; 146 0; 146 0; 147 0; 147 0; 148 0;	- 1600 1600 1600 1600 16138 1312 19,6 19,6 19,6 15,6 100 100 100 100 100 100 100 100 100 10	0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 - 0754 53100 51100 38800 44600 52324 66361 88,1 88,1 88,1 88,1 88,1 88,6 84,1	91,0 9802 91,0 91,0 91,0 91,0 87,3 - - 0802 5317 66361 90,1 90,1 87,3 -	90,4 90,4 90,4 90,4 90,4 86,7
(1) Sound power: calcula Size Fans: M Without Static pressur Air flow rate Sound power level Size Fans: J Inverter fan Air flow rate Sound data calculated	e A E L N U A E L N U I I I I I I I I I A A E A A A A A A A A	m³/h m³/h m³/h m³/h m³/h m³/h m³/h dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)	73,0 easurement 0282 20700 15200 22200 73,0	73,5 73,9 s made in 0302 22200 20700 27500 73,5	73,9 74,3 accordan 0332	74,5 - ce with U 0352 -	- NI EN ISC 0502 404000 404000 404000 266255 404000 86,8 86,8 81,3 81,3 81,3 86,8 80,8 81,3 8		as require: 0554 40400 40400 40400 86,2 76,1 76,9 88,4 0554 40500 84,2 84,2 76,1 76,1 76,9	- d for Eurov -	- ent certifice - 40400 - 40400 - 25488 - 29318 - 40269 - 60600 - 86,6 - 76,7 - 77,5 - 88,3 - 0604 - 35100 - 33800 - 25600 - 29500 - 40500 - 53100 - 84,8 - 84,8 - 76,7	40400 40400 25497 29318 40274 60600 87,5 83,1 83,1 84,0 88,9 0652 35100 33700 25600 29500 40500 53100 86,1 86,1 83,1		0682 606000 40267 46243 386344 60600 89,0 84,2 84,2 84,2 89,0 0682 55200 40500 40500 51100 87,5 87,5 84,2	- red in free 0702 606000 606000 38638 44312		14 0; 14 0; 15 1 66 16 1 66	- 1600 1600 1600 1600 16138 1312 19,6 19,6 15,6 15,6 100 100 100 100 100 100 100 100 100 10	0754 60600 60600 38640 44307 89,5 89,5 83,6 84,1 - 0754 53100 51100 38800 44600 52324 66361 88,1 88,1 88,1 88,1 83,6	91,0 9802 91,0 91,0 91,0 91,0 87,3 - - 0802 53100 51100 38800 - 52317 66361 90,1 87,3	

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Dimensions and weights			0202	- 0302	- 0332	- 0332		- 0332	0331			- 0032	0051	- 0002	0,02	0,01	0,52	0/51		
<u> </u>	0	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900
	A	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
A	E	mm	1652	1658	1658	1658	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
A	L	mm	1652	1652	1658	1658	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	-	-
	N	mm	1658	1658	1658	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
	U	mm	-	-	-	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
D	E,N	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
В	L	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	-	-
	U	mm	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	0	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368
	A	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
(E	mm	2818	3317	3317	3317	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	L	mm	2818	2818	3317	3317	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	-	-
	N	mm	3317	3317	3317	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368
	U	mm	-	-	-	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRG 0282H-0804H

Reversible air/water heat pump

Cooling capacity 52,5 ÷ 212,0 kW - Heating capacity 56,6 ÷ 214,4 kW



- · High efficiency also at partial loads
- · Reduced amount of refrigerant
- Compact dimensions





DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

FEATURES

Operating field

Working at full load up to -15°C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 60°C (for more details refer to the technical documentation).

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent ${\rm CO_2}$ values.

■ The leak detector is supplied as per standard.

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.

It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.

CONTROL PCO⁵

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Swing HP and LP controls: available for all models with inverter fan or with DCPX. By continuously modulating the fans, they streamline operation of the unit at any work point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

INTEGRATED SOLUTION

The "integrated solution" concept has been implemented in the system architecture, consisting in an integrated and streamlined control of compressors and electronic valve.

This solution allowed a variety of new features to be introduced, such as:

Low Superheat Control: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;

— **DLT control**: Control of electronic valve at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range, especially in heating mode.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Mod-

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. MULTICHILLER_EVO: Control, switch-on and switch-off system of the sin-

gle chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

GP: Anti-intrusion grid.

VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
AER403F1	E,L		•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERDACP	E,L		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERINET	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MUITICUILLED EVO	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A					•	•	•	•	•	•	•	•	•		•	•	•	
ועטו	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	E,L		•	•															

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Integrated hydronic kit: 00, I1, I2, I3,	14, P1, P2, P3	3, P4																
0	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22						
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22							
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22							
L	VT17	VT17	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22						
Integrated hydronic kit: 01, 02, 03, 0	4, 05, 06, 07,	08, K1, K2	2, K3, K4,	W1, W2,	W3, W4													
0	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22						
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22							
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22							
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22						

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°,A	-	-	-	-	DCPX146	DCPX146	DCPX146	DCPX146	DCPX146
E,L	DCPX145	DCPX145	DCPX145	DCPX145	As standard				
The accessor	y cannot be fitted on t	he configurations indica	ted with -						
Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
0	DCPY146	DCPY146	DCPY147	DCPY147	DCPY147	DCPY147	DCPY147	DCPY147	DCPY147

0252

DCPX146 DCPX147 DCPX147 DCPX147 DCPX147 DCPX147 DCPX147 DCPX147 DCPX147 E.L As standard
Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°,A	-	-	-	-	GP2 x 2 (1)				
E,L	GP3	GP3	GP4	GP4	GP2 x 2 (1)				

(1) x_i indicates the quantity to buy

The accessory cannot be fitted on the configurations indicated with

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°,L	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)						
A,E	GP2 x 2 (1)	GP2 x 3 (1)							

(1) x _ indicates the quantity to buy

Device for peak current reduction

<u> </u>									
Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°,A	-	-	DRENRG332N	-	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
E,L	DRENRG282	DRENRG302	DRENRG332N	DRENRG352	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°,A,E,L	DRENRG652	DRENRG654N	DRENRG682	DRENRG702	DRENRG704	DRENRG752	DRENRG754	DRENRG802	DRENRG804

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°,A	-	-	RIFNRG332N	-	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604
E,L	RIFNRG282	RIFNRG302	RIFNRG332N	RIFNRG352	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°,A,E,L	RIFNRG652	RIFNRG654N	RIFNRG682	RIFNRG702	RIFNRG704	RIFNRG752	RIFNRG754	RIFNRG802	RIFNRG804

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
°,A,E,L	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

CONFIGURATOR

Field		Description
1,2,3	,	NRG
4,5,6	,7	Size 0282, 0302, 0332, 0352, 0502, 0552, 0554, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754, 0802, 0804
8		Operating field
	Χ	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		Model
	Н	Heat pump
10		Heat recovery
	0	Without heat recovery
	D	With desuperheater (3)
11		Version
	0	Standard
	Α	High efficiency
	E	Silenced high efficiency (4)
	L	Standard silenced (4)
12		Coils
	0	Copper-aluminium
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
13		Fans
	0	Standard
	J	Inverter
14		Power supply
	0	400V ~ 3N 50Hz with magnet circuit breakers
15,10	6	Integrated hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump

Description
Kit with pump/s and storage tank with holes for heaters
Storage tank with holes for heaters and single low head pump (5)
Storage tank with holes for heaters and pump low head + stand-by pump (5)
Storage tank with holes for heaters and single high head pump (5)
Storage tank with holes for heaters and pump high head + stand-by pump (5)
Double loop
Double loop
Kit with pump/s
Single pump low head
Pump low head + stand-by pump
Single pump high head
Pump high head + stand-by pump
Kit with inverter pump/s to fixed speed
Single low head pump + fixed speed inverter
Single low head pump with fixed speed inverter + stand-by pump
Single high head pump + fixed speed inverter
Single high head pump with fixed speed inverter + stand-by pump
Kit with storage tank and inverter pump/s to fixed speed
Single low head pump + storage tank + fixed speed inverter
Storage tank and low head pump with fixed speed inverter + stand-by pump
Single high head pump + storage tank + fixed speed inverter
Storage tank and low head pump with fixed speed inverter + stand-by pump
Kit with storage tank and variable speed inverter pump/s
Single low head pump + Storage tank + variable speed inverter (6)
Double low head pump + Storage tank + variable speed inverter (6)
Single high head pump + Storage tank + variable speed inverter (6)
Double high head pump + Storage tank + variable speed inverter (6)

- (1) Water produced from 4 °C ÷ 20 °C
 (2) Water produced from 18 °C to −10 °C. The option is not compatible with hydronic kits W1-W2-W3-W4. Not available with desuperheater.
 (3) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
 (4) The size 0282-0302-0332-0352 are only available in the silenced versions "HL/HE"
 (5) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.
 (6) Not available with Low temperature electronic thermostatic valve "Z"

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PERFORMANCE SPECIFICATIONS

NRG H°

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	93,7	103,4	114,4	117,5	127,3	127,8	141,4	156,4	175,2	169,8	196,0	190,4	215,2	209,1
Input power	kW	-	-	-	-	34,7	39,1	37,8	43,0	43,9	48,9	50,8	51,6	59,6	58,0	69,0	66,0	79,1	74,5
Cooling total input current	A	-	-	-	-	62,0	66,0	60,0	73,0	80,0	82,0	91,0	87,0	97,0	109,0	111,0	117,0	126,0	126,0
EER	W/W	-	-	-	-	2,70	2,65	3,03	2,73	2,90	2,61	2,78	3,03	2,94	2,93	2,84	2,89	2,72	2,81
Water flow rate system side	l/h	-	-	-	-	16141	17808	19683	20225	21912	22017	24335	26922	30168	29239	33727	32773	37044	35991
Pressure drop system side	kPa	-	-	-	-	31	38	20	34	24	40	25	48	60	36	60	40	72	49
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	-	-	-	-	99,6	108,8	118,2	125,6	132,1	137,6	146,9	162,6	183,1	176,7	203,0	195,8	222,4	214,4
Input power	kW	-	-	-	-	31,5	34,4	35,9	38,0	40,7	42,2	45,2	50,3	57,4	54,5	62,7	59,0	69,8	64,1
Heating total input current	A	-	-	-	-	59,0	62,0	59,0	68,0	79,0	75,0	88,0	87,0	96,0	109,0	105,0	112,0	117,0	116,0
COP	W/W	-	-	-	-	3,16	3,17	3,30	3,31	3,24	3,26	3,25	3,23	3,19	3,24	3,24	3,32	3,19	3,35
Water flow rate system side	l/h	-	-	-	-	17265	18855	20522	21779	22925	23855	25482	28203	31767	30659	35221	33974	38576	37206
Pressure drop system side	kPa	-	-	-	-	36	43	22	40	27	48	28	54	67	41	67	45	80	53

NRG HL

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	52,5	60,5	69,3	80,7	91,0	100,0	110,8	113,2	122,9	122,4	135,2	152,6	170,4	165,0	189,1	184,2	205,8	202,2
Input power	kW	20,2	23,0	25,4	30,1	35,2	39,6	38,4	44,3	45,0	50,9	53,2	52,2	61,2	59,1	71,5	67,9	82,7	77,3
Cooling total input current	А	33,0	42,0	47,0	57,0	60,0	65,0	59,0	72,0	79,0	82,0	92,0	84,0	95,0	107,0	111,0	116,0	128,0	126,0
EER	W/W	2,60	2,63	2,73	2,68	2,59	2,53	2,88	2,55	2,73	2,40	2,54	2,92	2,79	2,79	2,64	2,71	2,49	2,62
Water flow rate system side	l/h	9048	10428	11932	13896	15671	17215	19059	19485	21152	21086	23262	26277	29331	28417	32540	31692	35428	34793
Pressure drop system side	kPa	30	41	31	43	30	36	19	32	23	37	23	46	56	34	56	37	66	45
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	56,6	65,4	74,6	87,5	99,6	108,8	118,2	125,6	132,1	137,6	146,9	162,6	183,1	176,7	203,0	195,8	222,4	214,4
Input power	kW	17,4	20,2	22,3	26,5	31,5	34,4	35,9	38,0	40,7	42,2	45,2	50,3	57,4	54,5	62,7	59,0	69,8	64,1
Heating total input current	A	29,0	40,0	44,0	54,0	59,0	62,0	59,0	68,0	79,0	75,0	88,0	87,0	96,0	109,0	105,0	112,0	117,0	116,0
COP	W/W	3,26	3,24	3,35	3,30	3,16	3,17	3,30	3,31	3,24	3,26	3,25	3,23	3,19	3,24	3,24	3,32	3,19	3,35
Water flow rate system side	I/h	9816	11328	12928	15158	17265	18855	20522	21779	22925	23855	25482	28203	31767	30659	35221	33974	38576	37206
Pressure drop system side	kPa	37	48	38	51	36	43	22	40	27	48	28	54	67	41	67	45	80	53

NRG HA

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	96,4	106,6	115,8	122,0	128,8	133,3	146,8	160,1	178,0	170,7	199,5	191,8	219,8	212,0
Input power	kW	-	-	-	-	32,6	36,6	37,2	39,7	43,3	45,5	48,6	49,8	57,4	56,7	66,3	64,4	75,9	72,5
Cooling total input current	A	-	-	-	-	60,0	64,0	60,0	70,0	80,0	78,0	90,0	85,0	94,0	108,0	108,0	116,0	123,0	124,0
EER	W/W	-	-	-	-	2,95	2,91	3,11	3,07	2,97	2,93	3,02	3,21	3,10	3,01	3,01	2,98	2,90	2,93
Water flow rate system side	l/h	-	-	-	-	16583	18342	19918	21002	22155	22958	25273	27557	30631	29392	34336	33010	37829	36487
Pressure drop system side	kPa	-	-	-	-	23	28	17	29	21	35	28	40	49	33	54	39	66	48
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	-	-	-	-	103,0	113,7	119,7	126,6	133,9	138,9	155,5	162,3	181,1	175,3	200,6	195,0	219,9	213,7
Input power	kW	-	-	-	-	31,0	33,8	35,6	37,4	40,4	41,5	47,0	49,1	55,3	53,3	60,9	57,8	67,5	62,7
Heating total input current	Α	-	-	-	-	59,0	61,0	58,0	68,0	79,0	75,0	91,0	86,0	93,0	107,0	103,0	110,0	114,0	114,0
COP	W/W	-	-	-	-	3,32	3,36	3,36	3,39	3,31	3,35	3,31	3,30	3,27	3,29	3,29	3,37	3,26	3,41
Water flow rate system side	l/h	-	-	-	-	17866	19723	20784	21964	23234	24088	26976	28153	31410	30409	34811	33832	38148	37079
Pressure drop system side	kPa	-	-	-	-	27	32	19	32	23	39	31	42	52	35	57	41	68	49

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HE

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	55,1	61,1	71,0	82,7	93,8	103,3	111,9	118,0	124,0	128,3	144,2	154,7	173,0	166,6	192,6	186,2	210,5	202,8
Input power	kW	19,3	22,3	24,4	28,6	33,0	37,4	38,2	40,8	44,9	46,7	48,9	50,9	58,9	57,3	68,8	65,7	79,3	75,4
Cooling total input current	Α	32,0	42,0	47,0	56,0	58,0	62,0	60,0	69,0	80,0	78,0	87,0	82,0	93,0	106,0	109,0	114,0	125,0	123,0
EER	W/W	2,85	2,75	2,91	2,89	2,84	2,76	2,93	2,89	2,76	2,75	2,95	3,04	2,94	2,91	2,80	2,83	2,65	2,69
Water flow rate system side	l/h	9484	10522	12223	14246	16136	17773	19250	20314	21332	22097	24814	26647	29783	28680	33149	32040	36227	34901
Pressure drop system side	kPa	20	24	24	33	22	26	16	27	19	32	26	38	47	31	51	36	60	44
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	58,8	65,4	76,6	88,8	103,0	113,7	119,7	126,6	133,9	138,9	155,5	162,3	181,1	175,3	200,6	195,0	219,9	213,7
Input power	kW	17,2	19,7	22,5	26,5	31,0	33,8	35,6	37,4	40,4	41,5	47,0	49,1	55,3	53,3	60,9	57,8	67,5	62,7
Heating total input current	Α	30,0	39,0	45,0	54,0	59,0	61,0	58,0	68,0	79,0	75,0	91,0	86,0	93,0	107,0	103,0	110,0	114,0	114,0
COP	W/W	3,42	3,32	3,40	3,35	3,32	3,36	3,36	3,39	3,31	3,35	3,31	3,30	3,27	3,29	3,29	3,37	3,26	3,41
Water flow rate system side	l/h	10207	11335	13280	15399	17866	19723	20784	21964	23234	24088	26976	28153	31410	30409	34811	33832	38148	37079
Pressure drop system side	kPa	23	28	29	39	27	32	19	32	23	39	31	42	52	35	57	41	68	49

ENERGY DATA - STANDARD/INVERTER FANS

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
Cooling capacity with low leaving water	temp (UE n°	2016/2281)																	
	0	W/W	-	-	-	-	3,92	3,84	3,97	4,00	3,83	3,94	3,88	4,17	4,06	3,87	3,95	3,92	3,82	3,80
CEED	A	W/W	-	-	-	-	4,21	4,14	4,07	4,34	4,01	4,24	4,10	4,40	4,32	4,14	4,31	4,17	4,12	4,04
SEER	E	W/W	4,40	4,32	4,37	4,33	4,26	4,13	4,03	4,29	3,97	4,10	4,06	4,36	4,21	4,10	4,20	4,13	4,07	4,00
	L	W/W	4,14	4,03	4,22	4,07	3,98	3,89	3,94	4,01	3,80	3,89	3,84	4,12	4,00	3,84	3,91	3,88	3,77	3,77
	0	%	-	-	-	-	154%	151%	156%	157%	150%	155%	152%	164%	160%	152%	155%	154%	150%	149%
	A	%	-	-	-	-	165%	163%	160%	171%	157%	167%	161%	173%	170%	162%	169%	164%	162%	159%
ηςς	E	%	173%	170%	172%	170%	167%	162%	158%	169%	156%	161%	160%	172%	166%	161%	165%	162%	160%	157%
	L	%	163%	158%	166%	160%	156%	153%	155%	157%	149%	153%	151%	162%	157%	150%	153%	152%	148%	148%
Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
Cooling capacity with low leaving water	temp (UE n°	2016/2281)																	
	0	W/W	-	-	-	-	4,04	3,96	4,10	4,12	3,96	4,06	4,00	4,30	4,19	3,99	4,07	4,04	3,94	3,91
CEED	A	W/W	_		_		4,33	4,26	4,20	4,47	4,13	4,37	4,23	4,54	4,45	4,26	4,43	4,29	4,25	4,17
							1,55	1,20												
SEER	E	W/W	4,45	4,36	4,41	4,37	4,38	4,25	4,16	4,42	4,09	4,22	4,19	4,49	4,34	4,22	4,33	4,25	4,20	4,13
SEEK	E L		4,45 4,18	4,36 4,07	4,41 4,26	4,37 4,10					4,09 3,92	4,22 4,01	4,19 3,96	4,49 4,25	4,34 4,13	4,22 3,95	4,33 4,03	4,25 4,00	4,20 3,89	4,13 3,88
	E L	W/W					4,38	4,25	4,16	4,42										
	E L ·	W/W W/W					4,38 4,10	4,25 4,01	4,16 4,06	4,42 4,12	3,92	4,01	3,96	4,25	4,13	3,95	4,03	4,00	3,89	3,88
пре		W/W W/W					4,38 4,10 159%	4,25 4,01 155%	4,16 4,06 161%	4,42 4,12 162%	3,92 155%	4,01 159%	3,96 157%	4,25 169%	4,13 164%	3,95 157%	4,03 160%	4,00 158%	3,89 155%	3,88 154%

ENERGY DATA - STANDARD/INVERTER FANS (35°C)

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
Performance in average ambient condition	ons (average)	- 35 °C (1)																	
	0	kW	-	-	-	-	88	97	103	109	115	119	128	141	159	154	178	171	193	188
DJdh	A	kW	-	-	-	-	91	101	105	110	117	121	136	141	158	153	176	170	191	187
Pdesignh	E	kW	52	58	68	78	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	L	kW	50	58	66	77	88	97	103	109	115	119	128	141	159	154	178	171	193	188
	0	W/W	-	-	-	-	3,50	3,55	3,36	3,55	3,33	3,61	3,32	3,47	3,57	3,23	3,54	3,32	3,41	3,36
CCOD	А	W/W	-	-	-	-	3,59	3,69	3,43	3,69	3,42	3,70	3,38	3,59	3,65	3,33	3,66	3,42	3,56	3,44
SCOP	E	W/W	4,06	4,00	4,02	3,91	3,59	3,69	3,43	3,69	3,42	3,70	3,38	3,59	3,65	3,33	3,66	3,42	3,56	3,44
	L	W/W	3,91	3,86	3,87	3,83	3,50	3,55	3,36	3,55	3,33	3,61	3,32	3,47	3,57	3,23	3,54	3,32	3,41	3,36
	0	%	-	-	-	-	135%	139%	131%	139%	130%	141%	130%	135%	139%	126%	139%	130%	134%	131%
	A	%	-	-	-	-	141%	145%	134%	145%	134%	145%	132%	141%	143%	130%	143%	134%	140%	134%
ηsh	E	%	159%	157%	158%	154%	141%	145%	134%	145%	134%	145%	132%	141%	143%	130%	143%	134%	140%	134%
	L	%	153%	151%	152%	150%	135%	139%	131%	139%	130%	141%	130%	135%	139%	126%	139%	130%	134%	131%
F. G	°,A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Efficiency energy class	E,L		A+	A+	A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

⁽¹⁾ Efficiencies for low temperature applications (35 °C)

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
Performance in average ambient conditi	ons (average)	- 35 °C (1)																	
	0	kW	-	-	-	-	88	97	103	109	115	119	128	141	159	154	178	171	193	188
Delacionela	A	kW	-	-	-	-	91	101	105	110	117	121	136	141	158	153	176	170	191	187
Pdesignh	E	kW	52	58	68	78	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	L	kW	50	58	66	77	88	97	103	109	115	119	128	141	159	154	178	171	193	188
	0	W/W	-	-	-	-	3,61	3,66	3,53	3,66	3,49	3,71	3,49	3,57	3,68	3,42	3,65	3,52	3,52	3,56
SCOP	A	W/W	-	-	-	-	3,70	3,80	3,60	3,80	3,59	3,81	3,59	3,70	3,76	3,53	3,77	3,63	3,67	3,64
SCOP	E	W/W	4,10	4,04	4,06	3,99	3,70	3,80	3,60	3,80	3,59	3,81	3,59	3,70	3,76	3,53	3,77	3,63	3,67	3,64
	L	W/W	3,95	3,90	3,91	3,91	3,61	3,66	3,53	3,66	3,49	3,71	3,49	3,57	3,68	3,42	3,65	3,52	3,52	3,56
	0	%	-	-	-	-	141%	143%	138%	143%	137%	146%	136%	140%	144%	134%	143%	138%	138%	139%
mak	A	%	-	-	-	-	145%	149%	141%	149%	141%	149%	141%	145%	147%	138%	148%	142%	144%	143%
ηsh	E	%	161%	159%	159%	157%	145%	149%	141%	149%	141%	149%	141%	145%	147%	138%	148%	142%	144%	143%
	L	%	155%	153%	153%	153%	141%	143%	138%	143%	137%	146%	136%	140%	144%	134%	143%	138%	138%	139%
F#F sion su on over u dose	°,A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Efficiency energy class	E,L		A+	A+	A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

⁽¹⁾ Efficiencies for low temperature applications (35 °C)

ENERGY DATA - STANDARD/INVERTER FANS (55°C)

Size			0282	0302	0332	0352	0502	0552	0602	0652	0682	0702	0752	0802
Fans: °														
Performance in average ambient co	nditions (average)) - 55 °C (1)												
		kW	-	-	-	-	88	98	109	120	139	155	178	-
Descianh	Α	kW	-	-	-	-	91	103	110	122	139	154	175	187
Pdesignh	E	kW	52	58	68	78	91	103	110	122	139	154	175	187
	L	kW	50	57	65	77	88	98	109	120	139	155	178	-
	۰	W/W	-	-	-	-	2,84	2,94	2,93	3,00	2,84	2,84	2,84	-
CCOD	Α	W/W	-	-	-	-	2,91	3,05	3,03	3,04	2,93	2,89	2,92	2,84
SCOP	E	W/W	3,13	3,10	3,11	3,06	2,91	3,05	3,03	3,04	2,93	2,89	2,92	2,84
	L	W/W	3,05	3,03	3,03	3,01	2,84	2,94	2,93	3,00	2,84	2,84	2,84	-
	0	%	-	-	-	-	111%	115%	114%	117%	111%	111%	111%	-
l	A	%	-	-	-	-	113%	119%	118%	119%	114%	113%	114%	110%
ηsh	E	%	122%	121%	122%	119%	113%	119%	118%	119%	114%	113%	114%	110%
	L	%	119%	118%	118%	117%	111%	115%	114%	117%	111%	111%	111%	-
F(f.)	°,A		-	-	-	-	-	-	-	-	-	-	-	-
Efficiency energy class	E,L		A++	A++	A++	-	-	-	-	-	-	-	-	-
(1) Efficiencies for average temperature	applications (55 °C	<u>.</u>)												
Size			0282	0302	0332	0352	0502	0552	0602	0652	0682	0702	0752	0802
Fans: J														
Performance in average ambient cor	nditions (average)	- 55 °C (1)		-										
	0	kW	-	-	-	-	88	98	109	120	139	155	178	-
DI : I	A	kW	-	-	-	-	91	103	110	122	139	154	175	187
Pdesignh	E	kW	52	58	68	78	91	103	110	122	139	154	175	187
	L	kW	50	57	65	77	88	98	109	120	139	155	178	-
	٥	W/W	-	-	-	-	2,92	3,02	3,02	3,09	2,93	2,93	2,93	-
	A	W/W	-	-	-	-	2,99	3,13	3,12	3,13	3,02	2,98	3,01	2,92
SCOP	E	W/W	3,16	3,12	3,14	3,12	2,99	3,13	3,12	3,13	3,02	2,98	3,01	2,92
	L	W/W	3,08	3,06	3,06	3,07	2,92	3,02	3,02	3,09	2,93	2,93	2,93	-
	0	%	-	-	-	-	114%	118%	118%	120%	114%	114%	114%	-
	A	%	_	-	-	-	117%	122%	122%	122%	118%	116%	117%	114%
ηsh	E	%	123%	122%	123%	122%	117%	122%	122%	122%	118%	116%	117%	114%
		%	120%	119%	119%	120%	114%	118%	118%	120%	114%	114%	114%	-
	°,A	,,	-	-	-	-	-	-	-	-	-	-	-	-
Efficiency energy class	FI		A++	A++	A++		_	_						

⁽¹⁾ Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

LLLC IIII C D/II/I																				
Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Electric data																				
	0	Α	-	-	-	-	73,5	79,1	88,3	97,4	111,5	122,6	139,4	156,1	80,5	97,2	113,5	132,7	144,0	155,3
Maximum aureant (FLA)	A	Α	-	-	-	-	73,5	79,1	88,3	97,4	111,5	122,6	139,4	156,1	80,5	97,2	111,4	132,7	144,0	155,3
Maximum current (FLA)	E	Α	41,6	49,9	56,9	67,6	73,5	79,1	88,3	97,4	111,5	122,6	139,4	156,1	80,5	97,2	111,4	132,7	144,0	155,3
	L	Α	40,2	49,9	58,1	67,6	73,5	79,1	88,3	97,4	111,5	122,6	139,4	156,1	80,5	97,2	113,5	132,7	144,0	155,3
	0	Α	-	-	-	-	276,8	282,5	329,5	338,6	396,5	407,7	601,7	618,4	200,8	221,3	268,5	287,7	347,4	358,7
Dook surrout (LDA)	A	Α	-	-	-	-	276,8	282,5	329,5	338,6	396,5	407,7	601,7	618,4	200,8	221,3	226,7	287,7	347,4	358,7
Peak current (LRA)	E	Α	161,9	174,0	172,3	222,6	276,8	282,5	329,5	338,6	396,5	407,7	601,7	618,4	200,8	221,3	226,7	287,7	347,4	358,7
	L	А	160,5	174,0	213,0	222,6	276,8	282,5	329,5	338,6	396,5	407,7	601,7	618,4	200,8	221,3	268,5	287,7	347,4	358,7

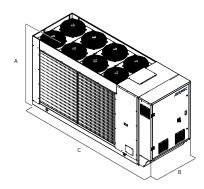
Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Compressor																				
Туре	°,A,E,L	type									Sci	oll								
Compressor regulation	°,A,E,L	Туре									On-	-Off								
Number	°,A,E,L	no.	2	2	2	2	2	2	4	2	4	2	4	2	2	4	2	4	2	4
Circuits	°,A,E,L	no.	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	1	2
Refrigerant	°,A,E,L	type									R:	32								
	0	kg	-	-	-	-	9,5	9,5	6,8	12,2	7,1	12,2	7,1	17,7	17,7	8,1	17,7	9,0	17,7	9,0
	Α	kg	-	-	-	-	12,8	13,3	7,4	13,3	7,7	13,3	8,7	18,2	18,2	8,3	18,4	10,0	18,4	9,5
Refrigerant load circuit 1 (1)	Е	kg	6,8	8,3	11,2	11,1	12,8	13,3	7,4	13,3	7,7	13,3	8,7	18,2	18,2	8,3	18,4	10,0	18,4	9,5
_	L	kg	6,5	6,8	7,4	7,4	9,5	9,5	6,8	12,2	7,1	12,2	7,1	17,7	17,7	8,1	17,7	9,0	17,7	9,0
	°,L	kg	-	-	-	-	-	-	6,8	-	7,1	-	7,1	-	-	8,1	-	9,0	-	9,0
Refrigerant load circuit 2 (1)	A,E	ka	-	-	-	-	-	-	7,4	-	7.7	-	8,7	-	-	8,3	-	10,0	-	9,5
Potential global heating	°,A,E,L	GWP									675kg	CO₁ea								
System side heat exchanger	, , ,											2 1								
ype	°,A,E,L	type									Brazeo	l nlate								
Number	°,A,E,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ian an	1.1212																		<u> </u>	<u> </u>
Гуре	°,A,E,L	type									Ax	ial								
урс	0	no.					2	2	2	2	2	2	2	3	3	3	3	3	3	3
-	A	no.					2	2	2	2	2	2	3	3	3	3	3	3	3	3
Number —	F	no.	6	6	8	8	2	2	2	2	2	2	3	3	3	3	3	3	3	3
_	L	no.	4	6	6	- 8	2	2	2	2	2	2		3	3	3	3	3	3	3
	0	m³/h	-		-	-	42831	42819	40170	41067	40170	41067	38299	62024	62022	60681	62022	60681	62022	
_	Α	m ³ /h					41097	41097	38299	39483	38299	39483	60681	59734	59721	57995	59721	57995	59721	5799
Air flow rate —	E	m ³ /h	21224	21224																
-	<u></u>	m ³ /h	15552		28177	25805	31035	31035	28870	29848	28870	29848	45978	45211	45211 47029	43804	45211	43804	45211	4380
(L	m·/n	10002	21229	22716	28186	32592	32592	30388	31000	30388	31000	28869	47029	4/029	45980	47029	45980	47029	4598
Sound data calculated in cooling mode (2)	0	ID/A)					07.2	07.5	06.5	07.7	07.4	07.0	07.4	00.4	00.5	00.0	00.0	00.1		
_		dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	87,1	89,4	89,5	88,8	90,0	90,1	90,1	90,0
Sound power level —	A	dB(A)		-	-		87,2	87,5	86,5	87,7	87,1	87,9	88,8	89,4	89,5	88,8	90,0	90,1	90,1	90,
	E	dB(A)	73,6	74,1	74,9	75,1	82,8	83,5	76,6	83,9	77,3	84,3	78,4	85,5	85,6	78,6	86,7	84,6	87,3	86,
	L	dB(A)	73,0	74,1	74,5	75,1	82,8	83,5	76,6	83,9	77,3	84,3	77,7	85,5	85,6	78,6	86,7	84,6	87,3	86,
ound data calculated in heating mode (2)																				
_	0	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	87,1	89,4	89,5	88,8	90,0	90,1	90,1	90,
Sound power level —	Α	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	88,8	89,4	89,5	88,8	90,0	90,1	90,1	90,
	E	dB(A)	73,6	74,1	74,9	75,1	87,2	87,5	86,5	87,7	87,1	87,9	88,8	89,4	89,5	88,8	90,0	90,1	90,1	90,
		dB(A)	73,0	74,1	74,5	75,1	87,2	87,5	86,5	87,7	87,1	87,9	87,1	89,4	89,5	88,8	90,0	90,1	90,1	90,

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DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Dimensions and weights			0202	0302	0332	0332	0302	0332	0334	0002	0004	0032	0034	0002	0/02	0/04	0/32	0/34	0002	0004
-	0	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900
٨	A	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
A	E	mm	1652	1658	1658	1658	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
	L	mm	1652	1652	1658	1658	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900
D	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
D	E,L	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	0	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368
(Α	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	E	mm	2818	3317	3317	3317	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	L	mm	2818	2818	3317	3317	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368

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NRGI 151-602

Air-water chiller

Cooling capacity 31.0 ÷ 132.2 kW



- High efficiency also at partial loads
- High modulation capacity
- Continuous modulation of the cooling capacity
- Compressors and fans with Inverter
- Reduced amount of refrigerant
- Stable temperature control of the outlet water





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

These are outdoor units with streamlined scroll compressors used with R32 gas.

Condensing coil with copper pipes and aluminium louvers, plate heat exchanger and **standard electronic expansion valve.**

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to $\,50^{\circ}\text{C}\,$ external air temperature. Unit can produce chilled water up to -10 $^{\circ}\text{C}.$

For more information refer to the selection program and to to the dedicated documentation.

High efficiency

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and **the use of steady speed compressors together with inverter-controlled variable speed compressors** guaranteeing a high energy efficiency level both at full and partial load.

Inverter compressor + On-Off

They can be configured with a single variable speed compressor or two in tandem configuration, one steady and one variable speed. This pair guarantees high efficiency both with partial and full loads.

Sizes 151-281 have a single variable speed compressor. Sizes 302-602 have two compressors in tandem configuration.

This solution gets the best value out of the particularities and advantages of each compressor, enhancing the efficiency of each load condition and allowing for

- High seasonal efficiency
- steady and precise modulation of the chilling demand
- The stability of the outlet water temperature.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO₂ values.

■ The leak detector is supplied as per standard.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

Single-compressor units have a standard electronic expansion valve, while units with tandem compressors have two.

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Fans

Inverter: standard from size 151 to size 352, available as an optional for the other sizes.

Boosted, asynchronous with phase cutting: standard from size 382 to size 602.

Both types of fan permit:

- Steady air flow rate adjustment
- Low consumption and reduced sound level at partial loads
- Operation with low outdoor air temperatures
- Precise condensation control for an extended operating range.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.

It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.

CONTROL PCO⁵

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: this function can be activated in all the units, to
 optimise unit operation at any point by continuously modulating the
 fan speed. In addition, the use of inverter fans allows increased energy
 efficiency with partial loads.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

INTEGRATED SOLUTION

The "integrated solution" concept has been implemented in the system architecture, consisting in an integrated and streamlined control of compressors and electronic valves.

This solution allowed a variety of new features to be introduced, such as:

- Low Superheat Control: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
- DLT control: Control of electronic valves at discharge temperature in certain operating conditions. This is demonstrated in an enhanced

reliability of the control and a considerable expansion of the machine's operating range.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Mod-bus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

GP: Anti-intrusion grid.

VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	151	201	281	302	332	352	382	502	552	602
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•		•	•	•	•	•	•	•
AERNET	A,E	•	•			•		•	•		•
MULTICHILLER_EVO	A,E	•	•		•	•	•	•	•	•	•
PGD1	A,E	•	•			•		•	•		•
SGD	A,E	•	•	•		•		•			

Antivibration

Ver	151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00, I1, I2, I3,	, I4, P1, P2, P3, P4									
A,E	VT17	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22
Integrated hydronic kit: 01, 02, 03, 0	4, 05, 06, 07, 08, 09,	K1, K2, K3, K4, W	1, W2, W3, W4							
A,E	VT13	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22
Anti-intrusion grid										
Ver	151	201	281	302	332	352	382	502	552	602
A,E	GP3	GP4	GP4	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

Ver	151	201	281	302	332	352	382	502	552	602
A,E	-	-	-	DRENRGI302	DRENRGI332	DRENRGI352	DRENRGI382	DRENRGI502	DRENRGI552	DRENRGI602

The accessory cannot be fitted on the configurations indicated with -

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	151	201	281	302	332	352	382	502	552	602	_
A.E	T6NRG1	Ī									

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	1	Description
1,2,3	3,4	NRGI
5,6,7	7	Size 151, 201, 281, 302, 332, 352, 382, 502, 552, 602
8		Operating field (1)
	χ	Electronic thermostatic expansion valve
9		Model
	0	Cooling only
10		Heat recovery
	0	Without heat recovery
	D	With desuperheater (2)
11		Version
	Α	High efficiency
	E	Silenced high efficiency
12		Coils
	0	Copper-aluminium
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
13		Fans
	J	Inverter
	М	Boosted with phase cutting (3)
14		Power supply
	0	400V ~ 3N 50Hz with magnet circuit breakers
15,1	6	Integrated hydronic kit
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters

Field	Description
05 05	Storage tank with holes for heaters and single low head pump (4)
06	Storage tank with holes for heaters and pump low head + stand-by pump (4)
07	Storage tank with holes for heaters and single high head pump (4)
08	Storage tank with holes for heaters and pump high head $+$ stand-by pump (4)
	Double loop
09	Double loop
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
I1	Single low head pump + fixed speed inverter
12	Single low head pump with fixed speed inverter + stand-by pump
13	Single high head pump + fixed speed inverter
14	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K1	Single low head pump + storage tank + fixed speed inverter
K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
К3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and variable speed inverter pump/s
W1	Single low head pump + Storage tank + variable speed inverter
W2	Double low head pump + Storage tank + variable speed inverter
W3	Single high head pump + Storage tank + variable speed inverter
W4	Double high head pump + Storage tank + variable speed inverter

- (1) Water produced from -10 °C ÷ 20 °C. Double electronic thermostatic valve from size 302 to 602.
 (2) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection
- neat exchanger. For more information about the unit operating range, refer to the Mageliano selection program

 (3) Only for 382 502 552 602 sizes

 (4) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRGI - A

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	39,2	52,6	58,2	69,4	77,7	83,2	93,2	103,3	114,0	132,2
Input power	kW	11,8	15,2	17,5	20,8	23,3	25,6	27,6	31,4	35,1	39,1
Cooling total input current	А	18,0	23,0	26,0	37,0	41,0	46,0	43,0	49,0	53,0	60,0
EER	W/W	3,31	3,47	3,32	3,33	3,34	3,25	3,37	3,29	3,24	3,38
Water flow rate system side	l/h	6746	9067	10028	11960	13388	14335	16031	17775	19616	22750
Pressure drop system side	kPa	18	33	40	35	44	50	24	23	28	29

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRGI - E

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	31,0	40,1	46,4	61,7	70,1	75,6	84,9	91,3	101,8	119,6
Input power	kW	8,9	11,0	13,1	17,9	20,2	22,5	24,6	26,9	30,8	34,2
Cooling total input current	A	13,0	17,0	19,0	32,0	36,0	41,0	39,0	43,0	47,0	53,0
EER	W/W	3,49	3,63	3,55	3,45	3,46	3,36	3,45	3,39	3,31	3,50
Water flow rate system side	l/h	5326	6900	7994	10624	12066	13021	14607	15705	17509	20576
Pressure drop system side	kPa	11	19	25	27	35	41	20	18	22	24

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12° C / 7° C; outside air 35° C

ENERGY DATA

		151	201	281	302	332	352	382	502	552	602
A	W/W	5,19	5,32	5,37	5,04	5,07	5,22	5,33	5,36	5,18	5,33
E	W/W	5,23	5,36	5,42	5,08	5,11	5,26	5,37	5,40	5,23	5,37
A	%	204,40	209,80	211,90	198,40	199,70	205,70	210,00	211,40	204,30	210,00
E	%	206,00	211,50	213,60	200,00	201,30	207,30	211,80	213,10	206,00	211,70
A	W/W	6,35	6,45	6,33	5,81	5,79	5,89	6,21	6,21	5,94	6,11
E	W/W	6,52	6,75	6,58	5,93	5,84	5,91	6,31	6,32	6,00	6,21
A	%	250,90	254,90	250,20	229,50	228,40	232,40	245,20	245,30	234,60	241,50
E	%	257,90	266,80	260,30	234,20	230,40	233,40	249,40	249,80	237,10	245,40
A	W/W	7,10	7,60	7,50	7,10	7,30	7,40	7,10	7,10	6,50	6,50
E	W/W	7,10	7,50	7,40	7,20	7,40	7,40	7,10	7,20	6,60	6,60
	A E A E A E A E	E W/W A % E % A W/W E W/W A % E % A W/W A % A % B %	E W/W 5,23 A % 204,40 E % 206,00 A W/W 6,35 E W/W 6,52 A % 250,90 E % 257,90 A W/W 7,10	E W/W 5,23 5,36 A % 204,40 209,80 E % 206,00 211,50 A W/W 6,35 6,45 E W/W 6,52 6,75 A % 250,90 254,90 E % 257,90 266,80 A W/W 7,10 7,60	E W/W 5,23 5,36 5,42 A % 204,40 209,80 211,90 E % 206,00 211,50 213,60 A W/W 6,35 6,45 6,33 E W/W 6,52 6,75 6,58 A % 250,90 254,90 250,20 E % 257,90 266,80 260,30 A W/W 7,10 7,60 7,50	E W/W 5,23 5,36 5,42 5,08 A % 204,40 209,80 211,90 198,40 E % 206,00 211,50 213,60 200,00 A W/W 6,35 6,45 6,33 5,81 E W/W 6,52 6,75 6,58 5,93 A % 250,90 254,90 250,20 229,50 E % 257,90 266,80 260,30 234,20 A W/W 7,10 7,60 7,50 7,10	E W/W 5,23 5,36 5,42 5,08 5,11 A % 204,40 209,80 211,90 198,40 199,70 E % 206,00 211,50 213,60 200,00 201,30 A W/W 6,35 6,45 6,33 5,81 5,79 E W/W 6,52 6,75 6,58 5,93 5,84 A % 250,90 254,90 250,20 229,50 228,40 E % 257,90 266,80 260,30 234,20 230,40	E W/W 5,23 5,36 5,42 5,08 5,11 5,26 A % 204,40 209,80 211,90 198,40 199,70 205,70 E % 206,00 211,50 213,60 200,00 201,30 207,30 A W/W 6,35 6,45 6,33 5,81 5,79 5,89 E W/W 6,52 6,75 6,58 5,93 5,84 5,91 A % 250,90 254,90 250,20 229,50 228,40 232,40 E % 257,90 266,80 260,30 234,20 230,40 233,40 A W/W 7,10 7,60 7,50 7,10 7,30 7,40	E W/W 5,23 5,36 5,42 5,08 5,11 5,26 5,37 A % 204,40 209,80 211,90 198,40 199,70 205,70 210,00 E % 206,00 211,50 213,60 200,00 201,30 207,30 211,80 A W/W 6,35 6,45 6,33 5,81 5,79 5,89 6,21 E W/W 6,52 6,75 6,58 5,93 5,84 5,91 6,31 A % 250,90 254,90 250,20 229,50 228,40 232,40 245,20 E % 257,90 266,80 260,30 234,20 230,40 233,40 249,40 A W/W 7,10 7,60 7,50 7,10 7,30 7,40 7,10	E W/W 5,23 5,36 5,42 5,08 5,11 5,26 5,37 5,40 A % 204,40 209,80 211,90 198,40 199,70 205,70 210,00 211,40 E % 206,00 211,50 213,60 200,00 201,30 207,30 211,80 213,10 A W/W 6,35 6,45 6,33 5,81 5,79 5,89 6,21 6,21 E W/W 6,52 6,75 6,58 5,93 5,84 5,91 6,31 6,32 A % 250,90 254,90 250,20 229,50 228,40 232,40 245,20 245,30 E % 257,90 266,80 260,30 234,20 230,40 233,40 249,40 249,80	E W/W 5,23 5,36 5,42 5,08 5,11 5,26 5,37 5,40 5,23 A % 204,40 209,80 211,90 198,40 199,70 205,70 210,00 211,40 204,30 E % 206,00 211,50 213,60 200,00 201,30 207,30 211,80 213,10 206,00 A W/W 6,35 6,45 6,33 5,81 5,79 5,89 6,21 6,21 5,94 E W/W 6,52 6,75 6,58 5,93 5,84 5,91 6,31 6,32 6,00 A % 250,90 254,90 250,20 229,50 228,40 232,40 245,20 245,30 234,60 E % 257,90 266,80 260,30 234,20 230,40 233,40 249,40 249,80 237,10 A W/W 7,10 7,60 7,50 7,10 7,30 7,40

⁽²⁾ Calculation performed with FIXED water flow rate.

Size			151	201	281	302	332	352	382	502	552	602
Fans: M												
SEER - 12/7 (EN14825: 2018) (1)												
CEED	A	W/W	-	-	-	-	-	-	5,33	5,36	5,18	5,33
SEER	E	W/W	-	-	-	-	-	-	5,37	5,40	5,23	5,37
Casanal aff sian su	A	%	-	-	-	-	-	-	210,00	211,40	204,30	210,00
Seasonal efficiency	E	%	-	-	-	-	-	-	211,80	213,10	206,00	211,70
SEER - 23/18 (EN14825: 2018) (2)												
CEED	A	W/W	-	-	-	-	-	-	6,21	6,21	5,94	6,11
SEER	E	W/W	-	-	-	-	-	-	6,31	6,32	6,00	6,21
Cassand offician au	А	%	-	-	-	-	-	-	245,20	245,30	234,60	241,50
Seasonal efficiency	E	%	-	-	-	-	-	-	249,40	249,80	237,10	245,40
SEPR - (EN 14825: 2018) (2)												
CEDD	A	W/W	-	-	-	-	-	-	7,10	7,10	6,50	6,50
SEPR	E	W/W	-	-	-	-	-	-	7,10	7,20	6,60	6,60

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			151	201	281	302	332	352	382	502	552	602
Electric data												
Maximum current (FLA)	A,E	Α	23,8	31,6	34,9	47,6	52,8	58,1	60,1	68,8	74,4	87,5
Peak current (LRA)	A,E	А	30,3	43,0	43,0	142,8	167,1	201,1	174,4	211,8	278,6	329,2

■ Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

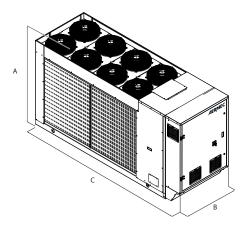
Size			151	201	281	302	332	352	382	502	552	602
Compressor												
Туре	A,E	type					Sc	roll				
Compressor regulation	A,E	Туре	ı	I	I	1+l	1+l	1+l	1+l	1+1	1+l	1+1
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	A,E	type					R	32				
System side heat excha	anger											
Туре	A,E	type					Braze	d plate				
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1

FANS DATA

Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Fan												
Туре	A,E	type					Ax	rial				
Fan motor	A,E	type					Inve	erter				
Number	A,E	no.	4	6	6	8	8	8	2	2	2	3
Air flow rate	A	m³/h	16669	24469	24476	30793	28649	28662	36174	36174	36149	54601
All flow fate	E	m³/h	14488	21255	21255	26704	24966	24966	26850	26850	26781	40488
Sound data calculated in cooling mo	de (1)											
Count and an accordance l	Α	dB(A)	81,8	84,6	85,9	82,2	85,0	85,1	85,4	86,5	87,7	88,1
Sound power level	E	dB(A)	79,3	82,8	83,3	80,9	81,3	81,7	82,8	83,0	85,4	85,5
Saurad = 12-2-1 (10 -2-)	A	dB(A)	50,0	52,7	54,1	50,3	53,2	53,3	53,5	54,5	55,8	56,0
Sound pressure level (10 m)	E	dB(A)	47,5	51,0	51,4	49,0	49,5	49,8	50,8	51,1	53,5	53,5
(1) Sound power: calculated on the basi	is of measurements	made in accorda	ance with UNI E	N ISO 9614-2, a	s required for E	urovent certific	ation. Sound p	ressure measur	ed in free field	(in compliance	with UNI EN IS	0 3744).
Size			151	201	281	302	332	352	382	502	552	602
Fans: M												
Increased fan												
Туре	A,E	type					A	rial				
Fan motor	A,E	type					Asynchronous	with phase cut				
Number	A,E	no.	-	-	-	-	-	-	2	2	2	3
A: A	A	m³/h	-	-	-	-	-	-	36174	36174	36149	54601
Air flow rate	E	m³/h	-	-	-	-	-	-	26850	26850	26781	40488
Sound data calculated in cooling mo	de (1)		-									
Count manual land	A	dB(A)	-	-	-	-	-	-	85,4	86,5	87,7	88,1
Sound power level	E	dB(A)	-	-	-	-	-	-	82,8	83,0	85,4	85,5
C	A	dB(A)	-	-	-	-	-	-	53,5	54,5	55,8	56,0
Sound pressure level (10 m)	E	dB(A)	-	-	-	-	-	-	50,8	51,1	53,5	53,5

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



		151	201	281	302	332	352	382	502	552	602
A,E	mm	1652	1652	1652	1652	1652	1652	1907	1907	1907	1900
A,E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
A,E	mm	2873	3372	3372	3372	3372	3372	3623	3623	3623	4373
		151	201	281	302	332	352	382	502	552	602
A,E	kg	826	899	899	986	1027	1028	1093	1101	1123	1313
				867	955		997	1062	1072		1284
	A,E A,E A,E	A,E mm A,E mm	A,E mm 1652 A,E mm 1100 A,E mm 2873 151 A,E kg 826	A,E mm 1652 1652 A,E mm 1100 1100 A,E mm 2873 3372 151 201	A,E mm 1652 1652 1652 A,E mm 1100 1100 1100 A,E mm 2873 3372 3372 151 201 281 A,E kg 826 899 899	A,E mm 1652 1652 1652 1652 A,E mm 1100 1100 1100 1100 A,E mm 2873 3372 3372 3372 151 201 281 302 A,E A,E kg 826 899 899 986	A,E mm 1652 1000 1000 11	A,E mm 1652 1652 1652 1652 1652 1652 A,E mm 1100 1100 1100 1100 1100 A,E mm 2873 3372 3372 3372 3372 3372 151 201 281 302 332 352 A,E kg 826 899 899 986 1027 1028	A,E mm 1652 1652 1652 1652 1652 1652 1907 A,E mm 1100 1100 1100 1100 1100 1100 1100 A,E mm 2873 3372 3372 3372 3372 3372 3623 151 201 281 302 332 352 382 A,E kg 826 899 899 986 1027 1028 1093	A,E mm 1652 1652 1652 1652 1652 1652 1907 1907 A,E mm 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 120 1	A,E mm 1652 1652 1652 1652 1652 1907 1907 1907 A,E mm 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 120 120 120 120 120 120 120 120 120 120 120 120 102 102 102 1093 1101 1123 A,E kg 826 899 899 986 1027 1028 1093 1101 1123

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NRGI 151H-602H

Reversible air/water heat pump

Cooling capacity 28.9 ÷ 123.7 kW - Heating capacity 31.6 ÷ 133.9 kW



- · High efficiency also at partial loads
- · High modulation capacity
- Continuous modulation of the cooling capacity
- Compressors and fans with Inverter
- Reduced amount of refrigerant
- Stable temperature control of the outlet water





DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.

These are outdoor units with streamlined scroll compressors used with R32 gas.

Condensing coil with copper pipes and aluminium louvers, plate heat exchanger and **standard electronic expansion valve.**

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 49 °C in summer. Hot water production up to 60 °C

For more information refer to the selection program and to to the dedicated documentation.

High efficiency

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and the use of steady speed compressors together with inverter-controlled variable speed compressors guaranteeing a high energy efficiency level both at full and partial load.

Inverter compressor + On-Off

They can be configured with a single variable speed compressor or two in tandem configuration, one steady and one variable speed. This pair guarantees high efficiency both with partial and full loads.

Sizes 151-281 have a single variable speed compressor. Sizes 302-602 have two compressors in tandem configuration.

This solution gets the best value out of the particularities and advantages of each compressor, enhancing the efficiency of each load condition and allowing for

- High seasonal efficiency
- steady and precise modulation of the chilling demand

— The stability of the outlet water temperature.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO₂ values.

■ The leak detector is supplied as per standard.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

Single-compressor units have a standard electronic expansion valve, while units with tandem compressors have two.

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Inverter fan:

All of the units are equipped as per standard with high-efficiency inverter-controlled axial fans which provide:

- Steady air flow rate adjustment
- Low consumption and reduced sound level at partial loads
- Operation with low outdoor air temperatures
- Precise condensation control for an extended operating range.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.

It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.

CONTROL PCO⁵

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Swing HP and LP controls: available for all models. By continuously
 modulating the fans, they streamline operation of the unit at any work
 point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.
- Night Mode: it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

INTEGRATED SOLUTION

The "integrated solution" concept has been implemented in the system architecture, consisting in an integrated and streamlined control of compressors and electronic valves.

This solution allowed a variety of new features to be introduced, such as:

- Low Superheat Control: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
- DLT control: Control of electronic valves at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range, especially in heating mode.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Mod-bus TCP/IP. SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

GP: Anti-intrusion grid. **VT:** Anti-vibration supports.

- ----

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	151	201	281	302	332	352	382	502	552	602
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•			•	•		•	•		•
AERNET	A,E	•	•		•	•		•	•	•	•
MULTICHILLER_EVO	A,E	•	•	•	•	•	•	•	•		•
PGD1	A,E	•	•	•			•				
SGD	A,E	•	•	•	•	•	•	•			

Antivibration

Ver	151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00, I1, I2, I	3, I4, P1, P2, P3, P4									
A,E	VT17	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22
Integrated hydronic kit: 01, 02, 03,	04, 05, 06, 07, 08, 09,	K1, K2, K3, K4, V	V1, W2, W3, W4							
A,E	VT13	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22
Anti-intrusion grid										
Ver	151	201	281	302	332	352	382	502	552	602
ΔF	GP3	GP4	GP4	GP4	GP4	GP4	GP2 v 2 (1)	GP2 v 2 (1)	GP2 v 2 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

							202			
Ver	151	201	281	302	332	352	382	502	552	602
A,E	-	-	-	DRENRGI302	DRENRGI332	DRENRGI352	DRENRGI382	DRENRGI502	DRENRGI552	DRENRGI602

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Trigrey buckground materies the accessory must be ass

Double safety valves

Ver	151	201	281	302	332	352	382	502	552	602
A,E	T6NRG1									

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

GURATOR
Description
NRGI
Size 151, 201, 281, 302, 332, 352, 382, 502, 552, 602
Operating field (1)
Electronic thermostatic expansion valve
Model
Heat pump
Heat recovery
Without heat recovery
With desuperheater (2)
Version
High efficiency
Silenced high efficiency
Coils
Copper-aluminium
Copper pipes-copper fins
Copper pipes-Tinned copper fins
Copper pieps-Coated aluminium fins
Fans
Standard with phase cut
Inverter
Power supply
400V ~ 3N 50Hz with magnet circuit breakers
Integrated hydronic kit
Without hydronic kit
Without hydronic kit
Kit with storage tank and pump/s
Storage tank with low head pump
Storage tank with low head pump + stand-by pump
Storage tank with high head pump
Storage tank with high head pump + stand-by pump

ield	Description
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (3)
06	Storage tank with holes for heaters and pump low head + stand-by pump (3)
07	Storage tank with holes for heaters and single high head pump (3)
08	Storage tank with holes for heaters and pump high head + stand-by pump (3)
	Double loop
09	Double loop
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
Р3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
11	Single low head pump + fixed speed inverter
12	Single low head pump with fixed speed inverter + stand-by pump
13	Single high head pump + fixed speed inverter
14	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K1	Single low head pump + storage tank + fixed speed inverter
K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
K3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and variable speed inverter pump/s
W1	Single low head pump + Storage tank + variable speed inverter
W2	Double low head pump + Storage tank + variable speed inverter
W3	Single high head pump + Storage tank + variable speed inverter
W4	Double high head pump + Storage tank + variable speed inverter

- (1) Water produced from -10 °C ÷ 20 °C. Double electronic thermostatic valve from size 302 to 602.
 (2) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
 (3) Storage tanks with holes for supplementary heaters, (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRGI - HA

Tittel Tix											
Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	36,5	48,9	54,2	64,1	72,1	77,3	87,0	95,7	106,0	123,7
Input power	kW	12,1	15,6	18,1	21,5	23,9	26,3	28,4	32,3	36,1	39,1
Cooling total input current	А	18,0	24,0	27,0	38,0	42,0	47,0	44,0	51,0	55,0	60,0
EER	W/W	3,00	3,13	3,00	2,98	3,02	2,94	3,06	2,96	2,93	3,16
Water flow rate system side	l/h	6280	8416	9328	11028	12414	13315	14969	16471	18246	21290
Pressure drop system side	kPa	15	28	34	28	35	41	19	18	23	25
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	39,6	53,4	59,0	69,9	78,1	84,1	94,7	104,8	115,7	133,9
Input power	kW	11,6	15,4	17,3	20,3	23,0	24,9	29,4	32,2	34,6	40,6
Heating total input current	А	18,0	24,0	27,0	38,0	42,0	46,0	46,0	52,0	54,0	64,0
COP	W/W	3,42	3,46	3,42	3,45	3,40	3,37	3,22	3,25	3,34	3,30
Water flow rate system side	l/h	6869	9260	10228	12113	13544	14563	16431	18188	20074	23220
Pressure drop system side	kPa	18	33	40	34	42	49	23	22	27	29

- (1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40°C / 45°C; Outside air 7°C d.b. / 6°C w.b.

NRGI - HE

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C/7 °C (1)											
Cooling capacity	kW	28,9	37,0	42,6	56,7	64,9	70,1	78,8	84,0	94,0	111,3
Input power	kW	9,1	11,4	13,5	18,4	20,8	23,2	25,3	27,6	31,6	34,1
Cooling total input current	A	13,0	17,0	20,0	33,0	36,0	41,0	39,0	44,0	49,0	53,0
EER	W/W	3,17	3,25	3,15	3,07	3,12	3,03	3,12	3,04	2,97	3,26
Water flow rate system side	l/h	4974	6363	7326	9764	11165	12069	13554	14451	16179	19152
Pressure drop system side	kPa	10	16	21	22	29	33	16	14	18	20
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	31,6	41,2	47,5	62,3	70,4	76,5	87,0	93,3	104,4	122,0
Input power	kW	9,1	11,8	13,6	18,0	20,3	22,2	27,0	28,5	31,2	36,8
Heating total input current	A	15,0	20,0	22,0	35,0	38,0	43,0	43,0	47,0	50,0	59,0
COP	W/W	3,49	3,49	3,49	3,47	3,47	3,44	3,23	3,27	3,35	3,32
Water flow rate system side	l/h	5484	7151	8247	10814	12215	13253	15103	16186	18126	21177
Pressure drop system side	kPa	12	20	26	27	34	40	20	18	22	24

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C/7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40°C/45°C; Outside air 7°C d.b./6°C w.b.

Size			151	201	281	302	332	352	382	502	552	602
Fans: °												
Performance in average ambien	t conditions (average)	- 35 °C (1)										
Γ	A		A++	A++	A++	A++	A++	-	-	-	-	-
Efficiency energy class	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Ddacianh	A	kW	34	46	51	61	67	73	82	91	100	116
Pdesignh	E	kW	27	35	41	54	61	66	75	81	90	105
SCOP	A	W/W	4,10	4,20	4,13	4,28	4,15	4,22	4,14	4,13	4,01	3,90
ocur	E	W/W	4,15	4,20	4,15	4,30	4,18	4,25	4,17	4,16	4,04	3,93
nch	A	%	161,00	165,00	162,00	168,00	163,00	165,73	162,63	162,06	157,32	152,89
ηsh	E	%	163,00	165,00	163,00	169,00	164,00	167,00	163,96	163,38	158,60	154,14
Performance in average ambien	t conditions (average)	- 55 °C (2)										
F66	A		A++	A++	A++	A++	A++	-	-	-	-	-
Efficiency energy class	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Dalasianala	A	kW	35	48	53	62	69	73	83	92	102	117
Pdesignh	E	kW	28	37	43	55	62	67	76	82	92	106
SCOP	A	W/W	3,20	3,30	3,28	3,28	3,30	3,38	3,18	3,30	3,25	3,17
ocur	E	W/W	3,23	3,30	3,28	3,28	3,30	3,38	3,29	3,27	3,26	3,18
	A	%	125,00	129,00	128,00	128,00	129,00	132,30	124,20	128,80	126,90	123,80
ηsh	E	%	126,00	129,00	128,00	128,00	129,00	132,00	128,40	127,70	127,20	124,10
(1) Efficiencies for low temperature(2) Efficiencies for average tempera)										
Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Performance in average ambien	t conditions (average)	- 35 °C (1)										
Efficiency energy class	A		A++	A++	A++	A++	A++	-	-	-	-	-
Efficiency energy class	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Dalasianda	A	kW	34	46	51	61	67	73	82	91	100	116
Pdesignh		LM	27	20	/1	ГА	(1		7.5	01	00	100

Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Performance in average ambient cor	nditions (average)	- 35 °C (1)										
F##	Α		A++	A++	A++	A++	A++	-	-	-	-	-
Efficiency energy class	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Ddasianh	A	kW	34	46	51	61	67	73	82	91	100	116
Pdesignh	E	kW	27	35	41	54	61	66	75	81	90	105
CCOD	Α	W/W	4,25	4,33	4,25	4,40	4,29	4,35	4,27	4,25	4,13	4,02
SCOP	E	W/W	4,28	4,35	4,28	4,43	4,33	4,38	4,30	4,29	4,17	4,05
	Α	%	167,00	170,00	167,10	173,00	168,40	170,95	167,75	167,17	162,28	157,71
ηsh	E	%	168,00	171,00	168,00	174,00	170,00	172,00	169,12	168,53	163,60	159,00
Performance in average ambient cor	nditions (average)	- 55 °C (2)										
F##	A		A++	A++	A++	A++	A++	-	-	-	-	-
Efficiency energy class	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Ddaaiaah	A	kW	35	48	53	62	69	73	83	92	102	117
Pdesignh	E	kW	28	37	43	55	62	67	76	82	92	106
CCOD	A	W/W	3,31	3,40	3,38	3,38	3,43	3,49	3,28	3,35	3,35	3,27
SCOP	E	W/W	3,33	3,40	3,38	3,38	3,40	3,48	3,39	3,37	3,36	3,28
	A	%	129,40	133,00	132,10	132,00	134,00	136,50	128,10	130,80	130,90	127,70
ηsh		%	130,00	133,00	132,00	132,00	133,00	136,00	132,50	131,80	131,20	128,00

⁽²⁾ Efficiencies for average temperature applications (55 °C)

Size			151	201	281	302	332	352	382	502	552	602
SEER - (EN14825:2018) 12/7 with inverte	r fans (1)											
CLLD	А	W/W	4,67	4,96	4,89	4,62	4,74	4,68	4,79	4,84	4,90	5,09
SEER	E	W/W	4,71	5,00	4,93	4,66	4,78	4,72	4,83	4,88	4,94	5,13
Caranal off sian su	А	%	183,90	195,27	192,49	181,84	186,68	184,20	188,75	190,52	192,91	200,54
Seasonal efficiency	E	%	185,40	196,86	194,06	183,31	188,19	185,69	190,29	192,07	194,48	202,17

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

Size			151	201	281	302	332	352	382	502	552	602
SEER - 12/7 (EN14825:2018) with standar	d fans (1)											
SEER	Α	W/W	4,49	4,76	4,69	4,44	4,55	4,49	4,60	4,64	4,70	4,88
SEEK	E	W/W	4,52	4,80	4,73	4,47	4,59	4,53	4,64	4,68	4,74	4,92
Conserval officians:	A	%	176,43	187,34	184,67	174,44	179,09	176,71	181,08	182,78	185,08	192,40
Seasonal efficiency	E	%	177,86	188.86	186,17	175.86	180,55	178,15	182,56	184,26	186.58	193,96

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

ELECTRIC DATA

Size			151	201	281	302	332	352	382	502	552	602
Electric data												
Maximum current (FLA)	A,E	А	23,8	31,6	34,9	47,6	52,8	58,1	60,1	68,8	74,4	87,5
2.1	A	А	30,3	43,0	43,0	142,8	167,1	201,1	174,4	211,8	278,6	329,2
Peak current (LRA)	E	А	30,3	43.0	43.0	136,2	160,5	194,5	166.6	204,0	270.8	317,5

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

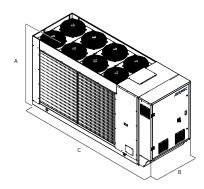
Size			151	201	281	302	332	352	382	502	552	602
Compressor												
Туре	A,E	type					Sc	roll				
Compressor regulation	A,E	Туре	Inverter	Inverter	Inverter	Inverter+0n/0ff						
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	A,E	type					R	32				
System side heat exch	anger											
Туре	A,E	type					Braze	d plate				
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1
Sound data calculated	in cooling n	node (1)										
Cound navior lovel	Α	dB(A)	81,8	84,6	86,0	82,2	85,0	85,1	85,4	86,5	87,8	88,1
Sound power level —	E	dB(A)	79,3	82,8	83,3	80,9	81,3	81,7	82,8	83,0	85,4	85,6

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Fan												
Туре	A,E	type					Ax	rial				
Fan motor	A,E	type					Inve	erter				
Number	A,E	no.	4	6	6	8	8	8	2	2	2	3
A:	А	m³/h	16896	24887	24891	31613	29660	29659	36859	36859	36859	55733
Air flow rate	E	m³/h	14667	21591	21591	27379	25774	25774	27308	27308	27307	41430

DIMENSIONS



C :			454	201	201	202		252	202			(02
Size			151	201	281	302	332	352	382	502	552	602
Dimensions and weights												
A	A,E	mm	1652	1652	1652	1652	1652	1652	1907	1907	1907	1900
В	A,E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	A,E	mm	2873	3372	3372	3372	3372	3372	3623	3623	3623	4373
Size			151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00												
Weights												
Weights Weight empty + packaging	A,E	kg	856	929	929	1019	1063	1064	1131	1137	1159	1365





















NRL 0280-0350

Air-water chiller

Cooling capacity 56 ÷ 82 kW



- Low noise levels in silenced versions
- · High efficiency also at partial loads
- Night mode
- Compact dimensions





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 47 °C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load. Night Mode

for standard versions is mandatory DCPX accessory (standard on all low noise versions) or "J" inverter fan

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **MULTICHILLER_EVO:** Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring

constant flow rate to the evaporators. **PGD1:** Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

GP: Anti-intrusion grid.

VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

PRM1: It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe. **C-TOUCH:** 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	0280	0300	0330	0350
AER485P1	E	•	•	•	•
AERBACP	E	•	•	•	•
AERLINK	E	•	•	•	•
AERNET	E	•	•	•	•
MULTICHILLER_EVO	E	•	•	•	•
PGD1	E	•	•	•	•
SGD	E	•	•	•	•
Model	Ver	0280	0300	0330	0350
C-TOUCH	E	•	•	•	•

Condensation control temperature

Ver	0280	0300	0330	0350
Fans: M				
E	DCPX63	DCPX63	DCPX63	DCPX63

Antivibration

Ver	0280	0300	0330	0350			
Integrated hydronic kit: 00, P1, P2, P3, P4							
E	VT17	VT17	VT17	VT17			
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09							
E	VT13	VT13	VT13	VT13			

Anti-intrusion grid

Device for peak current reduction

Ver			0330	0350	
Power supply: °					
E	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)	

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350
E	RIF50	RIF50	RIF50	RIF51

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description						
1,2,3	NRL						
4,5,6,7	Size 0280, 0300, 0330, 0350						
8	Operating field						
٥	Standard mechanic thermostatic valve (1)						
Χ	Electronic thermostatic expansion valve (1)						
Υ	Low temperature mechanic thermostatic valve (2)						
9	Model						
0	Cooling only						
C	Motocondensing unit						
10	Heat recovery						
٥	Without heat recovery						
D	With desuperheater (3)						
T	With total recovery						
11	Version (4)						
E	Silenced high efficiency						
12	Coils						
0	Copper-aluminium						
R	Copper pipes-copper fins						
S	Copper pipes-Tinned copper fins						
V	Copper pieps-Coated aluminium fins						
13	Fans						
J	Inverter (5)						
М	Oversized (6)						
14	Power supply						
0	400V ~ 3N 50Hz with magnet circuit breakers						
15,16	Integrated hydronic kit						
	Without hydronic kit						

Field	Description
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (7)
06	Storage tank with holes for heaters and pump low head + stand-by pump (7)
07	Storage tank with holes for heaters and single high head pump (7)
08	Storage tank with holes for heaters and pump high head + stand-by pump (7)
	Double loop
09	Double loop
10	Double loop with supplementary electric heater
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump

- (1) Water produced from 4 °C ÷ 18 °C
 (2) Water produced from 4 °C ÷ 18 °C
 (3) Water produced from 4 °C ÷ 18 °C
 (3) Water produced from 4 °C ÷ 18 °C
 (3) For "YT" "ZT" "VD" and "ZD" recovery versions, contact the headquarters; Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
 (4) The size up 0280 ÷ 0350 are only available in the silenced versions "E" with inverer fans
 (5) Standard for size 0280 ÷ 0350, without useful static pressure, option for other size with useful static pressure.
 (6) Standard for size 0500, without useful static pressure, option for other size with useful static pressure.
 (7) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRL - E

Size		0280	0300	0330	0350
Cooling performance 12 °C/7 °C (1)	'				
Cooling capacity	kW	56,8	64,8	73,8	82,8
Input power	kW	17,1	19,7	22,1	25,5
Cooling total input current	A	30,0	34,0	37,0	45,0
EER	W/W	3,33	3,29	3,34	3,24
Water flow rate system side	I/h	9793	11168	12714	14260
Pressure drop system side	kPa	43	39	35	44

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRL - C

Size			0280	0300	0330	0350
Model: C						
Cooling performance 12 °C/7 °C(1)						
Cooling capacity	E	kW	59,0	67,0	76,0	85,0
Input power	E	kW	17,0	19,6	22,0	25,3
Input current	E	A	35,0	39,0	43,0	49,0
EER	E	W/W	3,47	3,42	3,45	3,36

⁽¹⁾ Evaporating temperature 5 °C, External air 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Energy index data

Size			0280	0300	0330	0350
Fans: J						
SEER - 12/7 (EN14825: 2018) (1)						
SEER	E	W/W	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	E	%	- (2)	- (2)	- (2)	- (2)
SEER - 23/18 (EN14825: 2018) (3)						
SEER	E	W/W	4,55	4,70	4,62	4,47
Seasonal efficiency	E	%	178,90	184,90	181,60	175,90
SEPR - (EN 14825: 2018) (3)						
SEPR	E	W/W	5,81	5,94	5,85	5,66

- (1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
- (2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C) (3) Calculation performed with FIXED water flow rate.

Size			0280	0300	0330	0350
Fans: M						
SEER - 12/7 (EN14825: 2018) (1)						
SEER	E	W/W	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	E	%	- (2)	- (2)	- (2)	- (2)
SEER - 23/18 (EN14825: 2018) (3)						
SEER	E	W/W	4,55	4,70	4,62	4,47
Seasonal efficiency	E	%	178,90	184,90	181,60	175,90
SEPR - (EN 14825: 2018) (3)						
SEPR	E	W/W	5,81	5,94	5,85	5,66

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0280	0300	0330	0350
Electric data						
Maximum current (FLA)	E	A	46,0	53,0	58,0	63,0
Peak current (LRA)	E	A	155,0	184,0	190,0	200,0

GENERAL TECHNICAL DATA

General data

Size			0280	0300	0330	0350
Compressor						
Туре	E	type		Sc	roll	
Compressor regulation	E	Туре		0n	-Off	
Number	E	no.	2	2	2	2
Circuits	E	no.	2	2	2	2
Refrigerant	E	type		R4	10A	
System side heat exchanger						
Туре	E	type		Braze	d plate	
Number	E	no.	1	1	1	1
System side hydraulic connections						
Connections (in/out)	E	Туре		Groove	ed joints	
Sizes (in/out)	E	Ø		2"	1/2	
Sound data calculated in cooling mod	e (1)					
Sound power level	E	dB(A)	74,0	74,0	75,0	76,0
Sound pressure level (10 m)	E	dB(A)	42,3	42,2	43,2	44,2

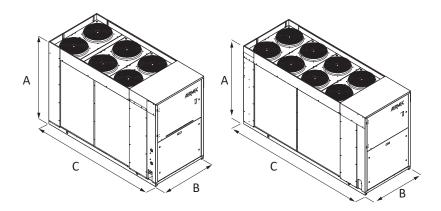
⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Fans

Size			0280	0300	0330	0350
Fan					·	
Туре	E	type		A	kial	
Number	E	no.	6	6	8	8
Size			0280	0300	0330	0350
Fans: M						
Increased fan						
Fan motor	E	type		Asynchronous	with phase cut	
Without Static pressure						
Air flow rate	E	m³/h	-	-	-	-
High static pressure	E	Pa	-	-	-	-
Sound power level	E	dB(A)	-	-	-	-
With static pressure						
Air flow rate	E	m³/h	22000	22000	27000	27000
High static pressure	E	Pa	50	50	50	50
Sound power level	E	dB(A)	74,0	74,0	75,0	76,0
Size			0280	0300	0330	0350
Fans: J						
Inverter fan						
Fan motor	E	type		Inve	erter	
Air flow rate	E	m³/h	22000	22000	27000	27000
High static pressure	E	Pa	80	80	80	80
Sound data calculated in cooling mode	(1)				·	
Sound power level	E	dB(A)	74,0	74,0	75,0	76,0

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Dimensions and weights

Size			0280	0300	0330	0350	
Dimensions and weights							
A	E	mm	1606	1606	1606	1606	
В	E	mm	1100	1100	1100	1100	
C	E	mm	2450	2950	2950	2950	
Dimensions and weights without hydronic kit							
Empty weight	E	kg	686	751	761	767	





















NRL 0280H-0350H

Reversible air/water heat pump

Cooling capacity 51 ÷ 76 kW - Heating capacity 58 ÷ 86 kW



- · High efficiency also at partial loads
- Compact dimensions
- · Quick & easy installation





DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

E Silenced high efficiency

L Standard silenced

FEATURES

Operating field

Working at full load up to -15° C outside air temperature in winter, and up to 46° C in summer. Hot water production up to 55° C (for more information see the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

- Floating HP control: the function can be activated with inverter fans or
 with DCPX which allows unit operation to be optimised at any operating
 point through continuous modulation of the fan speed. In addition, the
 use of inverter fans ensures an increase in energy efficiency at partial
 loads.
- Night Mode: it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

GP: Anti-intrusion grid. **VT:** Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0280	0300	0330	0350
AER485P1	E,L	•	•	•	•
AERBACP	E,L	•	•	•	•
AERLINK	E,L	•	•	•	•
AERNET	E,L	•	•	•	•
BMConverter	E,L	•	•	•	•
MULTICHILLER_EVO	E,L	•	•	•	•
PGD1	E,L	•	•	•	•
SGD	E,L	•	•	•	
Model	Ver	0280	0300	0330	0350
C-TOUCH	E,L	•	•	•	•

Condensation control temperature

Ver	0280	0300	0330	0350
Fans: M				
F.I	DCPX63	DCPX63	DCPX63	DCPX63

Antivibration

Ver	0280	0300	0330	0350		
Integrated hydronic kit: 00, P1, P2, P3, P4	!					
E,L	VT17	VT17	VT17	VT17		
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09						
E,L	VT13	VT13	VT13	VT13		

Anti-intrusion grid

Ver	0280		0300	0330	0350
E	GP3		GP4	GP4	GP4
L	GP3		GP3	GP3	GP3
Model	Ver	0280	0300	0330	0350
C-TOUCH	E,L	•	•	•	•

Device for peak current reduction

Ver	0280	0300	0330	0350
E,L	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350
E,L	RIF50	RIF50	RIF50	RIF51

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	NRL
4,5,6,7	Size 0280, 0300, 0330, 0350
8	Operating field
0	Standard mechanic thermostatic valve
Х	Electronic thermostatic expansion valve
9	Model
Н	Heat pump
10	Heat recovery
0	Without heat recovery
D	With desuperheater (1)
11	Version
Ε	Silenced high efficiency
L	Standard silenced
12	Coils
0	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
٧	Copper pieps-Coated aluminium fins
13	Fans
J	Inverter (2)
М	Oversized
14	Power supply
0	400V ~ 3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit

Field	Description
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (3)
06	Storage tank with holes for heaters and pump low head + stand-by pump (3)
07	Storage tank with holes for heaters and single high head pump (3)
08	Storage tank with holes for heaters and pump high head + stand-by pump (3)
	Double loop
09	Double loop
10	Double loop with holes for heaters
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump

PERFORMANCE SPECIFICATIONS

NRL HL

Size		0280	0300	0330	0350
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	50,8	60,8	65,9	72,8
Input power	kW	20,4	22,8	26,4	31,4
Cooling total input current	A	36,0	40,0	44,0	51,0
EER	W/W	2,49	2,67	2,49	2,32
Water flow rate system side	l/h	8762	10480	11340	12542
Pressure drop system side	kPa	47	43	29	45
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	58,2	68,2	75,2	82,3
Input power	kW	19,0	21,7	24,6	28,3
Heating total input current	A	33,0	38,0	41,0	50,0
COP	W/W	3,06	3,14	3,05	2,91
Water flow rate system side	I/h	10080	11818	13035	14252
Pressure drop system side	kPa	61	54	36	56

NRL HE

Size		0280	0300	0330	0350
Cooling performance 12 °C / 7 °C (1)	,				
Cooling capacity	kW	52,9	61,9	68,8	76,8
Input power	kW	18,1	20,2	23,4	26,9
Cooling total input current	A	30,0	34,0	37,0	45,0
EER	W/W	2,93	3,06	2,94	2,86
Water flow rate system side	l/h	9106	10652	11855	13229
Pressure drop system side	kPa	27	27	51	29
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	59,1	69,2	76,3	86,2
Input power	kW	17,5	20,6	23,1	26,1
Heating total input current	A	35,0	39,0	43,0	49,0
COP	W/W	3,38	3,36	3,31	3,30
Water flow rate system side	l/h	10254	11992	13209	14947
Pressure drop system side	kPa	25	34	66	34

⁽¹⁾ The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(2) Standard for size 0280 ÷ 0350, without useful static pressure, option for other size with useful static pressure.
(3) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0280	0300	0330	0350
Electric data			,			
Marrian Company (FLA)	E	A	46,0	53,0	58,0	63,0
Maximum current (FLA)	L	A	46,0	53,0	53,0	63,0
Deale comment (LDA)	E	A	155,0	184,0	190,0	200,0
Peak current (LRA)	L	A	155,0	184,0	184,0	200,0

ENERGY DATA

Size			0280	0300	0330	0350
Cooling capacity with low leaving wat	er temp (UE n° 2016/	(2281)				
SEER	E	W/W	3,74	3,71	3,80	3,71
SECK	L	W/W	2,96	3,19	3,01	3,28
nee	E	%	146,50	145,20	148,90	145,30
ηςς	L	%	115,30	124,40	117,30	128,30
UE 811/2013 performance in average a	ambient conditions (average) - 35 °C - Pdesignl	h ≤ 70 kW (1)			
Efficiency energy class	E,L		A+	A+	A+	-
Pdesignh	E,L	kW	-	-	-	-
nch	E	%	138,00	137,00	137,00	135,00
ηsh	L	%	125,00	128,00	125,00	125,00
CCOD	E	W/W	3,53	3,50	3,50	3,45
SCOP	L	W/W	3,20	3,28	3,20	3,20

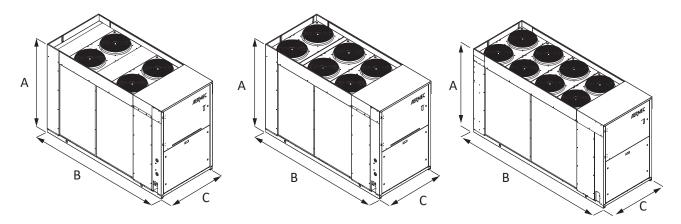
⁽¹⁾ Efficiencies for low temperature applications (35 °C)

GENERAL TECHNICAL DATA

Size			0280	0300	0330	0350				
Compressor										
Туре	E,L	type		Sc	roll					
Compressor regulation	E,L	Туре		0n	-Off					
Number	E,L	no.	2	2	2	2				
Circuits	E,L	no.	2	2	2	2				
Refrigerant	E,L	type		R4	10A					
System side heat exchanger										
Туре	E,L	type		Braze	d plate					
Number	E,L	no.	1	1	1	1				
System side hydraulic connections										
Connections (in/out)	E,L	Туре	Grooved joints							
Sizes (in/out)	E,L	Ø		2"	1/2					
Fan			-							
Туре	E,L	type		ax	ials					
	E	no.	6	8	8	8				
Number	L	no.	4	6	6	6				
A:- 0	E	m³/h	20000	26000	26000	26000				
Air flow rate	L	m³/h	14000	20000	20000	20000				
Sound data calculated in cooling m	ode (1)									
	E	dB(A)	74,0	75,0	75,0	76,0				
Sound power level	L	dB(A)	73,0	74,0	74,0	75,0				
Cound avecouse lovel (10 ms)	E	dB(A)	42,3	43,2	43,2	44,2				
Sound pressure level (10 m)	L	dB(A)	41,3	42,3	42,3	43,3				

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0280	0300	0330	0350
Dimensions and weights						
A	E,L	mm	1606	1606	1606	1606
В	E,L	mm	1100	1100	1100	1100
r	E	mm	-	2950	2950	2950
C	L	mm	2450	2450	2450	2450
Weights						
Wish and budges in his	E	kg	730	795	805	811
Without hydronic kit	L	kg	713	724	731	740



















NRG 0800-2400

Air-water chiller

Cooling capacity 225,7 ÷ 725,0 kW



- · High efficiency also at partial loads
- · Reduced amount of refrigerant
- Night mode





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

These are outdoor units with streamlined scroll compressors used with R32 gas axial fan, microchannel batteries and plate exchangers.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to 49°C external air temperature. Unit can produce chilled water up to -10 $^{\circ}\text{C}$ in some versions.

For more information refer to the selection program and to to the dedicated documentation.

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO₂ values.

■ The leak detector is supplied as per standard.

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.

It's available in various configurations, with storage tank or pumps.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in
 the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

FL: Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
AER485P1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•			•	•	•
FL	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L,N,U						•	•	•			•

Antivibration

Antivibiation											
Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 0	0										
٥	AVX1125	AVX1125	AVX1125	AVX1125	AVX1127	AVX1127	AVX1127	AVX1129	AVX1130	AVX1130	AVX1138
A,L	AVX1125	AVX1125	AVX1127	AVX1127	AVX1127	AVX1143	AVX1143	AVX1138	AVX1138	AVX1150	AVX1150
E,U	AVX1127	AVX1127	AVX1127	AVX1143	AVX1143	AVX1148	AVX1148	AVX1136	AVX1139	AVX1139	AVX1141
N	AVX1143	AVX1143	AVX1143	AVX1148	AVX1148	AVX1148	AVX1136	AVX1139	AVX1141	AVX1141	AVX1145
Integrated hydronic kit: A	A, AB, AC, AD, AE, AF,	AG, AH, AI, AJ, B	A, BB, BC, BD, B	E, BF, BG, BH, BI,	BJ, CA, CB, CC, C	D, CE, CF, CG, CH,	CI, CJ, KA, KB, K	C, KD, KE, KF, KG,	KH, KI, KJ		
0	AVX1126	AVX1126	AVX1126	AVX1126	AVX1128	AVX1128	AVX1128	AVX1131	AVX1131	AVX1131	AVX1135
A,L	AVX1126	AVX1126	AVX1128	AVX1128	AVX1128	AVX1147	AVX1147	AVX1135	AVX1135	AVX1137	AVX1137
E,U	AVX1128	AVX1128	AVX1128	AVX1147	AVX1147	AVX1135	AVX1135	AVX1137	AVX1140	AVX1140	AVX1142
N	AVX1147	AVX1147	AVX1147	AVX1135	AVX1135	AVX1135	AVX1137	AVX1140	AVX1142	AVX1142	AVX1146
Integrated hydronic kit: D	A, DB, DC, DD, DE, DF,	, DG, DH, DI, DJ,	IA, IB, IC, ID, IE, I	F, IG, IH, II, IJ, JA	, JB, JC, JD, JE, JF	, JG, JH, JI, JJ, PA	, PB, PC, PD, PE,	PF, PG, PH, PI, P.	J		
0	AVX1125	AVX1125	AVX1125	AVX1125	AVX1126	AVX1126	AVX1126	AVX1132	AVX1132	AVX1132	AVX1133
A,L	AVX1125	AVX1125	AVX1126	AVX1126	AVX1126	AVX1144	AVX1144	AVX1134	AVX1138	AVX1150	AVX1150
E,U	AVX1126	AVX1126	AVX1126	AVX1144	AVX1144	AVX1149	AVX1149	AVX1136	AVX1139	AVX1139	AVX1141
N	AVX1144	AVX1144	AVX1144	AVX1149	AVX1149	AVX1149	AVX1136	AVX1139	AVX1141	AVX1141	AVX1145

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: M											
0	DCPX161	DCPX161	DCPX161	DCPX161	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX165	DCPX167
Α	DCPX161	DCPX161	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX167	DCPX167	DCPX169	DCPX169
E,L,N	As standard										
U	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX167	DCPX167	DCPX169	DCPX171	DCPX171	DCPX172

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
°,A,E,L,N,U	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400	DRENRG1600	DRENRG1800	DRENRG2000	DRENRG2200	DRENRG2400

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
°,A,E,L,N,U	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400	RIFNRG1600	RIFNRG1800	RIFNRG2000	RIFNRG2200	RIFNRG2400

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
0	GP2VN	GP2VN	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4G	GP4G	GP4G	GP5G
A,L	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G
E,U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G

A grey background indicates the accessory must be assembled in the factory

■ GP2VN becomes GP2VNA if configured with a type A or B hydronic kit

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
°.A.E.L.N.U	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3						

A grey background indicates the accessory must be assembled in the factory

Fiel	d	Description
1,2,	3	NRG
15	6,7	Size
	0,,	0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400
3		Operating field
	X	Electronic thermostatic expansion valve (1)
_	Z	Low temperature electronic thermostatic valve (2) Model
)	0	Cooling only
10		Heat recovery
	0	Without heat recovery
	D	With desuperheater (3)
	T	With total recovery (4)
11		Version
	0	Standard
	Α	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		Coils
	0	Aluminium microchannel
	1	Copper-aluminium
	0	Coated aluminium microchannel
	R	Copper-copper
	S	Tinned copper
12	V	Copper-painted alumimium
13		Fans
	J M	Inverter Oversized
14	IVI	
14	0	Power supply 400V ~ 3 50Hz with magnet circuit breakers
15,1	16	Integrated hydronic kit
,	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	D.I	
	PI	Pump I
	PJ	Pump J (5)
	PJ	Pump J (5) Pump n° 1 pump + stand-by pump
	PJ DA	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump
	PJ DA DB	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump
	DA DB DC	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump
	DA DB DC DD	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump
	DA DB DC DD DE	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump
	DA DB DC DD DE DF	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump
	DA DB DC DD DE DF DG	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump
	DA DB DC DD DE DF DG DH	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump G + stand-by pump Pump H + stand-by pump
	DA DB DC DD DE DF DG	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump I + stand-by pump
	DA DB DC DD DE DF DG DH DI	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump J + stand-by pump Pump J + stand-by pump
	DA DB DC DD DE DF DG DH DI DJ	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump J + stand-by pump (5) Kit with storage tank and n° 1 pump
	DA DB DC DD DE DF DG DH DI DJ	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Storage tank and n° 1 pump Storage tank and pump A
	DA DB DC DD DE DF DG DH DI DJ AA AB	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Storage tank and n° 1 pump Storage tank and pump A Storage tank and pump B
	DA DB DC DD DE DF DG DH DI DJ	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Storage tank and n° 1 pump Storage tank and pump A
	DA DB DC DD DE DF DG DH DJ AA AB AC	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Storage tank and n° 1 pump Storage tank and pump A Storage tank and pump B Storage tank and pump C
	DA DB DC DD DE DF DG DH DI DJ AA AB AC AD	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Storage tank and n° 1 pump Storage tank and pump A Storage tank and pump B Storage tank and pump C Storage tank and pump C
	DA DB DC DD DE DF DG DH DI DJ AA AB AC AD AE	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump E + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Pump J + stand-by pump Storage tank and n° 1 pump Storage tank and pump A Storage tank and pump B Storage tank and pump C Storage tank and pump D Storage tank and pump E
	DA DB DC DD DE DF DG DH DI DJ AA AB AC AD AF	Pump J (5) Pump n° 1 pump + stand-by pump Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump Pump D + stand-by pump Pump E + stand-by pump Pump F + stand-by pump Pump G + stand-by pump Pump H + stand-by pump Pump I + stand-by pump Pump J + stand-by pump Storage tank and n° 1 pump Storage tank and pump A Storage tank and pump B Storage tank and pump C Storage tank and pump C Storage tank and pump E Storage tank and pump E Storage tank and pump F

ield	Description
AJ	Storage tank and pump J (5)
	Kit with storage tank and n° 1 pump + stand-by pump
BA	Storage tank with pump A + stand-by pump
BB	Storage tank with pump B + stand-by pump
ВС	Storage tank with pump C + stand-by pump
BD	Storage tank with pump D + stand-by pump
BE	Storage tank with pump E + stand-by pump
BF	Storage tank with pump F + stand-by pump
BG	Storage tank with pump G + stand-by pump
ВН	Storage tank with pump H + stand-by pump
BI	Storage tank with pump I + stand-by pump
BJ	Storage tank with pump J + stand-by pump (5)
	Kit with n° 1 inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed
IB	Pump B equipped with inverter device to work at fixed speed
IC	Pump C equipped with inverter device to work at fixed speedr
ID	Pump D equipped with inverter device to work at fixed speed
ΙE	Pump E equipped with inverter device to work at fixed speed
IF	Pump F equipped with inverter device to work at fixed speed (6)
IG	Pump G equipped with inverter device to work at fixed speed (6)
IH	Pump H equipped with inverter device to work at fixed speed (6)
Ш	Pump I equipped with inverter device to work at fixed speed (6)
IJ	Pump J equipped with inverter device to work at fixed speed (7)
	Kit with n° 1 inverter pump + stand-by pump to fixed speed
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (6)
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (6)
JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (6)
JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (6)
JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (7)
	Kit with storage tank and n° 1 inverter pump to fixed speed
CA	Buffer tank + pump A, equipped with inverter to work at fixed speed
CB	Buffer tank + pump B, equipped with inverter to work at fixed speed
CC	Buffer tank + pump C, equipped with inverter to work at fixed speed
CD	Buffer tank + pump D, equipped with inverter to work at fixed speed
EC	Buffer tank + pump E, equipped with inverter to work at fixed speed
CF	Buffer tank + pump F, equipped with inverter to work at fixed speed (6)
CG	Buffer tank + pump G, equipped with inverter to work at fixed speed (6)
CH	Buffer tank + pump H, equipped with inverter to work at fixed speed (6)
Cl	Buffer tank + pump I, equipped with inverter to work at fixed speed (6)
CJ	Buffer tank + pump J, equipped with inverter to work at fixed speed (6)
	Kit with storage tank and n° 1 pump + stand-by pump to fixed speed
KA	Buffer tank+pump A+stand-by pump, both with inverter to work at fixed speed
KB	Buffer tank+pump B+stand-by pump, both with inverter to work at fixed speed
KC	Buffer tank+pump C+stand-by pump, both with inverter to work at fixed speed
KD	Buffer tank+pump D+stand-by pump, both with inverter to work at fixed speed
KE	Buffer tank+pump E+stand-by pump, both with inverter to work at fixed speed
KF	Buffer tank+pump F+stand-by pump, both with inverter to work at fixed speed (6)
KG	Buffer tank+pump G+stand-by pump, both with inverter to work at fixed speed (6)
KH	Buffer tank+pump H+stand-by pump, both with inverter to work at fixed speed (6)
KI	Buffer tank+pump I+stand-by pump, both with inverter to work at fixed speed (6)
KJ	Buffer tank+pump J+stand-by pump, both with inverter to work at fixed speed (7)

Storage tank and pump I

ΑI

⁽¹⁾ Water produced from $4^{\circ}\text{C} \div 20^{\circ}\text{C}$ (2) Water produced from $8^{\circ}\text{C} \div -10^{\circ}\text{C}$ (3) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection process. (4) None of the hydronic kits (from PA to KJ) are compatible with the following sizes and with versions with

- (6) Hydronic kit not available with sizes 0800 version °/L/A, 0900 version °/L/A, 1000 version °, 1100 version
- (7) For all possible configurations which include the "J" pump please be in touch with Aermec. Hydronic kit is not available with sizes 0800 version "/L/A, 0900 version "/L/A, 1000 version °, 1100 version °.

PERFORMANCE SPECIFICATIONS

NRG - °

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	229,0	251,4	278,2	314,5	372,4	399,7	459,4	532,8	593,5	635,8	698,1
Input power	kW	70,6	80,3	90,1	107,8	118,6	129,5	152,5	170,8	197,3	212,9	226,5
Cooling total input current	A	122,0	138,0	156,0	182,0	198,0	222,0	248,0	282,0	325,0	353,0	366,0
EER	W/W	3,24	3,13	3,09	2,92	3,14	3,09	3,01	3,12	3,01	2,99	3,08
Water flow rate system side	l/h	39392	43247	47863	54104	64061	68767	79015	91640	102081	109354	120062
Pressure drop system side	kPa	36	44	54	51	60	62	42	57	62	62	64

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12° C / 7° C; outside air 35° C

NRG - L

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	225,7	247,6	279,0	317,6	360,5	410,2	451,3	526,9	590,3	640,5	679,3
Input power	kW	70,6	80,3	88,3	106,0	121,5	133,0	151,3	171,3	200,0	209,3	224,5
Cooling total input current	Α	121,0	138,0	148,0	174,0	201,0	216,0	243,0	277,0	323,0	337,0	364,0
EER	W/W	3,20	3,09	3,16	3,00	2,97	3,08	2,98	3,08	2,95	3,06	3,03
Water flow rate system side	l/h	38832	42603	47996	54644	62004	70568	77616	90617	101513	110161	116806
Pressure drop system side	kPa	36	43	42	48	47	53	41	49	53	62	39

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - A

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	230,4	253,6	287,0	328,9	374,1	424,3	468,8	542,9	608,8	663,3	702,9
Input power	kW	69,3	78,3	86,3	100,7	116,2	127,9	144,7	163,4	187,9	202,4	217,9
Cooling total input current	A	123,0	139,0	151,0	174,0	197,0	215,0	238,0	275,0	317,0	334,0	358,0
EER	W/W	3,33	3,24	3,33	3,27	3,22	3,32	3,24	3,32	3,24	3,28	3,23
Water flow rate system side	l/h	39642	43624	49381	56584	64350	72980	80631	93379	104697	114081	120866
Pressure drop system side	kPa	37	45	44	52	52	56	44	53	58	67	42

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	229,7	256,5	280,7	330,9	378,2	424,6	466,3	542,7	617,8	652,1	705,8
Input power	kW	68,3	77,4	86,8	100,0	116,7	128,4	144,7	165,0	186,7	203,2	214,1
Cooling total input current	A	116,0	132,0	149,0	167,0	191,0	208,0	231,0	268,0	302,0	327,0	343,0
EER	W/W	3,37	3,32	3,24	3,31	3,24	3,31	3,22	3,29	3,31	3,21	3,30
Water flow rate system side	l/h	39530	44119	48278	56919	65043	73027	80200	93338	106248	112132	121358
Pressure drop system side	kPa	38	35	38	48	39	38	44	47	59	45	37

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - U

	_					
389,3	435,6	479,7	558,1	634,0	671,3	725,0
114,3	126,8	142,5	163,7	185,1	200,1	212,0
193,0	212,0	233,0	272,0	308,0	330,0	349,0
3,41	3,44	3,37	3,41	3,43	3,35	3,42
66957	74921	82502	95984	109036	115443	124657
40	39	47	49	62	48	39
	114,3 193,0 3,41 66957	114,3 126,8 193,0 212,0 3,41 3,44 66957 74921	114,3 126,8 142,5 193,0 212,0 233,0 3,41 3,44 3,37 66957 74921 82502	114,3 126,8 142,5 163,7 193,0 212,0 233,0 272,0 3,41 3,44 3,37 3,41 66957 74921 82502 95984	114,3 126,8 142,5 163,7 185,1 193,0 212,0 233,0 272,0 308,0 3,41 3,44 3,37 3,41 3,43 66957 74921 82502 95984 109036	114,3 126,8 142,5 163,7 185,1 200,1 193,0 212,0 233,0 272,0 308,0 330,0 3,41 3,44 3,37 3,41 3,43 3,35 66957 74921 82502 95984 109036 115443

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - N

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M												
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	235,0	262,1	290,7	339,2	389,2	430,7	481,8	556,2	627,9	670,3	719,8
Input power	kW	67,2	76,1	85,1	98,7	113,4	126,5	141,8	163,9	184,6	198,3	212,1
Cooling total input current	Α	115,0	129,0	145,0	164,0	185,0	208,0	225,0	262,0	297,0	320,0	338,0
EER	W/W	3,50	3,44	3,42	3,44	3,43	3,40	3,40	3,39	3,40	3,38	3,39
Water flow rate system side	l/h	40430	45090	50006	58350	66941	74070	82857	95663	107988	115265	123768
Pressure drop system side	kPa	41	38	41	50	41	38	42	49	61	47	39

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
SEER - 12/7 (EN14825: 2018) (1)													
	0	W/W	4,46	4,43	4,34	4,36	4,47	4,40	4,62	4,62	4,56	4,58	4,59
	A	W/W	4,66	4,67	4,66	4,64	4,66	4,64	4,72	4,77	4,77	4,76	4,77
SEER	E	W/W	4,76	4,82	4,75	4,76	4,79	4,89	4,87	4,98	4,95	4,89	4,88
DEEK	L	W/W	4,60	4,58	4,65	4,62	4,61	4,77	4,69	4,81	4,83	4,78	4,81
	N	W/W	4,83	4,86	4,88	4,87	4,88	5,00	4,97	5,05	5,01	4,95	4,93
	U	W/W	4,72	4,74	4,75	4,75	4,76	4,73	4,78	4,85	4,82	4,83	4,82
	0	%	175,50	174,30	170,50	171,30	175,90	173,00	181,60	181,80	179,50	180,00	180,60
	Α	%	183,40	183,80	183,20	182,70	183,20	182,40	185,70	187,80	187,70	187,50	187,60
Concornal officiency	E	%	187,50	189,60	187,00	187,40	188,50	192,60	191,60	196,30	195,00	192,70	192,00
Seasonal efficiency	L	%	180,80	180,10	183,00	181,60	181,20	187,90	184,60	189,20	190,30	188,00	189,50
	N	%	190,10	191,20	192,20	191,80	192,10	196,90	195,90	198,80	197,30	194,80	194,30
	U	%	185,80	186,70	187,10	186,80	187,40	186,20	188,30	191,00	189,70	190,10	189,60
SEER - 23/18 (EN14825: 2018) (2)													
	0	W/W	5,09	4,99	4,86	4,89	5,02	4,91	5,20	5,17	5,09	5,06	5,09
	Α	W/W	5,35	5,29	5,31	5,23	5,19	5,17	5,28	5,34	5,32	5,25	5,39
SEER	E	W/W	5,46	5,51	5,38	5,36	5,38	5,54	5,44	5,56	5,46	5,49	5,53
DEEN	L	W/W	5,29	5,20	5,26	5,17	5,11	5,29	5,25	5,32	5,32	5,24	5,37
	N	W/W	5,54	5,57	5,55	5,51	5,52	5,63	5,59	5,63	5,52	5,55	5,59
	U	W/W	5,46	5,48	5,43	5,39	5,41	5,37	5,38	5,46	5,38	5,45	5,51
	0	%	200,70	196,50	191,50	192,40	197,60	193,20	205,10	203,70	200,40	199,20	200,40
	Α	%	211,00	208,40	209,30	206,10	204,60	203,70	208,10	210,50	209,80	207,10	212,70
Seasonal efficiency	E	%	215,40	217,40	212,00	211,40	212,10	218,60	214,40	219,30	215,30	216,40	218,00
seasonal eniclency	L	%	208,60	204,80	207,20	203,80	201,50	208,60	206,90	209,80	209,90	206,50	211,90
	N	%	218,40	219,80	219,10	217,20	217,70	222,30	220,40	222,30	217,90	218,90	220,50
	U	%	215,40	216,20	214,20	212,50	213,50	211,90	212,20	215,50	212,20	214,90	217,40

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: M													
SEER - 12/7 (EN14825: 2018) (1)													
	0	W/W	4,35	4,33	4,25	4,29	4,15	4,22	- (2)	- (2)	- (2)	- (2)	- (2)
	Α	W/W	4,43	4,45	4,45	4,45	4,47	4,60	4,63	4,63	4,63	4,57	4,58
SEER	E	W/W	4,51	4,58	4,56	4,57	4,59	4,66	4,67	4,70	4,68	4,65	4,66
SEER	L	W/W	4,39	4,39	4,47	4,44	4,43	4,61	4,60	4,62	4,62	4,57	4,59
	N	W/W	4,57	4,62	4,69	4,67	4,68	4,76	4,78	4,75	4,72	4,70	4,72
	U	W/W	4,48	4,52	4,54	4,56	4,58	4,69	4,70	4,71	4,68	4,64	4,64
	0	%	171,10	170,00	167,10	168,50	163,10	165,80	- (2)	- (2)	- (2)	- (2)	- (2)
	Α	%	174,00	174,80	174,80	175,10	175,90	180,80	182,20	182,30	182,10	179,60	180,20
Seasonal efficiency	E	%	204,20	206,80	203,60	202,90	202,70	208,50	206,10	207,50	204,20	206,20	209,00
Seasonal efficiency	L	%	172,60	172,40	175,70	174,60	174,20	181,30	181,00	181,80	181,80	179,90	180,70
	N	%	179,90	181,70	184,40	183,70	184,00	187,50	188,00	187,00	185,90	184,80	185,60
	U	%	176,30	177,70	178,50	179,20	180,10	184,70	184,80	185,50	184,20	182,40	182,40
SEER - 23/18 (EN14825: 2018) (3)													
	0	W/W	4,97	4,87	4,77	4,81	4,65	4,72	4,86	4,98	4,90	4,89	4,86
	Α	W/W	5,09	5,04	5,07	5,02	4,98	5,13	5,18	5,20	5,17	5,06	5,20
SEER	E	W/W	5,18	5,25	5,17	5,15	5,14	5,29	5,23	5,26	5,18	5,23	5,30
SEER	L	W/W	5,06	4,98	5,05	4,98	4,92	5,12	5,15	5,13	5,10	5,03	5,15
	N	W/W	5,25	5,30	5,34	5,28	5,29	5,38	5,37	5,33	5,24	5,29	5,36
	U	W/W	5,19	5,23	5,19	5,18	5,20	5,33	5,29	5,32	5,24	5,26	5,32
	0	%	195,90	191,90	187,80	189,30	183,10	185,60	191,20	196,20	192,80	192,70	191,30
	Α	%	200,40	198,50	199,90	197,90	196,00	202,00	204,30	204,90	203,70	199,50	205,00
Seasonal efficiency	E	%	204,20	206,80	203,60	202,90	202,70	208,50	206,10	207,50	204,20	206,20	209,00
Seasonal eniciency	L	%	199,30	196,30	199,10	196,00	193,80	201,60	203,00	202,30	200,90	198,20	203,00
	N	%	207,10	209,10	210,40	208,20	208,40	212,10	211,80	210,30	206,50	208,70	211,40
	U	%	204,70	206,10	204,60	204,00	205,00	210,20	208,40	209,80	206,40	207,40	209,80

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C

(3) Calculation performed with FIXED v	water flow rate.												
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
SEPR - (EN 14825: 2018) (1)													
		W/W	5,84	5,73	5,82	5,67	5,95	6,14	6,27	6,31	6,09	6,12	6,30
	Α	W/W	6,12	6,09	6,21	6,13	6,12	6,35	6,41	6,46	6,38	6,45	6,48
SEPR	E	W/W	6,24	6,26	6,28	6,23	6,14	6,72	6,72	6,78	6,73	6,64	6,62
DEFR	L	W/W	6,10	6,05	6,16	6,08	5,87	6,54	6,44	6,56	6,54	6,50	6,43
	N	W/W	6,36	6,35	6,37	6,38	6,43	6,82	6,80	6,93	6,85	6,78	6,71
	U	W/W	6,38	6,36	6,36	6,25	6,30	6,55	6,63	6,55	6,50	6,59	6,64
(1) Calculation performed with FIXED v	water flow rate.												
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: M													
SEPR - (EN 14825: 2018) (1)													
		W/W	5,68	5,58	5,70	5,58	5,60	5,96	5,95	6,10	5,92	5,97	6,07
	A	W/W	5,79	5,78	5,93	5,95	5,87	6,34	6,27	6,33	6,32	6,30	6,31
CEDR	E	W/W	5,94	5,94	6,04	6,00	5,89	6,41	6,41	6,47	6,44	6,36	6,42
/FPK													

5,93

6,12

6,04

5,84

6,13

6,02

5,63

6,17

6,07

6,29

6,49

6,49

6,29

6,50

6,50

6,35

6,60

6,41

6,28

6,52

6,37

6,26

6,50

6,42

6,21

6,49

6,46

ELECTRIC DATA

SEPR

ELECTRIC DATA													
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Electric data													
	0	А	158,2	176,5	198,8	226,7	262,4	290,3	318,1	371,7	417,5	445,4	481,1
Maximum assument (FLA)	A,L	Α	162,2	180,5	200,6	228,5	256,4	290,1	317,9	369,5	415,3	449,0	476,9
Maximum current (FLA)	E,U	Α	164,0	182,3	200,6	234,3	262,2	295,9	323,7	375,3	426,9	454,8	488,5
	N	Α	169,8	188,1	206,4	240,1	268,0	295,9	329,5	381,1	432,7	460,6	494,3
	٥	Α	361,6	417,7	440,0	689,0	724,7	752,6	780,4	834,1	879,9	907,7	943,4
Deals surrent (LDA)	A,L	А	365,6	421,7	441,8	690,8	718,7	752,4	780,2	831,9	877,7	911,3	939,2
Peak current (LRA)	E,U	A	367,4	423,5	441,8	696,6	724,5	758,2	786,0	837,7	889,3	917,1	950,8
	N	Α	373,2	429,3	447,6	702,4	730,3	758,2	791,8	843,5	895,1	922,9	956,6

[■] Data calculated without hydronic kit and accessories.

W/W

W/W

W/W

5,85

6,03

6,04

5,77

6,02

6,05

⁽¹⁾ Calculation performed with FIXED water flow rate.

GENERAL TECHNICAL DATA

Compressors

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Compressor													
Туре	°,A,E,L,N,U	type						Scroll					
Compressor regulation	°,A,E,L,N,U	Туре						On/Off					
Number	°,A,E,L,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type						R32					
	0	kg	10,5	10,9	11,3	14,0	15,0	15,0	15,8	20,6	20,6	24,1	29,0
0.6: (1.1: 1:4/4)	A,L	kg	11,3	10,9	11,0	15,0	15,8	18,0	18,0	20,6	24,0	24,4	26,3
Refrigerant load circuit 1 (1)	E,U	kg	15,4	15,0	16,1	19,9	19,9	24,0	23,3	25,9	28,1	33,8	30,8
	N	kg	16,0	16,0	17,3	24,2	26,3	26,3	30,8	30,0	37,5	34,1	34,1
	0	kg	10,5	10,9	11,3	14,0	15,0	15,0	15,8	20,6	20,6	25,6	29,0
0.6: (1.1: ::2/4)	A,L	kg	11,3	10,9	11,0	15,0	15,8	20,5	20,5	20,6	24,0	24,4	26,3
Refrigerant load circuit 2 (1)	E,U	kg	15,4	15,0	16,1	19,9	19,9	25,5	23,3	25,9	28,1	33,8	30,8
	N	kg	16,0	16,0	18,8	25,4	26,3	26,3	30,8	30,0	37,5	34,1	34,1
Potential global heating	°,A,E,L,N,U	GWP						675kgCO ₂ eq					

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

System side heat exchanger

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
System side heat exchanger													
Туре	°,A,E,L,N,U	type	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate					
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00													
Hydraulic connections													
Connections (in/out)	°,A,E,L,N,U	Туре						Grooved joints	5				
	0	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"
Sizes (in/out)	A,L	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
	E,N,U	Ø	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

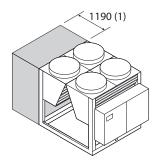
Fans

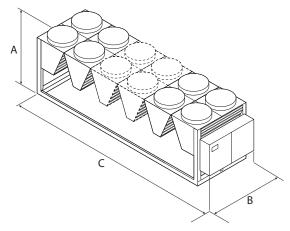
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: M													
Increased fan													
Туре	°,A,E,L,N,U	type						axials					
Fan motor	^,A,U	type						Asynchronous	5				
rall illotor	E,L,N	type					Asynch	ronous with p	hase cut				
		no.	4	4	4	4	6	6	6	8	8	8	10
Number	A,L	no.	4	4	6	6	6	8	8	10	10	12	12
Number	E,U	no.	6	6	6	8	8	10	10	12	14	14	16
	N	no.	8	8	8	10	10	10	12	14	16	16	18
Without Static pressure													
	0	m³/h	76740	76740	76744	76744	115121	115121	115121	153480	153480	153480	191819
	A	m³/h	76743	76743	115110	115110	115110	153480	153480	191850	191850	230220	230220
A:	E	m³/h	74973	74973	74973	99978	99978	124970	124970	149950	174934	174934	199932
Air flow rate	L	m³/h	62605	62605	74978	74978	74978	99996	99996	124953	124953	149882	149882
	N	m³/h	99973	99973	99973	124966	124966	124966	149960	174953	199946	199946	224939
	U	m³/h	115110	115110	115110	153480	153480	191850	191850	230220	268590	268590	306960
	0	dB(A)	89,2	89,2	90,5	90,6	92,4	92,5	92,6	93,7	93,8	93,8	94,8
	A	dB(A)	90,5	90,5	90,5	90,8	91,1	92,0	92,3	93,1	93,4	94,2	94,3
Caused manual laural	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2
Sound power level	L	dB(A)	85,1	85,1	84,5	85,1	85,4	86,6	87,2	87,7	88,4	89,1	89,5
	N	dB(A)	85,3	85,4	85,4	86,9	87,5	88,1	89,0	89,4	89,8	90,5	91,0
	U	dB(A)	90,8	90,8	90,8	92,2	92,4	93,5	93,6	94,3	94,9	95,0	95,6

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
Inverter fan													
Туре	°,A,E,L,N,U	type						Axial					
Fan motor	°,A,E,L,N,U	type						Inverter					
	0	no.	4	4	4	4	6	6	6	8	8	8	10
Number	A,L	no.	4	4	6	6	6	8	8	10	10	12	12
Number	E,U	no.	6	6	6	8	8	10	10	12	14	14	16
	N	no.	8	8	8	10	10	10	12	14	16	16	18
	0	m³/h	65555	65555	76744	76744	115121	115121	115121	153480	153480	153480	191819
	A	m³/h	76743	76743	98321	98321	98321	131111	131087	163789	163789	196572	196572
A:	E	m³/h	74973	74973	74973	99978	99978	124970	124970	149950	174934	174934	199932
Air flow rate	L	m³/h	62605	62605	74978	74978	74978	99996	99996	124953	124953	149882	149882
	N	m³/h	99973	99973	99973	124966	124966	124966	149960	174953	199946	199946	224939
	U	m³/h	98320	98320	98320	131139	131139	163815	163815	196680	229462	229462	262164
Sound data calculated in cooling mode	(1)												
	0	dB(A)	87,1	87,1	91,7	91,8	93,6	93,7	93,8	94,9	94,9	95,0	95,9
	A	dB(A)	91,7	91,7	88,1	88,7	89,2	89,9	90,2	90,9	91,5	92,3	92,5
Carrad marriage larval	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2
Sound power level	L	dB(A)	85,1	85,1	84,5	85,1	85,4	86,6	87,2	87,7	88,4	89,1	89,5
	N	dB(A)	85,3	85,4	85,4	86,9	87,5	88,1	89,0	89,4	89,8	90,5	91,0
	U	dB(A)	88,6	88,6	88,6	90,1	90,5	91,6	91,8	92,5	93,0	93,2	93,8

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS





 $(1) Additional \ module \ needed \ to \ contain \ the \ hydronic \ kit \ with \ "accumulation" \ option \ in \ sizes:$ NRG 0800°, 0900°, 1000°, 1100° NRG 0800L, 0900L NRG 0800A, 0900A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit	: 00												
Dimensions and weights													
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	0	mm	2780	2780	2780	2780	3970	3970	3970	5160	5160	5160	6350
r	A,L	mm	2780	2780	3970	3970	3970	5160	5160	6350	6350	7540	7540
C	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9920
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9920	9920	11110

■ The units 0800°, 0900°, 1000°, 1100°; 0800L, 0900L; and 0800A, 0900A with the "storage tank" option, are 3970mm long.

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00													
Weights													
	0	kg	2140	2140	2150	2150	2850	2960	3180	3830	4030	4210	4740
-	A,L	kg	2160	2160	2580	2730	2870	3440	3650	4250	4460	4960	5070
Empty weight	E,U	kg	2580	2590	2600	3220	3430	3930	4070	4660	4960	5400	5990
-	N	kg	3050	3070	3080	3630	3850	3990	4470	5110	5750	5880	6370

















NRG 0800H-3600H

Reversible air/water heat pump

Cooling capacity 194,9 ÷ 962,3 kW - Heating capacity 209,6 ÷ 991,9 kW



- · High efficiency also at partial loads
- · Reduced amount of refrigerant
- Night mode





DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

FEATURES

Operating field

Working at full load up to -15 $^{\circ}$ C outside air temperature in winter, and up to 49 $^{\circ}$ C in summer. Hot water production up to 60 $^{\circ}$ C (for more details refer to the technical documentation).

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO₂ values.

■ The leak detector is supplied as per standard.

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.

It is available in different configurations with storage tank or with fixed pumps also inverter.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration (from size 0800 to 2400)
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: available for all models with an inverter fan or DCPX. Thanks to continuous fan modulation, unit operation is optimised in every working position in cooling mode. The result is enhanced machine energy efficiency with partial loads.
- "EASYLOG" data logger as per standard: allows all operating data read by the pCO5 to be stored on an SD card.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

486 www.aermec.com NRG-0800-3600-HP_Y_CE50_02



In the 'BMS card' port, the compatible accessories are:

- AER485P1
- AERBACP
- MULTICHILLER_EVO + AER485P1

In the 'J25-BMS2' port, the compatible accessories are:

- AERNET
- Note:
- "BMS card" and "J25-BMS2" are two ports on the unit's control board.
 Only one accessory can be connected to each port.
- An 'EASYLOG' diagnostic device may be present in port 'J25-BMS2', possibly disconnect it to connect the accessory AERNET.
- For other requirements, please contact the company.

INTEGRATED SOLUTION

The "integrated solution" concept has been implemented in the system architecture, consisting in an integrated and streamlined control of compressors and electronic valve.

This solution allowed a variety of new features to be introduced, such as:

- Low Superheat Control: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
- DLT control: Control of electronic valve at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range, especially in heating mode.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FL:** Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
AER485P1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•
AERNET	°,A,E,L	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•
FL	°,A,E,L	•	•	•	•	•	•	•	•	•	•			•		•	•	•
MULTICHILLER_EVO	°,A,E,L	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•
PGD1	°,A,E,L	•	•	•	•	•	•	•	•	•		•			•	•	•	•

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
0	DCPX161	DCPX161	DCPX161	DCPX163	DCPX163	DCPX163	DCPX163	DCPX165	DCPX167
A	DCPX161	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX165	DCPX167	DCPX167
E,L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
Ver	2200	2400	2600	2800		3000	3200	3400	3600
Ver °	2200 DCPX167	2400 DCPX167	2600 DCPX174	2800 DCPX174	1 [3000 DCPX175	3200 DCPX175	3400 DCPX175	3600 DCPX175

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																	
0	AVX1151	AVX1151	AVX1151	AVX1153	AVX1153	AVX1153	AVX1153	AVX1154	AVX1163	AVX1163	AVX1163	AVX1167	AVX1167	AVX1171	AVX1171	AVX1171	AVX1171
A,L	AVX1151	AVX1153	AVX1153	AVX1153	AVX1154	AVX1154	AVX1154	AVX1156	AVX1156	AVX1159	AVX1159	AVX1167	AVX1171	AVX1171	AVX1171	AVX1169	AVX1169
E	AVX1153	AVX1154	AVX1154	AVX1154	AVX1156	AVX1156	AVX1159	AVX1161	AVX1161	AVX1165	AVX1165	AVX1169	AVX1173	AVX1173	AVX1173	AVX1175	AVX1175
Integrated hydronic kit: AA, A	B, AC, AD, A	E, AF, AG, <i>I</i>	AH, AI, AJ, I	BA, BB, BC,	BD, BE, BF	, BG, BH, B	I, BJ, CA, C	B, CC, CD, C	E, CF, CG, C	H, CI, CJ, K	A, KB, KC,	KD, KE, KF,	KG, KH, KI	, KJ			
0	AVX1152	AVX1152	AVX1152	AVX1152	AVX1152	AVX1152	AVX1152	AVX1155	AVX1157	AVX1157	AVX1157	AVX1168	AVX1168	AVX1172	AVX1172	AVX1172	AVX1172
A,L	AVX1152	AVX1152	AVX1152	AVX1152	AVX1155	AVX1155	AVX1155	AVX1157	AVX1157	AVX1160	AVX1160	AVX1168	AVX1172	AVX1172	AVX1172	AVX1170	AVX1170
E	AVX1152	AVX1155	AVX1155	AVX1155	AVX1157	AVX1157	AVX1160	AVX1162	AVX1162	AVX1166	AVX1166	AVX1170	AVX1174	AVX1174	AVX1174	AVX1176	AVX1176
Integrated hydronic kit: DA, D	B, DC, DD, D	E, DF, DG,	DH, DI, DJ,	IA, IB, IC, I	D, IE, IF, IG	, IH, II, IJ, J	IA, JB, JC, J	D, JE, JF, JG	, JH, JI, JJ,	PA, PB, PC	, PD, PE, PI	, PG, PH, P	I, PJ				
0	AVX1151	AVX1151	AVX1151	AVX1153	AVX1153	AVX1153	AVX1153	AVX1154	AVX1163	AVX1163	AVX1163	AVX1167	AVX1167	AVX1171	AVX1171	AVX1171	AVX1171
A,L	AVX1151	AVX1153	AVX1153	AVX1153	AVX1154	AVX1154	AVX1158	AVX1156	AVX1156	AVX1164	AVX1164	AVX1167	AVX1171	AVX1171	AVX1171	AVX1169	AVX1169
E	AVX1153	AVX1154	AVX1154	AVX1154	AVX1156	AVX1156	AVX1159	AVX1161	AVX1161	AVX1165	AVX1165	AVX1169	AVX1173	AVX1173	AVX1173	AVX1175	AVX1175

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°,A,E,L	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400	DRENRG1600	DRENRG1800	DRENRG2000
A grey background indicates the accessory	must be assembled in t	he factory							
Ver	2200	2400	2600	2800		3000	3200	3400	3600
°,A,E,L	DRENRG2200	DRENRG2400	DRENRG2600	DRENRG28	300 DRE	NRG3000 [DRENRG3200	DRENRG3400	DRENRG3600

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°,A,E,L	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400	RIFNRG1600	RIFNRG1800	RIFNRG2000
A grey background indicates the accessor	y must be assembled in th	ne factory							
Ver	2200	2400	2600	2800		3000	3200	3400	3600
°,A,E,L	RIFNRG2200	RIFNRG2400	RIFNRG2600	RIFNRG28	00 RIF	NRG3000	RIFNRG3200	RIFNRG3400	RIFNRG3600

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
0	GP2VN	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP3G	GP4G	GP5G	GP5G	GP5G	GP11G	GP10G	GP12G	GP12G	GP12G	GP12G
A,L	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G	GP11G	GP12G	GP12G	GP12G	GP13G	GP13G
E	GP3G	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G	GP8G	GP13G	GP14G	GP14G	GP14G	GP15G	GP15G

A grey background indicates the accessory must be assembled in the factory

■ GP2VN becomes GP2VNA if configured with a type A or B hydronic kit

Double safety valves

Ver 0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
°,A,E,L T6NRGI	S1 T6NRGLS	1 T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3	T6NRGLS3	T6NRGLS	4 T6NRGLS5	T6NRGLS5	T6NRGLS5	T6NRGLS5

A grey background indicates the accessory must be assembled in the factory

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CONFIGURATOR

Fiel	d	Description
1,2,		NRG
		Size
4,5,	6,7	0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, 3000, 3200, 3400, 3600
8		Operating field
	Χ	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		Model
	Н	Heat pump
10		Heat recovery
	0	Without heat recovery
_	D	With desuperheater (3)
11		Version
	0	Standard
_	Α	High efficiency
_	E	Silenced high efficiency
_	ī	Standard silenced
12		Coils
14	0	
_	R	Copper-aluminium
		Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins Fans
13	0	
		Standard
	J	Inverter
14	0	Power supply
		400V ~ 3 50Hz with magnet circuit breakers
15,	16	Integrated hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (4)
		Pump n° 1 pump + stand-by pump
_	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
_	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
_	DF	Pump F + stand-by pump
_	DG	Pump G + stand-by pump
_	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (4)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
_	AG	Storage tank and pump G
	AH	Storage tank and pump H
	Al	Storage tank and pump l
	AJ	Storage tank and pump J (4)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump
		The state of the s

Field	Description
BB	Storage tank with pump B + stand-by pump
BC	Storage tank with pump C + stand-by pump
BD	Storage tank with pump D + stand-by pump
BE	Storage tank with pump E + stand-by pump
BF	Storage tank with pump F + stand-by pump
BG	Storage tank with pump G + stand-by pump
ВН	Storage tank with pump H + stand-by pump
BI	Storage tank with pump I + stand-by pump
BJ	Storage tank with pump J + stand-by pump (4)
	Kit with n° 1 inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed
IB	Pump B equipped with inverter device to work at fixed speed
IC	Pump C equipped with inverter device to work at fixed speedr
ID	Pump D equipped with inverter device to work at fixed speed
IE	Pump E equipped with inverter device to work at fixed speed
IF	Pump F equipped with inverter device to work at fixed speed (5)
IG	Pump G equipped with inverter device to work at fixed speed (5)
IH	Pump H equipped with inverter device to work at fixed speed (5)
	Pump I equipped with inverter device to work at fixed speed (5)
IJ	Pump J equipped with inverter device to work at fixed speed (6)
	Kit with n° 1 inverter pump + stand-by pump to fixed speed Pump A+stand-by pump, both equipped with inverter to work at fixed speed
JA JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5)
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5)
JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (5)
JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (5)
	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (6)
	Kit with storage tank and n° 1 inverter pump to fixed speed
CA	Buffer tank + pump A, equipped with inverter to work at fixed speed
СВ	Buffer tank + pump B, equipped with inverter to work at fixed speed
CC	Buffer tank + pump C, equipped with inverter to work at fixed speed
CD	Buffer tank + pump D, equipped with inverter to work at fixed speed
EC	Buffer tank + pump E, equipped with inverter to work at fixed speed
CF	Buffer tank + pump F, equipped with inverter to work at fixed speed (5)
CG	Buffer tank + pump G, equipped with inverter to work at fixed speed (5)
CH	Buffer tank + pump H, equipped with inverter to work at fixed speed (5)
Cl	Buffer tank + pump I, equipped with inverter to work at fixed speed (5)
CJ	Buffer tank + pump J, equipped with inverter to work at fixed speed (6)
	Kit with storage tank and n° 1 pump + stand-by pump to fixed speed
KA	Buffer tank+pump A+stand-by pump, both with inverter to work at fixed speed
KB	Buffer tank+pump B+stand-by pump, both with inverter to work at fixed speed
KC	Buffer tank+pump C+stand-by pump, both with inverter to work at fixed speed
KD	Buffer tank+pump D+stand-by pump, both with inverter to work at fixed speed
KE	Buffer tank+pump E+stand-by pump, both with inverter to work at fixed speed
KF	Buffer tank+pump F+stand-by pump, both with inverter to work at fixed speed (5)
KG	Buffer tank+pump G+stand-by pump, both with inverter to work at fixed speed (5)
КН	Buffer tank+pump H+stand-by pump, both with inverter to work at fixed speed (5)
KI	Buffer tank+pump l+stand-by pump, both with inverter to work at fixed speed (5)
KJ	Buffer tank+pump J+stand-by pump, both with inverter to work at fixed speed (6)

⁽¹⁾ Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C ÷ -10 °C
(3) This option is not available with the Z operating field. The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) For all configurations including pump J please contact the factory.
(5) Hydronic kit not available with sizes 0800 version °/L/A, 0900 version °, 1000 version °, 1800 version °.
(6) For all possible configurations which include the "J" pump please be in touch with Aermec. Hydronic kit is not available with sizes 0800 version °,L/A, 0900 version °, 1000 version °.

PERFORMANCE SPECIFICATIONS

NRG H°

- Interior																		
Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	200,5	220,2	238,5	292,2	325,7	353,6	381,6	456,8	531,9	561,5	591,1	705,6	749,2	824,6	859,3	895,1	925,3
Input power	kW	72,8	83,7	95,6	107,5	123,5	144,5	160,8	179,5	199,4	219,3	239,1	249,8	277,9	299,4	317,7	334,1	354,4
Cooling total input current	Α	127,0	144,0	163,0	182,0	207,0	238,0	268,0	300,0	333,0	362,0	391,0	424,0	485,0	506,0	527,0	567,0	597,0
EER	W/W	2,75	2,63	2,49	2,72	2,64	2,45	2,37	2,55	2,67	2,56	2,47	2,83	2,70	2,75	2,70	2,68	2,61
Water flow rate system side	l/h	34503	37880	41031	50268	56029	60821	65615	78560	91483	96570	101650	121347	128839	141815	147773	153929	159128
Pressure drop system side	kPa	25	30	35	45	45	47	29	42	50	49	47	53	60	69	73	75	79
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	212,2	235,2	256,2	310,2	348,1	384,0	416,2	492,2	568,3	603,5	638,4	729,6	782,6	858,4	896,3	931,7	966,8
Input power	kW	66,1	73,5	80,8	98,1	109,5	123,5	129,7	153,3	175,5	186,3	198,1	232,9	252,2	275,3	288,2	299,7	312,5
Heating total input current	Α	120,0	133,0	145,0	173,0	190,0	210,0	221,0	263,0	303,0	319,0	337,0	395,0	430,0	471,0	490,0	506,0	524,0
COP	W/W	3,21	3,20	3,17	3,16	3,18	3,11	3,21	3,21	3,24	3,24	3,22	3,13	3,10	3,12	3,11	3,11	3,09
Water flow rate system side	l/h	36823	40823	44470	53838	60421	66654	72264	85444	98663	104778	110847	126695	135884	149044	155628	161773	167874
Pressure drop system side	kPa	29	36	42	53	54	58	37	52	60	60	58	58	66	76	81	83	88

NRG HL

MIGHE																		
Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C/7 °C(1)																		
Cooling capacity	kW	194,9	231,4	252,7	283,9	335,9	367,7	399,5	467,1	515,0	568,3	599,3	684,6	752,3	804,8	836,8	889,9	919,8
Input power	kW	73,7	78,6	88,8	107,7	118,0	136,6	154,7	175,4	203,9	213,7	232,1	255,0	275,5	305,5	325,1	334,6	353,5
Cooling total input current	Α	125,0	136,0	153,0	179,0	196,0	222,0	249,0	285,0	331,0	346,0	374,0	420,0	457,0	506,0	528,0	540,0	568,0
EER	W/W	2,65	2,94	2,85	2,64	2,85	2,69	2,58	2,66	2,53	2,66	2,58	2,69	2,73	2,63	2,57	2,66	2,60
Water flow rate system side	l/h	33540	39819	43473	48838	57788	63245	68702	80332	88566	97728	103054	117728	129370	138391	143907	153027	158170
Pressure drop system side	kPa	23	33	34	39	45	47	33	39	41	49	35	51	59	64	67	75	70
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	209,6	244,9	268,8	305,3	357,3	394,2	431,7	502,3	558,0	611,4	647,2	717,8	788,1	844,0	880,6	933,5	969,8
Input power	kW	64,6	76,2	83,3	95,6	111,1	123,9	131,4	152,8	170,0	186,9	199,5	227,5	249,8	267,9	280,7	297,4	310,8
Heating total input current	Α	115,0	134,0	147,0	165,0	188,0	207,0	219,0	257,0	288,0	313,0	333,0	378,0	416,0	447,0	466,0	491,0	512,0
COP	W/W	3,24	3,22	3,23	3,19	3,22	3,18	3,29	3,29	3,28	3,27	3,24	3,15	3,16	3,15	3,14	3,14	3,12
Water flow rate system side	l/h	36369	42513	46657	52988	62021	68420	74962	87217	96884	106143	112386	124645	136849	146552	152908	162100	168406
Pressure drop system side	kPa	28	39	40	47	53	56	40	47	51	60	42	57	66	71	75	84	80

NRG HA

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	200,5	236,4	258,7	292,2	344,0	378,0	412,2	480,7	532,0	584,8	618,3	700,8	768,8	824,7	859,0	911,3	943,6
Input power	kW	71,4	78,5	88,2	105,8	117,2	134,5	151,4	172,4	196,2	210,0	227,1	245,1	271,0	296,0	314,1	327,9	345,4
Cooling total input current	Α	127,0	141,0	157,0	182,0	201,0	226,0	251,0	289,0	333,0	351,0	377,0	424,0	462,0	509,0	529,0	545,0	571,0
EER	W/W	2,81	3,01	2,93	2,76	2,94	2,81	2,72	2,79	2,71	2,78	2,72	2,86	2,84	2,79	2,73	2,78	2,73
Water flow rate system side	l/h	34505	40669	44506	50268	59178	65028	70879	82668	91485	100578	106317	120517	132216	141823	147725	156722	162264
Pressure drop system side	kPa	24	33	34	39	45	47	33	39	42	50	35	53	61	67	70	79	74
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	214,2	249,2	273,9	311,8	364,1	404,2	439,5	510,6	568,3	624,2	661,5	726,3	796,9	854,6	892,3	944,8	982,2
Input power	kW	65,5	76,7	84,1	96,3	111,6	125,5	132,9	153,9	171,9	189,2	201,7	229,0	250,4	268,2	280,9	299,3	312,3
Heating total input current	Α	119,0	139,0	152,0	170,0	195,0	215,0	227,0	265,0	298,0	325,0	344,0	389,0	428,0	458,0	477,0	506,0	526,0
COP	W/W	3,27	3,25	3,25	3,24	3,26	3,22	3,31	3,32	3,31	3,30	3,28	3,17	3,18	3,19	3,18	3,16	3,15
Water flow rate system side	l/h	37179	43255	47538	54127	63192	70158	76308	88642	98663	108366	114875	126116	138372	148390	154943	164062	170550
Pressure drop system side	kPa	29	40	41	49	55	58	41	49	53	62	44	58	67	73	77	86	82

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C /7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40°C / 45°C; Outside air 7°C d.b. / 6°C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HE

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C/7 °C(1)																		
Cooling capacity	kW	210,2	241,4	265,0	301,3	349,5	385,3	433,9	499,0	555,3	602,8	639,1	718,4	790,6	846,2	879,4	924,9	962,3
Input power	kW	68,8	76,7	85,7	101,9	115,0	130,8	142,8	165,0	189,0	202,2	217,7	241,7	264,6	289,3	308,3	320,7	337,3
Cooling total input current	Α	120,0	135,0	150,0	173,0	192,0	215,0	234,0	272,0	312,0	332,0	355,0	390,0	433,0	474,0	493,0	512,0	536,0
EER	W/W	3,05	3,15	3,09	2,96	3,04	2,94	3,04	3,02	2,94	2,98	2,94	2,97	2,99	2,93	2,85	2,88	2,85
Water flow rate system side	l/h	36167	41535	45585	51820	60126	66279	74616	85811	95491	103665	109890	123535	135965	145529	151221	159049	165476
Pressure drop system side	kPa	24	33	34	40	45	47	33	40	42	50	35	56	62	70	74	71	74
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	220,6	251,8	277,3	320,3	367,5	407,1	456,1	525,1	586,9	634,6	674,7	737,8	806,3	867,9	904,3	951,9	991,9
Input power	kW	67,2	77,5	84,8	98,3	110,5	122,3	137,5	158,0	176,7	191,9	204,0	230,9	251,4	270,6	283,3	299,9	313,6
Heating total input current	Α	119,0	137,0	150,0	170,0	189,0	207,0	229,0	266,0	299,0	321,0	340,0	384,0	419,0	452,0	470,0	497,0	516,0
COP	W/W	3,28	3,25	3,27	3,26	3,33	3,33	3,32	3,32	3,32	3,31	3,31	3,20	3,21	3,21	3,19	3,17	3,16
Water flow rate system side	l/h	38284	43702	48137	55596	63813	70679	79187	91172	101894	110186	117170	128108	140013	150692	157019	165295	172243
Pressure drop system side	kPa	31	35	39	45	36	35	44	45	55	47	39	60	65	75	79	77	81

ENERGY INDEX

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: °																			
SEER - 12/7 (EN14825: 2018) (1)																			
	0	W/W	3,82	3,93	3,69	3,95	3,76	3,66	3,63	3,77	3,94	-	-	-	-	-	-	-	-
SEER	Α	W/W	3,92	4,26	4,03	4,04	4,31	4,05	4,14	4,16	4,14	-	-	-	-	-	-	-	-
SEEK	E	W/W	4,24	4,47	4,46	4,30	4,49	4,23	4,54	4,48	4,30	-	-	-	-	-	-	-	-
	L	W/W	3,89	4,20	4,14	4,07	4,32	4,14	4,09	4,16	4,05	-	-	-	-	-	-	-	-
	0	%	149,69	154,31	144,66	154,85	147,58	143,34	142,18	147,82	154,74	-	-	-	-	-	-	-	-
Seasonal efficiency	Α	%	153,94	167,22	158,24	158,70	169,32	159,16	162,42	163,51	162,60	-	-	-	-	-	-	-	-
Seasonal enriciency	E	%	166,62	175,64	175,43	169,12	176,71	166,29	178,62	176,32	169,05	-	-	-	-	-	-	-	-
	L	%	152,78	164,88	162,52	159,98	169,62	162,45	160,44	163,31	158,98	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																			
	0	W/W	4,42	4,52	4,23	4,46	4,31	4,17	4,16	4,25	4,43	4,56	4,55	4,84	4,69	4,70	4,61	4,69	4,57
CLLD	A	W/W	4,58	4,90	4,67	4,63	4,86	4,60	4,69	4,68	4,62	4,60	4,67	4,94	4,94	4,95	4,95	4,95	4,95
SEER	E	W/W	4,95	5,13	5,09	4,90	5,03	4,78	5,13	5,04	4,80	4,95	5,00	5,15	5,16	5,15	5,07	5,09	5,03
	L	W/W	4,65	4,84	4,73	4,62	4,81	4,64	4,62	4,66	4,56	4,64	4,67	4,81	4,84	4,80	4,79	4,81	4,79
	0	%	173,96	177,67	166,01	175,30	169,38	163,98	163,39	167,16	174,39	179,50	179,00	190,59	184,41	185,05	181,49	184,72	179,79
C	A	%	180,39	193,01	183,69	182,32	191,25	180,93	184,52	184,13	181,81	180,84	183,73	194,77	194,67	194,96	194,98	195,10	194,96
Seasonal efficiency	Е	%	194,99	202,37	200,52	193,16	198,13	188,06	202,21	198,68	189,12	194,99	196,98	203,18	203,49	202,94	199,98	200,57	198,18
	L	%	182,93	190,46	186,38	181,81	189,53	182,80	181,68	183,24	179,38	182,56	183,91	189,59	190,78	188,98	188,76	189,33	188,66
UE 813/2013 performance in average a	mbient conditi	ons (aver	age) - 35	°C - Pdes	ignh ≤ 4	00 kW (3	3)												
Pdesignh	°,A,E,L	kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0	W/W	3,70	3,66	3,70	3,62	3,63	3,64	3,78	3,78	3,84	3,84	3,87	3,78	3,72	3,72	3,70	3,71	3,68
CCOD	A	W/W	3,86	3,75	3,80	3,83	3,80	3,84	3,96	3,92	4,00	3,97	4,03	3,93	3,92	3,90	3,87	3,86	3,82
SCOP	E	W/W	3,82	3,74	3,79	3,80	3,78	3,86	3,96	3,93	3,99	3,96	4,02	3,90	3,88	3,86	3,82	3,81	3,79
	L	W/W	3,75	3,71	3,77	3,73	3,72	3,81	3,90	3,89	3,95	3,88	3,95	3,83	3,82	3,81	3,79	3,78	3,76
	0	%	144,95	143,51	145,03	141,70	142,39	142,72	148,37	148,22	150,74	150,57	151,99	148,07	145,75	145,71	145,18	145,33	144,35
	A	%	151,26	147,10	148,95	150,09	148,92	150,73	155,38	153,74	157,11	156,00	158,37	154,40	153,86	153,03	151,98	151,25	149,80
ηsh	E	%	149,60	146,63	148,74	148,95	148,14	151,30	155,26	154,27	156,73	155,51	157,88	152,82	152,24	151,22	149,93	149,22	148,54
	L	%	146,96	145,41	147,82	146,29	145,93	149,25	152,96	152,42	155,05	152,28	154,95	150,34	149,82	149,41	148,61	148,12	147,48
UE 813/2013 performance in average a	mbient conditi	ons (aver	age) - 55	°C - Pdes	ignh ≤ 4	00 kW (4	l)												
Pdesignh	°,A,E,L	kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0	W/W	3,08	3,05	3,08	3,05	3,03	3,00	3,03	3,06	3,21	3,18	3,18	3,12	3,09	3,11	3,11	3,11	3,06
CCOD	A	W/W	3,18	3,15	3,17	3,19	3,16	3,16	3,17	3,17	3,29	3,27	3,25	3,23	3,24	3,24	3,23	3,23	3,14
SCOP	E	W/W	3,19	3,14	3,17	3,17	3,13	3,15	3,20	3,19	3,32	3,26	3,26	3,24	3,24	3,24	3,22	3,20	3,14
	L	W/W	3,09	3,10	3,14	3,10	3,08	3,12	3,11	3,13	3,23	3,18	3,17	3,14	3,14	3,15	3,14	3,15	3,12
	0	%	120,10	119,16	120,24	118,86	118,20	117,16	118,26	119,46	125,22	124,15	124,36	121,80	120,53	121,33	121,20	121,49	119,23
	A	%	124,31	122,92	123,79	124,47	123,37	123,50	123,70	123,68	128,55	127,96	127,17	126,29	126,72	126,55	126,01	126,19	122,60
ηsh	E	%	124,44	122,64	123,96	123,61	122,14	122,87	125,09	124,79	129,60	127,34	127,57	126,53	126,49	126,53	125,75	124,86	122,72
	L	%	120,43	121,14	122,52	120,80	120,36	121,82	121,38	122,19	126,39	124,30	123,94	122,40	122,78	122,90	122,56	122,90	121,88
SEPR - (EN 14825: 2018) (2)																			
	0	W/W	4,93	5,03	4,88	5,11	5,01	5,11	5,00	5,11	5,29	5,27	5,11	5,51	5,52	5,52	5,51	5,51	5,51
CEDD	A	W/W	5,07	5,49	5,34	5,31	5,63	5,58	5,57	5,62	5,49	5,55	5,58	5,52	5,53	5,53	5,53	5,53	5,52
SEPR	E	W/W	5,60	5,85	5,91	5,58	5,78	5,87	6,19	6,11	5,89	6,09	6,03	5,56	5,57	5,57	5,56	5,56	5,56
	L	W/W	5,14	5,48	5,47	5,31	5,48	5,61	5,55	5,63	5,44	5,65	5,56	5,51	5,52	5,52	5,51	5,51	5,51

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																			
SEER - 12/7 (EN14825: 2018) (1)																			
	0	W/W	3,91	4,03	3,76	4,01	3,91	3,74	3,72	3,92	4,10	-	-	-	-	-	-	-	-
CEED	Α	W/W	4,13	4,47	4,22	4,21	4,48	4,13	4,21	4,29	4,27	4,57	4,58	4,56	4,55	4,56	4,55	4,55	4,55
SEER	E	W/W	4,48	4,70	4,65	4,49	4,69	4,49	4,73	4,76	4,56	4,68	4,65	4,76	4,76	4,74	4,68	4,69	4,64
	L	W/W	4,08	4,38	4,31	4,23	4,49	4,33	4,17	4,32	4,24	4,57	4,57	4,58	4,61	4,56	4,56	4,57	4,56
	0	%	153,54	158,21	147,58	157,44	153,60	146,56	145,75	153,87	160,99	-	-	-	-	-	-	-	-
Concornal officioness	Α	%	162,28	175,77	165,92	165,53	176,30	162,21	165,54	168,43	167,63	179,84	180,02	179,30	179,05	179,25	179,11	179,12	179,03
Seasonal efficiency	E	%	176,01	184,84	182,87	176,49	184,43	176,41	186,08	187,33	179,21	184,21	182,92	187,25	187,42	186,77	184,02	184,64	182,40
	L	%	160,02	172,22	169,30	166,37	176,46	170,12	163,61	169,99	166,45	179,96	179,77	180,32	181,27	179,57	179,44	179,67	179,24
SEER - 23/18 (EN14825: 2018) (2)																			
	0	W/W	4,53	4,62	4,30	4,53	4,48	4,26	4,26	4,36	4,53	4,68	4,67	5,20	5,04	5,05	4,95	5,04	4,89
SEER	Α	W/W	4,82	5,14	4,88	4,83	5,05	4,68	4,77	4,78	4,70	4,74	4,81	5,32	5,32	5,33	5,34	5,33	5,33
SEER	E	W/W	5,22	5,39	5,29	5,11	5,24	5,05	5,33	5,29	5,01	5,07	5,11	5,49	5,49	5,47	5,39	5,40	5,34
	L	W/W	4,86	5,04	4,92	4,80	5,00	4,85	4,70	4,80	4,72	4,81	4,84	5,12	5,16	5,10	5,09	5,10	5,09
	0	%	178,23	181,99	169,18	178,03	176,17	167,49	167,32	171,54	178,15	184,08	183,60	205,12	198,46	198,95	195,09	198,65	192,44
Concornal officioness	Α	%	189,87	202,58	192,30	190,02	199,05	184,16	187,89	188,04	185,13	186,42	189,27	209,91	209,61	210,19	210,50	210,33	210,27
Seasonal efficiency	E	%	205,68	212,67	208,75	201,59	206,78	199,04	210,37	208,55	197,30	199,90	201,24	216,49	216,66	215,99	212,50	213,20	210,64
	L	%	191,27	198,67	193,92	188,82	196,81	191,05	185,11	189,15	185,81	189,25	190,57	201,98	203,21	201,03	200,73	201,14	200,54
UE 813/2013 performance in average an	nbient conditi	ons (aver	age) - 35	°C - Pdes	ignh ≤ 4	00 kW (3	3)												
Pdesignh	°,A,E,L	kW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	0	W/W	3,75	3,72	3,74	3,65	3,72	3,69	3,84	3,87	3,90	3,92	3,98	3,85	3,79	3,79	3,78	3,78	3,76
SCOP	Α	W/W	3,98	3,87	3,91	3,92	3,89	3,93	4,04	4,03	4,08	4,08	4,13	4,01	4,00	3,98	3,95	3,93	3,90
SCOP	E	W/W	3,94	3,86	3,89	3,90	3,88	4,00	4,05	4,08	4,09	4,09	4,13	3,97	3,96	3,93	3,90	3,88	3,86
	L	W/W	3,85	3,81	3,86	3,82	3,85	3,87	3,94	3,98	4,02	3,99	4,06	3,91	3,90	3,89	3,87	3,85	3,84
	0	%	147,19	145,69	146,78	143,12	145,88	144,64	150,61	151,86	152,83	153,82	156,25	151,09	148,73	148,69	148,14	148,30	147,30
nch	A	%	156,18	151,63	153,29	153,96	152,61	154,02	158,78	158,12	160,03	160,11	162,27	157,54	157,00	156,15	155,07	154,33	152,86
ηsh	E	%	154,67	151,25	152,53	152,86	152,04	156,84	159,16	160,06	160,74	160,54	162,33	155,93	155,35	154,31	152,99	152,26	151,57
	L	%	151,15	149,30	151,53	149,80	151,00	151,92	154,77	156,17	157,80	156,44	159,42	153,41	152,88	152,46	151,65	151,15	150,49
UE 813/2013 performance in average an	nbient conditi	ons (aver	age) - 55	°C - Pdes	ignh ≤ 4	00 kW (4	l)												
Pdesignh	°,A,E,L	kW	-	-	-	-	-		-	-	-				-	-	-	-	-
		W/W	3,13	3,11	3,12	3,08	3,11	3,05	3,08	3,15	3,26	3,26	3,29	3,18	3,15	3,17	3,17	3,17	3,12
SCOP	A	W/W	3,30	3,26	3,28	3,28	3,25	3,24	3,24	3,26	3,36	3,37	3,35	3,30	3,31	3,30	3,29	3,29	3,20
300	E	W/W	3,31	3,25	3,27	3,26	3,22	3,28	3,29	3,33	3,42	3,38	3,37	3,30	3,30	3,30	3,28	3,26	3,21
	L	W/W	3,19	3,20	3,23	3,18	3,20	3,19	3,15	3,22	3,31	3,28	3,28	3,20	3,21	3,21	3,20	3,21	3,18
		%	122,27	121,29	121,95	120,26	121,59	119,01	120,35	122,90	127,46	127,29	128,67	124,30	123,00	123,82	123,69	123,98	121,67
nch	A	%	129,05	127,35	128,02	128,24	126,95	126,45	126,66	127,60	131,34	131,91	130,84	128,88	129,31	129,14	128,59	128,77	125,11
ηsh	E	%	129,38	127,17	127,67	127,41	125,90	128,13	128,78	130,27	133,70	132,16	131,79	129,12	129,08	129,12	128,32	127,41	125,24
	L	%	124,44	124,94	126,12	124,20	125,05	124,58	123,06	125,71	129,24	128,27	128,14	124,91	125,29	125,42	125,07	125,42	124,38
SEPR - (EN 14825: 2018) (2)																			
	•	W/W	5,05	5,15	4,98	5,20	5,21	5,23	5,12	5,31	5,49	5,45	5,37	5,51	5,52	5,52	5,51	5,51	5,51
SEPR	A	W/W	5,34	5,76	5,59	5,54	5,85	5,69	5,67	5,79	5,66	5,85	5,87	5,52	5,53	5,53	5,53	5,53	5,52
JLI II	E	W/W	5,91	6,15	6,16	5,82	6,03	6,22	6,44	6,48	6,24	6,31	6,25	5,56	5,57	5,57	5,56	5,56	5,56

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Electric data																			
	0	Α	162,2	180,5	198,8	234,5	262,4	290,3	318,1	371,7	425,3	453,2	481,1	542,5	588,3	641,9	669,8	697,7	725,5
Maximum current (FLA)	A,L	Α	162,2	188,3	206,6	234,5	270,2	298,1	325,9	379,5	425,3	461,0	488,9	542,5	596,1	641,9	669,8	705,5	733,3
	E	Α	170,0	196,1	214,4	242,3	278,0	305,9	341,5	395,1	440,9	476,6	504,5	558,1	611,7	657,5	685,4	721,1	748,9
	•	Α	365,6	421,7	440,0	696,8	724,7	752,6	780,4	834,1	887,7	915,5	943,4	1004,8	1050,6	1104,2	1132,1	1160,0	1187,8
Peak current (LRA)	A,L	Α	365,6	429,5	447,8	696,8	732,5	760,4	788,2	841,9	887,7	923,3	951,2	1004,8	1058,4	1104,2	1132,1	1167,8	1195,6
	E	A	373,4	437,3	455,6	704,6	740,3	768,2	803,8	857,5	903,3	938,9	966,8	1020,4	1074,0	1119,8	1147,7	1183,4	1211,2

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Compressors

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Compressor																			
Туре	°,A,E,L	type									Scroll								
Compressor regulation	°,A,E,L	Туре									0n-0ff								
Number	°,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6	7	8	9	9	9	9
Circuits	°,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
Refrigerant	°,A,E,L	type									R32								
	٥	kg	16,5	16,5	22,5	23,3	23,3	22,5	22,5	30,4	30,8	36,0	36,0	34,4	35,1	35,4	35,4	38,9	38,9
Refrigerant load circuit 1 (1)	A,L	kg	13,0	22,0	20,0	20,0	28,0	28,0	29,3	33,0	43,9	40,0	41,0	34,4	39,6	44,1	44,1	44,1	44,6
	E	kg	21,8	28,5	29,3	27,5	29,3	34,9	42,0	51,0	53,6	56,3	51,8	48,9	48,9	50,6	50,6	52,4	53,4
	٥	kg	16,5	16,5	22,5	23,3	23,3	22,5	22,5	30,4	30,8	36,0	36,0	34,4	35,1	35,4	35,4	38,9	38,9
Refrigerant load circuit 2 (1)	A,L	kg	13,0	22,0	22,0	20,0	28,0	28,0	29,3	33,0	43,9	40,0	41,0	34,4	39,6	44,1	44,1	44,1	44,6
	E	kg	21,8	28,5	29,3	27,5	29,3	34,9	42,0	51,0	53,6	56,3	51,8	48,9	48,9	50,6	50,6	52,4	53,4
	0	kg	-	-	-	-	-	-	-	-	-	-	-	34,4	35,1	35,4	35,4	38,9	38,9
Refrigerant load circuit 3 (1)	A,L	kg	-	-	-	-	-	-	-	-	-	-	-	34,4	39,6	44,1	44,1	44,1	44,6
	E	kg	-	-	-	-	-	-	-	-	-	-	-	48,9	48,9	50,6	50,6	52,4	53,4
Potential global heating	°,A,E,L	GWP								6	75kgCO₃e	q							

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

System side heat exchanger

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
System side heat exchanger																			
Туре	°,A,E,L	type								В	razed pla	te							
Number	°,A,E,L	no.	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Hydraulic connections																			
Connections (in/out)	°,A,E,L	Туре								Gr	ooved joi	nts							
	0	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"	5"	5"	5"	5"	5"
Sizes (in/out)	A,L	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"	5"	5"	5"	5"	5"	5"
	E	Ø	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"	5"	5"	5"	5"	5"	5"

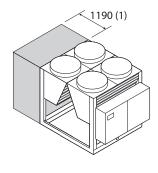
Fans																			
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: °																			
Fan																			
Туре	°,A,E,L	type									Axial								
	0	no.	4	4	4	6	6	6	6	8	10	10	10	14	14	16	16	16	16
Number	A,L	no.	4	6	6	6	8	8	8	10	10	12	12	14	16	16	16	18	18
	Е	no.	6	8	8	8	10	10	12	14	14	16	16	18	20	20	20	22	22
F	°,A	type								As	synchrono	us							
Fan motor	E,L	type								Asynchro	nous with	phase cu	t						
	0	m³/h	82398	82398	82424	123596	123596	123561	123561	164866	205969	205969	205969	288399	288399	329594	329594	329598	329598
A: A	A	m³/h	82403	123609	123609	123605	164779	164779	164779	205996	205998	247152	247152	288414	329556	329556	329556	370819	370819
Air flow rate	E	m³/h	102378	136491	136491	136491	170613	170613	204757	238871	238871	272982	272982	315634	349835	349835	349835	383943	383943
	L	m³/h	68237	102348	102348	102356	136528	136528	136528	170617	170614	204825	204825	238801	273004	273004	273004	307010	307010

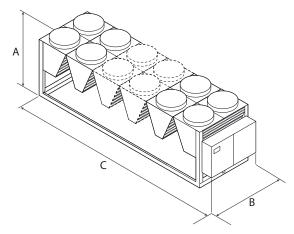
Sound data

Journa data																			
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Sound data calculated in cooling mode (1	I)																		
	0	dB(A)	90,5	90,5	90,5	92,3	92,4	92,5	92,6	93,8	94,7	94,7	94,8	96,5	96,6	97,1	97,1	97,2	97,3
Cound nowar lovel	Α	dB(A)	90,5	92,2	92,2	92,3	93,6	93,6	93,7	94,6	94,7	95,4	95,5	96,5	97,1	97,1	97,1	97,6	97,7
Sound power level	E	dB(A)	85,2	86,2	86,2	87,0	88,3	88,8	89,7	90,1	90,2	90,9	91,2	92,2	92,5	92,6	92,8	93,3	93,5
	L	dB(A)	83,5	84,7	84,8	85,8	87,2	87,8	88,3	88,9	89,0	89,8	90,1	91,0	91,3	91,4	91,7	92,2	92,4
	0	dB(A)	58,4	58,4	58,4	60,0	60,1	60,2	60,4	61,3	62,1	62,2	62,2	63,7	63,7	64,1	64,2	64,3	64,3
Cound procesure lovel (10 m)	Α	dB(A)	58,4	59,9	59,9	60,0	61,2	61,2	61,3	62,1	62,1	62,8	62,8	63,7	64,1	64,1	64,2	64,6	64,6
Sound pressure level (10 m)	Е	dB(A)	52,9	53,8	53,8	54,6	55,7	56,3	57,0	57,3	57,4	57,9	58,2	59,1	59,3	59,4	59,7	60,0	60,2
	L	dB(A)	51,4	52,5	52,5	53,5	54,8	55,4	55,9	56,4	56,5	57,1	57,4	58,2	58,4	58,5	58,8	59,1	59,4

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS





(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes: NRG 0800H°, 0900H°, 1000H° NRG 0800HL NRG 0800HA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00)																		
Dimensions and weights																			
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	0	mm	2780	2780	2780	3970	3970	3970	3970	5160	6350	6350	6350	8730	8730	9920	9920	9920	9920
C	A,L	mm	2780	3970	3970	3970	5160	5160	5160	6350	6350	7540	7540	8730	9920	9920	9920	11110	11110
	E	mm	3970	5160	5160	5160	6350	6350	7540	8730	8730	9920	9920	11110	12300	12300	12300	13490	13490
Weights																			
	0	kg	2350	2385	2385	3040	3185	3335	3585	4425	5200	5430	5540	7035	7310	8070	8185	8410	8520
Empty weight	A,L	kg	2350	2850	2860	3045	3770	3930	4170	4905	5230	5850	5880	7035	7800	8105	8220	8840	8930
	E	kg	2835	3460	3465	3650	4405	4405	4995	5800	6100	6795	6915	7980	8810	9090	9200	9845	9970
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: AA	A. AB. AC. A	D. AE.																	
KB, KC, KD, KE, KF, KG, KH,		, - ,	,	-,,	,	,, .	,	,, .	_, _,	<i>-</i> -, -	,,		-,,	,	,, -	,,	3, •	-,, -	47
Dimensions and weights	,																		
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
-	0	mm	3970	3970	3970	3970	3970	3970	3970	5160	6350	6350	6350	8730	8730	9920	9920	9920	9920
C	A,L	mm	3970	3970	3970	3970	5160	5160	5160	6350	6350	7540	7540	8730	9920	9920	9920	11110	11110
	E	mm	3970	5160	5160	5160	6350	6350	7540	8730	8730	9920	9920	11110	12300	12300	12300	13490	13490
Weights																			
	0	kg	3350	3380	3380	3770	3915	4065	4315	5185	6000	6230	6345	7725	8005	8760	8875	9100	9210
Empty weight	A,L	kg	3330	3585	3595	3780	4530	4685	4925	5710	6035	6810	6840	7725	8005	8760	8875	9100	9210
17 - 3	E	kg	3570	4215	4225	4180	5165	5165	5955	6765	7110	7680	7800	8875	9705	9985	10100	10745	10865
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: DA	A DR DC I	D DE																	
PE, PF, PG, PH, PI, PJ	٦, ٥٥, ٥८, ١	, DE,	, טוי, ט	G, DII,	, טו, ט	J, IM, I	b, ic,	ID, IL,	ir, id,	111, 11,	יאל, ארו	, ,,,,,	د, على, .	, J.,	JG, JII	, 31, 33	, ra, r	В, ГС,	, F D,
Dimensions and weights																			
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
R	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	,,,,,,,	mm	2780	2780	2780	3970	3970	3970	3970	5160	6350	6350	6350	8730	8730	9920	9920	9920	9920
C	A,L	mm	2780	3970	3970	3970	5160	5160	5160	6350	6350	7540	7540	8730	9920	9920	9920	11110	11110
	E	mm	3970	5160	5160	5160	6350	6350	7540	8730	8730	9920	9920	11110	12300	12300	12300	13490	13490
Weights	-	111111	3710	3100	3100	3100	0330	0330	7.5-10	0130	0130	7720	7720	11110	12300	12300	12300	13770	13-170
neight	0	kg	2780	2810	2810	3465	3610	3760	4010	4790	5560	5795	5905	7420	7695	8450	8565	8790	8900
Empty weight	A,L	kq	2780	3280	3285	3475	4135	4290	4535	5270	5595	6210	6245	7420	8185	8485	8600	9220	9310
Linpty weight	F F	kq	3200	3825	3830	4015	4770	4770	5360	6165	6465	7160	7280	8360	9190	9470	9585	10230	10350
	L	кy	3200	3023	7070	4013	4//0	4//0	2200	0103	UHUJ	/ 100	7200	0,000	7170	7470	7,70,7	10230	טרנטו

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRB 0800-2406

Air-water chiller

Cooling capacity 216,9 ÷ 716,9 kW



- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- HP floating: ESEER +7% with inverter fans





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

They are outdoor units with axial fan scroll compressors, microchannel batteries and plate exchangers.

In the unit with desuperheater, it is also possible to produce free-hot water. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to 51°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

It is standard in all sizes from 1805 to 2406.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. ESEER up to +7% with inverter fans.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load. Night Mode
 for standard versions is mandatory DCPX accessory (standard on
 all low noise versions) or "J" inverter fan

CONFIGURATOR

Configuration options

Fiel	d	Description								
1,2,	.3	NRB								
4.5	6,7	Size								
	,,	0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406								
В	0	Operating field								
		Standard mechanic thermostatic valve (1)								
	Х	Electronic thermostatic expansion valve (1)								
	Υ	Low temperature mechanic thermostatic valve (2)								
_	Z	Low temperature electronic thermostatic valve (2)								
9	0	Model								
		Cooling only								
	C	Motocondensing unit (3)								
10	0	Heat recovery								
		Without heat recovery								
	D	With desuperheater (4)								
	T	With total recovery (5)								
11	0	Version								
		Standard								
	Α	High efficiency								
	E	Silenced high efficiency								
	L	Standard silenced								
	N	Silenced very high efficiency								
	U	Very high efficiency								
12	0	Coils								
		Aluminium microchannel								
	1	Copper-aluminium								
	0 R	Coated aluminium microchannel								
	S	Copper-copper								
	<u>ه</u>	Tinned copper								
13	V	Copper-painted alumimium Fans								
13		Inverter								
	M									
14	IVI	Oversized								
14	0	Power supply 400V ~ 3 50Hz with magnet circuit breakers								
15,1	16	Integrated hydronic kit								
13,	10	Without hydronic kit								
	00	Without hydronic kit								
	00	Kit with n° 1 pump								
	PA	Pump A								
	PB	Pump B								
	PC	Pump C								
	PD									
	PE	Pump D Pump E								
	PF									
_	PG	Pump F								
	ru	Pump G								

F: 11	D. Lat
Field	Description
PH_	Pump H
PI	Pump I
PJ	Pump J (6)
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump (7)
DB	Pump B + stand-by pump (7)
DC	Pump C + stand-by pump (7)
DD	Pump D + stand-by pump (7)
DE	Pump E + stand-by pump (7)
DF	Pump F + stand-by pump (7)
DG	Pump G + stand-by pump (7)
DH	Pump H + stand-by pump (7)
DI	Pump I + stand-by pump (7)
DJ	Pump J + stand-by pump (8)
	Kit with storage tank and n° 1 pump
AA	Storage tank and pump A
AB	Storage tank and pump B
AC	Storage tank and pump C
AD	Storage tank and pump D
AE	Storage tank and pump E
AF	Storage tank and pump F
AG	Storage tank and pump G
AH	Storage tank and pump H
Al	Storage tank and pump I
AJ	Storage tank and pump J (6)
	Kit with storage tank and n° 1 pump + stand-by pump
BA	Storage tank with pump A + stand-by pump (7)
BB	Storage tank with pump B + stand-by pump (7)
ВС	Storage tank with pump C + stand-by pump (7)
BD	Storage tank with pump D + stand-by pump (7)
BE	Storage tank with pump E + stand-by pump (7)
BF	Storage tank with pump F + stand-by pump (7)
BG	Storage tank with pump G + stand-by pump (7)
ВН	Storage tank with pump H + stand-by pump (7)
BI	Storage tank with pump I + stand-by pump (7)
BJ	Storage tank with pump J + stand-by pump (8)

- (1) Water produced from 4 °C t ÷ 18 °C
 (2) Processed water from 4 °C to −8° C for the °−L versions, and from 4 °C to −10°C for A − E − U − N versions
 (3) Condensing units "C" are not compatible with the Y/X/Z/T/D option
 (4) The temperature of the water in the heat exchanger inlet must never drop below 35 °C.
 (5) None of the hydronic kits (from PA to BJ) are compatible with the following sizes and with versions with heat recovery T: 0800 − 0900 − 1000 − 1100 version °; 0800 − 0900 version A; 0800 − 0900 version L. None of the hydronic kits with pump(s) and storage tank (from AA to BJ) are compatible with all the sizes and with versions with heat recovery T
 (6) For all configurations including pump J please contact the factory.
 (7) None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805 versions °. L−A, 2006-2206 version °.
 (8) For all combinations with pump J, please contact our head office. None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805 versions °.L−A, 2006-2206 version °.

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ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FL:** Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

XLA: The Kit, which consists of resistances for the electric power board and "J" inverter fans, allows the outdoor air temperature operating range to be extended from -10° C to -20° C outdoor air.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L,N,U								•			•
MULTICHILLER_EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L,N,U	•	•		•		•	•	•	•	•	•

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
ans: M					'	
0	DCPX130	DCPX130	DCPX130	DCPX130	DCPX131	DCPX131
A	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
E,L,N	As standard					
U	DCPX131	DCPX131	DCPX131	DCPX132	DCPX132	DCPX132
Ver	1600	1805	2006		2206	2406
ans: M		'			'	
0	DCPX131	DCPX155	DCPX155	5	DCPX155	DCPX156
A	DCPX132	DCPX155	DCPX156	6	DCPX156	DCPX134
E,L,N	As standard	As standard	As standa	rd	As standard	As standard
II	DCPX133	DCPX134	DCPX134	4	DCPX135	DCPX135

Antivibration

Alltiviblation											
Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
0	AVX805	AVX805	AVX805	AVX805	AVX808	AVX808	AVX808	AVX810	AVX810	AVX810	AVX809
A,L	AVX805	AVX805	AVX806	AVX808	AVX808	AVX808	AVX810	AVX810	AVX809	AVX809	AVX863
E,U	AVX806	AVX806	AVX808	AVX807	AVX807	AVX810	AVX809	AVX863	AVX863	AVX813	AVX813
N	AVX807	AVX807	AVX807	AVX809	AVX809	AVX809	AVX863	AVX812	AVX812	AVX814	AVX814
Integrated hydronic kit: AA, AB, AC, Al	D, AE, AF, AG, AH, A	I, AJ, BA, BB, BO	C, BD, BE, BF, BC	G, BH							
0	AVX844	AVX844	AVX844	AVX844	AVX844	AVX848	AVX848	AVX845	AVX845	AVX845	AVX847
A,L	AVX844	AVX844	AVX844	AVX844	AVX844	AVX848	AVX845	AVX845	AVX847	AVX847	AVX849
E,U	AVX844	AVX844	AVX844	AVX845	AVX845	AVX845	AVX847	AVX849	AVX849	AVX851	AVX851
N	AVX845	AVX845	AVX845	AVX847	AVX847	AVX847	AVX849	AVX850	AVX851	AVX852	AVX852
Integrated hydronic kit: BI, BJ											
0	AVX844	AVX844	AVX844	AVX844	AVX846	AVX848	AVX848	AVX845	AVX845	AVX845	AVX847
A,L	AVX844	AVX844	AVX846	AVX846	AVX846	AVX848	AVX845	AVX845	AVX847	AVX847	AVX849
E,U	AVX844	AVX844	AVX846	AVX845	AVX845	AVX845	AVX847	AVX849	AVX849	AVX851	AVX851
N	AVX845	AVX845	AVX845	AVX847	AVX847	AVX847	AVX849	AVX850	AVX851	AVX852	AVX852
Integrated hydronic kit: DA, DB, DC, P	A, PB, PC, PD, PE, F	PF, PG, PH									
0	AVX822	AVX822	AVX822	AVX822	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX828
A,L	AVX822	AVX822	AVX825	AVX825	AVX825	AVX825	AVX826	AVX826	AVX828	AVX828	AVX830
E,U	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX828	AVX830	AVX830	AVX832	AVX832
N	AVX826	AVX826	AVX826	AVX828	AVX828	AVX828	AVX830	AVX831	AVX831	AVX833	AVX833
Integrated hydronic kit: DD, DE, DF, D	G, DH, PI, PJ										
0	AVX823	AVX823	AVX823	AVX823	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX829
A,L	AVX823	AVX823	AVX825	AVX825	AVX825	AVX825	AVX826	AVX826	AVX829	AVX829	AVX830
E,U	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX829	AVX830	AVX830	AVX832	AVX832
N	AVX826	AVX826	AVX826	AVX829	AVX829	AVX829	AVX830	AVX831	AVX831	AVX833	AVX833
Integrated hydronic kit: DI, DJ											
0	AVX864	AVX864	AVX829	AVX864	AVX825	AVX825	AVX827	AVX827	AVX827	AVX827	AVX829

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A,L	AVX864	AVX864	AVX825	AVX825	AVX825	AVX825	AVX827	AVX827	AVX829	AVX829	AVX830
E,U	AVX825	AVX825	AVX825	AVX827	AVX827	AVX827	AVX829	AVX830	AVX830	AVX832	AVX832
N	Δ\/\\27	Δ\/¥827	Δ\/ΥΩ27	Δ\/YΩ2Q	ΔΛΛΧδΟ	ΔΥΥΩΌ	VAXXSU	Δ\/YΩ31	Δ\/Y.2.3.1	V/\X833	V/X833

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°,A,E,L,N,U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°,A,E,L,N,U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°,A,L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E,U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
0	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A,L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2416
E,N,U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
٥	GP2VN	GP2VN	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP4G	GP4G	GP4G	GP5G
A,L	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4G	GP5G	GP5G	GP6V
E,U	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

■ GP2VN becomes GP2VNA if configured with a type A or B hydronic kit

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
٥	T6NRB13	T6NRB13	T6NRB13	T6NRB13	T6NRB15						
A,L	T6NRB13	T6NRB13	T6NRB14	T6NRB14	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB16
E,U	T6NRB14	T6NRB14	T6NRB14	T6NRB14	T6NRB15	T6NRB15	T6NRB15	T6NRB17	T6NRB16	T6NRB19	T6NRB19
N	T6NRB14	T6NRB14	T6NRB14	T6NRB14	T6NRB15	T6NRB15	T6NRB18	T6NRB19	T6NRB19	T6NRB20	T6NRB20

A grey background indicates the accessory must be assembled in the factory $% \left(1\right) =\left(1\right) \left(1\right)$

Kit for low temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
٥	-	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)
A,L	-	-	-	-	-	-	XLA (1)				
E,U	-	-	-	XLA (1)							
N	XLA (1)										

(1) With the accessory XLA do not use the DCPX.
The accessory cannot be fitted on the configurations indicated with A grey background indicates the accessory must be assembled in the factory

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PERFORMANCE SPECIFICATIONS

NRB - °

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	221,5	244,5	270,3	299,7	353,1	404,9	439,0	511,2	560,9	598,2	675,8
Input power	kW	73,3	83,1	94,1	110,3	117,5	135,4	155,1	175,7	194,0	216,6	236,5
Cooling total input current	А	128,3	143,1	160,0	185,5	201,6	229,9	260,8	299,7	329,8	366,5	404,6
EER	W/W	3,02	2,94	2,87	2,72	3,00	2,99	2,83	2,91	2,89	2,76	2,86
Water flow rate system side	l/h	38117	42077	46498	51565	60733	69640	75512	87913	96469	102883	116222
Pressure drop system side	kPa	46	55	38	45	44	39	46	40	47	53	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - L

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C (1)												
Cooling capacity	kW	216,9	237,7	272,7	307,7	343,9	391,0	438,4	498,2	555,4	608,2	666,2
Input power	kW	73,0	85,9	92,0	107,4	122,7	139,0	151,9	173,3	191,6	213,6	233,8
Cooling total input current	А	122,8	142,3	154,5	179,0	203,4	231,8	250,8	289,7	318,6	359,2	390,2
EER	W/W	2,97	2,77	2,97	2,87	2,80	2,81	2,89	2,87	2,90	2,85	2,85
Water flow rate system side	l/h	37323	40891	46905	52926	59137	67243	75381	85669	95498	104586	114564
Pressure drop system side	kPa	25	20	27	24	29	23	30	28	37	36	44

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	224,1	252,2	283,7	326,1	361,2	411,7	462,2	519,2	576,0	633,3	697,6
Input power	kW	70,6	80,9	90,2	104,7	115,3	131,8	147,6	166,3	183,5	203,1	223,3
Cooling total input current	A	123,9	139,9	158,8	181,8	198,2	224,1	252,4	283,8	316,2	348,7	386,3
EER	W/W	3,17	3,12	3,15	3,12	3,13	3,12	3,13	3,12	3,14	3,12	3,12
Water flow rate system side	l/h	38561	43394	48802	56076	62118	70789	79487	89271	99048	108894	119965
Pressure drop system side	kPa	27	22	30	27	32	25	34	30	39	39	48

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	219,2	248,3	275,0	321,4	358,7	403,2	455,0	514,5	569,0	637,2	688,3
Input power	kW	69,6	79,4	88,5	102,2	114,9	129,8	144,5	164,7	183,0	203,4	221,4
Cooling total input current	A	119,5	134,7	148,8	172,1	192,6	215,7	240,1	275,1	306,1	342,6	372,8
EER	W/W	3,15	3,13	3,11	3,15	3,12	3,11	3,15	3,12	3,11	3,13	3,11
Water flow rate system side	l/h	37710	42726	47303	55271	61679	69338	78240	88465	97841	109550	118323
Pressure drop system side	kPa	19	23	20	27	21	27	26	33	33	22	25

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	227,6	257,6	286,5	329,6	369,8	414,6	466,9	529,2	594,0	655,1	716,9
Input power	kW	68,8	77,7	86,8	99,5	111,7	126,1	140,9	159,5	179,0	197,8	215,3
Cooling total input current	A	124,3	138,5	152,9	176,0	195,6	218,0	244,0	278,3	311,7	347,7	377,4
EER	W/W	3,30	3,31	3,30	3,31	3,31	3,28	3,31	3,32	3,32	3,31	3,33
Water flow rate system side	l/h	39151	44308	49294	56689	63596	71302	80286	91003	102137	112618	123250
Pressure drop system side	kPa	20	25	21	29	23	28	27	35	36	23	27

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

11112 11												
Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C (1)												
Cooling capacity	kW	227,7	260,4	284,7	327,7	367,7	412,3	466,1	521,6	579,1	645,7	702,6
Input power	kW	68,5	78,9	86,4	98,5	111,9	125,4	140,4	157,8	176,0	194,6	212,9
Cooling total input current	A	118,2	135,1	146,9	166,9	188,6	209,4	234,0	264,2	295,4	328,9	360,0
EER	W/W	3,32	3,30	3,30	3,33	3,29	3,29	3,32	3,31	3,29	3,32	3,30
Water flow rate system side	l/h	39166	44792	48972	56365	63234	70905	80151	89691	99569	111009	120789
Pressure drop system side	kPa	20	25	21	28	23	28	27	34	34	23	26

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
SEER - 12/7 (EN14825: 2018) (1)													
	0	W/W	4,44	4,33	4,27	4,25	4,39	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,65	4,55	4,66	4,70	4,69	4,73	4,76	4,64	4,64	4,62	4,61
SEER	E	W/W	4,75	4,67	4,63	4,81	4,82	4,76	4,88	4,73	4,67	4,70	4,74
SEEK	L	W/W	4,56	4,42	4,50	4,51	4,58	4,59	4,67	4,56	4,56	4,58	4,57
	N	W/W	4,85	4,79	4,83	4,96	4,93	4,97	5,03	4,93	4,82	4,89	4,83
	U	W/W	4,76	4,75	4,71	4,89	4,85	4,86	4,91	4,84	4,77	4,82	4,78
	0	%	174,60	170,10	167,60	167,10	172,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	182,80	179,10	183,40	185,00	184,70	186,20	187,30	182,70	182,40	181,70	181,50
C	E	%	187,00	183,70	182,00	189,30	189,60	187,50	192,30	186,20	183,90	184,80	186,40
Seasonal efficiency	L	%	179,20	173,80	177,00	177,50	180,10	180,40	183,90	179,50	179,40	180,10	179,60
	N	%	191,10	188,40	190,30	195,40	194,20	195,90	198,10	194,10	189,90	192,40	190,00
	U	%	187,40	187,10	185,20	192,50	191,00	191,30	193,30	190,70	187,70	189,60	188,10
SEER - 23/18 (EN14825: 2018) (3)				-									
25/10 (2111102512010) (5)	0	W/W	5,28	5,16	5,07	4,96	5,40	5,44	5,18	5,07	5,13	4,77	5,07
	A	W/W	5,50	5,35	5,50	5,51	5,55	5,55	5,63	5,34	5,44	5,30	5,42
SEER	E	W/W	5,62	5,53	5,46	5,70	5,69	5,63	5,77	5,50	5,52	5,48	5,59
SEEK	L	W/W	5,34	5,14	5,35	5,33	5,37	5,34	5,47	5,26	5,32	5,20	5,26
	N	W/W	5,92	5,71	5,76	5,91	5,88	5,91	5,99	5,75	5,74	5,71	5,75
	U	W/W	5,65	5,67	5,59	5,82	5,76	5,80	5,83	5,67	5,69	5,61	5,68
	0	%	208,10	203,40	199,80	195,40	212,90	214,50	204,10	199,90	202,10	187,80	199,60
	A	%	217,00	210,90	217,00	217,50	219,10	219,10	222,10	210,50	214,60	209,10	213,60
Seasonal efficiency	E	%	221,90	218,30	215,30	224,90	224,50	222,20	227,70	216,80	217,70	216,00	220,60
Seasonal efficiency	L	%	210,40	202,70	211,00	210,20	211,60	210,40	215,80	207,40	209,70	205,10	207,50
	N	%	229,90	225,30	227,50	233,50	232,10	233,40	236,40	226,80	226,40	225,50	227,10
	U	%	222,80	223,70	220,70	229,90	227,50	228,80	230,20	223,80	224,50	221,50	224,00
SEPR - (EN 14825: 2018) (3)													
	0	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	Α	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
CEDD	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
SEPR	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,67	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(3) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
SEER - 12/7 (EN14825: 2018) (1)													
	0	W/W	4,23	4,13	4,10	4,11	4,19	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,41	4,34	4,39	4,45	4,48	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEER	E	W/W	4,47	4,40	4,40	4,54	4,54	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEEK	L	W/W	4,31	4,17	4,25	4,27	4,31	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	W/W	4,61	4,56	4,58	4,72	4,68	4,72	4,78	4,66	4,58	4,61	4,62
	U	W/W	4,51	4,51	4,51	4,63	4,64	4,65	4,70	4,61	4,56	4,57	4,59
	0	%	166,00	162,30	161,00	161,20	164,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	173,50	170,60	172,40	174,90	176,00	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	E	%	175,60	173,10	173,10	178,70	178,50	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
asonai eπciency - - -	L	%	169,40	163,60	166,80	167,60	169,20	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	%	181,30	179,30	180,00	185,70	184,10	185,90	188,20	183,40	180,30	181,50	181,60
	U	%	177,20	177,40	177,20	182,10	182,50	183,10	184,80	181,40	179,20	179,90	180,50
SEER - 23/18 (EN14825: 2018) (3)													
	0	W/W	5,08	4,98	4,92	4,82	5,20	5,26	5,03	4,91	4,97	4,63	4,91
	A	W/W	5,29	5,15	5,25	5,28	5,35	5,37	5,42	5,15	5,22	5,09	5,22
SEER	E	W/W	5,36	5,24	5,28	5,40	5,43	5,37	5,54	5,21	5,22	5,21	5,30
SEEK	L	W/W	5,06	4,87	5,07	5,08	5,05	5,10	5,19	5,02	5,02	4,92	4,99
	N	W/W	5,57	5,47	5,50	5,66	5,61	5,65	5,73	5,48	5,48	5,44	5,54
	U	W/W	5,41	5,44	5,41	5,58	5,56	5,60	5,63	5,46	5,49	5,39	5,50
	0	%	200,10	196,00	193,60	189,90	205,10	207,30	198,30	193,30	195,70	182,00	193,50
	A	%	208,40	203,00	206,80	208,00	211,10	211,60	213,60	203,10	205,70	200,60	205,60
Canada officiana	E	%	211,40	206,40	208,30	213,00	214,00	211,80	218,50	205,50	205,70	205,30	208,90
Seasonal efficiency	L	%	199,40	191,90	199,70	200,10	199,10	200,80	204,40	197,70	197,60	193,90	196,40
	N	%	219,70	215,80	216,80	223,40	221,50	223,00	226,20	216,00	216,30	214,60	218,40
-	U	%	213,40	214,40	213,30	220,00	219,50	221,00	222,20	215,30	216,40	212,50	216,90

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
SEPR - (EN 14825: 2018) (3)													
	0	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
SEPR	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,63	5,60	5,64
	U	W/W	5.67	5.54	5,66	5,54	5.68	5,59	5.69	5,55	5,55	5,58	5.72

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
	0	Α	164,3	180,7	197,0	226,4	262,1	291,1	320,1	371,3	416,0	445,0	480,4
Maninarum arresent (FLA)	A,L	Α	177,1	193,4	222,5	251,8	281,2	310,2	351,9	396,7	454,2	483,2	530,8
Maximum current (FLA)	E,U	A	189,8	206,1	222,5	264,5	293,9	322,9	364,6	428,0	472,8	514,5	543,5
	N	Α	202,5	218,8	235,2	277,3	306,6	335,6	383,2	440,7	485,5	527,2	556,2
	0	A	352,9	408,1	424,4	477,1	512,8	625,3	654,3	705,5	750,3	779,3	814,6
Dook current (LDA)	A,L	Α	365,6	420,8	449,9	502,5	531,9	644,4	686,1	730,9	788,4	817,4	865,0
Peak current (LRA)	E,U	А	378,3	433,5	449,9	515,3	544,6	657,1	698,8	762,2	807,0	848,7	877,7
	N	A	391,1	446,2	462,6	528,0	557,3	669,8	717,4	774,9	819,7	861,4	890,4

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Туре	°,A,E,L,N,U	type						Scroll					
Compressor regulation	°,A,E,L,N,U	Туре						Asynchronous			-		
Number	°,A,E,L,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type						R410A			-		
	0	kg	14,0	14,5	15,0	16,0	20,5	21,0	21,0	26,0	26,0	26,0	31,0
Refrigerant load	A,L	kg	15,0	16,0	20,0	22,0	21,0	22,5	23,5	25,0	30,0	31,0	32,5
circuit 1 (1)	E,U	kg	20,5	20,0	21,5	26,0	25,0	26,0	30,0	32,0	36,0	44,5	56,0
-	N	kg	25,0	26,5	26,5	29,0	28,0	35,0	42,0	38,0	43,0	62,0	42,0
	0	kg	14,0	14,5	15,0	16,0	20,5	21,0	21,0	29,0	29,0	29,0	34,0
Refrigerant load	A,L	kg	15,0	16,0	20,0	22,0	21,0	22,5	25,5	30,0	34,0	34,0	37,5
circuit 2 (1)	E,U	kg	20,5	20,0	21,5	27,0	28,0	27,0	32,0	37,0	39,0	45,5	56,0
	N	kg	25,0	26,5	26,5	30,0	31,0	35,0	42,0	42,0	47,0	62,0	49,0
Potential global heating	°,A,E,L,N,U	GWP						2088kgCO₂eq					
System side heat exc	hanger												
Туре	°,A,E,L,N,U	type						Brazed plate					
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connection	ıs												
Connections (in/out)	°,A,E,L,N,U	Туре						Grooved joints					
Hydraulic connection	s without hydr	onic kit											
Sizes (in/out)	°,A,E,L,N,U	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"
Hydraulic connection	ıs with hydroni	c kit											
Sizes (in/out)	°,A,E,L,N,U	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"

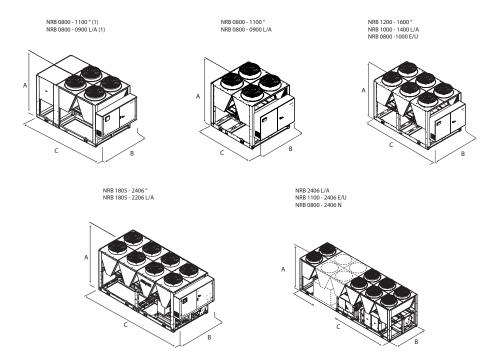
⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

Fans						4400	4200						
Size Fans: M			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
rans: w													
Туре	°,A,E,L,N,U	type						Axial					
турс	°,A,U	type						Asynchronous					
Fan motor	E,L,N	type					Asynch	ronous with pl					
	0	no.	4	4	4	4	6	6	6	8	8	8	10
Number	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
With static pressure													
•	0	m³/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m³/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
Air flow rate	E	m³/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m³/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m³/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m³/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static procesure	°,A,U	Pa	50	50	50	50	50	50	50	50	50	50	50
High static pressure	E,L,N	Pa	120	120	120	120	120	120	120	120	120	120	120
Without Static pressure													
	0	m³/h	72000	72000	72000	72000	108000	108000	108000	144000	144000	144000	180000
	A	m³/h	72000	72000	108000	108000	108000	108000	144000	144000	180000	180000	216000
Air flow rate	E	m³/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
7111 HOW TALL	L	m³/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m³/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m³/h	108000	108000	108000	144000	144000	144000	180000	216000	216000	252000	252000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0	0	0
With static pressure													
		dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
Sound power level	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5
Without Static pressure						-							
		dB(A)	89,7	89,7	89,7	89,7	91,7	91,7	91,7	93,4	93,2	93,5	94,9
	A	dB(A)	89,7	89,7	91,7	91,7	91,7	91,7	93,1	93,4	94,3	94,6	95,8
Sound power level	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	92,3	92,3	92,3	93,6	93,6	93,6	94,6	95,7	95,5	96,5	96,8
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
Fan													
Туре	°,A,E,L,N,U	type						Axial					
Fan motor	°,A,E,L,N,U	type						Inverter					
	0	no.	4	4	4	4	6	6	6	8	8	8	10
Number	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
numuci	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Inverter fan													
		m³/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m³/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
Air flow rate	E	m³/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
7 III HOW TULE	L	m³/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m³/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m³/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
	•	Pa	120	120	120	120	120	120	120	75	75	75	75
High static pressure	A,U	Pa	120	120	120	120	120	120	120	120	120	120	120
	E,L,N	Pa	200	200	200	200	200	200	200	200	200	200	200
Sound data calculated in cooling													
	•	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
Sound power level	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
Journa power level													
Journal power level	NU	dB(A)	86,3 90,0	86,3 90,0	86,3 90,0	87,5 91,5	87,5 91,5	87,5 91,5	88,5 92,7	89,8 94,2	90,3 94,7	91,5 96,0	92,0 96,5

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes: 0800°, 0900°, 1000°, 1100° 0800L, 0900L 0800A, 0900A

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights													
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	0	mm	2780	2780	2780	2780	3970	3970	3970	5160	5160	5160	6350
(A,L	mm	2780	2780	3970	3970	3970	3970	4760	5160	6350	6350	7140
C	E,U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520

■ The units 0800°, 0900°, 1000°, 1100°; 0800L, 0900L; and 0800A, 0900A with the "storage tank" option, are 3970mm long.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
	0	kg	2240	2280	2350	2390	2880	2930	2960	3660	3830	3870	4360
	A,L	kg	2260	2320	2800	2870	2910	2970	3490	3710	4280	4360	4780
Empty weight	E,U	kg	2720	2760	2840	3370	3440	3460	3940	4490	4700	5350	5390
	N	kg	3220	3270	3340	3770	3840	3870	4290	4940	5160	5750	5790

[■] The weights are for standard units with plate heat exchangers and no hydronic kit.

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.



















NRB 0800-2406 Q

Air-water chiller with shell and tube heat exchanger

Cooling capacity 216,9 ÷ 716,9 kW



- Microchannel coil
- Shell and tube heat exchanger
- Night mode
- Operation up to 50 °C outdoor air
- HP floating: ESEER +7% with inverter fans





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

They are outdoor units with axial fan scroll compressors, microchannel coils and Shell and tube exchangers.

In the unit with desuperheater, it is also possible to produce free-hot water. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

 $^{\circ}$ Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. ESEER up to +7% with inverter fans.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load. Night Mode
 for standard versions is mandatory DCPX accessory (standard on
 all low noise versions) or "J" inverter fan

504 www.aermec.com NRB-0800-3600-CO-T_Y_CE50_10

CONFIGURATOR

_		GURATOR
Fiel		Description
1,2,	3	NRB
4,5,	6,7	Size 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		Operating field
	0	Standard mechanic thermostatic valve (1)
	Χ	Electronic thermostatic expansion valve (1)
	Υ	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
9		Model
	Q	Cooling only with shell and tube heat exchanger
10		Heat recovery
	0	Without heat recovery
	D	With desuperheater (3)
	T	With total recovery (4)
11		Version
	0	Standard
	Α	High efficiency
	Ε	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		Coils
	0	Aluminium microchannel
	1	Copper-aluminium
	0	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	٧	Copper pieps-Coated aluminium fins
13		Fans
	J	Inverter
	М	Oversized

Field	Description
14	Power supply
0	400V ~ 3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
	Without hydronic kit (5)
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump

- (1) Water produced from 4 °C \div 18 °C
- (1) Water produces 10114 C = -1. (2) Processed water from 4°C to -8°C for the ° L versions, and from 4°C to -10°C for A E U N versions (3) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
- (4) For compatibility with total recovery see table below.(5) For compatibility with the hydronic kit, see the table below.

Compatible with total recovery

Version		800	900	1000	1100	1200	1400	1600	1805	2006	2206	2406
standard	0	-	-	-	-	-	-	-	-	-	-	•
Standard silenced	L	-	-	-	-	-	-	-	-	•	•	•
High efficiency	A	-	-	-	-	-	-	-	-	•	•	
Silenced high efficiency	E	-	-	-	-	-	-	•	•	•	•	•
Very high efficiency	U	-	-	-	-	-	-	•	•	•		•
Silenced very high efficiency	N	-	-	-	•	•		•	•		•	•

Compatibility of models with hydronic units available with a configurator

Version		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
standard	0	-	-	-	-	•	-	-	•	•	•	•
Standard silenced	L	-	-	•	-	-	-	•	•	•	•	
High efficiency	A	-	-		-	-	-			•		
Silenced high efficiency	E	•		-	•	•	•	•	•	•	•	
Very high efficiency	U	•	•	-	•	•		•	•	•	•	•
Silenced very high efficiency	N			•	•	•	•	•	•			•

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. FL: Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP: Anti-intrusion grid kit

KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E,L,N,U							•		•		•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,A,E,L,N,U	•		•		•	•	•				•
PGD1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
Fans: M						
0	DCPX130	DCPX130	DCPX130	DCPX130	DCPX131	DCPX131
A	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
E,L,N	As standard					
U	DCPX131	DCPX131	DCPX131	DCPX132	DCPX132	DCPX132
Ver	1600	1805	20	006	2206	2406
Fans: M		'				
0	DCPX131	DCPX155	DCF	PX155	DCPX155	DCPX156
A	DCPX132	DCPX155	DCF	PX156	DCPX156	DCPX134
E,L,N	As standard	As standard	As st	andard	As standard	As standard
U	DCPX133	DCPX134	DCP	X134	DCPX135	DCPX135

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
0	AVX1107	AVX1107	AVX1107	AVX1107	AVX1108	AVX1108	AVX1108	AVX1109	AVX1109	AVX1109	AVX1110
A,L	AVX1107	AVX1107	AVX1108	AVX1108	AVX1108	AVX1108	AVX1109	AVX1109	AVX1110	AVX1110	AVX1111
E,U	AVX1108	AVX1108	AVX1108	AVX1109	AVX1109	AVX1109	AVX1110	AVX1111	AVX1111	AVX1105	AVX1105
N	AVX1109	AVX1109	AVX1109	AVX1110	AVX1110	AVX1110	AVX1111	AVX1105	AVX1105	AVX1102	AVX1102
Integrated hydronic kit: DA, DB, DC,	DD, DE, DF, DG, DH, I	DI, DJ, PA, PB, P	C, PD, PE, PF, P	G, PH, PI, PJ							
0	-	-	-	-	AVX1108	-	-	AVX1109	AVX1109	AVX1109	AVX1110
A,L	-	-	AVX1108	-	-	-	AVX1109	AVX1109	AVX1110	AVX1110	AVX1111
E,U	AVX1108	AVX1108	-	AVX1109	AVX1109	AVX1109	AVX1110	AVX1111	AVX1111	AVX1105	AVX1105
N	AVX1109	AVX1109	AVX1109	AVX1110	AVX1110	AVX1110	AVX1111	AVX1105	AVX1105	AVX1102	AVX1102

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°,A,E,L,N,U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°,A,E,L,N,U D	PRENRB1600 (1) DREN	RB1805 (1) DRE	NRB2006 (1) DI	RENRB2206 (1) DF	RENRB2406 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°,A,L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E,U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Ver	1600	1805	2006	2206	2406
0	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A,L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2416
E,N,U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
0	GP2VN	GP2VN	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP4VN	GP5VN
A,L	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN
E,U	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP4VN
Integrated hydronic kit: DA, DB, DC, D	D, DE, DF, DG, DH, I	OI, DJ, PA, PB, P	C, PD, PE, PF, P	G, PH, PI, PJ							
0	-	-	-	-	GP3VN	-	-	GP4VN	GP4VN	GP4VN	GP5VN
A,L	-	-	GP3VN	-	-	-	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN
E,U	GP3VN	GP3VN	-	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP4VN

A grey background indicates the accessory must be assembled in the factory

Kit for low temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
0	-	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)
A,L	-	-	-	-	-	-	XLA (1)				
E,U	-	-	-	XLA (1)							
N	XLA (1)										

(1) With the accessory XLA do not use the DCPX.
The accessory cannot be fitted on the configurations indicated with A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRB - °

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	221,5	244,5	270,3	299,7	353,1	404,9	439,0	511,2	560,9	598,2	675,8
Input power	kW	73,3	83,1	94,1	110,3	117,5	135,4	155,1	175,7	194,0	216,6	236,5
Cooling total input current	А	128,3	143,1	160,0	185,5	201,6	229,9	260,8	299,7	329,8	366,5	404,6
EER	W/W	3,02	2,94	2,87	2,72	3,00	2,99	2,83	2,91	2,89	2,76	2,86
Water flow rate system side	l/h	38117	42077	46498	51565	60733	69640	75512	87913	96469	102883	116222
Pressure drop system side	kPa	46	55	38	45	44	39	46	40	47	53	52

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - L

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	216,9	237,7	272,7	307,7	343,9	391,0	438,4	498,2	555,4	608,2	666,2
Input power	kW	73,0	85,9	92,0	107,4	122,7	139,0	151,9	173,3	191,6	213,6	233,8
Cooling total input current	A	122,8	142,3	154,5	179,0	203,4	231,8	250,8	289,7	318,6	359,2	390,2
EER	W/W	2,97	2,77	2,97	2,87	2,80	2,81	2,89	2,87	2,90	2,85	2,85
Water flow rate system side	l/h	37323	40891	46905	52926	59137	67243	75381	85669	95498	104586	114564
Pressure drop system side	kPa	25	20	27	24	29	23	30	28	37	36	44
(4) 0 001 4 104 4 104 1			-04									

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12° C / 7° C; outside air 35° C

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	224,1	252,2	283,7	326,1	361,2	411,7	462,2	519,2	576,0	633,3	697,6
Input power	kW	70,6	80,9	90,2	104,7	115,3	131,8	147,6	166,3	183,5	203,1	223,3
Cooling total input current	А	123,9	139,9	158,8	181,8	198,2	224,1	252,4	283,8	316,2	348,7	386,3
EER	W/W	3,17	3,12	3,15	3,12	3,13	3,12	3,13	3,12	3,14	3,12	3,12
Water flow rate system side	l/h	38561	43394	48802	56076	62118	70789	79487	89271	99048	108894	119965
Pressure drop system side	kPa	27	22	30	27	32	25	34	30	39	39	48

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	219,2	248,3	275,0	321,4	358,7	403,2	455,0	514,5	569,0	637,2	688,3
Input power	kW	69,6	79,4	88,5	102,2	114,9	129,8	144,5	164,7	183,0	203,4	221,4
Cooling total input current	A	119,5	134,7	148,8	172,1	192,6	215,7	240,1	275,1	306,1	342,6	372,8
EER	W/W	3,15	3,13	3,11	3,15	3,12	3,11	3,15	3,12	3,11	3,13	3,11
Water flow rate system side	l/h	37710	42726	47303	55271	61679	69338	78240	88465	97841	109550	118323
Pressure drop system side	kPa	19	23	20	27	21	27	26	33	33	22	25
(1) D. J. FN 14511 2022 H. J.			F0C									

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C (1)												
Cooling capacity	kW	227,6	257,6	286,5	329,6	369,8	414,6	466,9	529,2	594,0	655,1	716,9
Input power	kW	68,8	77,7	86,8	99,5	111,7	126,1	140,9	159,5	179,0	197,8	215,3
Cooling total input current	A	124,3	138,5	152,9	176,0	195,6	218,0	244,0	278,3	311,7	347,7	377,4
EER	W/W	3,30	3,31	3,30	3,31	3,31	3,28	3,31	3,32	3,32	3,31	3,33
Water flow rate system side	l/h	39151	44308	49294	56689	63596	71302	80286	91003	102137	112618	123250
Pressure drop system side	kPa	20	25	21	29	23	28	27	35	36	23	27

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C (1)												
Cooling capacity	kW	227,7	260,4	284,7	327,7	367,7	412,3	466,1	521,6	579,1	645,7	702,6
Input power	kW	68,5	78,9	86,4	98,5	111,9	125,4	140,4	157,8	176,0	194,6	212,9
Cooling total input current	Α	118,2	135,1	146,9	166,9	188,6	209,4	234,0	264,2	295,4	328,9	360,0
EER	W/W	3,32	3,30	3,30	3,33	3,29	3,29	3,32	3,31	3,29	3,32	3,30
Water flow rate system side	l/h	39166	44792	48972	56365	63234	70905	80151	89691	99569	111009	120789
Pressure drop system side	kPa	20	25	21	28	23	28	27	34	34	23	26

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
SEER - 12/7 (EN14825: 2018) (1)				-	-								
	0	W/W	4,44	4,33	4,27	4,25	4,39	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,65	4,55	4,66	4,70	4,69	4,73	4,76	4,64	4,64	4,62	4,61
CLLD	E	W/W	4,75	4,67	4,63	4,81	4,82	4,76	4,88	4,73	4,67	4,70	4,74
SEER	L	W/W	4,56	4,42	4,50	4,51	4,58	4,59	4,67	4,56	4,56	4,58	4,57
	N	W/W	4,85	4,79	4,83	4,96	4,93	4,97	5,03	4,93	4,82	4,89	4,83
	U	W/W	4,76	4,75	4,71	4,89	4,85	4,86	4,91	4,84	4,77	4,82	4,78
	0	%	174,60	170,10	167,60	167,10	172,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	182,80	179,10	183,40	185,00	184,70	186,20	187,30	182,70	182,40	181,70	181,50
Cassanal officiana	E	%	187,00	183,70	182,00	189,30	189,60	187,50	192,30	186,20	183,90	184,80	186,40
Seasonal efficiency	L	%	179,20	173,80	177,00	177,50	180,10	180,40	183,90	179,50	179,40	180,10	179,60
	N	%	191,10	188,40	190,30	195,40	194,20	195,90	198,10	194,10	189,90	192,40	190,00
	U	%	187,40	187,10	185,20	192,50	191,00	191,30	193,30	190,70	187,70	189,60	188,10
SEER - 23/18 (EN14825: 2018) (3)													
	0	W/W	5,28	5,16	5,07	4,96	5,40	5,44	5,18	5,07	5,13	4,77	5,07
	Α	W/W	5,50	5,35	5,50	5,51	5,55	5,55	5,63	5,34	5,44	5,30	5,42
SEER	E	W/W	5,62	5,53	5,46	5,70	5,69	5,63	5,77	5,50	5,52	5,48	5,59
SEEK	L	W/W	5,34	5,14	5,35	5,33	5,37	5,34	5,47	5,26	5,32	5,20	5,26
	N	W/W	5,92	5,71	5,76	5,91	5,88	5,91	5,99	5,75	5,74	5,71	5,75
	U	W/W	5,65	5,67	5,59	5,82	5,76	5,80	5,83	5,67	5,69	5,61	5,68
	0	%	208,10	203,40	199,80	195,40	212,90	214,50	204,10	199,90	202,10	187,80	199,60
	A	%	217,00	210,90	217,00	217,50	219,10	219,10	222,10	210,50	214,60	209,10	213,60
Seasonal efficiency	E	%	221,90	218,30	215,30	224,90	224,50	222,20	227,70	216,80	217,70	216,00	220,60
Seasonal efficiency	L	%	210,40	202,70	211,00	210,20	211,60	210,40	215,80	207,40	209,70	205,10	207,50
	N	%	229,90	225,30	227,50	233,50	232,10	233,40	236,40	226,80	226,40	225,50	227,10
	U	%	222,80	223,70	220,70	229,90	227,50	228,80	230,20	223,80	224,50	221,50	224,00
SEPR - (EN 14825: 2018) (3)													
	•	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
SEPR	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
JLI II	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,67	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(3) Calculation performed with FIXED water flow rate.

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Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
SEER - 12/7 (EN14825: 2018) (1)													
	0	W/W	4,23	4,13	4,10	4,11	4,19	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,41	4,34	4,39	4,45	4,48	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEER	E	W/W	4,47	4,40	4,40	4,54	4,54	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
JLLN	L	W/W	4,31	4,17	4,25	4,27	4,31	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	W/W	4,61	4,56	4,58	4,72	4,68	4,72	4,78	4,66	4,58	4,61	4,62
	U	W/W	4,51	4,51	4,51	4,63	4,64	4,65	4,70	4,61	4,56	4,57	4,59
	0	%	166,00	162,30	161,00	161,20	164,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	173,50	170,60	172,40	174,90	176,00	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	E	%	175,60	173,10	173,10	178,70	178,50	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Seasonal eniciency	L	%	169,40	163,60	166,80	167,60	169,20	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	%	181,30	179,30	180,00	185,70	184,10	185,90	188,20	183,40	180,30	181,50	181,60
	U	%	177,20	177,40	177,20	182,10	182,50	183,10	184,80	181,40	179,20	179,90	180,50
SEER - 23/18 (EN14825: 2018) (3)													
	0	W/W	5,08	4,98	4,92	4,82	5,20	5,26	5,03	4,91	4,97	4,63	4,91
	A	W/W	5,29	5,15	5,25	5,28	5,35	5,37	5,42	5,15	5,22	5,09	5,22
SEER	E	W/W	5,36	5,24	5,28	5,40	5,43	5,37	5,54	5,21	5,22	5,21	5,30
JLLN	L	W/W	5,06	4,87	5,07	5,08	5,05	5,10	5,19	5,02	5,02	4,92	4,99
	N	W/W	5,57	5,47	5,50	5,66	5,61	5,65	5,73	5,48	5,48	5,44	5,54
	U	W/W	5,41	5,44	5,41	5,58	5,56	5,60	5,63	5,46	5,49	5,39	5,50
	0	%	200,10	196,00	193,60	189,90	205,10	207,30	198,30	193,30	195,70	182,00	193,50
	A	%	208,40	203,00	206,80	208,00	211,10	211,60	213,60	203,10	205,70	200,60	205,60
Seasonal efficiency	E	%	211,40	206,40	208,30	213,00	214,00	211,80	218,50	205,50	205,70	205,30	208,90
Seasonal eniciency	L	%	199,40	191,90	199,70	200,10	199,10	200,80	204,40	197,70	197,60	193,90	196,40
	N	%	219,70	215,80	216,80	223,40	221,50	223,00	226,20	216,00	216,30	214,60	218,40
	U	%	213,40	214,40	213,30	220,00	219,50	221,00	222,20	215,30	216,40	212,50	216,90
SEPR - (EN 14825: 2018) (3)													
	0	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	Α	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
SEPR	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
JELU	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,63	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

LLLC I MIC DAIA													
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
	0	Α	164,3	180,7	197,0	226,4	262,1	291,1	320,1	371,3	416,0	445,0	480,4
Maximum current (FLA)	A,L	Α	177,1	193,4	222,5	251,8	281,2	310,2	351,9	396,7	454,2	483,2	530,8
	E,U	Α	189,8	206,1	222,5	264,5	293,9	322,9	364,6	428,0	472,8	514,5	543,5
	N	Α	202,5	218,8	235,2	277,3	306,6	335,6	383,2	440,7	485,5	527,2	556,2
		Α	352,9	408,1	424,4	477,1	512,8	625,3	654,3	705,5	750,3	779,3	814,6
eak current (LRA)	A,L	Α	365,6	420,8	449,9	502,5	531,9	644,4	686,1	730,9	788,4	817,4	865,0
	E,U	Α	378,3	433,5	449,9	515,3	544,6	657,1	698,8	762,2	807,0	848,7	877,7
	N	Α	391,1	446,2	462,6	528,0	557,3	669,8	717,4	774,9	819,7	861,4	890,4

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Туре	°,A,E,L,N,U	type						Scroll					
Compressor regulation	°,A,E,L,N,U	Туре						0n/0ff					
Number	°,A,E,L,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Partialisation of the unit with mechanical thermostatic valve	°,A,E,L,N,U	%	25%	25%	25%	25%	25%	25%	25%	17%	17%	17%	17%
Partialisation of the unit with electronic thermostatic expansion valve	°,A,E,L,N,U	%	25%	25%	25%	25%	25%	25%	25%	17%	17%	17%	17%
Refrigerant	°,A,E,L,N,U	type		-				R410A		-	-		
	0	kg	28,0	29,0	30,0	32,0	41,0	42,0	42,0	55,0	55,0	55,0	65,0
Refrigerant charge (1)	A,L	kg	30,0	32,0	40,0	44,0	42,0	45,0	49,0	55,0	64,0	65,0	70,0
Kenigerani Charge (1)	E,U	kg	41,0	40,0	43,0	53,0	53,0	53,0	62,0	69,0	75,0	90,0	112,0
	N	kg	50,0	53,0	53,0	59,0	59,0	70,0	84,0	80,0	90,0	124,0	91,0
Oil	°,A,E,L,N,U	Туре											
Oil charge circuit 1	°,A,E,L,N,U	kg	9,3	11,5	13,6	13,1	12,6	12,6	12,6	16,6	24,9	24,9	12,6
Oil charge circuit 2	°,A,E,L,N,U	kg	9,3	11,5	13,6	13,1	12,6	12,6	12,6	24,9	24,9	24,9	24,9
System side heat exchanger													
Туре	°,A,E,L,N,U	type						Shell and tube	1				
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections													
Connections (in/out)	°,A,E,L,N,U	Туре						Grooved joints	5				
Hydraulic connections without hydronic													
	0	Ø	5"	5"	5"	5"	5"	5"	5"	6"	6"	6"	6"
Sizes (in/out)	A,L	Ø	5"	5"	5"	5"	5"	6"	6"	6"	6"	6"	6"
	E,N,U	Ø	5″	5"	5"	5″	6"	6"	6"	6"	6"	6"	6"
Hydraulic connections with hydronic kit				_						_	_		
		Ø	-	-	-	-	3″	-	-	4"	4"	4"	4"
Sizes (in/out)	A,L	Ø	-	-	3"	-	-	-	4"	4"	4"	4"	4"
אוניס (ווון טענ)	E,U	Ø	3″	3"	-	3"	3"	3″	4"	4"	4"	4"	4"
	N	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Water filter not supplied. Installation is mandatory or the guarantee will void.

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Fans

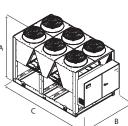
raiis													
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
Fan					-	-							
Туре	°,A,E,L,N,U	type			-	-		Axial					
Fan motor	°,A,U	type						Asynchronous					
	E,L,N	type						ronous with pl					
		no.	4	4	4	4	6	6	6	8	8	8	10
Number	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
With static pressure	0	2											
		m³/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m³/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
Air flow rate	E	m³/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m³/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m³/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m³/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static pressure	°,A,U	Pa	50	50	50	50	50	50	50	50	50	50	50
	E,L,N	Pa	120	120	120	120	120	120	120	120	120	120	120
Without Static pressure													
	0	m³/h	72000	72000	72000	72000	108000	108000	108000	144000	144000	144000	180000
	A	m³/h	72000	72000	108000	108000	108000	108000	144000	144000	180000	180000	216000
Air flow rate	E	m³/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m³/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m³/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m³/h	108000	108000	108000	144000	144000	144000	180000	216000	216000	252000	252000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0	0	0
With static pressure					-				-				
		dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
Sound power level	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
Journa power rever	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5
Without Static pressure													
		dB(A)	89,7	89,7	89,7	89,7	91,7	91,7	91,7	93,4	93,2	93,5	94,9
	A	dB(A)	89,7	89,7	91,7	91,7	91,7	91,7	93,1	93,4	94,3	94,6	95,8
Sound power level	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
Journa power rever	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	92,3	92,3	92,3	93,6	93,6	93,6	94,6	95,7	95,5	96,5	96,8
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
Fan													
Туре	°,A,E,L,N,U	type						Axial					
Fan motor	°,A,E,L,N,U	type						Inverter					
	0	no.	4	4	4	4	6	6	6	8	8	8	10
Number	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Inverter fan													
		m³/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m³/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
Air flow rate	E	m³/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
I utc	L	m³/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m³/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m³/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
		Pa	120	120	120	120	120	120	120	75	75	75	75
High static pressure	A,U	Pa	120	120	120	120	120	120	120	120	120	120	120
	E,L,N	Pa	200	200	200	200	200	200	200	200	200	200	200
Sound data calculated in cooling mo													
	0	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
			07.0	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
	A	dB(A)	87,8	07,0	70,0	, 0,0	, .						
Sound nower level	A E	dB(A) dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
Sound power level						86,3 84,8	86,3 84,8				89,5 88,5	90,8 89,8	91,3 90,5
Sound power level		dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0			

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

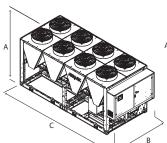
DIMENSIONS

NRB 0800 - 1100 ° NRB 0800 - 0900 L/A

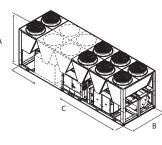
NRB 1200 - 1600 ° NRB 1000 - 1400 L/A NRB 0800 -1000 E/U



NRB 1805 - 2206 ° NRB 1600 - 1805 L/A NRB 1200 - 1400 E/U NRB 0800 - 1000 N



NRB 2406 ° NRB 2006 - 2406 L/A NRB 1600 - 2406 E/U NRB 1100 - 2406 N



Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights without hydro	nic kit												
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	0	mm	2780	2780	2780	2780	3970	3970	3970	5160	5160	5160	6350
	A,L	mm	2780	2780	3970	3970	3970	3970	4760	5160	6350	6350	7140
(E,U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520
Dimensions and weights with pump/s													
	0	mm	-	-	-	-	2450	-	-	2450	2450	2450	2450
A	A,L	mm	-	-	2450	-	-	-	2450	2450	2450	2450	2450
A	E,U	mm	2450	2450	-	2450	2450	2450	2450	2450	2450	2450	2450
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	0	mm	-	-	-	-	2200	-	-	2200	2200	2200	2200
В	A,L	mm	-	-	2200	-	-	-	2200	2200	2200	2200	2200
В	E,U	mm	2200	2200	-	2200	2200	2200	2200	2200	2200	2200	2200
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
		mm	-	-	-	-	3970	-	-	5160	5160	5160	6350
(A,L	mm	-	-	3970	-	-	-	4760	5160	6350	6350	7140
	E,U	mm	3970	3970	-	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
	0	kg	2390	2430	2500	2540	3030	3080	3110	3810	3980	4020	4560
Farmeto considerate	A,L	kg	2410	2470	2950	3020	3060	3120	3640	3910	4480	4560	4980
Empty weight	E,U	kg	2870	2910	2990	3520	3590	3610	4140	4690	4900	5650	5690
	N	kg	3370	3420	3490	3920	3990	4020	4490	5140	5360	6050	6090

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NRB 0800H-2406H

Reversible air/water heat pump

Cooling capacity 196,4 ÷ 647,7 kW - Heating capacity 209,8 ÷ 683,9 kW



- · High efficiency also at partial loads
- Night mode
- HP floating: ESEER +7% with inverter fans
- Also available with Shell and tube heat exchanger





DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

FEATURES

Operating field

Working at full load up to -15 $^{\circ}$ C outside air temperature in winter, and up to 50 $^{\circ}$ C in summer. Hot water production up to 55 $^{\circ}$ C.

(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables

in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. ESEER up to +7% with inverter fans.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load. Night Mode
 for standard versions is mandatory DCPX accessory (standard on
 all low noise versions) or "J" inverter fan

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP. SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FL:** Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

BRC1: Condensate drip tray. Consider 1 for each V-block.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
	Vei	0000	0700	1000	1100	1200	1700	1000	1003	2000	2200	
AER485P1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L		•	•	•	•	•	•	•	•	•	
FL	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L	•	•	•	•		•	•	•	•		

Antivibration

Antivibration											
Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
0	AVX1000	AVX1000	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1006	AVX1006	AVX1010	AVX1010
A,L	AVX1000	AVX1004	AVX1004	AVX1004	AVX1004	AVX1006	AVX1006	AVX1010	AVX1010	AVX1016	AVX1016
E	AVX1004	AVX1006	AVX1006	AVX1006	AVX1006	AVX1010	AVX1013	AVX1024	AVX1024	AVX1033	AVX1033
Integrated hydronic kit: AA, AB, AC, AD), AE, AF, AG, AH, B	A, BB, BC									
0	AVX1003	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1012	AVX1012
A,L	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1008	AVX1008	AVX1012	AVX1017	AVX1017
E	AVX1005	AVX1008	AVX1008	AVX1008	AVX1008	AVX1012	AVX1015	AVX1025	AVX1025	AVX1035	AVX1035
Integrated hydronic kit: AI, AJ, BD, BE,	BF, BG, BH, BI, BJ										
0	AVX1003	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1008	AVX1012	AVX1012
A,L	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1008	AVX1012	AVX1012	AVX1017	AVX1017
E	AVX1005	AVX1008	AVX1008	AVX1008	AVX1008	AVX1012	AVX1015	AVX1025	AVX1025	AVX1035	AVX1035
Integrated hydronic kit: DA, DB, DC, PA	N, PB, PC, PD, PE, P	F, PG, PH									
0	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1010	AVX1010
A,L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1010	AVX1010	AVX1016	AVX1016
E	AVX1004	AVX1006	AVX1006	AVX1006	AVX1009	AVX1010	AVX1013	AVX1024	AVX1024	AVX1034	AVX1034
Integrated hydronic kit: DD, DE, DF, DG	i, DH, PI, PJ										
0	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1011	AVX1011
A,L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1011	AVX1011	AVX1016	AVX1016
E	AVX1004	AVX1007	AVX1007	AVX1007	AVX1009	AVX1011	AVX1014	AVX1024	AVX1024	AVX1034	AVX1034
Integrated hydronic kit: DI, DJ											
0	AVX1002	AVX1002	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1007	AVX1007	AVX1011	AVX1011
A,L	AVX1002	AVX1004	AVX1004	AVX1004	AVX1004	AVX1007	AVX1007	AVX1011	AVX1011	AVX1016	AVX1016
E	AVX1004	AVX1007	AVX1007	AVX1007	AVX1007	AVX1011	AVX1014	AVX1024	AVX1024	AVX1034	AVX1034

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
Fans: °		'			'	
0	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
A	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131	DCPX132
E,L	As standard					
Ver	1600	1805	2006		2206	2406
Fans: °		"				
0	DCPX131	DCPX155	DCPX15	5	DCPX156	DCPX156
A	DCPX132	DCPX156	DCPX15	6	DCPX134	DCPX134

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°,A,E,L	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°,A,E,L	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
0	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
A,L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1401
E	RIFNRB0800	RIFNRB0901	RIFNRB1001	RIFNRB1001	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
٥	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A,L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2216	RIFNRB2416
F	RIFNRR1601	RIFNRB1815	RIFNRR2016	RIFNRR2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
0	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4G	GP4G	GP5G	GP5G
A,L	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5G	GP5G	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

The units 0800-0900 H°, 0800 HL/HA with the optional "storage tank" are 3970 mm long, and they must mount the GP2VNA grids.

Condensate drip

Ver	0800	0900	1000	1100	1200	1400
0	BRC1x2 (1)	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)
A,L	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x4 (1)
E	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
٥	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)
A,L	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)	BRC1x6 (1)	BRC1x6 (1)
E	BRC1x6 (1)	BRC1x7 (1)	BRC1x7 (1)	BRC1x8 (1)	BRC1x8 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

_		CONTROL
Fiel		Description
1,2,	,3	NRB
4,5,	6,7	Size 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		Operating field
	0	Standard mechanic thermostatic valve
	Χ	Electronic thermostatic expansion valve (1)
9		Model
	Н	Heat pump
10		Heat recovery
	0	Without heat recovery
	D	With desuperheater (2)
11		Version
	0	Standard
	Α	High efficiency
	Е	Silenced high efficiency
	L	Standard silenced
12		Coils
	0	Copper-aluminium
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	٧	Copper pieps-Coated aluminium fins
13		Fans
	0	Standard
	J	Inverter
14		Power supply
	0	400V ~ 3 50Hz with magnet circuit breakers
15,	16	Integrated hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (3)
	1,7	i miiks (2)

Field	Description
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump (4)
DB	Pump B + stand-by pump (4)
DC	Pump C + stand-by pump (4)
DD	Pump D + stand-by pump (4)
DE	Pump E + stand-by pump (4)
DF	Pump F + stand-by pump (4)
DG	Pump G + stand-by pump (4)
DH	Pump H + stand-by pump (4)
DI	Pump I + stand-by pump (4)
DJ	Pump J + stand-by pump (5)
	Kit with storage tank and n° 1 pump
AA	Storage tank and pump A
AB	Storage tank and pump B
AC	Storage tank and pump C
AD	Storage tank and pump D
AE	Storage tank and pump E
AF	Storage tank and pump F
AG	Storage tank and pump G
AH	Storage tank and pump H
Al	Storage tank and pump l
AJ	Storage tank and pump J (3)
	Kit with storage tank and n° 1 pump + stand-by pump
BA	Storage tank with pump A + stand-by pump (4)
BB	Storage tank with pump B + stand-by pump (4)
BC	Storage tank with pump C + stand-by pump (4)
BD	Storage tank with pump D $+$ stand-by pump (4)
BE	Storage tank with pump E + stand-by pump (4)
BF	Storage tank with pump F + stand-by pump (4)
BG	Storage tank with pump G + stand-by pump (4)
ВН	Storage tank with pump H + stand-by pump (4)
BI	Storage tank with pump I + stand-by pump (4)
BJ	Storage tank with pump J + stand-by pump (5)

- (1) Electronic thermostatic as standard from size 1805÷2406.
 (2) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
 (3) For all configurations including pump J please contact the factory.
 (4) None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805-2006 version °.
 (5) For all combinations with pump J, please contact our head office. None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805-2006 version °.

PERFORMANCE SPECIFICATIONS

NDD LIO

NKR H.												
Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C (1)												
Cooling capacity	kW	196,4	218,0	251,8	279,2	314,2	353,8	389,0	456,7	501,9	568,7	616,1
Input power	kW	74,1	86,1	91,7	107,9	119,5	141,6	155,6	172,6	193,2	211,2	231,1
Cooling total input current	A	131,0	150,0	163,0	189,0	207,0	242,0	263,0	296,0	331,0	365,0	398,0
EER	W/W	2,65	2,53	2,74	2,59	2,63	2,50	2,50	2,65	2,60	2,69	2,67
Water flow rate system side	l/h	33794	37515	43314	48020	54046	60853	66910	78531	86311	97783	105939
Pressure drop system side	kPa	34	24	32	26	33	31	37	32	38	37	42
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	215,0	237,4	275,0	306,0	343,9	366,2	412,6	478,4	527,7	592,0	643,2
Input power	kW	70,2	77,7	89,6	99,8	112,3	121,7	137,0	157,3	174,3	193,9	210,7
Heating total input current	A	125,0	138,0	158,0	175,0	195,0	212,0	236,0	274,0	304,0	340,0	369,0
COP	W/W	3,06	3,06	3,07	3,07	3,06	3,01	3,01	3,04	3,03	3,05	3,05
Water flow rate system side	l/h	37311	41207	47745	53116	59705	63585	71640	83071	91620	102803	111681
Pressure drop system side	kPa	42	28	38	32	40	34	42	36	42	40	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	197,9	227,9	247,7	275,2	301,1	359,1	392,2	453,8	495,0	552,5	592,9
Input power	kW	75,3	78,6	89,8	106,2	123,2	133,0	153,4	169,0	193,9	208,9	234,1
Cooling total input current	А	126,0	133,0	150,0	176,0	203,0	220,0	252,0	280,0	321,0	347,0	390,0
EER	W/W	2,63	2,90	2,76	2,59	2,44	2,70	2,56	2,69	2,55	2,64	2,53
Water flow rate system side	l/h	34040	39194	42596	47339	51779	61758	67431	78030	85114	95003	101921
Pressure drop system side	kPa	14	18	15	19	14	20	18	23	23	29	17
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	209,8	250,3	274,3	304,8	334,3	394,3	431,0	497,4	543,0	609,3	654,3
Input power	kW	67,1	79,5	87,1	98,9	108,2	126,2	136,7	158,3	173,1	194,8	208,8
Heating total input current	Α	119,0	139,0	152,0	171,0	187,0	216,0	234,0	272,0	299,0	336,0	363,0
COP	W/W	3,13	3,15	3,15	3,08	3,09	3,12	3,15	3,14	3,14	3,13	3,13
Water flow rate system side	l/h	36429	43447	47619	52924	58032	68469	74854	86379	94306	105817	113644
Pressure drop system side	kPa	15	22	19	23	17	24	21	28	28	35	21

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	206,2	243,8	266,9	297,0	329,2	385,5	425,3	488,4	538,3	601,4	651,3
Input power	kW	71,8	78,2	88,1	102,2	117,2	129,2	147,2	163,7	184,8	201,3	222,3
Cooling total input current	А	127,0	141,0	157,0	179,0	203,0	225,0	254,0	285,0	321,0	352,0	389,0
EER	W/W	2,87	3,12	3,03	2,91	2,81	2,98	2,89	2,98	2,91	2,99	2,93
Water flow rate system side	l/h	35459	41942	45909	51076	56619	66291	73125	83982	92547	103407	111966
Pressure drop system side	kPa	15	21	18	22	17	23	21	27	27	34	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	214,3	254,4	279,0	310,5	341,2	400,9	438,9	506,0	553,2	620,0	666,5
Input power	kW	66,6	79,3	86,7	97,1	106,2	124,8	137,1	157,5	171,8	193,5	207,0
Heating total input current	Α	120,0	142,0	155,0	172,0	187,0	219,0	240,0	277,0	303,0	342,0	368,0
COP	W/W	3,22	3,21	3,22	3,20	3,21	3,21	3,20	3,21	3,22	3,20	3,22
Water flow rate system side	l/h	37204	44148	48436	53909	59226	69618	76226	87877	96076	107669	115772
Pressure drop system side	kPa	16	23	20	24	18	25	22	29	29	36	22

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C (1)												
Cooling capacity	kW	209,6	241,7	264,7	294,5	326,7	377,8	432,4	489,4	540,5	597,8	647,7
Input power	kW	67,3	77,4	85,0	98,1	112,4	125,3	139,1	157,0	177,4	192,3	215,2
Cooling total input current	А	115,0	132,0	144,0	164,0	187,0	208,0	230,0	261,0	296,0	322,0	362,0
EER	W/W	3,12	3,12	3,11	3,00	2,91	3,02	3,11	3,12	3,05	3,11	3,01
Water flow rate system side	l/h	36053	41586	45538	50642	56185	64960	74341	84155	92932	102793	111352
Pressure drop system side	kPa	15	20	18	22	16	22	21	27	27	33	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	223,4	258,1	283,7	316,7	349,3	403,2	458,7	520,7	571,9	634,1	683,9
Input power	kW	69,3	80,5	87,9	98,5	109,0	126,1	143,1	162,7	177,1	198,2	211,7
Heating total input current	А	122,0	140,0	153,0	170,0	188,0	216,0	244,0	278,0	305,0	341,0	367,0
COP	W/W	3,22	3,21	3,23	3,22	3,20	3,20	3,21	3,20	3,23	3,20	3,23
Water flow rate system side	l/h	38791	44787	49248	54989	60660	70010	79655	90422	99327	110122	118791
Pressure drop system side	kPa	17	23	20	25	19	25	24	31	31	38	23

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C /7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
	0	А	168,6	185,0	209,8	239,2	268,5	297,5	326,5	379,8	424,6	462,1	491,1
Maximum current (FLA)	A,L	A	168,6	193,5	209,8	239,2	268,5	306,0	335,0	388,3	433,1	470,6	499,6
	E	A	177,1	202,0	218,3	247,7	277,0	314,5	352,0	405,3	450,1	487,6	516,6
	0	A	357,2	412,4	437,2	489,9	519,2	631,7	660,7	714,0	758,8	796,3	825,3
Peak current (LRA)	A,L	A	357,2	420,9	437,2	489,9	519,2	640,2	669,2	722,5	767,3	804,8	833,8
	E	A	365,7	429,4	445,7	498,4	527,7	648,7	686,2	739,5	784,3	821,8	850,8

ENERGY INDICES (REG. 2016/2281 EU)

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient condit	tions (averag	e) - 35 °C - Pde	esignh ≤ 400	kW (1)								
Pdesignh	kW	203	224	260	289	325	346	296	343	379	425	462
SCOP	W/W	3,65	3,65	3,65	3,68	3,65	3,60	3,73	3,73	3,80	3,73	3,80
ηsh	%	143,00	143,00	143,00	144,00	143,00	141,00	146,00	143,00	149,00	146,00	149,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,79	3,66	3,88	3,81	3,91	3,80	3,89	3,92	3,80	- (3)	- (3)
Seasonal efficiency	%	148,40	143,50	152,20	149,50	153,20	149,10	152,70	153,80	149,00	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,67	4,76
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	183,90	187,30
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,88	5,02
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	192,30	197,70
SEPR - (EN14825: 2018) High temperature with inver	ter fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54
SEPR - (EN14825: 2018) High temperature with stand	lard fans (4)											
SEPR	W/W		-	-	-	_	-		-	-	5,53	5,54

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient condi	tions (averag	e) - 35 °C - Pdo	esignh ≤ 400	kW (1)								
Pdesignh	kW	197	235	258	286	314	370	306	353	385	433	464
SCOP	W/W	3,73	3,75	3,75	3,68	3,68	3,73	3,93	3,83	3,95	3,83	3,93
ηsh	%	146,00	147,00	147,00	144,00	144,00	146,00	154,00	150,00	155,00	150,00	154,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,83	4,01	3,92	3,90	3,82	4,05	3,99	4,04	3,87	- (3)	- (3)
Seasonal efficiency	%	150,30	157,20	153,90	149,60	159,00	156,40	156,60	158,60	151,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,72	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,70	183,60
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,08	5,11
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	200,30	201,20
SEPR - (EN14825: 2018) High temperature with stand	dard fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51
SEPR - (EN14825: 2018) High temperature with inver	rter fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51
(1) Efficiencies for low temperature applications (35 °C)												

⁽¹⁾ Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(4) Calculation performed with FIXED water flow rate.

⁽¹⁾ Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(4) Calculation performed with FIXED water flow rate.

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NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditi	ons (averag	e) - 55 °C - Pd	esignh ≤ 400	kW (1)								
Pdesignh	kW	196	233	255	284	312	367	304	351	384	430	462
SCOP	W/W	3,03	3,08	3,03	3,08	3,03	3,10	3,13	3,08	3,30	3,08	3,15
ηsh	%	118,00	120,00	118,00	120,00	118,00	121,00	122,00	120,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,96	4,13	4,09	4,09	4,07	4,23	4,22	4,22	4,10	- (3)	- (3)
Seasonal efficiency	%	155,40	162,10	160,40	160,60	159,70	166,10	165,60	165,80	161,0	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,3%	179,6%
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,96	5,01
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	195,30	197,40
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,30	179,60
SEPR - (EN14825: 2018) High temperature with standa	ard fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52
SEPR - (EN14825: 2018) High temperature with inverte	er fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(4) Calculation performed with FIXED water flow rate.

NRB HE

IND HE												
Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient condit	ions (averag	e) - 55 °C - Pd	esignh ≤ 400	kW (1)								
Pdesignh	kW	204	236	259	290	320	369	318	361	397	440	474
SCOP	W/W	3,05	3,08	3,05	3,10	3,03	3,08	3,13	3,05	3,30	3,08	3,15
ηsh	%	119,00	120,00	119,00	121,00	118,00	120,00	122,00	119,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	4,16	4,15	4,18	4,19	4,16	4,27	4,39	4,36	4,22	- (3)	- (3)
Seasonal efficiency	%	163,40	163,00	164,10	164,70	163,40	167,90	172,70	171,40	165,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)			-									
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,4%	183,7%
SEER - 23/18 (EN14825: 2018) with standard fans (4)			-									
SEER	W/W	-	-	-	-	-	-	-	-	-	5,17	5,20
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	203,60	204,90
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with stand	ard fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54
SEPR - (EN14825: 2018) High temperature with invert	ter fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(4) Calculation performed with FIXED water flow rate.

FANS

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °													
Fan													
Туре	°,A,E,L	type						Axial					
Гон на мара н	°,A	type						Asynchronous	;				
Fan motor	E,L	type					Asynch	ronous with p	hase cut				
	0	no.	4	4	6	6	6	6	6	8	8	10	10
Number	A,L	no.	4	6	6	6	6	8	8	10	10	12	12
	E	no.	6	8	8	8	8	10	12	14	14	16	16
	0	m³/h	80000	80000	120000	120000	120000	120000	120000	160000	160000	200000	200000
Air Aanneata	A	m³/h	80000	120000	120000	120000	120000	160000	160000	200000	200000	240000	240000
Air flow rate	E	m³/h	90000	120000	120000	120000	120000	150000	180000	210000	210000	240000	240000
	L	m³/h	60000	90000	90000	90000	90000	120000	120000	150000	150000	180000	180000

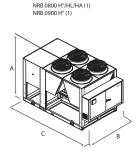
GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Туре	°,A,E,L	type						Scroll					
Compressor regulation	°,A,E,L	Туре						0n-0ff					
Number	°,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L	type						R410A					
	0	kg	44,0	44,0	54,0	62,0	62,0	60,0	60,0	81,0	82,0	100,0	95,0
Refrigerant charge (1)	A	kg	44,0	60,0	64,0	62,0	66,0	81,0	78,0	99,0	102,0	117,0	119,0
Reingerant Charge (1)	E	kg	58,0	76,5	78,0	76,0	78,0	93,0	112,0	136,0	143,0	152,0	152,0
	L	kg	44,0	60,0	64,0	62,0	66,0	78,0	78,0	104,0	102,0	117,0	117,0
System side heat exchanger													
Туре	°,A,E,L	type						Brazed plate					
Hydraulic connections													
Connections (in/out)	°,A,E,L	Туре						Grooved joints	5				
Hydraulic connections without hydronic	kit												
Sizes (in/out)	°,A,E,L	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"
Hydraulic connections with hydronic kit													
Sizes (in/out)	°,A,E,L	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"
Sound data calculated in cooling mode (2)												
	0	dB(A)	89,5	89,5	91,6	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2
Cound nowar loval	A	dB(A)	89,5	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2	95,1	95,1
Sound power level	E	dB(A)	84,6	86,1	86,1	86,1	86,1	87,2	88,2	89,4	89,9	91,1	91,6
	L	dB(A)	82,6	84,6	84,6	84,6	84,6	86,1	86,1	87,7	88,2	89,6	90,1
	0	dB(A)	57,4	57,4	59,3	59,3	59,3	59,3	59,3	60,7	60,7	61,7	61,7
Cound proceure loyal (10 m)	A	dB(A)	57,4	59,3	59,3	59,3	59,3	60,7	60,7	61,6	61,6	62,5	62,5
Sound pressure level (10 m)	E	dB(A)	52,4	53,7	53,7	53,7	53,7	54,7	55,5	56,7	57,2	58,2	58,7
	L	dB(A)	50,5	52,4	52,4	52,4	52,4	53,8	53,8	55,2	55,7	57,0	57,5

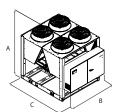
In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

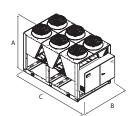
DIMENSIONS



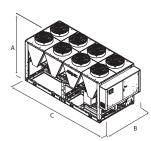




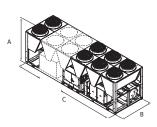
NRB 0800 HE NRB 0900-1200 HL/HA NRB 1000-1600 H°



NRB 1805-2406 H° NRB 1805-2006 HL/HA



NRB 1400-1600 HL/HA NRB 2206-2406 HL-HA NRB 0900-2406 HE



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes: NRB 0800H°, 0900H° NRB 0800 HL/HA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights withou	ut hydronic kit												
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	0	mm	2780	2780	3970	3970	3970	3970	3970	5160	5160	6350	6350
(A,L	mm	2780	3970	3970	3970	3970	4760	4760	6350	6350	7140	7140
	F	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520

■ The units 0800-0900 H°, 0800 HL/HA with the optional "storage tank" are 3970 mm long.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
	0	kg	2520	2580	3160	3210	3250	3310	3340	4200	4370	4990	5030
Empty weight	A,L	kg	2550	3130	3200	3240	3320	3970	4040	4780	4990	5490	5730
-	Е	kg	3080	3770	3840	3870	3950	4510	5020	5860	6080	6610	6800

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.



















NRB 0800W-2406W

Reversible air/water heat pump with shell and tube heat exchanger

Cooling capacity 196,4 \div 647,7 kW – Heating capacity 209,8 \div 683,9 kW



- · Shell and tube heat exchanger
- · High efficiency also at partial loads
- Night mode
- HP floating: ESEER +7% with inverter fans





DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.

They are outdoor units with axial fan scroll compressors and Shell and tube exchangers.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

FEATURES

Operating field

Working at full load up to -10 $^{\circ}$ C outside air temperature in winter, and up to 50 $^{\circ}$ C in summer. Hot water production up to 55 $^{\circ}$ C.

(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables

in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. ESEER up to +7% with inverter fans.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load. Night Mode
 for standard versions is mandatory DCPX accessory (standard on
 all low noise versions) or "J" inverter fan

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP. SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FL:** Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

BRC1: Condensate drip tray. Consider 1 for each V-block.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L	•	•	•	•	•	•	•		•	•	•
AERLINK	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L					•						
FL	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,A,E,L	•						•				•
PGD1	°,A,E,L	•		•				•	•	•		•

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
0	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1123	AVX1123	AVX1124	AVX1124
A,L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1123	AVX1123	AVX1124	AVX1124	AVX1115	AVX1115
E	AVX1004	AVX1123	AVX1123	AVX1123	AVX1123	AVX1124	AVX1119	AVX1117	AVX1117	AVX1116	AVX1116
Integrated hydronic kit: DA, DB, DC, D	DD, DE, DF, DG, DH,	DI, DJ, PA, PB, P	C, PD, PE, PF, PC	G, PH, PI, PJ							
0	-	-	AVX1004	AVX1004	AVX1004	-	-	AVX1123	AVX1123	AVX1124	AVX1124
A,L	-	AVX1004	-	-	-	AVX1123	AVX1123	AVX1124	AVX1124	AVX1115	AVX1115
E	AVX1004	AVX1123	AVX1123	AVX1123	AVX1123	AVX1124	AVX1119	AVX1117	AVX1117	AVX1116	AVX1116

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°,A,E,L	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°,A,E,L	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
VEI	0000		1000	1100	1200	1700
۰	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
A,L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1401
E	RIFNRB0800	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

$\underline{\textbf{A}}$ grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
0	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A,L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2216	RIFNRB2416
E	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

And madon gna											
Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
0	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP5VN
A	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP4VN	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP4VN	GP6V	GP7V	GP7V	GP8V	GP8V
L	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP5VN	GP4VN	GP5VN	GP5VN	GP6V	GP6V
Integrated hydronic kit: DA, DB, DC,	DD, DE, DF, DG, DH, I	OI, DJ, PA, PB, P	C, PD, PE, PF, PC	G, PH, PI, PJ							
0	-	-	GP3VN	GP3VN	GP3VN	-	-	GP4VN	GP4VN	GP5VN	GP5VN
A	-	GP3VN	-	-	-	GP4VN	GP4VN	GP5VN	GP4VN	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP4VN	GP6V	GP7V	GP7V	GP8V	GP8V
L	-	GP3VN	-	-	-	GP5VN	GP4VN	GP5VN	GP5VN	GP6V	GP6V

A grey background indicates the accessory must be assembled in the factory

Condensate drip

Ver	0800	0900	1000	1100	1200	1400
0	BRC1x2 (1)	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)
A,L	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x4 (1)
E	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)

⁽¹⁾ Condensate drip tray. Consider 1 for each V-block. A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
0	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)
A,L	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)	BRC1x6 (1)	BRC1x6 (1)
E	BRC1x6 (1)	BRC1x7 (1)	BRC1x7 (1)	BRC1x8 (1)	BRC1x8 (1)

CONFIGURATOR

Field	Description
1,2,3	NRB
4,5,6,7	Size 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8	Operating field
0	Standard mechanic thermostatic valve
χ	Electronic thermostatic expansion valve
9	Model
W	Heat pump with shell and tube heat exchanger
10	Heat recovery
0	Without heat recovery
D	With desuperheater (1)
11	Version
0	Standard
Α	High efficiency
Е	Silenced high efficiency
L	Standard silenced
12	Coils
0	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
٧	Copper pieps-Coated aluminium fins
13	Fans
0	Standard
J	Inverter
14	Power supply

Field	Description
٥	400V ~ 3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
00	Without hydronic kit
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (2)
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (2)

${\color{red}\textbf{Compatibility of models with hydronic units available with a configurator}}$

Version		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406	2600	2800	3000	3200	3400	3600
Standard	H°	-	-	•	•	•	-	-	•	•	•	•	•		•		•	•
Standard silenced	HL	-	•	-	-	-	•	•	•	•	•						•	•
High efficiency	HA	-		-	-	-	•	•	•	•	•	•	•		•			
Silenced high efficiency	HE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

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⁽¹⁾ Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

⁽¹⁾ The desuperheater can only be used with cold running.(2) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NRB H°

	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
kW	196,4	218,0	251,8	279,2	314,2	353,8	389,0	456,7	501,9	568,7	616,1
kW	74,1	86,1	91,7	107,9	119,5	141,6	155,6	172,6	193,2	211,2	231,1
A	131,0	150,0	163,0	189,0	207,0	242,0	263,0	296,0	331,0	365,0	398,0
W/W	2,65	2,53	2,74	2,59	2,63	2,50	2,50	2,65	2,60	2,69	2,67
l/h	33794	37515	43314	48020	54046	60853	66910	78531	86311	97783	105939
kPa	34	24	32	26	33	31	37	32	38	37	42
kW	215,0	237,4	275,0	306,0	343,9	366,2	412,6	478,4	527,7	592,0	643,2
kW	70,2	77,7	89,6	99,8	112,3	121,7	137,0	157,3	174,3	193,9	210,7
А	125,0	138,0	158,0	175,0	195,0	212,0	236,0	274,0	304,0	340,0	369,0
W/W	3,06	3,06	3,07	3,07	3,06	3,01	3,01	3,04	3,03	3,05	3,05
l/h	37311	41207	47745	53116	59705	63585	71640	83071	91620	102803	111681
kPa	42	28	38	32	40	34	42	36	42	40	46
	kW A W/W I/h kPa kW kW A W/W I/h	kW 196,4 kW 74,1 A 131,0 W/W 2,65 I/h 33794 kPa 34 kW 215,0 kW 70,2 A 125,0 W/W 3,06 I/h 37311	kW 196,4 218,0 kW 74,1 86,1 A 131,0 150,0 W/W 2,65 2,53 I/h 33794 37515 kPa 34 24 kW 215,0 237,4 kW 70,2 77,7 A 125,0 138,0 W/W 3,06 3,06 I/h 37311 41207	kW 196,4 218,0 251,8 kW 74,1 86,1 91,7 A 131,0 150,0 163,0 W/W 2,65 2,53 2,74 I/h 33794 37515 43314 kPa 34 24 32 kW 215,0 237,4 275,0 kW 70,2 77,7 89,6 A 125,0 138,0 158,0 W/W 3,06 3,06 3,07 I/h 37311 41207 47745	kW 196,4 218,0 251,8 279,2 kW 74,1 86,1 91,7 107,9 A 131,0 150,0 163,0 189,0 W/W 2,65 2,53 2,74 2,59 I/h 33794 37515 43314 48020 kPa 34 24 32 26 kW 215,0 237,4 275,0 306,0 kW 70,2 77,7 89,6 99,8 A 125,0 138,0 158,0 175,0 W/W 3,06 3,06 3,07 3,07 I/h 37311 41207 47745 53116	kW 196,4 218,0 251,8 279,2 314,2 kW 74,1 86,1 91,7 107,9 119,5 A 131,0 150,0 163,0 189,0 207,0 W/W 2,65 2,53 2,74 2,59 2,63 I/h 33794 37515 43314 48020 54046 kPa 34 24 32 26 33 kW 215,0 237,4 275,0 306,0 343,9 kW 70,2 77,7 89,6 99,8 112,3 A 125,0 138,0 158,0 175,0 195,0 W/W 3,06 3,06 3,07 3,07 3,06 I/h 37311 41207 47745 53116 59705	kW 196,4 218,0 251,8 279,2 314,2 353,8 kW 74,1 86,1 91,7 107,9 119,5 141,6 A 131,0 150,0 163,0 189,0 207,0 242,0 W/W 2,65 2,53 2,74 2,59 2,63 2,50 I/h 33794 37515 43314 48020 54046 60853 kPa 34 24 32 26 33 31 kW 215,0 237,4 275,0 306,0 343,9 366,2 kW 70,2 77,7 89,6 99,8 112,3 121,7 A 125,0 138,0 158,0 175,0 195,0 212,0 W/W 3,06 3,06 3,07 3,07 3,06 3,01 I/h 37311 41207 47745 53116 59705 63585	kW 196,4 218,0 251,8 279,2 314,2 353,8 389,0 kW 74,1 86,1 91,7 107,9 119,5 141,6 155,6 A 131,0 150,0 163,0 189,0 207,0 242,0 263,0 W/W 2,65 2,53 2,74 2,59 2,63 2,50 2,50 I/h 33794 37515 43314 48020 54046 60853 66910 kPa 34 24 32 26 33 31 37 kW 215,0 237,4 275,0 306,0 343,9 366,2 412,6 kW 70,2 77,7 89,6 99,8 112,3 121,7 137,0 A 125,0 138,0 158,0 175,0 195,0 212,0 236,0 W/W 3,06 3,06 3,07 3,07 3,06 3,01 3,01 I/h 37311 41207	kW 196,4 218,0 251,8 279,2 314,2 353,8 389,0 456,7 kW 74,1 86,1 91,7 107,9 119,5 141,6 155,6 172,6 A 131,0 150,0 163,0 189,0 207,0 242,0 263,0 296,0 W/W 2,65 2,53 2,74 2,59 2,63 2,50 2,50 2,65 I/h 33794 37515 43314 48020 54046 60853 66910 78531 kPa 34 24 32 26 33 31 37 32 kW 215,0 237,4 275,0 306,0 343,9 366,2 412,6 478,4 kW 70,2 77,7 89,6 99,8 112,3 121,7 137,0 157,3 A 125,0 138,0 158,0 175,0 195,0 212,0 236,0 274,0 W/W 3,06 3,06	kW 196,4 218,0 251,8 279,2 314,2 353,8 389,0 456,7 501,9 kW 74,1 86,1 91,7 107,9 119,5 141,6 155,6 172,6 193,2 A 131,0 150,0 163,0 189,0 207,0 242,0 263,0 296,0 331,0 W/W 2,65 2,53 2,74 2,59 2,63 2,50 2,50 2,65 2,60 I/h 33794 37515 43314 48020 54046 60853 66910 78531 86311 kPa 34 24 32 26 33 31 37 32 38 kW 215,0 237,4 275,0 306,0 343,9 366,2 412,6 478,4 527,7 kW 70,2 77,7 89,6 99,8 112,3 121,7 137,0 157,3 174,3 A 125,0 138,0 158,0 175,0 <td>kW 196,4 218,0 251,8 279,2 314,2 353,8 389,0 456,7 501,9 568,7 kW 74,1 86,1 91,7 107,9 119,5 141,6 155,6 172,6 193,2 211,2 A 131,0 150,0 163,0 189,0 207,0 242,0 263,0 296,0 331,0 365,0 W/W 2,65 2,53 2,74 2,59 2,63 2,50 2,50 2,65 2,60 2,69 I/h 33794 37515 43314 48020 54046 60853 66910 78531 86311 97783 kPa 34 24 32 26 33 31 37 32 38 37 kW 215,0 237,4 275,0 306,0 343,9 366,2 412,6 478,4 527,7 592,0 kW 70,2 77,7 89,6 99,8 112,3 121,7 137,0 157,</td>	kW 196,4 218,0 251,8 279,2 314,2 353,8 389,0 456,7 501,9 568,7 kW 74,1 86,1 91,7 107,9 119,5 141,6 155,6 172,6 193,2 211,2 A 131,0 150,0 163,0 189,0 207,0 242,0 263,0 296,0 331,0 365,0 W/W 2,65 2,53 2,74 2,59 2,63 2,50 2,50 2,65 2,60 2,69 I/h 33794 37515 43314 48020 54046 60853 66910 78531 86311 97783 kPa 34 24 32 26 33 31 37 32 38 37 kW 215,0 237,4 275,0 306,0 343,9 366,2 412,6 478,4 527,7 592,0 kW 70,2 77,7 89,6 99,8 112,3 121,7 137,0 157,

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	kW	197,9	227,9	247,7	275,2	301,1	359,1	392,2	453,8	495,0	552,5	592,9
Input power	kW	75,3	78,6	89,8	106,2	123,2	133,0	153,4	169,0	193,9	208,9	234,1
Cooling total input current	A	126,0	133,0	150,0	176,0	203,0	220,0	252,0	280,0	321,0	347,0	390,0
EER	W/W	2,63	2,90	2,76	2,59	2,44	2,70	2,56	2,69	2,55	2,64	2,53
Water flow rate system side	l/h	34040	39194	42596	47339	51779	61758	67431	78030	85114	95003	101921
Pressure drop system side	kPa	14	18	15	19	14	20	18	23	23	29	17
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	209,8	250,3	274,3	304,8	334,3	394,3	431,0	497,4	543,0	609,3	654,3
Input power	kW	67,1	79,5	87,1	98,9	108,2	126,2	136,7	158,3	173,1	194,8	208,8
Heating total input current	A	119,0	139,0	152,0	171,0	187,0	216,0	234,0	272,0	299,0	336,0	363,0
COP	W/W	3,13	3,15	3,15	3,08	3,09	3,12	3,15	3,14	3,14	3,13	3,13
Water flow rate system side	l/h	36429	43447	47619	52924	58032	68469	74854	86379	94306	105817	113644
Pressure drop system side	kPa	15	22	19	23	17	24	21	28	28	35	21

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	206,2	243,8	266,9	297,0	329,2	385,5	425,3	488,4	538,3	601,4	651,3
Input power	kW	71,8	78,2	88,1	102,2	117,2	129,2	147,2	163,7	184,8	201,3	222,3
Cooling total input current	А	127,0	141,0	157,0	179,0	203,0	225,0	254,0	285,0	321,0	352,0	389,0
EER	W/W	2,87	3,12	3,03	2,91	2,81	2,98	2,89	2,98	2,91	2,99	2,93
Water flow rate system side	l/h	35459	41942	45909	51076	56619	66291	73125	83982	92547	103407	111966
Pressure drop system side	kPa	15	21	18	22	17	23	21	27	27	34	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	214,3	254,4	279,0	310,5	341,2	400,9	438,9	506,0	553,2	620,0	666,5
Input power	kW	66,6	79,3	86,7	97,1	106,2	124,8	137,1	157,5	171,8	193,5	207,0
Heating total input current	A	120,0	142,0	155,0	172,0	187,0	219,0	240,0	277,0	303,0	342,0	368,0
COP	W/W	3,22	3,21	3,22	3,20	3,21	3,21	3,20	3,21	3,22	3,20	3,22
Water flow rate system side	l/h	37204	44148	48436	53909	59226	69618	76226	87877	96076	107669	115772
Pressure drop system side	kPa	16	23	20	24	18	25	22	29	29	36	22

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Beat exchanger water (services side) 12°C /7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C /7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	209,6	241,7	264,7	294,5	326,7	377,8	432,4	489,4	540,5	597,8	647,7
Input power	kW	67,3	77,4	85,0	98,1	112,4	125,3	139,1	157,0	177,4	192,3	215,2
Cooling total input current	A	115,0	132,0	144,0	164,0	187,0	208,0	230,0	261,0	296,0	322,0	362,0
EER	W/W	3,12	3,12	3,11	3,00	2,91	3,02	3,11	3,12	3,05	3,11	3,01
Water flow rate system side	l/h	36053	41586	45538	50642	56185	64960	74341	84155	92932	102793	111352
Pressure drop system side	kPa	15	20	18	22	16	22	21	27	27	33	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	223,4	258,1	283,7	316,7	349,3	403,2	458,7	520,7	571,9	634,1	683,9
Input power	kW	69,3	80,5	87,9	98,5	109,0	126,1	143,1	162,7	177,1	198,2	211,7
Heating total input current	A	122,0	140,0	153,0	170,0	188,0	216,0	244,0	278,0	305,0	341,0	367,0
COP	W/W	3,22	3,21	3,23	3,22	3,20	3,20	3,21	3,20	3,23	3,20	3,23
Water flow rate system side	l/h	38791	44787	49248	54989	60660	70010	79655	90422	99327	110122	118791
Pressure drop system side	kPa	17	23	20	25	19	25	24	31	31	38	23

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
	0	A	168,6	185,0	209,8	239,2	268,5	297,5	326,5	423,4	487,6	516,6	570,9
Maximum current (FLA)	A,L	A	168,6	193,5	209,8	239,2	268,5	306,0	335,0	468,1	512,9	561,3	590,3
	E	Α	177,1	202,0	218,3	247,7	277,0	314,5	352,0	487,5	532,3	580,7	609,7
	0	A	357,2	412,4	437,2	489,9	519,2	631,7	660,7	757,6	821,8	850,8	905,1
Peak current (LRA)	A,L	Α	357,2	420,9	437,2	489,9	519,2	640,2	669,2	802,3	847,1	895,5	924,5
	E	A	365,7	429,4	445,7	498,4	527,7	648,7	686,2	821,7	866,5	914,9	943,9

ENERGY INDICES (REG. 2016/2281 EU)

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient condit	tions (averag	e) - 35 °C - Pde	esignh ≤ 400	kW (1)								
Pdesignh	kW	203	224	260	289	325	346	296	343	379	425	462
SCOP	W/W	3,65	3,65	3,65	3,68	3,65	3,60	3,73	3,73	3,80	3,73	3,80
ηsh	%	143	143	143	144	143	141	146	143	149	146	149
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,79	3,66	3,88	3,81	3,91	3,80	3,89	3,92	3,80	- (3)	- (3)
Seasonal efficiency	%	148,40	143,50	152,20	149,50	153,20	149,10	152,70	153,80	149,00	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,67	4,76
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	183,90	187,30
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,88	5,02
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with stand	lard fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54
SEPR - (EN14825: 2018) High temperature with inver-	ter fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54

⁽¹⁾ Data EN 14511:2022; Beat exchanger water (services side) 12°C /7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(4) Calculation performed with FIXED water flow rate.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditi	ions (average) - 35 °C - Pde	esignh ≤ 400	kW (1)								
Pdesignh	kW	197	235	258	286	314	370	306	353	385	433	464
SCOP	W/W	3,73	3,75	3,75	3,68	3,68	3,73	3,93	3,83	3,95	3,83	3,93
ηsh	%	146	147	147	144	144	146	154	150	155	150	154
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,83	4,01	3,92	3,90	3,82	4,05	3,99	4,04	3,87	- (3)	- (3)
Seasonal efficiency	%	150,30	157,20	153,90	149,60	159,00	156,40	156,60	158,60	151,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,72	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,70	183,60
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,08	5,11
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with stand	ard fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51
SEPR - (EN14825: 2018) High temperature with invert	er fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(4) Calculation performed with FIXED water flow rate.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient condit	tions (averag	e) - 55 °C - Pde	esignh ≤ 400	kW (1)								
Pdesignh	kW	196	233	255	284	312	367	304	351	384	430	462
SCOP	W/W	3,03	3,08	3,03	3,08	3,03	3,10	3,13	3,08	3,30	3,08	3,15
ηsh	%	118	120	118	120	118	121	122	120	129	120	123
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,96	4,13	4,09	4,09	4,07	4,23	4,22	4,22	4,10	- (3)	- (3)
Seasonal efficiency	%	155,40	162,10	160,40	160,60	159,70	166,10	165,60	165,80	161,0	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,3%	179,6%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,96	5,01
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	195,30	197,40
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with stand	lard fans (4)											
SEPR	W/W	-			-	-	-	-		-	5,52	5,52
SEPR - (EN14825: 2018) High temperature with inver	ter fans (4)											
SEPR	W/W	-	_	-	-	_	-	-	-	-	5,52	5,52

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(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(4) Calculation performed with FIXED water flow rate.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient condit	ions (average) - 55 °C - Pd	esignh ≤ 400	kW (1)								
Pdesignh	kW	204	236	259	290	320	369	318	361	397	440	474
SCOP	W/W	3,05	3,08	3,05	3,10	3,03	3,08	3,13	3,05	3,30	3,08	3,15
ηsh	%	119	120	119	121	118	120	122	119	129	120	123
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	4,16	4,15	4,18	4,19	4,16	4,27	4,39	4,36	4,22	- (3)	- (3)
Seasonal efficiency	%	163,40	163,00	164,10	164,70	163,40	167,90	172,70	171,40	165,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,4%	183,7%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,17	5,20
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	203,60	204,90
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with stand	ard fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54
SEPR - (EN14825: 2018) High temperature with invert	ter fans (4)											
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C/7°C
(4) Calculation performed with FIXED water flow rate.

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Туре	°,A,E,L	type						Scroll					
Compressor regulation	°,A,E,L	Туре						0n-0ff					
Number	°,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2
Defrinement	°,A,L	type						R410A					
Refrigerant	E	type											
	0	kg	41,0	42,0	55,0	56,0	56,0	58,0	58,0	84,0	84,0	100,0	100,0
Refrigerant charge (1)	A,L	kg	43,0	56,0	58,0	58,0	60,0	84,0	87,0	100,0	103,0	116,0	125,0
	E	kg	56,0	80,0	82,0	82,0	84,0	97,0	113,0	137,0	140,0	153,0	162,0
System side heat exchange	r		-										
Туре	°,A,E,L	type						Shell and tube					
Hydraulic connections													
Connections (in/out)	°,A,E,L	Туре						Grooved joints					
Hydraulic connections with	out hydronic kit												
Cinca (in least)	0	Ø	5"	5"	5"	5"	5"	5"	5"	6"	6"	6"	6"
Sizes (in/out)	A,E,L	Ø	5"	5"	5"	5"	6"	6"	6"	6"	6"	6"	6"
Hydraulic connections with	hydronic kit		-										
	0	Ø	-	-	3"	3"	3"	-	-	4"	4"	4"	4"
Sizes (in/out)	A,L	Ø	-	3"	-	-	-	3"	4"	4"	4"	4"	4"
	E	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Water filter not supplied. Installation is mandatory or the guarantee will void.

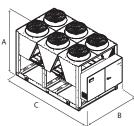
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fan													
Туре	°,A,E,L	type						Axial					
Fan motor	°,A	type						Asynchronous					
Tall illottol	E,L	type					Asynch	ronous with ph	ase cut				
	0	no.	4	4	6	6	6	6	6	8	8	10	10
Number	A,L	no.	4	6	6	6	6	8	8	10	10	12	12
	E	no.	6	8	8	8	8	10	12	14	14	16	16
	0	m³/h	80000	80000	120000	120000	120000	120000	120000	160000	160000	200000	200000
Air flow rate	A	m³/h	80000	120000	120000	120000	120000	160000	160000	200000	200000	240000	240000
All flow fale	E	m³/h	90000	120000	120000	120000	120000	150000	180000	210000	210000	240000	240000
	L	m³/h	60000	90000	90000	90000	90000	120000	120000	150000	150000	180000	180000
Sound data calculated in cool	ing mode (1)												
	٥	dB(A)	89,5	89,5	91,6	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2
Cound nowar lovel	A	dB(A)	89,5	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2	95,1	95,1
Sound power level	E	dB(A)	84,6	86,1	86,1	86,1	86,1	87,2	88,2	89,4	89,9	91,1	91,6
	L	dB(A)	82,6	84,6	84,6	84,6	84,6	86,1	86,1	87,7	88,2	89,6	90,1
	0	dB(A)	57,4	57,4	59,3	59,3	59,3	59,3	59,3	60,7	60,7	61,7	61,7
Cound processes lovel (10 m)	A	dB(A)	57,4	59,3	59,3	59,3	59,3	60,7	60,7	61,6	61,6	62,5	62,5
Sound pressure level (10 m)	E	dB(A)	52,4	53,7	53,7	53,7	53,7	54,7	55,5	56,7	57,2	58,2	58,7
	L	dB(A)	50,5	52,4	52,4	52,4	52,4	53,8	53,8	55,2	55,7	57,0	57,5

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

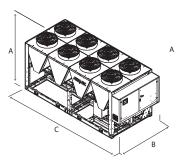
DIMENSIONS

NRB 0800 - 0900 ° NRB 0800 L/A

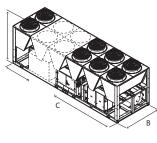
NRB 1000 - 1600 ° NRB 0900 - 1200 L/A NRB 0800 E



NRB 1805 - 2006 ° NRB 1400 - 1600 L/A NRB 0900 - 1200 E



NRB 2206 - 2406 ° NRB 1805 - 2406 L/A NRB 1400 - 2406 E



Size				0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights with	out hydronic	: kit												
A	•	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В		°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
		0	mm	2780	2780	3970	3970	3970	3970	3970	5160	5160	6350	6350
C	_	A,L	mm	2780	3970	3970	3970	3970	4760	4760	6350	6350	7140	7140
	_	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520
Dimensions and weights with	pump/s													
		0	mm	-	-	2450	2450	2450	-	-	2450	2450	2450	2450
A		A,L	mm	-	2450	-	-	-	2450	2450	2450	2450	2450	2450
	_	E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
		0	mm	-	-	2200	2200	2200	-	-	2200	2200	2200	2200
В		A,L	mm	-	2200	-	-	-	2200	2200	2200	2200	2200	2200
	_	E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
		0	mm	-	-	3970	3970	3970	-	-	5160	5160	6350	6350
C		A,L	mm	-	3970	-	-	-	4760	4760	6350	6350	7140	7140
		E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520
Size			0800	0900	1000	1100)	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic	kit: 00				'									
Weights														
-	0	kg	2670	2730	3310	3360		3400	3460	3490	4350	4520	5190	5230
Empty weight	A,L	kg	2700	3280	3350	3390		3470	4120	4240	4980	5190	5690	6030
	E	kg	3230	3920	3990	4020		4100	4660	5220	6060	6280	6810	7100

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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CL 025-200

Air-water chiller

Cooling capacity 5,8 ÷ 41 kW



- Standard version
- Version with Integrated hydronic kit system side
- · Fan Plug-fan







DESCRIPTION

Chillers for indoor installation for chilled water production with scroll compressors, plugfan fans, external copper coils with aluminum louvers. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A With storage tank and pump

P With pump

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to -10°C .

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.

In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Air supply

Horizontal or vertical, adjustable during installation for all sizes. Directional air discharge hood:

- plastic for sizes 050 to 090
- galvanised steel for the other sizes

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

The regulation using an outside air temperature sensor allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.

MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply

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water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VT: Anti-vibration supports.

CLPA: Galvanised steel plenum to be installed on the condenser coil, facilitates duct installations.

KR: Anti-freeze electric heater for the plate heat exchanger. **GPCL:** Protection grille for the source side exchange coil.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	025	030	040	050	070	080	090	100	150	200
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,P	•	•		•		•	•	•		•
AERSET	°,A,P	•	•	•	•	•	•	•	•	•	•
MODU-485BL	°,A,P	•			•			•	•		•
MULTICONTROL	°,A,P	•	•		•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•	•	•
SGD	°,A,P	•		•	•			•	•		•
SPLW (1)	°,A,P	•	•	•	•	•	•	•	•	•	•

⁽¹⁾ Probe required for MULTICONTROL to manage the secondary circuit system.

Antivibration

Ver	025	030	040	050	070	080	090	100	150	200
°,P	VT9	VT15	VT15	VT15						
A	VT15A	VT15	VT15	VT15						

Galvanised steel plenum

Ver	025	030	040	050	070	080	090	100	150	200
°,A,P	CLPA1 (1)	CLPA1 (1)	CLPA2 (2)	CLPA3	CLPA3	CLPA3				

⁽¹⁾ Not compatible with the GPCL1 accessory (2) Not compatible with the GPCL2 accessory

Device for peak current reduction

Ver	025	030	040	050	070	080	090	100	150	200
°,A,P	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)						

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.

Antifreeze electric heater

Ver	025	030	040	050	070	080	090	100	150	200
°,A,P	KR2	KR100	KR100	KR100						

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	025	030	040	050	070	080	090	100	150	200
°,A,P	GPCL1	GPCL1	GPCL2	GPCL2	GPCL2	GPCL2	GPCL2	GPCL3	GPCL3	GPCL3

A grey background indicates the accessory must be assembled in the factory

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2	α
3,4,5	Size 025, 030, 050, 070, 090, 100, 150, 200
6	Model
0	Cooling only
7	Execution
0	Standard
8	Version
0	Standard
A	With storage tank and pump
P	With pump
9	Heat recovery
0	Without heat recovery
D	With desuperheater (1)
10	Coils
0	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
11	Operating field
0	Standard mechanic thermostatic valve (2)
Υ	Low temperature mechanic thermostatic valve (3)
Z	Low temperature electronic thermostatic valve (4)
12	Evaporator
0	Standard
С	Motocondensing unit
13	Power supply Power
0	400V ~ 3N 50Hz with magnet circuit breakers (5)
M	230V ~ 3 50Hz (6)

⁽¹⁾ It is only available in size CL 050 ÷ 200; If the unit is also fitted with one of the low temperature valves in addition to the desuperheater, it is necessary to always guarantee a water temperature of 35°C at the inlet of the desuperheater.

(2) Water produced from 4 °C ÷ 18 °C

(3) Water produced from 0 °C ÷ − 10 °C (4) Water produced from 0 °C ÷ 4 °C (5) Only for CL 025 ÷ 200 sizes (6) Only for CL 025 ÷ 030 sizes

PERFORMANCE SPECIFICATIONS

CL ° - (version °) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	090	100	150	200
Cooling performance 12 °C / 7 °C (1)	,									
Cooling capacity	kW	5,8	7,1	8,8	12,7	16,3	20,2	26,3	33,0	40,6
Input power	kW	2,2	2,6	3,5	4,3	5,5	6,8	8,8	11,3	14,4
Cooling total input current - 400V	Α	4,8	5,1	7,5	8,4	10,0	13,0	17,0	19,0	25,0
Cooling total input current - 230V	Α	10,0	13,0	17,0	-	-	-	-	-	-
EER	W/W	2,70	2,72	2,50	2,98	3,00	2,98	2,99	2,91	2,82
Water flow rate system side	l/h	1008	1233	1523	2189	2817	3484	4533	5695	7001
Pressure drop system side	kPa	19	26	25	27	29	29	45	53	72

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

CL ° - (versions A/P) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	050	070	090	100	150	200
Cooling performance 12 °C/7 °C (1)									
Cooling capacity	kW	5,9	7,2	12,8	16,5	20,4	26,5	33,4	41,0
Input power	kW	2,1	2,6	4,2	5,4	6,8	8,9	11,6	14,6
Cooling total input current - 400V	A	5,1	5,4	9,0	11,0	13,0	18,0	21,0	27,0
Cooling total input current - 230V	A	11,0	14,0	-	-	-	-	-	-
EER	W/W	2,76	2,78	3,02	3,04	3,02	2,97	2,87	2,81
Water flow rate system side	l/h	1008	1233	2189	2817	3484	4533	5695	7001
Useful head system side	kPa	71	62	73	66	58	83	131	122

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY DATA

Size			025	030	040	050	070	080	090	100	150	200
SEER - 12/7 (EN14825:2018) with stan	dard fans (1)											
SEER	0	W/W	4,11	4,11	-	4,10	4,11	-	4,12	4,38	4,32	4,10
DEEK	A,P	W/W	4,22	4,22	-	4,17	4,21	-	4,22	4,21	4,13	4,12
Casanal off diamen	0	%	161,3%	161,4%	-	161,1%	161,3%	-	161,8%	172,0%	169,7%	161,0%
Seasonal efficiency	A,P	%	165,7%	165,7%	-	163,8%	165,2%	-	165,6%	165,5%	162,3%	161,8%
SEER - 23/18 (EN14825: 2018) with sta	andard fans (2)											
SEER	0	W/W	4,72	4,47	-	4,50	4,44	-	4,52	5,13	4,99	4,51
DEEK	A,P	W/W	4,86	4,62	-	4,64	4,58	-	4,72	4,90	4,65	4,36
Cassanal officians	0	%	185,9%	175,9%	-	176,8%	174,7%	-	177,7%	202,2%	196,6%	177,2%
Seasonal efficiency	A,P	%	191,2%	181,7%	-	182,6%	180,0%	-	185,7%	193,1%	183,0%	171,5%
SEPR - (EN14825: 2018) High tempera	ture with standa	rd fans (2)										
SEPR	0	W/W	5,38	5,10	-	5,10	5,03	-	5,04	5,67	5,59	5,30
חיזכ	A,P	W/W	5,49	5,21	-	5,18	5,13	-	5,16	5,56	5,37	5,20

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

LLLC IIII C D/II/I												
Size			025	030	040	050	070	080	090	100	150	200
Power supply: °												
Electric data												
Marrian and (FLA)	0	А	11,0	11,6	12,6	13,6	15,4	17,0	20,4	27,4	30,8	40,8
Maximum current (FLA)	A,P	А	11,4	12,0	13,0	14,4	16,1	17,7	21,1	29,3	33,8	43,8
DI	0	А	44,6	40,6	71,6	77,2	77,2	77,2	105,2	90,9	92,6	125,6
Peak current (LRA)	A,P	A	45,0	41,0	72,0	77,9	77,9	77,9	105,9	92,8	95,6	128,6
Size			025	030	040	050	070	080	090	100	150	200
Power supply: M												
Electric data												
M : (FLA)	0	A	22,0	25,0	25,0	-	-	-	-	-	-	-
Maximum current (FLA)	A,P	A	22,6	25,6	25,7	-	-	-	-	-	-	-
D .//DA\	0	А	67,0	88,0	118,0	-	-	-	-	-	-	-
Peak current (LRA)	A.P	A	67,6	88.6	118,6	-	-	-	-	-	-	-

GENERAL TECHNICAL DATA

Size		025	030	040	050	070	080	090	100	150	200	
Compressor												
Туре	°,A,P	type					Sc	roll				
Compressor regulation	°,A,P	Туре					0n	-off				
Number	°,A,P	no.	1	1	1	1	1	1	1	2	2	2
Circuits	°,A,P	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	°,A,P	type					R4	10A				
Refrigerant charge (1)	°,A,P	kg	1,5	2,7	2,7	4,0	4,0	4,0	4,0	5,5	7,5	7,5
System side heat exchanger												
Туре	°,A,P	type					Braze	d plate				
Number	°,A,P	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections								-				
Connections (in/out)	°,A,P	Туре					Gas	s - F				
Size (in)	°,A,P	Ø					1	1/4				
Size (out)	°,A,P	Ø					1	1/4				
Fan												
Type	°,A,P	type					Plug	g-fan				
Fan motor	°,A,P	type					Inve	erter				
Number	°,A,P	no.	1	1	1	1	1	1	1	2	2	2
Air flow rate	°,A,P	m³/h	4000	4000	4000	6500	6500	6500	7500	10000	12000	12000
High static pressure	°,A,P	Pa	50	50	50	50	50	50	50	50	50	50
Intake plus machine body												
Sound power level	°,A,P	dB(A)	78,0	78,0	78,0	73,0	73,0	73,0	76,0	74,0	79,0	79,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	46,0	41,0	41,0	41,0	44,0	42,0	47,0	47,0
Machine exhaust												
Sound power level	°,A,P	dB(A)	78,0	78,0	78,0	78,0	78,0	78,0	81,0	78,0	83,0	83,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	46,0	46,0	46,0	46,0	49,0	47,0	52,0	52,0

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DISCHARGE HOOD POSSIBLE CONFIGURATIONS

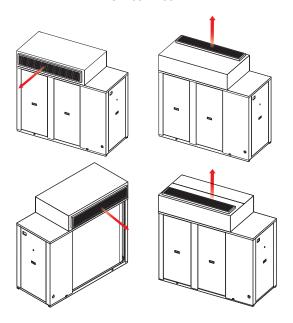
CL 025 ÷ 090





Air supply Horizontal or vertical, adjustable during installation for all sizes. Directional air discharge hood:

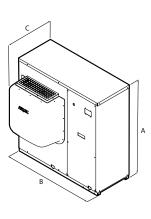
CL 100 ÷ 200



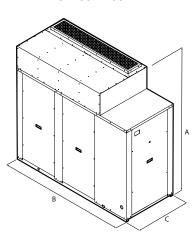
- plastic for sizes 050 to 090galvanised steel for the other sizes

DIMENSIONS

CL 025 ÷ 090



CL 100 ÷ 200



Size			025	030	040	050	070	080	090	100	150	200
Dimensions and weights												
A	°,A,P	mm	1028	1281	1281	1281	1281	1281	1281	1674	1674	1674
D	°,P	mm	1005	1006	1006	1160	1160	1160	1160	1897	1897	1897
D	A	mm	1366	1458	1458	1610	1610	1610	1610	1897	1897	1897
(°,A,P	mm	702	754	754	798	798	798	798	801	801	801
	۰	kg	127	160	160	208	210	210	212	469	471	475
Empty weight	A	kg	157	201	201	252	260	260	256	532	537	542
	P	kg	133	166	166	217	225	225	221	482	487	492

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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CL 025H-200H

Reversible air/water heat pump

Cooling capacity 6,5 ÷ 50,9 kW - Heating capacity 7,7 ÷ 44,8 kW



- Cooling / heating / high-temperature water production even for DHW production.
- Water produced up to 60 °C
- Heating operations with external temperatures down to -15 °C
- · Fan Plug-fan





DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A With storage tank and pump

P With pump

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 46 °C in summer. Hot water production up to 60 °C.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.

In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Air supply

Horizontal or vertical, adjustable during installation for all sizes. Directional air discharge hood:

- plastic for sizes 050 to 090
- galvanised steel for the other sizes

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

Hot water production

Special attention has been paid to winter operation: compared with traditional heat pumps, the operating limits have been extended thanks to particular technological expedients.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

The regulation using an outside air temperature sensor allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.

MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.

SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/ return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VT: Anti-vibration supports.

BSKW: Electric heaters kit with IP44 panel for remote mounting in a shel-

CLPA: Galvanised steel plenum to be installed on the condenser coil, facilitates duct installations.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction. **KRB:** Electric anti-freeze resistance kit for base.

GPCL: Protection grille for the source side exchange coil.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	025	030	040	050	070	080	090	100	150	200
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,P	•			•	•	•	•	•	•	•
AERSET	°,A,P	•	•	•	•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•	•	•
SDHW (1)	°,A,P	•				•	•	•		•	•
SGD	°,A,P	•	•	•	•	•	•	•	•	•	•
SPLW (2)	°,A,P					•		•		•	•

- (1) Probe required for MULTICONTROL for managing the domestic hot water system.
 (2) Probe required for MULTICONTROL to manage the secondary circuit system.
- MODU-485BL = Accessory mandatory for the production of domestic hot water

Antivibration

Ver	025	030	040	050	070	080	090	100	150	200
°,P	VT9	VT15	VT15	VT15						
A	VT15A	VT15	VT15	VT15						

BSKW: Electric heater kit

Ver	025	030	040	050	070	080	090	100	150	200
Power supply: °										
∘ A D	BS6KW400T,									
°,A,P	BS9KW400T									
Power supply: M										
∘ A D	BS4KW230M,	BS4KW230M,	BS4KW230M,							
°,A,P	BS6KW230M	BS6KW230M	BS6KW230M				-			

Galvanised steel plenum

Ver	025	030	040	050	070	080	090	100	150	200
°,A,P	CLPA1 (1)	CLPA1 (1)	CLPA2 (2)	CLPA3	CLPA3	CLPA3				

- (1) Not compatible with the GPCL1 accessory (2) Not compatible with the GPCL2 accessory

Device for peak current reduction

Ver	025	030	040	050	070	080	090	100	150	200
Power supply: °										
°,A,P	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)						

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.

A grey background indicates the accessory must be assembled in the factory

Electric Heater for the Base

Ver	025	030	040	050	070	080	090	100	150	200
°,A,P	KRB4 (1)	KRB4 (1)	KRB5 (1)	KRB6 (1)	KRB6 (1)	KRB6 (1)				

⁽¹⁾ Incompatible with the condensate collection basin accessory with integrated resistance.

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	025	030	040	050	070	080	090	100	150	200
°,A,P	GPCL1	GPCL1	GPCL2	GPCL2	GPCL2	GPCL2	GPCL2	GPCL3	GPCL3	GPCL3

A grey background indicates the accessory must be assembled in the factory

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CONFIGURATOR

Description
(L
Size 025, 030, 040, 050, 070, 080, 090, 100, 150, 200
Model
Heat pump
Execution
Standard
Version
Standard
With storage tank and pump (1)
With pump
Heat recovery
Without heat recovery
Coils
Copper-aluminium
Copper pipes-copper fins
Copper pipes-Tinned copper fins
Copper pieps-Coated aluminium fins
Operating field
Standard mechanic thermostatic valve (2)
Low temperature mechanic thermostatic valve (3)
Low temperature electronic thermostatic valve (4)
Evaporator
Standard
Power supply
400V 3N ~ 50Hz (5)
230V ~ 50Hz (6)

⁽¹⁾ The version with integrated storage tank is not suitable for the production of domestic hot water (DHW). (2) Water produced from 4 $^{\circ}$ C \div 18 $^{\circ}$ C (3) Water produced from 0 $^{\circ}$ C \div -10 $^{\circ}$ C

CL - (H°) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 12 °C/7 °C (1)											
Cooling capacity	kW	6,4	8,4	10,4	11,9	14,0	15,5	19,0	23,9	31,3	37,6
Input power	kW	2,6	3,1	3,8	4,2	4,8	5,6	6,8	8,2	10,9	14,4
Cooling total input current - 400V	A	5,5	6,3	6,6	7,5	8,3	9,6	13,0	14,0	21,0	26,0
Cooling total input current - 230V	A	13,0	15,0	16,0	-	-	-	-	-	-	-
EER	W/W	2,44	2,73	2,74	2,87	2,90	2,77	2,81	2,93	2,86	2,61
Water flow rate system side	l/h	1104	1441	1785	2054	2411	2676	3272	4122	5388	6477
Pressure drop system side	kPa	13	12	13	11	15	26	26	34	22	43
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	7,9	9,8	12,5	14,4	15,9	18,6	21,0	27,8	34,8	43,8
Input power	kW	2,3	2,9	3,7	4,1	4,7	5,5	6,5	8,1	10,6	14,4
Heating total input current - 400V	A	5,5	6,2	6,4	7,5	8,1	9,2	13,0	14,0	19,0	26,0
Heating total input current - 230V	A	12,0	14,0	15,0	-	-	-	-	-	-	-
СОР	W/W	3,41	3,32	3,40	3,52	3,36	3,40	3,20	3,44	3,27	3,03
Water flow rate system side	I/h	1368	1693	2164	2502	2756	3214	3634	4822	6034	7581
Pressure drop system side	kPa	19	16	18	17	21	32	34	49	30	42

⁽⁴⁾ Water produced from 0 °C \div 4 °C (5) Only for CL 025 \div 200 sizes (6) Only for CL 025 \div 040 sizes

PERFORMANCE SPECIFICATIONS 12 °C/7 °C - 40 °C/45 °C

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C /7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

CL - (HP/HA) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	6,5	8,4	10,5	12,0	14,1	15,7	19,1	24,2	31,6	38,0
Input power	kW	2,6	3,0	3,7	4,2	4,8	5,6	6,7	8,3	11,3	14,7
Cooling total input current - 400V	A	5,8	6,7	7,0	8,1	8,9	10,0	14,0	15,0	23,0	28,0
Cooling total input current - 230V	A	13,0	16,0	16,0	-	-	-	-	-	-	-
EER	W/W	2,49	2,79	2,79	2,90	2,94	2,82	2,85	2,91	2,81	2,58
Water flow rate system side	l/h	1104	1441	1785	2054	2411	2676	3272	4122	5388	6477
Useful head system side	kPa	76	75	69	92	86	80	64	99	158	145
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	7,8	9,7	12,4	14,3	15,8	18,4	20,8	27,6	34,5	43,4
Input power	kW	2,3	2,9	3,6	4,1	4,7	5,4	6,5	8,2	11,0	14,8
Heating total input current - 400V	Α	5,9	6,6	6,8	8,1	8,7	9,9	13,0	15,0	21,0	28,0
Heating total input current - 230V	Α	12,0	15,0	16,0	-	-	-	-	-	-	-
COP	W/W	3,42	3,34	3,42	3,50	3,35	3,40	3,21	3,35	3,14	2,92
Water flow rate system side	l/h	1368	1693	2164	2502	2756	3214	3634	4822	6034	7581
Useful head system side	kPa	68	67	56	84	78	66	53	72	133	103

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

CL - (H°) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	8,5	11,1	13,8	15,8	18,6	20,6	25,2	31,7	41,6	49,9
Input power	kW	2,8	3,3	4,0	4,4	5,1	6,0	7,2	8,7	11,6	15,4
Cooling total input current - 400V	A	5,8	6,6	6,9	8,0	8,7	10,0	14,0	15,0	22,0	27,0
Cooling total input current - 230V	A	13,0	16,0	17,0	-	-	-	-	-	-	-
EER	W/W	3,05	3,42	3,43	3,59	3,63	3,45	3,50	3,63	3,57	3,24
Water flow rate system side	l/h	1472	1922	2381	2740	3216	3570	4364	5498	7187	8639
Pressure drop system side	kPa	23	21	23	20	27	46	46	60	39	77
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	8,2	10,1	12,9	15,0	16,5	19,2	21,7	28,9	36,1	45,4
Input power	kW	2,0	2,5	3,1	3,5	4,0	4,6	5,5	6,8	9,0	12,4
Heating total input current - 400V	A	4,7	5,3	5,4	6,4	6,8	7,8	11,0	12,0	16,0	22,0
Heating total input current - 230V	A	10,0	12,0	13,0	-	-	-	-	-	-	-
COP	W/W	4,16	4,08	4,15	4,30	4,12	4,17	3,93	4,22	3,99	3,67
Water flow rate system side	l/h	1413	1749	2235	2585	2846	3320	3754	4981	6233	7832
Pressure drop system side	kPa	20	17	19	18	22	34	36	52	32	45

CL - (HP/HA) - (400V 3N \sim 50Hz / 230V \sim 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	8,6	11,2	13,9	16,0	18,7	20,8	25,4	32,0	41,9	50,3
Input power	kW	2,7	3,2	4,0	4,4	5,1	5,9	7,2	8,9	12,1	15,8
Cooling total input current - 400V	Α	6,2	7,0	7,3	8,6	9,4	11,0	15,0	16,0	24,0	30,0
Cooling total input current - 230V	Α	14,0	17,0	17,0	-	-	-	-	-	-	-
EER	W/W	3,13	3,50	3,50	3,64	3,69	3,52	3,55	3,58	3,45	3,18
Water flow rate system side	l/h	1472	1922	2381	2740	3216	3570	4364	5498	7187	8639
Useful head system side	kPa	63	59	48	79	66	55	27	41	81	57
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	8,1	10,0	12,8	14,8	16,3	19,1	21,6	28,6	35,8	45,0
Input power	kW	1,9	2,4	3,1	3,4	4,0	4,6	5,5	7,0	9,4	12,8
Heating total input current - 400V	A	5,0	5,6	5,8	7,0	7,5	8,5	11,0	13,0	18,0	24,0
Heating total input current - 230V	A	11,0	13,0	14,0	-	-	-	-	-	-	-
COP	W/W	4,18	4,11	4,19	4,30	4,13	4,19	3,94	4,09	3,80	3,52
Water flow rate system side	l/h	1413	1749	2235	2585	2846	3320	3754	4981	6233	7832
Useful head system side	kPa	66	65	54	82	76	63	49	65	124	93

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C /7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C (2) Data EN 14511:2022; System side water heat exchanger 30 °C/ 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			025	030	040	050	070	080	090	100	150	200
Cooling capacity with low leaving wate	r temp (UE n° 20	16/2281)										
SEER	0	W/W	2,93	3,27	3,32	3,45	3,43	3,27	3,39	4,06	4,06	3,66
SECK	A,P	W/W	3,11	3,47	3,53	3,62	3,62	3,46	3,60	4,06	3,85	3,60
	0	%	114,20	127,60	129,60	134,80	134,00	127,80	132,40	159,20	159,20	143,40
ηςς	A,P	%	121,40	135,90	138,00	142,00	141,70	135,30	141,00	159,50	150,80	141,10
UE 811/2013 performance in average a	mbient conditio	ns (average) -	35 °C - Pdesig	nh ≤ 70 kW (1)							
Pdesignh	°,A,P	kW	-	-	-	-	-	-	-	-	-	-
SCOP	0	W/W	3,35	3,35	3,45	3,58	3,45	3,53	3,30	3,53	3,35	3,23
SCOP	A,P	W/W	3,43	3,43	3,53	3,63	3,50	3,58	3,35	3,45	3,23	3,20
nch	0	%	131,00	131,00	135,00	140,00	135,00	138,00	129,00	138,00	131,00	126,00
ηsh	A,P	%	134,00	134,00	138,00	142,00	137,00	140,00	131,00	135,00	126,00	125,00
Efficiency energy class	°,A,P		A+	A+	A+	A+	A+	A+	A+	A+	A+	A+

⁽¹⁾ Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			025	030	040	050	070	080	090	100	150	200
Power supply: °												
Electric data												
Marrian compant (FLA)	0	А	11,0	11,9	11,9	13,5	14,7	15,2	20,4	27,0	30,3	40,8
Maximum current (FLA)	A,P	A	11,4	12,4	12,3	14,3	15,4	15,9	21,1	29,0	33,4	43,8
Deal word (LDA)	0	A	44,6	44,6	57,1	64,2	74,2	94,2	105,2	77,7	109,3	125,6
Peak current (LRA)	A,P	A	45,0	45,0	57,6	64,9	74,9	94,9	105,9	79,6	112,4	128,6
Size			025	030	040	050	070	080	090	100	150	200
Power supply: M												
Electric data												
(FLA)	0	A	19,0	24,0	24,0	-	-	-	-	-	-	-
Maximum current (FLA)	- 10	Α	10.0	24,7	25.0	_	_	_	_		_	
maximum current (12/1)	A,P	A	19,8	24,7	23,0							
Peak current (LRA)	A,P •	A	86,0	96,0	96,0	-	_	-	-	-	-	-

GENERAL TECHNICAL DATA

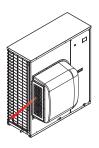
Size			025	030	040	050	070	080	090	100	150	200
Compressor												
Туре	°,A,P	type					Sc	roll				
Compressor regulation	°,A,P	Туре					0n	-off				
Number	°,A,P	no.	1	1	1	1	1	1	1	2	2	2
Circuits	°,A,P	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	°,A,P	type					R4	10A				
Refrigerant charge (1)	°,A,P	kg	2,7	2,7	4,3	5,6	5,6	5,6	5,7	8,3	8,0	7,5
System side heat exchanger												
Туре	°,A,P	type					Braze	d plate				
Number	°,A,P	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	°,A,P	Туре					Ga	s-F				
Size (in)	°,A,P	Ø					1	1/4				
Size (out)	°,A,P	Ø					1	1/4				
Fan												
Туре	°,A,P	type					Plug	g-fan				
Fan motor	°,A,P	type					Inv	erter				
Number	°,A,P	no.	1	1	1	1	1	1	1	2	2	2
Air flow rate	°,A,P	m³/h	4000	4000	6500	6500	6500	6500	7500	10000	12000	16000
High static pressure	°,A,P	Pa	50	50	50	80	80	80	80	80	100	100
Intake plus machine body												
Sound power level	°,A,P	dB(A)	78,0	78,0	73,0	73,0	73,0	73,0	76,0	74,0	79,0	80,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	41,0	41,0	41,0	41,0	44,0	42,0	47,0	48,0
Machine exhaust												
Sound power level	°,A,P	dB(A)	78,0	78,0	78,0	78,0	78,0	78,0	81,0	78,0	83,0	85,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	46,0	46,0	46,0	46,0	49,0	47,0	52,0	54,0

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DISCHARGE HOOD POSSIBLE CONFIGURATIONS

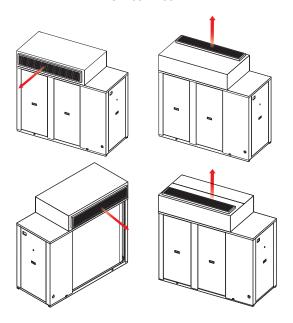
CL 025 ÷ 090





Air supply Horizontal or vertical, adjustable during installation for all sizes. Directional air discharge hood:

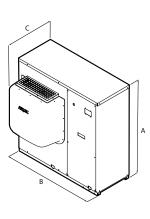
CL 100 ÷ 200



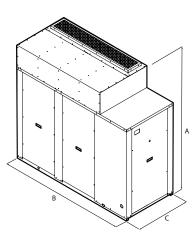
- plastic for sizes 050 to 090galvanised steel for the other sizes

DIMENSIONS

CL 025 ÷ 090







Size			025	030	040	050	070	080	090	100	150	200
Dimensions and weights												
A	°,A,P	mm	1028	1028	1281	1281	1281	1281	1281	1674	1674	1674
D	°,P	mm	1005	1005	1160	1160	1160	1160	1160	1897	1897	1897
D	A	mm	1366	1366	1610	1610	1610	1610	1610	1897	1897	1897
(°,A,P	mm	702	702	798	798	798	798	798	801	801	801
	۰	kg	142	142	229	229	240	240	234	504	527	515
Empty weight	A	kg	172	172	274	274	284	284	279	567	593	581
	P	kg	148	148	239	239	250	250	243	517	543	531

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NLC 0280-1250

Air-water chiller

Cooling capacity 53 ÷ 322 kW



- High efficiency also at partial loads
- · Complete air flow versatility
- EC fan Plug-fan with high performance
- Night mode





DESCRIPTION

Chiller offering chilled/hot water, designed to mit air conditioning needs in residential / commercial complexes or industrial applications. Indoor units with Scroll compressors, centrifugal fans and plate heat exchangers.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to -10 $^{\circ}\text{C}$.

Units mono or dual-circuit

The range includes units with 2 compressors in single circuit and units with 4 compressors divided into two independent circuits.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction. In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

Hot water production

In the configuration with desuperheater or total recovery, it is also possible to produce free-hot water.

CONTROL PCO₅

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in
 the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible

to save a log file with all the connected unit datas in the personal terminal for post analysis.

FL: Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

AVX: Spring anti-vibration supports.

VT: Anti-vibration supports.

FLG: Flange for ducts.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

KRQ: Electric heater for the control and electric power board.

KRA: Anti-freeze electric heater for the buffer tank.

C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
AER485P1	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E	•	•	•	•	•	•	•	•	•	•	•		•	•	•
AERLINK	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E	•	•	•	•	•	•	•	•	•	•	•		•	•	•
FL	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E	•	•	•	•		•	•		•				•		•
SGD	°,A,E	•	•	•	•											
Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
C-TOUCH	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

FILTROW

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°,A,E	FILTRO W DN50 (1)	FILTRO W DN65 (1)						

(1) Installation is mandatory, contrarily garantee becomes void.

Ver	0700	0750	0800	0900	1000	1100	1250
°,A,E	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN80 (1)				

 $(1)\ \ Installation\ is\ mandatory, contrarily\ garantee\ becomes\ void.$

Flange for ducts

Ver	0280	0300	0330	0350	0550	0600	0650	0675
٥	FLG1	FLG1	FLG1	FLG1	FLG1	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)
A,E	FLG1	FLG1	FLG1	FLG1	FLG2 x 2 (1)			
(1) x indicates the quantity to buy.								

Ver	0700	0750	0800	0900	1000	1100	1250
0	FLG1 x 2 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)
A,E	FLG1 x 2 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)

(1) x... indicates the quantity to buy.

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: 00								
°,A,E	VT17	VT17	VT17	VT17	-	-	-	-
Integrated hydronic kit: 01, 02, 03, 0	4, 05, 06, 07, 08							
°,A,E	VT11	VT11	VT11	VT11	-	-	-	-
Integrated hydronic kit: P1, P2, P3,	P4, P5, P6, P7, P8							
°,A,E	VT13	VT13	VT13	VT13	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675
ntegrated hydronic kit: 00								
0	-	-	-	-	AVX437	AVX421	AVX421	AVX421
A,E	-	-	-	-	AVX421	AVX421	AVX421	AVX421
tegrated hydronic kit: 01, 02, 03, 04, 05,	06, 07, 08							
٥	-	-	-	-	AVX439	AVX423	AVX423	AVX423
A,E	-	-	-	-	AVX423	AVX423	AVX423	AVX423
tegrated hydronic kit: P1, P3, P5, P7								
0	-	-	-	-	AVX438	AVX421	AVX421	AVX421
A,E	-	-	-	-	AVX421	AVX421	AVX421	AVX421
tegrated hydronic kit: P2, P4, P6, P8		-						
0	-	-	-	-	AVX438	AVX422	AVX422	AVX422

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A,E	-	-	-	-	AVX422	AVX422	AVX422	AVX422
e accessory cannot be fitted on the configu	urations indicated with							
Ver	0700	0750	0800	0900		1000	1100	1250
rtegrated hydronic kit: 00								
٥	AVX424	AVX440	AVX440	AVX444		AVX431	AVX431	AVX431
A,E	AVX424	AVX428	AVX431	AVX431		AVX431	AVX431	AVX431
ntegrated hydronic kit: 01, 03, 05, 07								
٥	AVX427	AVX441	AVX441	AVX446		AVX435	AVX434	AVX434
A,E	AVX427	AVX430	AVX434	AVX434		AVX434	AVX434	AVX434
ntegrated hydronic kit: 02, 04, 06, 08								
۰	AVX427	AVX441	AVX441	AVX446		AVX435	AVX436	AVX436
A,E	AVX427	AVX430	AVX435	AVX435		AVX435	AVX436	AVX436
ntegrated hydronic kit: P1, P3, P5, P7								
۰	AVX425	AVX425	AVX442	AVX445		AVX432	AVX432	AVX432
A,E	AVX425	AVX429	AVX432	AVX432		AVX432	AVX432	AVX432
ntegrated hydronic kit: P2, P4, P6, P8								
۰	AVX426	AVX426	AVX443	AVX445		AVX433	AVX433	AVX433
A,E	AVX426	AVX429	AVX433	AVX433		AVX433	AVX433	AVX433
RE: Device for peak currer	nt reduction	_	·	_				
Ver	0280	0300	0330	0350	0550	0600	0650	0675
°,A,E	DRE275 (1)	DRE275 (1)	DRE300 (1)	DRE350 (1)	DRE552 (1)	DRE602 (1)	DRE652 (1)	DRE675 (1

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°,A,E	DRE275 (1)	DRE275 (1)	DRE300 (1)	DRE350 (1)	DRE552 (1)	DRE602 (1)	DRE652 (1)	DRE675 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
°,A,E	DRE350 x 2	DRE552 x 2	DRE552 x 2	DRE602 x 2	DRE652 x 2	DRE675 x 2	DRE1250 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°,A,E	RIFNLC1	RIFNLC1	RIFNLC2	RIFNLC3	RIFNLC1	RIFNLC1	RIFNLC1	RIFNLC4
A grey background indicates the accessor	ory must be assembled in the	factory						
Ver	0700	0750	0800	0900		1000	1100	1250
°,A,E	RIFNLC3 x 2 (1)	RIFNLC3 + RIFNLC2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1) F	RIFNLC1 x 2 (1)	RIFNLC4 x 2 (1)	RIFNLC3 x 2 (1)

(1) x... indicates the quantity to buy.
A grey background indicates the accessory must be assembled in the factory

Anti-condensate electric board resistance

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°,A,E	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ
A grey background indicates the accessory	must be assembled in the fa	actory						
Ver	0700	0750	0800	0900	0 1	1000	1100	1250
°,A,E	KRQ	KRQ	KRQ	KRQ		KRQ	KRQ	KRQ

A grey background indicates the accessory must be assembled in the factory

Anti-freeze electric heater for the storage tank

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: 01, 02, 03, 0	4, 05, 06, 07, 08							
°,A,E	KRA1	KRA1	KRA1	KRA1	KRA2	KRA2	KRA2	KRA2
Integrated hydronic kit: P1, P2, P3, P	4, P5, P6, P7, P8							
A,E	KRA1	KRA1	KRA1	KRA1	KRA2	KRA2	KRA2	KRA2
A grey background indicates the accessor	y must be assembled in the	e factory	_					

Ver	0700	0750	0800	0900	1000	1100	1250							
Integrated hydronic kit: 01, 02, 03, 04,	05, 06, 07, 08													
°,A,E	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2							
Integrated hydronic kit: P1, P2, P3, P4	Integrated hydronic kit: P1, P2, P3, P4, P5, P6, P7, P8													
A,E	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2							

A grey background indicates the accessory must be assembled in the factory $\,$

CONFIGURATOR

Field	Description
1,2,3	NLC
4,5,6,7	Size
8	0280, 0300, 0330, 0350, 0550, 0600, 0650, 0675, 0700, 0750, 0800, 0900, 1000, 1100, 1250 Operating field
0	Standard mechanic thermostatic valve (1)
X	Electronic thermostatic expansion valve (1)
	Low temperature mechanic thermostatic valve (2)
Z	Low temperature electronic thermostatic valve (2)
9	Model Model
•	Cooling only
	Motocondensing unit
10	Heat recovery
0	Without heat recovery
D	With desuperheater (3)
 Т	
11	With total recovery (4) Version
•	Version Standard
A E	High efficiency Silenced high efficiency
12	Coils
0	Copper-aluminium
R	
S	Copper pipes-copper fins Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
	Copper preps-coated additional into
<u>13</u>	Inverter
14	Power supply
0	400V ~ 3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with storage tank and inverter pump/s
05	Storage tank with low-head inverter pump
06	Storage tank with low-nead inverter pump + stand-by pump
07	Storage tank with high head inverter pump Storage tank with high head inverter pump
08	Storage tank with high head inverter pump + stand-by pump
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
1.7	Kit with pump/s, with inverter speed
P5	Single low head pump + fixed speed inverter (5)
P6	Single low head pump + fixed speed inverter + stand-by pump (5)
P7	Single high head pump + fixed speed inverter (5)
P8	Single high head pump with fixed speed inverter + stand-by pump (5)
10	Single might head pointp that niced special interfect it station by pump (5)

 ⁽¹⁾ Water produced from 4 °C ÷ 18 °C
 (2) Water produced from 4 °C ÷ -10 °C
 (3) The temperature of the water in the heat exchanger inlet must never drop below 35 °C.
 (4) Options not available for standard unit ™on, condensing unit and with alls hydronic kit.
 (5) The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.

PERFORMANCE SPECIFICATIONS

NLC - °

	0900	1000	1100 1250
400.7			
400 - 000			
400 = 000			
189,/ 220	220,2	242,6	277,4 306,7
79,0 86,	86,4	99,8	107,6 121,3
136,0 148	148,0	169,0	181,0 208,0
2,40 2,5	2,55	2,43	2,58 2,53
32644 378	37884	41733 4	47712 52763
38 35	35	35	41 48
	136,0 2,40 32644	79,0 86,4 136,0 148,0 2,40 2,55 32644 37884	79,0 86,4 99,8 136,0 148,0 169,0 2,40 2,55 2,43 32644 37884 41733

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NLC - A

Size		0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	54,0	59,4	66,9	78,6	106,3	119,5	129,2	146,3	157,4	177,9	209,7	233,2	257,6	290,6	319,2
Input power	kW	19,5	21,5	23,4	27,7	37,7	42,9	45,0	52,4	55,3	60,3	75,4	84,8	89,6	105,7	115,9
Cooling total input current	А	36,0	40,0	43,0	53,0	63,0	71,0	73,0	87,0	107,0	113,0	126,0	139,0	146,0	173,0	198,0
EER	W/W	2,77	2,76	2,85	2,84	2,82	2,78	2,87	2,79	2,85	2,95	2,78	2,75	2,88	2,75	2,75
Water flow rate system side	l/h	9295	10223	11511	13539	18298	20566	22250	25188	27095	30617	36080	40118	44310	49980	54911
Pressure drop system side	kPa	20	24	22	30	25	30	36	36	25	25	33	33	35	37	43

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NLC - E

Size		0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	52,2	58,0	64,2	73,4	102,9	115,6	124,5	142,6	151,1	171,3	201,2	224,8	248,0	282,8	310,6
Input power	kW	19,3	21,5	23,7	27,4	37,6	42,7	45,9	52,5	55,4	60,1	74,9	85,2	90,6	105,8	116,0
Cooling total input current	A	36,0	39,0	43,0	53,0	62,0	69,0	73,0	85,0	106,0	112,0	123,0	138,0	146,0	170,0	197,0
EER	W/W	2,70	2,70	2,71	2,67	2,74	2,71	2,71	2,72	2,73	2,85	2,69	2,64	2,74	2,67	2,68
Water flow rate system side	I/h	8986	9982	11047	12628	17714	19896	21442	24552	25995	29483	34637	38675	42661	48640	53433
Pressure drop system side	kPa	19	23	20	26	23	29	34	34	23	24	31	30	33	35	41

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
SEER - 12/7 (EN14825: 2018) (1)																	
	0	W/W	5,33	5,02	4,92	4,97	4,25	4,87	4,57	4,73	4,28	4,15	4,10	4,12	4,10	4,15	4,10
SEER	A	W/W	5,79	5,77	5,33	5,34	5,24	5,33	5,15	5,03	4,75	4,93	4,55	4,46	4,63	4,42	4,35
	E	W/W	4,83	4,98	4,74	4,80	4,58	4,70	4,53	4,55	4,48	4,63	4,19	4,14	4,31	4,19	4,12
	0	%	210,30	197,80	193,90	195,80	167,10	191,60	179,60	186,00	168,20	162,80	161,00	161,90	161,10	163,10	161,00
Seasonal efficiency	Α	%	228,60	227,60	210,20	210,40	206,70	210,10	202,90	198,30	186,90	194,00	178,80	175,50	182,30	173,90	171,10
•	E	%	190,30	196,00	186,70	189,00	180,10	185,00	178,30	179,10	176,20	182,10	164,60	162,70	169,20	164,40	161,90
SEER - 23/18 (EN14825: 2018) (2)																	
	0	W/W	6,25	5,89	5,79	5,84	5,02	5,72	5,37	5,58	5,08	4,91	4,86	4,90	4,86	4,93	4,87
SEER	A	W/W	6,84	6,82	6,27	6,27	6,17	6,27	6,07	5,93	5,62	5,84	5,39	5,29	5,49	5,25	5,16
	E	W/W	5,68	5,85	5,58	5,64	5,39	5,54	5,35	5,37	5,29	5,46	4,96	4,90	5,10	4,95	4,88
	0	%	246,80	232,50	228,50	230,50	197,70	225,80	211,90	220,10	200,00	193,40	191,40	192,80	191,50	194,10	191,60
Seasonal efficiency	A	%	270,60	269,70	247,60	247,70	243,60	247,80	239,80	234,30	221,80	230,40	212,40	208,50	216,60	206,90	203,50
	E	%	224,20	230,80	220,30	222,70	212,70	218,40	211,00	211,80	208,60	215,50	195,30	193,00	200,90	195,00	192,00
SEPR - (EN 14825: 2018) (2)																	
	0	W/W	6,54	6,22	6,12	6,02	5,18	5,73	5,32	5,70	5,45	5,08	5,04	5,25	5,04	5,07	5,03
SEPR	A	W/W	6,87	6,88	6,44	6,47	6,21	6,35	5,98	5,90	5,94	6,32	5,65	5,40	5,72	5,41	5,39
	E	W/W	5,91	5,92	5,65	5,55	5,14	5,36	5,03	5,15	5,12	5,48	5,09	5,01	5,09	5,05	5,03

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

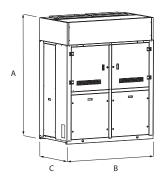
LLLC I RIC DAIA																	
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Electric data																	
Maximum current (FLA)	0	Α	52,0	56,0	62,0	73,0	103,0	111,0	119,0	132,0	146,0	169,0	206,0	222,0	238,0	263,0	289,0
Maximum current (FLA)	A,E	Α	52,0	56,0	62,0	73,0	92,0	111,0	119,0	132,0	146,0	158,0	183,0	210,0	238,0	263,0	289,0
Dools surrent (LDA)	0	Α	128,0	130,0	133,0	216,0	261,0	273,0	281,0	358,0	290,0	346,0	353,0	372,0	400,0	489,0	515,0
Peak current (LRA)	A,E	Α	128,0	130,0	133,0	216,0	273,0	273,0	281,0	358,0	290,0	357,0	376,0	384,0	400,0	489,0	515,0

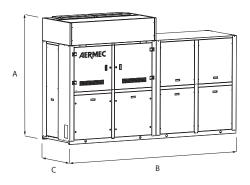
GENERAL TECHNICAL DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Compressor																	
Туре	°,A,E	type								Scroll							
Compressor regulation	°,A,E	Туре								0n/0ff							
Number	°,A,E	no.	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4
Circuits	°,A,E	no.	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Refrigerant	°,A,E	type								R410A							
	0	kg	7,0	7,0	8,5	9,0	13,7	15,0	18,0	19,0	9,5	8,3	13,8	13,5	15,0	19,1	19,1
Refrigerant load circuit 1 (1)	A	kg	8,7	8,5	9,5	10,0	18,0	18,7	22,0	22,0	10,7	9,5	18,7	19,5	22,0	22,0	22,0
	E	kg	8,7	8,5	9,5	10,0	18,0	18,7	21,0	21,5	10,7	9,5	18,7	19,0	21,1	22,0	22,0
		kg	-	-	-	-	-	-	-	-	9,5	12,3	13,8	13,5	15,0	19,1	19,1
Refrigerant load circuit 2 (1)	A	kg	-	-	-	-	-	-	-	-	10,7	17,0	18,7	19,5	22,0	22,0	22,0
	E	kg	-	-	-	-	-	-	-	-	10,7	17,0	18,7	19,0	20,6	22,0	22,0
System side heat exchanger																	
Туре	°,A,E	type								Brazed plat							
Number	°,A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
(1) The load indicated in the table is an estir	mated and preli	minary val	ue. The fina	l value of	the refrige	rant load i	s indicated	on the un	it's technic	al label. Fo	or further i	nformatio	n contact t	he office.			
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00																	
System side hydraulic connections																	
Connections (in/out)	°,A,E	Type							G	rooved joir	ts						
Sizes (in/out)	0	Ø	2"	2"	2"	2"	2"	2" 1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3″	3″	3"	3"
izes (in/out)	A,E	Ø	2"	2"	2"	2"	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2″1/2	3″	3″	3″	3"	3"
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 01,	02, 03, 04	1, 05, 0	5, 07, 0	8, P1, I	P2, P3,	P4, P5	, P6, P	7, P8									
System side hydraulic connections																	
Connections (in/out)	°,A,E	Туре							G	rooved join	ts						
Sizes (in/out)	°,A,E	Ø	2"	2"	2"	2"	2" 1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"
Size																	4356
			0280	0300	0330	0350		0600	0650	0675	0700	0750	0800	0900	1000	1100	1750
Fans: I			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J			0280	0300	0330	0350		0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fan	°.A.E	type	0280	0300	0330	0350		0600	0650		0700	0750	0800	0900	1000	1100	1250
Fan Type	°,A,E °.A.E	type type	0280	0300	0330	0350		0600		Plug-fun		0750	0800	0900	1000	1100	1250
Fan Type Fan motor	°,A,E °,A,E	type					0550				tors		0800				
Fan Type Fan motor	°,A,E	type no.	2	2	2	2	0550	4	EC I	Plug-fun nverter mo 4	tors 4	4	4	6	8	8	8
Fan Type Fan motor	°,A,E	type					0550		ECI	Plug-fun nverter mo	tors						8 8
Fan Type	°,A,E	type no. no.	2 2	2 2	2 2	2 2	0550 2 4	4 4	EC 1 4 4	Plug-fun nverter mo 4 4	tors 4 4	4 6	4 8	6 8	8 8	8 8	8
Fan Type Fan motor Number	°,A,E ° A,E	no. no. m³/h	2 2 21600	2 2 24000	2 2 21150	2 2 23600	2 4 23200	4 4 34050	EC I 4 4 34050	Plug-fun nverter mo 4 4 38200	tors 4 4 47150	4 6 46750	4 8 46350	6 8 62150	8 8 68100 54300	8 8 66650	8 8 71750
Fan Type Fan motor Number Air flow rate	°,A,E ° A,E A	no. no. m³/h m³/h	2 2 21600 21150	2 2 24000 23600	2 2 21150 19400	2 2 23600 22050	2 4 23200 27700	4 4 34050 33350	EC I 4 4 34050 27150	Plug-fun nverter mo 4 4 38200 32750	tors 4 4 47150 44050	4 6 46750 57900	4 8 46350 55350	6 8 62150 55350	8 8 68100	8 8 66650 65450	8 8 71750 65450
Fan Type Fan motor Number Air flow rate	°,A,E ° A,E A	no. no. m³/h m³/h	2 2 21600 21150	2 2 24000 23600	2 2 21150 19400	2 2 23600 22050	2 4 23200 27700	4 4 34050 33350	EC I 4 4 34050 27150	Plug-fun nverter mo 4 4 38200 32750	tors 4 4 47150 44050	4 6 46750 57900	4 8 46350 55350	6 8 62150 55350	8 8 68100 54300	8 8 66650 65450	8 8 71750 65450
Fan Type Fan motor Number Air flow rate Machine exhaust	°,A,E ° A,E ° A E	type no. no. m³/h m³/h m³/h	2 2 21600 21150 15000	2 2 24000 23600 18400	2 2 21150 19400 14650	2 2 23600 22050 16450	2 4 23200 27700 14900	4 4 34050 33350 22200	EC I 4 4 34050 27150 14600	Plug-fun nverter mo 4 4 38200 32750 21750	tors 4 4 47150 44050 32900	4 6 46750 57900 41900	4 8 46350 55350 29850	6 8 62150 55350 29850	8 8 68100 54300 29200	8 8 66650 65450 43500	8 8 71750 65450 43500
Fan Type Fan motor Number Air flow rate Machine exhaust	°,A,E ° A,E ° A E	type no. no. m³/h m³/h m³/h	2 2 21600 21150 15000	2 2 24000 23600 18400	2 2 21150 19400 14650	2 2 23600 22050 16450	2 4 23200 27700 14900	4 4 34050 33350 22200	EC I 4 4 34050 27150 14600	Plug-fun nverter mo 4 4 38200 32750 21750	tors 4 47150 44050 32900	4 6 46750 57900 41900	4 8 46350 55350 29850	6 8 62150 55350 29850	8 8 68100 54300 29200	8 8 66650 65450 43500	8 8 7175 6545 4350 89,1 88,1
Fan Type Fan motor Number Air flow rate Machine exhaust Sound power level	°,A,E ° A,E ° A E	type no. no. m³/h m³/h m³/h dB(A)	2 2 21600 21150 15000	2 2 24000 23600 18400 85,6 86,1	2 2 21150 19400 14650 82,9 81,9	2 2 23600 22050 16450 85,4 84,5	2 4 23200 27700 14900 87,5 82,9	4 4 34050 33350 22200 83,9 85,2	EC I 4 4 34050 27150 14600 83,9 82,9	Plug-fun nverter mo 4 4 38200 32750 21750 86,1 85,1	tors 4 47150 44050 32900 88,4 87,5	4 6 46750 57900 41900 89,6 85,8	4 8 46350 55350 29850 90,5 85,9	6 8 62150 55350 29850 86,9 88,2	8 8 68100 54300 29200 86,9 85,9	8 8 66650 65450 43500 89,1 88,1	8 8 7175 6545 4350 89,1 88,1
Fan Type Fan motor Number	°,A,E ° A,E ° A E	type no. no. m³/h m³/h m³/h dB(A)	2 2 21600 21150 15000	2 2 24000 23600 18400 85,6 86,1	2 2 21150 19400 14650 82,9 81,9	2 2 23600 22050 16450 85,4 84,5	2 4 23200 27700 14900 87,5 82,9	4 4 34050 33350 22200 83,9 85,2	EC I 4 4 34050 27150 14600 83,9 82,9	Plug-fun nverter mo 4 4 38200 32750 21750 86,1 85,1	tors 4 47150 44050 32900 88,4 87,5	4 6 46750 57900 41900 89,6 85,8	4 8 46350 55350 29850 90,5 85,9	6 8 62150 55350 29850 86,9 88,2	8 8 68100 54300 29200 86,9 85,9	8 8 66650 65450 43500 89,1 88,1	8 8 71750 65450 43500
Fan Type Fan motor Number Air flow rate Machine exhaust Sound power level	°,A,E ° A,E ° A E A E	type no. no. m³/h m³/h m³/h dB(A) dB(A)	2 2 21600 21150 15000 83,3 83,6 76,7	2 2 24000 23600 18400 85,6 86,1 80,1	2 2 21150 19400 14650 82,9 81,9 76,5	2 2 23600 22050 16450 85,4 84,5 78,3	2 4 23200 27700 14900 87,5 82,9 75,2	4 4 34050 33350 22200 83,9 85,2 78,5	ECI 4 4 34050 27150 14600 83,9 82,9 75,2	Plug-fun nverter mo 4 4 38200 32750 21750 86,1 85,1 78,4	tors 4 4 47150 44050 32900 88,4 87,5 81,3	4 6 46750 57900 41900 89,6 85,8 80,0	4 8 46350 55350 29850 90,5 85,9 78,2	6 8 62150 55350 29850 86,9 88,2 81,5	8 8 68100 54300 29200 86,9 85,9 78,2	8 8 66650 65450 43500 89,1 88,1 81,4	8 8 71750 65450 43500 89,1 88,1 81,4

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DIMENSIONS





Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00																	
Dimensions and weights																	
<u>A</u>	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
В		mm	1750	1750	1750	1750	1750	3150	3150	3150	3500	3500	3500	4900	6300	6300	6300
	A,E	mm	1750	1750	1750	1750	3150	3150	3150	3150	3500	4900	6300	6300	6300	6300	6300
(°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight		kg	759	759 775	787	798	994	1409	1415	1450	1510	1682	1858	2294	2692	2775	2789
	A,E	kg	775	//5	809	813	1432	1436	1470	1485	1553	2156	2728	2744	2818	2844	2858
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 01,	03, 05, 07	7															
Dimensions and weights																	
<u>A</u>	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
В		mm	3400	3400	3400	3400	3500	4150	4150	4150	5250	4900	5250	5900	7300	7300	7300
	A,E	mm	3400	3400	3400	3400	4150	4150	4150	4150	5250	5900	7300	7300	7300	7300	7300
<u>C</u>	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	A,E	kg kg	973 989	973 989	1001	1022	1479 1715	1691 1719	1707 1761	1741 1777	1889 1931	2061	2259 3035	2599 3050	3018 3144	3101 3170	3115 3184
	H,E	ку															
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 02, 0 Dimensions and weights	04, 06, 08	3															
 	0 A F		2154	2154	2154	2154	2100	2196	2100	2107	2196	2100	2196	2196	2100	2196	2196
<u>A</u>	°,A,E	mm	2154 3400	3400	3400	3400	2196 3500	4150	2196 4150	2196 4150	5250	2196 4900	5250	5900	2196 7300	7300	7300
В	A,E	mm mm	3400	3400	3400	3400	4150	4150	4150	4150	5250	5900	7300	7300	7300	7300	7300
(°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	,,,,,,	kg	1016	1016	1044	1076	1533	1745	1770	1804	1942	2114	2334	2674	3114	3197	3211
Empty weight	A,E	kq	1032	1032	1066	1091	1768	1772	1824	1840	1985	2492	3110	3126	3240	3266	3280
Ci	7,7,2	ку	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Size Integrated hydronic kit: P1,	D2 DE D.	7	0280	0300	0330	0330	0550	0000	0000	00/3	0/00	0/30	0800	0900	1000	1100	1230
Dimensions and weights	P3, P3, P																
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
	0	mm	2500	2500	2500	2500	2500	3150	3150	3150	4250	4250	7300	4900	6300	6300	6300
В	A,E	mm	2500	2500	2500	2500	3150	3150	3150	3150	4250	4900	6300	6300	6300	6300	6300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	0	kg	888	888	916	937	1146	1468	1483	1518	1664	1836	2041	2375	2793	2876	2890
Empty weight	A,E	kg	904	904	939	953	1491	1495	1538	1554	1707	2215	2809	2825	2919	2945	2959
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: P2,	P4. P6. P	B	0200	- 0300	- 0330	- 0330	- 0330		- 0030	- 00/3	0,00	0,50		- 0,00	1000	1100	1250
Dimensions and weights	,,																
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
D	0	mm	2500	2500	2500	2500	2500	3150	3150	3150	4250	4250	7300	4900	6300	6300	6300
В	A,E	mm	2500	2500	2500	2500	3150	3150	3150	3150	4250	4900	6300	6300	6300	6300	6300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	0	kg	931	960	991	1199	1522	1546	1581	1718	1890	2117	2451	2888	2972	3054	2986
Empty weight	А	kg	948	948	982	1007	1545	1549	1601	1617	1760	2268	2885	2900	3014	3040	3054
	E	kg	948	948	982	1007	1545	1549	1601	1617	1760	2268	2885	2900	3014	3040	931

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NLC 0280H-1250H

Reversible air/water heat pump

Cooling capacity 53 ÷ 322 kW - Heating capacity 55 ÷ 342 kW



- · High efficiency also at partial loads
- · Complete air flow versatility
- EC fan Plug-fan with high performance
- Night mode





DESCRIPTION

Reversible heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.

Indoor units with Scroll compressors, centrifugal fans and plate heat exchangers

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Work up to 44° C of outdoor air temperature at full load, depending on size and version. For further details refer to the selection software / technical documentation.

Units mono or dual-circuit

The range includes units with 2 compressors in single circuit and units with 4 compressors divided into two independent circuits.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.

In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Version with Integrated hydronic kit

Integrated hydronic \bar{k} it containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO₅

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FL:** Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

AVX: Spring anti-vibration supports.

VT: Anti-vibration supports. FLG: Flange for ducts.

FILW: Water filter

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing

about 10% reduction of input current.

KRB: Electric anti-freeze resistance kit for base.

KRQ: Electric heater for the control and electric power board.

KRA: Anti-freeze electric heater for the buffer tank.

C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E		•		•							•				
AERLINK	A,E	•	•	•	•	•	•	•		•	•			•	•	•
AERNET	A,E	•	•	•	•	•	•	•		•	•	•	•	•	•	•
FL	A,E	•	•	•	•	•	•	•			•	•	•	•	•	•
MULTICHILLER_EVO	A,E	•	•	•	•	•	•	•		•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•		•	•	•	•		•	•
SGD	A,E	•	•	•	•											

Water filter

	Ver	0280	0300	0330	0350	0550	0600	0650	0675
	A,E	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN65 (1)			
(1) [nstallation is mandatory contrarily da	rantee hecomes void							

Ver	0700	0750	0800	0900	1000	1100	1250
A,E	FILTRO W DN80 (1)						

(1) Installation is mandatory, contrarily garantee becomes void.

Flange for ducts

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A,E	FLG1	FLG1	FLG1	FLG1	FLG2 x 2 (1)			
(1) x indicates the quantity to buy.								
Ver	0700	0750	0800	0900	0	1000	1100	1250
A,E	FLG1 x 2 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG2 x 4	4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)

(1) x... indicates the quantity to buy.

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydron	ic kit: 00														
A,E	VT17	VT17	VT17	VT17	-	-	-	-	-	-	-	-	-	-	-
Integrated hydron	ic kit: 01, 02, 0	3, 04, 05, 06	, 07, 08												
A,E	VT11	VT11	VT11	VT11	-	-	-	-	-	-	-	-	-	-	-
Integrated hydron	ic kit: P1, P2, F	P3, P4, P5, P	6, P7, P8												
A,E	VT13	VT13	VT13	VT13	-	-	-	-	-	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Alltiviblation	<u> </u>														
Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydroi	nic kit: 00														
A,E	-	-	-	-	AVX410	AVX410	AVX410	AVX410	AVX410	AVX416	AVX418	AVX418	AVX420	AVX420	AVX420
Integrated hydroi	nic kit: 01, 02, (03, 04													
A,E	-	-	-	-	AVX412	AVX412	AVX412	AVX412	AVX415	AVX417	AVX419	AVX419	AVX419	AVX419	AVX419
New York New York															
A	-	-	-	-	AVX423	AVX412	AVX412	AVX412	AVX415	AVX417	AVX419	AVX419	AVX419	AVX419	AVX419
E	-	-	-	-	AVX412	AVX412	AVX412	AVX412	AVX415	AVX417	AVX419	AVX419	AVX419	AVX419	AVX419
Integrated hydroi	nic kit: P1, P3, I	P5, P7													
A,E	-	-	-	-	AVX410	AVX410	AVX410	AVX410	AVX413	AVX416	AVX418	AVX418	AVX420	AVX420	AVX420
Integrated hydroi	nic kit: P2, P4, I	P6, P8													
A,E	-	-	-	-	AVX411	AVX411	AVX411	AVX411	AVX414	AVX416	AVX418	AVX418	AVX420	AVX420	AVX420

The accessory cannot be fitted on the configurations indicated with -

DRE: Device for peak current reduction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A,E	DRE275 (1)	DRE275 (1)	DRE300 (1)	DRE350 (1)	DRE552 (1)	DRE602 (1)	DRE652 (1)	DRE675 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
A,E	DRE350 x 2	DRE552 x 2	DRE552 x 2	DRE602 x 2	DRE652 x 2	DRE675 x 2	DRE1250 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A,E	RIFNLC1	RIFNLC1	RIFNLC2	RIFNLC3	RIFNLC1	RIFNLC1	RIFNLC1	RIFNLC4

A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
A,E	RIFNLC3 x 2 (1)	RIFNLC3 + RIFNLC2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC4 x 2 (1)	RIFNLC3 x 2 (1)

Anti-condensate electric board resistance

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
A,E	KRQ														

A grey background indicates the accessory must be assembled in the factory

Anti-freeze electric heater for the storage tank

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
A,E	KRA1	KRA1	KRA1	KRA1	KRA2										

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

CONFIGURATOR

Field	Description
1,2,3	NLC
4,5,6,7	Size 0280, 0300, 0330, 0350, 0550, 0600, 0650, 0675, 0700, 0750, 0800, 0900, 1000, 1100, 1250
8	Operating field (1)
0	Standard mechanic thermostatic valve
Χ	Electronic thermostatic expansion valve
9	Model
Н	Heat pump
10	Heat recovery
0	Without heat recovery
D	With desuperheater (2)
11	Version
A	High efficiency
E	Silenced high efficiency
12	Coils
0	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
13	Fans
J	Inverter
14	Power supply
0	400V ~ 3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit

Field	Description
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with storage tank and inverter pump/s
05	Storage tank with low-head inverter pump
06	Storage tank with low head inverter pump + stand-by pump
07	Storage tank with high head inverter pump
08	Storage tank with high head inverter pump + stand-by pump
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with pump/s, with inverter speed
P5	Single low head pump + fixed speed inverter (3)
P6	Single low head pump with fixed speed inverter + stand-by pump (3)
P7	Single high head pump + fixed speed inverter (3)
P8	Single high head pump with fixed speed inverter + stand-by pump (3)

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⁽¹⁾ x... indicates the quantity to buy.
A grey background indicates the accessory must be assembled in the factory

Water produced from 4 °C ÷ 18 °C
 The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
 The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.

PERFORMANCE SPECIFICATIONS

NLC - HA / HE

NEC-HA/HE																	
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Cooling performance 12 °C / 7 °C (1)																	
Cooling conscitu	Α	kW	54,4	60,4	66,7	78,6	102,5	115,3	126,0	143,4	158,1	181,1	202,0	232,5	252,7	287,1	316,5
Cooling capacity	Е	kW	52,1	58,2	63,5	75,0	97,8	110,6	118,5	136,8	150,2	172,1	192,7	223,8	242,2	273,7	305,0
Innut namer	А	kW	20,0	22,5	24,4	28,6	37,7	43,4	46,9	54,6	57,4	66,3	74,7	87,1	93,6	108,9	127,4
Input power	E	kW	20,4	23,0	25,5	29,4	40,1	46,0	49,1	56,5	58,8	67,2	79,8	90,2	97,1	112,6	128,0
Coolin a total in out annual	А	A	36,0	41,0	45,0	56,0	68,0	77,0	81,0	96,0	112,0	121,0	136,0	155,0	162,0	192,0	219,0
Cooling total input current	E	A	36,0	40,0	45,0	55,0	69,0	77,0	83,0	95,0	111,0	121,0	139,0	153,0	166,0	191,0	218,0
FFD	А	W/W	2,72	2,69	2,73	2,75	2,72	2,66	2,69	2,63	2,75	2,73	2,70	2,67	2,70	2,64	2,48
EER	E	W/W	2,55	2,53	2,49	2,55	2,44	2,40	2,41	2,42	2,55	2,56	2,42	2,48	2,49	2,43	2,38
W-4	A	I/h	9368	10396	11480	13535	17638	19855	21700	24691	27213	31158	34751	40001	43480	49382	54436
Water flow rate system side	E	l/h	8967	10021	10934	12905	16829	19040	20401	23542	25847	29620	33162	38500	41662	47091	52474
Durantura duran atratama sida	А	kPa	21	25	23	30	24	29	35	35	26	25	34	34	36	38	44
Pressure drop system side	E	kPa	20	24	20	27	20	25	29	30	24	25	33	35	38	42	53
Heating performance 40 °C / 45 °C (2)																	
Heating capacity	A,E	kW	56,4	63,5	70,7	82,6	109,8	122,4	137,1	156,5	168,5	193,6	218,3	244,7	273,4	312,4	348,1
Input power	A,E	kW	19,1	21,9	24,0	27,8	37,0	41,5	46,4	53,7	55,9	65,1	73,6	82,9	91,5	105,2	118,1
Heating total input current	A,E	А	36,0	40,0	44,0	54,0	65,0	74,0	78,0	91,0	105,0	114,0	129,0	145,0	153,0	179,0	199,0
COP	A,E	W/W	2,95	2,90	2,95	2,97	2,97	2,95	2,95	2,91	3,01	2,97	2,97	2,95	2,99	2,97	2,95
Water flow rate system side	A,E	I/h	9781	11023	12266	14321	19050	21235	23760	27154	29225	33591	37889	42470	47456	54236	60425
Pressure drop system side	A,E	kPa	22	27	25	32	27	32	40	41	29	28	38	37	41	43	52

ENERGY DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Cooling capacity with low leaving water	temp (UE n° 2	2016/2281)															
SEER	Α	W/W	4,48	4,50	4,52	4,71	4,89	4,74	4,65	4,52	4,38	4,33	4,51	4,47	4,36	4,29	4,08
JEEN	E	W/W	4,16	4,16	4,08	4,50	4,29	4,23	4,29	4,22	4,20	4,14	3,98	4,21	4,13	3,99	3,86
nee	Α	%	176,10	177,10	177,80	185,20	192,50	186,40	183,10	177,70	172,20	170,30	177,50	175,80	171,40	168,70	160,00
ηςς	E	%	163,20	163,50	160,30	177,10	168,50	166,00	168,40	165,90	165,00	162,60	156,20	165,30	162,20	156,40	151,40
UE 811/2013 performance in average am	bient conditi	ions (avera	ge) - 35 °C	- Pdesign	h ≤ 70 kV	V (1)											
SCOP	A,E	W/W	3,28	3,20	3,28	-	-	-	-	-	-	-	-	-	-	-	-
ηsh	A,E	%	128,00	125,00	128,00	-	-	-	-	-	-	-	-	-	-	-	-
Efficiency energy class	A,E		A+	A+	A+	-	-	-	-	-	-	-	-	-	-	-	-

⁽¹⁾ Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Electric data																	
Maximum current (FLA)	A,E	Α	52,2	55,6	62,0	71,4	103,0	110,9	118,8	131,8	142,8	167,1	206,0	221,8	237,6	263,6	289,6
Peak current (LRA)	A,E	Α	127,9	129,6	132,8	215,4	272,9	272,9	280,8	357,8	286,8	355,6	375,9	383,8	399,6	489,6	515,6

GENERAL TECHNICAL DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Compressor																	
Туре	A,E	type								Scroll							
Compressor regulation	A,E	Туре								On-Off							
Number	A,E	no.	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4
Circuits	A,E	no.	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Refrigerant	A,E	type								R410A							
Refrigerant charge (1)	A,E	kg	9,2	9,5	11,0	11,0	18,5	20,0	25,0	25,0	23,0	32,0	42,0	42,0	50,0	50,0	50,0
System side heat exchanger																	
Туре	A,E	type								Brazed plat	te						
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Connections (in/out)	A,E	Туре				,			G	rooved joir	nts						
Sizes (in/out)	A,E	Ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2"1/2	2" 1/2	2"1/2	2"1/2	3"	3"	3"	3″	3″
Fan																	
Туре	A,E	type								Plug-fun							
Fan motor	A,E	type							ECI	nverter mo	otors						
Number	A,E	no.	2	2	2	2	4	4	4	4	4	6	8	8	8	8	8
Machine exhaust																	
C	A	dB(A)	84,1	87,9	86,3	88,9	85,2	87,9	86,4	89,5	91,9	86,7	88,2	90,9	89,4	92,5	92,5
Sound power level	E	dB(A)	77,3	80,5	77,6	81,5	78,5	81,3	79,4	83,2	84,5	79,4	81,5	84,3	82,4	86,2	86,2

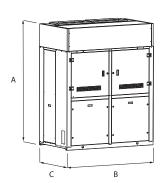
⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

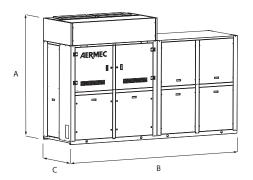
⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Intake plus machine body																	
Count manual laural	Α	dB(A)	78,9	81,7	80,6	83,1	83,9	85,1	84,4	85,7	85,3	86,0	87,2	88,2	87,2	88,9	89,3
Sound power level	E	dB(A)	75,1	78,0	76,0	79,7	82,3	82,8	82,3	84,1	82,7	85,3	85,3	85,8	85,3	87,1	88,2

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DIMENSIONS





Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Dimensions and weights																	
A	A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
В	A,E	mm	1750	1750	1750	1750	3150	3150	3150	3150	3500	4900	6300	6300	6300	6300	6300
С	A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	A,E	kg	790	790	828	832	1452	1456	1492	1507	1586	2194	2768	2783	2863	2889	2903
Dimensions and weights with pump/s																	
A	A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
В	A,E	mm	2500	2500	2500	2500	3150	3150	3150	3150	4250	4900	6300	6300	6300	6300	6300
С	A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Dimensions and weights with storage tar	k and pump	/s															
A	A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
В	A,E	mm	3400	3400	3400	3400	4150	4150	4150	4150	5250	5900	7300	7300	7300	7300	7300
C	A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100



















NSM 1402-9603

Air-water chiller

Cooling capacity 302 ÷ 2100 kW



- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- HP floating: ESEER +5% with inverter fans





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.

In the unit with desuperheater, it is also possible to produce free-hot water. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to 51 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Inverter fans

Standard inverter fans for sizes and versions (°) from 2002 to 9603, optional for other sizes and versions. Option for all configurations.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

 As standard from size 5202÷6402 and 8403÷9603, optional for all other sizes.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: available for all models with inverter fans or with DCPX. Allows, with continuous fan modulation, to optimize the operation of the unit in any operating point, ensuring an increase in the energy efficiency at partial load. ESEER up to +5% with inverter fans
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load. Night Mode
 for standard versions is mandatory DCPX accessory (standard on
 all low noise versions) or "J" inverter fan

ACCESSORIES

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Mod-bus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured

as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **DCPX:** Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

1402

1602

1802

2002

2202

PRV3: Allows you to control the chiller at a distance.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

3002

3202

3402

3602

3902

GP_: Anti-intrusion grid kit

2502

2352

KRS: Electric heater for the heat exchanger

2652

2802

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602 180	02 2002	2202	2352	2502	2652 2802	3002	3202	3402	3602	3902
AER485P1 x n° 2 (1)	°,A,E,L,N,U	•				•			•	•	•	•	
AERBACP	°,A,E,L,N,U								•				
AERNET	°,A,E,L,N,U												
MULTICHILLER EVO	°,A,E,L,N,U				•		•		•		•		
PRV3	°,A,E,L,N,U					•	•			•		•	•
Model	Ver	4202	4502 4	802 5202	5602	6002	2 6402	6503	6703	6903	7203	8403	9603
AER485P1 x n° 2 (1)	°,A,E,L,N,U	•	•		•	•	•		-				
	°,A,L							•			•		•
AER485P1 x n° 3 (1)	E,U							•	•	•	•		
	N							•					
	°,A,L	•							•		•	•	
AERBACP	E,U		•		•	•	•	•		•	•		
	N	•			•		•						
	°,A,L		•		•	•	•	•	•	•	•	•	•
AERNET	E,U	•	•		•	•	•	•	•	•	•		
	N		•				•	•					
	°,A,L	•	•				•	•			•	•	•
MULTICHILLER_EVO	E,U	•	•			•	•	•		•	•		
	N	•	•		•	•	•	•					
	°,A,L	•	•		•	•	•	•	•	•	•	•	•
PRV3	E,U	•	•		•	•	•	•	•	•	•		
	N	•	•		•	•	•	•					
(1) x Indicates the quantity of access	ories to match.												
Ver	1402	1602	1802	2002	2	202	2352	2502	2	2652	2802		3002
Fans: M													
0	DCPX110	DCPX110	DCPX110	DCPX110	DC	PX110	DCPX110	DCPX110	DC	PX111	DCPX111	[CPX112
A	DCPX111	DCPX111	DCPX111	DCPX111	DC	PX112	DCPX112	DCPX112	DC	PX113	DCPX113	[)CPX113
E,L,N	As standard	As standard	As standard	As standard	As st	tandard	As standard	As standard	As s	tandard	As standard	l As	standard
U	DCPX111	DCPX111	DCPX112	DCPX112	DC	PX113	DCPX113	DCPX114	DC	PX114	DCPX114	[CPX114
Ver	3202	3402	3602	3902	4	202	4502	4802	5	202	5602	,	6002
Fans: M													
0	DCPX112	DCPX112	DCPX112	DCPX113	DC	PX113	DCPX114	DCPX114	DC	PX115	DCPX115	[CPX115
A	DCPX113	DCPX114	DCPX114	DCPX115	DC	PX115	DCPX116	DCPX116	DC	PX116	DCPX117	[CPX118
E,N	As standard	As standard	As standard	As standard	As st	tandard	As standard	As standard	Ass	tandard	As standard	l As	standard
L	As standard	As standard	As standard	As standard	As st	tandard	As standard	As standard	As s	tandard	-		-
U	DCPX114	DCPX115	DCPX115	DCPX116	DC	PX117	DCPX117	DCPX118	DC	PX119	DCPX130	[CPX131
Ver	6402		6503	6703		690	3	7203		8403		96	03
Fans: M													
0	DCPX116	DCPX	135+DCPX113	DCPX135+DCF	PX113	DCPX125+	DCPX114	DCPX114+DCPX1	36 D	CPX114+DC	ΣPX136 [)CPX114+	-DCPX136
A	DCPX118	DCPX	115+DCPX136	DCPX115+DCF	PX136	DCPX116+		DCPX116+DCPX1	36 D	CPX117+DC	PX136	-	
E	As standard	A	is standard	As standar	rd	As stan	dard	As standard		-		-	
L	As standard	A	s standard	As standar	rd	As stan	dard	As standard		As standa	ard	-	
N	As standard	A	s standard	-		-		-		-		-	
U	DCPX132	DCPX	116+DCPX137	DCPX117+DCF	PX137	DCPX117+	DCPX137	DCPX118+DCPX1	37	-		-	

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00, DA, DB, D	C, DD, DE, DF, D	G, DH, DI, DJ	, PA, PB, PC,	PD, PE, PF, I	PG, PH, PI, P	J, TF, TG, TH,	TI, TJ							
0	AVX900	AVX900	AVX900	AVX904	AVX904	AVX904	AVX904	AVX904	AVX904	AVX959	AVX959	AVX960	AVX960	AVX911
A,L	AVX901	AVX901	AVX901	AVX904	AVX959	AVX959	AVX959	AVX903	AVX903	AVX903	AVX903	AVX909	AVX909	AVX907
E,U	AVX901	AVX901	AVX959	AVX959	AVX959	AVX903	AVX903	AVX906	AVX906	AVX906	AVX906	AVX907	AVX907	AVX912
N	AVX959	AVX959	AVX903	AVX903	AVX903	AVX906	AVX906	AVX907	AVX907	AVX907	AVX907	AVX912	AVX910	AVX913

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00, TF, TG, 1												0.00	
0	AVX911	AVX909	AVX909	AVX907	AVX907	AVX907	AVX912	AVX914	AVX914	AVX915	AVX916	AVX916	AVX91
A,L	AVX907	AVX912	AVX912	AVX912	AVX910	AVX913	AVX913	AVX924	AVX924	AVX925	AVX925	AVX927	
E,U	AVX910	AVX910	AVX913	AVX913	AVX920	AVX917	AVX918	AVX925	AVX927	AVX927	AVX928	-	-
N	AVX913	AVX917	AVX918	AVX919	AVX921	AVX921	AVX921	AVX926	-	-	-	-	-
ntegrated hydronic kit: DA, DB, DC,	, DD, DE, PA, PB, PC,	PD, PE											
0	AVX911	-	-	-	-	-	-	-	-	-	-	-	-
A,L	AVX907	-	-	-	-	-	-	-	-	-	-	-	-
E,U	AVX910	-	-	-	-	-	-	-	-	-	-	-	-
N	AVX913	-	-	-	-	-	-	-	-	-	-	-	-
ntegrated hydronic kit: DF, DG, DH,	, DI, DJ, PF, PG, PH, I	PI, PJ											
0	AVX911	AVX909	AVX909	AVX907	AVX907	AVX907	AVX912	-	-	-	-	-	-
A,L	AVX907	AVX912	AVX912	AVX912	AVX910	AVX913	AVX913	-	-	-	-	-	-
E,U	AVX910	AVX910	AVX913	AVX913	AVX920	AVX917	AVX918	-	-	-	-	-	-
N	AVX913	AVX917	AVX918	AVX919	AVX921	AVX921	AVX921	-	-	-	-	-	-
ower factor correction													
Ver	1402		1602	1802	20	002	2202	23	52	2502	2652		2802
0	RIFNSM140	2Q RIF	NSM1602Q	RIFNSM1802Q	RIFNSI	M2002Q	RIFNSM2202Q	RIFNSM	2352Q	RIFNSM2502Q	RIFNSM26	52Q	RIFNSM280
A,L	RIFNSM140	2Q RIF	NSM1602Q	RIFNSM1802Q	RIFNSI	M2002Q	RIFNSM2202Q	RIFNSM	2352Q	RIFNSM2502Q	RIFNSM26	52Q	RIFNSM280
E	RIFNSM140	2Q RIF	NSM1602Q	RIFNSM1802Q	RIFNSI	M2002Q	RIFNSM2202Q	RIFNSM	12352C	RIFNSM2502C	RIFNSM26	52Q	RIFNSM280
N	RIFNSM140	2Q RIF	NSM1602Q	RIFNSM1802C	RIFNSI	M2002Q	RIFNSM2202C	RIFNSM	12352C	RIFNSM2502C	RIFNSM26	52Q	RIFNSM280
U	RIFNSM140	2Q RIF	NSM1602Q	RIFNSM1802Q	RIFNS	M2002C	RIFNSM2202Q	RIFNSM	12352C	RIFNSM2502C	RIFNSM26	520	RIFNSM280
grev background indicates the access	ory must be assemble	ed in the fac	torv										
Ver	3002		3202	3402	3/	602	3902	420	n2	4502	4802		5202
•	RIFNSM300	20 RIF	NSM3202Q	RIFNSM3402Q		M3602Q	RIFNSM3902C	RIFNSM		RIFNSM4502C	RIFNSM48	12(RIFNSM520
A,E,L,U	RIFNSM300		NSM3202C	RIFNSM3402C		M3602C	RIFNSM3902C	RIFNSM		RIFNSM4502C	RIFNSM48		RIFNSM520
	IIII IVOIVIOO												
		ed with -	NSM3202C	RIFNSM3402C		M3602C	RIFNSM3902C	RIFNSM		-	-		-
the accessory cannot be fitted on the co A grey background indicates the access Ver	onfigurations indicate ory must be assemble 5602	ed with - ed in the fac	tory 6002	6402	RIFNSI			RIFNSM	14202C	7203	8403		9603
he accessory cannot be fitted on the co grey background indicates the access	onfigurations indicate ory must be assemble	ed with - ed in the fac	tory		RIFNSI	M3602C	RIFNSM3902C		14202C	-	-		-
he accessory cannot be fitted on the cc grey background indicates the access Ver °,A,L he accessory cannot be fitted on the co grey background indicates the access	onfigurations indicate ory must be assemble 5602 RIFNSM560 onfigurations indicate	ed with - ed in the fac 2C RIF ed with -	tory 6002 NSM6002C	6402	RIFNSI	M3602C	RIFNSM3902C		14202C	-	-		-
he accessory cannot be fitted on the co grey background indicates the access Ver °,A,L he accessory cannot be fitted on the co grey background indicates the access Grids	onfigurations indicats ory must be assemble 5602 RIFNSM560 onfigurations indicats ory must be assemble	ed with - ed in the fac 2C RIF ed with -	6002 NSM6002C	6402 RIFNSM6402C	RIFNSI	M3602C 503	6703 -	690	03	7203	8403 -		9603
he accessory cannot be fitted on the co grey background indicates the access Ver °,A,L he accessory cannot be fitted on the co grey background indicates the access irids	onfigurations indicats ory must be assemble 5602 RIFNSM560 onfigurations indicats ory must be assemble 1402	ed with - ed in the fac 2C RIF ed with -	6002 NSM6002C ttory	6402 RIFNSM6402C	RIFNSI 65	M3602C 503 -	6703 - 2202	690	03 52	7203	8403		9603
he accessory cannot be fitted on the co grey background indicates the access Ver °,A,L he accessory cannot be fitted on the co grey background indicates the access Grids Ver °	onfigurations indicats ory must be assemble 5602 RIFNSM560 onfigurations indicate ory must be assemble 1402 GP3V	ed with - ed in the fac 2C RIF ed with -	tory 6002 NSM6002C tory 1602 GP3V	6402 RIFNSM6402C 1802 GP3V	6: 20	M3602C 503 - 002	6703 - 2202 GP4V	235 GP4	03 03 52 4V	7203 - 2502 GP4V	8403 - 2652 GP4V		9603 - - 2802 GP4V
he accessory cannot be fitted on the cc grey background indicates the access Ver °,A,L he accessory cannot be fitted on the cc grey background indicates the access Grids Ver ° A,L	onfigurations indicats ory must be assemble 5602 RIFNSM560 onfigurations indicate ory must be assemble 1402 GP3V GP4V	ed with - ed in the fac 2C RIF ed with -	tory 6002 NSM6002C tory 1602 GP3V GP4V	6402 RIFNSM6402C 1802 GP3V GP4VN	6: 20 6:	M3602C 503 - 002 P4V	6703 - 2202 GP4V GP5V	23: GP4	14202C 103 103 103 104 104 105 105 105 105 105 105 105 105 105 105	7203 - 2502 GP4V GP5V	2652 GP4V GP6V		9603 - 2802 GP4V GP6V
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A grey background indicates the accessory must be assembled in the factory

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

3002

KRS23

KRS23

KRS23

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3202

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3402

KRS23

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A,E,L

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3602

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KRS24

KRS24

3902

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KRS24

KRS24

4202

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KRS24

KRS24

KRS24

4502

KRS23

KRS24

KRS24

KRS23+KRS23

4802

KRS24

KRS24

KRS23+KRS23

KRS24

5202

KRS24

KRS24

KRS23+KRS23

KRS24

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
0	KRS24								
A,L	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E,U	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	NSM
4,5,6,7	Size 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403 9603
8	Operating field
0	Standard mechanic thermostatic valve (1)
Х	Electronic thermostatic expansion valve (2)
Υ	Low temperature mechanic thermostatic valve (3)
Z	Low temperature electronic thermostatic valve (3)
9	Model
0	Cooling only
C	Motocondensing unit (4)
10	Heat recovery
0	Without heat recovery
D	With desuperheater (5)
T	With total recovery (6)
11	Version
0	Standard
Α	High efficiency
Е	Silenced high efficiency
L	Standard silenced
N	Silenced very high efficiency
U	Very high efficiency
12	Coils
0	Aluminium microchannel
- 1	Copper-aluminium
0	Coated aluminium microchannel
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
13	Fans
J	Inverter
М	Oversized (7)
14	Power supply
0	400V~3 50Hz with fuses
2	230V~3 50Hz with fuses
4	230V~3 50Hz with magnet circuit breakers
8	400V~3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit

Field	Description
	Without hydronic kit
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump
	Kit with 2 pumps
TF	Double pump F
TG	Double pump G (8)
TH	Double pump H (8)
TI	Double pump I (8)
TJ	Double pump J (8)

- (1) Water produced from 4 °C ÷ 15 °C
 (2) Water produced from 4 °C ÷ 18 °C
 (3) Water produced from 4 °C ÷ -8 °C
 (4) The motor condensing units are not configurable with option D and T, and with the integrated hydronic kit
 (5) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
 (6) The models 1402° 1602° 1802° cannot have total recovery, which is available for all the other sizes and versions. If it is necessary to have total recovery as well as the hydronic kit, feasibility must be evaluated when ordering.
 (7) The units from 2652 to 9603 in the version "°" and from 5202 to 6402 and unit 9603 version "L" and "A" are not available with increased fans "M"
 (8) The unit from 5603 to 9603 can only have hydronic kit "TF TG TH TI TJ"

PERFORMANCE SPECIFICATIONS

NSM - °

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	307,5	348,9	397,0	450,3	489,4	524,7	543,8	577,3	613,8	680,5	725,1	770,1	813,8	906,1
Input power	kW	104,8	121,0	139,0	152,8	166,4	180,6	193,9	210,5	226,5	232,7	247,5	272,1	298,3	316,2
Cooling total input current	A	182,0	207,0	229,0	257,0	281,0	306,0	329,0	356,0	381,0	392,0	414,0	447,0	484,0	520,0
EER	W/W	2,93	2,88	2,86	2,95	2,94	2,91	2,81	2,74	2,71	2,92	2,93	2,83	2,73	2,87
Water flow rate system side	l/h	52881	59999	68270	77459	84185	90223	93509	99261	105543	117009	124685	132413	139916	155801
Pressure drop system side	kPa	27	36	38	49	57	26	28	33	35	39	42	47	38	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM°

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	958,5	1051,2	1099,1	1168,1	1195,0	1237,7	1327,6	1393,8	1439,8	1578,6	1669,7	1742,2	1859,9
Input power	kW	345,9	360,3	388,1	403,4	430,8	453,1	460,3	488,6	517,2	559,8	575,1	659,2	730,6
Cooling total input current	Α	573,0	597,0	641,0	668,0	712,0	749,0	766,0	806,0	857,0	927,0	966,0	1103,0	1230,0
EER	W/W	2,77	2,92	2,83	2,90	2,77	2,73	2,88	2,85	2,78	2,82	2,90	2,64	2,55
Water flow rate system side	l/h	164794	180726	188953	200816	205451	212795	228246	239604	247511	271348	287011	299461	319697
Pressure drop system side	kPa	41	48	42	46	48	55	62	44	46	30	33	36	40

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - L

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	302,4	344,0	392,7	428,1	490,9	513,8	537,4	583,4	602,8	664,4	709,1	771,0	826,1	908,8
Input power	kW	102,7	117,2	135,7	155,9	167,8	179,4	192,5	202,9	215,3	238,3	261,2	265,4	296,6	316,1
Cooling total input current	A	173,0	196,0	218,0	254,0	277,0	297,0	319,0	336,0	354,0	391,0	426,0	429,0	473,0	509,0
EER	W/W	2,94	2,94	2,89	2,75	2,93	2,86	2,79	2,88	2,80	2,79	2,72	2,91	2,79	2,88
Water flow rate system side	l/h	52016	59162	67531	73600	84402	88342	92402	100313	103652	114244	121903	132545	142018	156242
Pressure drop system side	kPa	27	36	38	18	24	25	28	33	31	36	23	23	25	32

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - L

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	949,7	1032,5	1076,9	1122,7	1183,7	1254,5	1295,6	1395,1	1436,6	1605,1	1649,4	1758,0	1946,7
Input power	kW	348,7	365,9	395,0	428,8	442,3	453,2	476,4	491,5	523,6	556,9	586,7	660,2	713,5
Cooling total input current	A	567,0	593,0	638,0	693,0	716,0	736,0	776,0	793,0	849,0	914,0	960,0	1067,0	1163,0
EER	W/W	2,72	2,82	2,73	2,62	2,68	2,77	2,72	2,84	2,74	2,88	2,81	2,66	2,73
Water flow rate system side	I/h	163268	177512	185148	193004	203496	215669	222723	239820	246956	275911	283536	302181	334622
Pressure drop system side	kPa	34	44	46	33	36	42	45	33	34	45	47	34	45

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C/7 °C (1)															
Cooling capacity	kW	315,6	360,2	415,2	461,4	509,5	544,9	576,9	620,9	658,9	699,4	741,7	800,6	884,3	955,2
Input power	kW	99,0	113,7	133,7	148,3	161,8	173,6	183,3	197,5	208,3	223,6	237,4	253,4	281,2	303,8
Cooling total input current	Α	175,0	198,0	223,0	250,0	278,0	298,0	314,0	340,0	355,0	378,0	399,0	421,0	459,0	502,0
EER	W/W	3,19	3,17	3,11	3,11	3,15	3,14	3,15	3,14	3,16	3,13	3,12	3,16	3,15	3,14
Water flow rate system side	l/h	54280	61954	71417	79331	87600	93687	99196	106766	113293	120259	127516	137633	152015	164211
Pressure drop system side	kPa	30	39	43	21	26	28	32	37	37	40	25	25	29	36

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - A

115111 71														
Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1021,7	1084,5	1160,1	1213,2	1275,8	1352,3	1402,7	1462,2	1531,9	1682,9	1753,4	1908,6	2106,4
Input power	kW	328,5	347,0	371,7	389,2	410,5	432,6	451,5	466,3	493,4	534,6	560,2	614,3	673,3
Cooling total input current	Α	547,0	577,0	614,0	647,0	685,0	725,0	758,0	772,0	821,0	897,0	936,0	1017,0	1132,0
EER	W/W	3,11	3,13	3,12	3,12	3,11	3,13	3,11	3,14	3,10	3,15	3,13	3,11	3,13
Water flow rate system side	l/h	175657	186457	199460	208561	219327	232478	241144	251345	263330	289291	301409	328062	362058
Pressure drop system side	kPa	39	49	53	38	42	49	52	36	39	49	53	41	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C/7 °C (1)															
Cooling capacity	kW	319,6	368,5	417,6	472,4	514,2	543,2	579,6	615,2	652,1	695,4	740,6	796,5	881,6	951,8
Input power	kW	101,7	117,4	132,3	150,0	165,4	173,7	186,0	194,8	210,1	224,0	238,6	255,4	283,8	305,7
Cooling total input current	Α	171,0	196,0	214,0	245,0	272,0	288,0	309,0	324,0	347,0	367,0	389,0	411,0	450,0	490,0
EER	W/W	3,14	3,14	3,16	3,15	3,11	3,13	3,12	3,16	3,10	3,11	3,10	3,12	3,11	3,11
Water flow rate system side	l/h	54958	63367	71800	81228	88406	93396	99657	105762	112115	119555	127316	136926	151562	163628
Pressure drop system side	kPa	15	14	18	21	24	26	30	24	26	29	26	25	29	36

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)	'													
Cooling capacity	kW	1018,9	1082,1	1159,1	1206,7	1265,2	1322,0	1389,6	1464,9	1528,1	1670,1	1752,6	-	-
Input power	kW	325,9	347,4	370,9	387,8	405,6	422,2	443,7	469,4	489,0	534,5	563,0	-	-
Cooling total input current	A	529,0	560,0	598,0	628,0	656,0	686,0	724,0	764,0	792,0	861,0	898,0	-	-
EER	W/W	3,13	3,11	3,13	3,11	3,12	3,13	3,13	3,12	3,13	3,12	3,11	-	-
Water flow rate system side	I/h	175173	186051	199271	207449	217481	227238	238869	251810	262683	287098	301260	-	-
Pressure drop system side	kPa	40	49	36	38	24	24	29	35	40	49	45	-	-

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	331,0	378,1	432,1	481,7	527,6	564,7	590,5	635,0	675,3	708,2	750,8	811,2	902,5	975,6
Input power	kW	98,6	113,5	128,9	145,7	161,0	169,2	178,4	190,3	204,2	214,1	228,0	245,2	273,3	294,9
Cooling total input current	A	173,0	197,0	218,0	248,0	275,0	292,0	309,0	330,0	352,0	366,0	387,0	410,0	448,0	490,0
EER	W/W	3,36	3,33	3,35	3,31	3,28	3,34	3,31	3,34	3,31	3,31	3,29	3,31	3,30	3,31
Water flow rate system side	l/h	56933	65026	74302	82821	90716	97089	101524	109164	116096	121764	129073	139455	155146	167724
Pressure drop system side	kPa	17	15	19	21	25	28	31	25	28	30	26	26	30	37

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - U

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1043,4	1104,7	1184,6	1234,0	1301,2	1360,8	1419,5	1505,6 (2)	1579,3	1693,4	1772,6	-	-
Input power	kW	315,2	336,8	357,4	380,5	400,8	418,5	427,8	453,3	472,9	522,1	540,7	-	-
Cooling total input current	A	530,0	562,0	597,0	634,0	671,0	706,0	725,0	762,0	795,0	870,0	896,0	-	-
EER	W/W	3,31	3,28	3,31	3,24	3,25	3,25	3,32	3,32	3,34	3,24	3,28	-	-
Water flow rate system side	l/h	179384	189926	203652	212142	223669	233910	244004	258808	271482	291091	304708	-	-
Pressure drop system side	kPa	42	51	38	40	26	26	31	37	42	51	46	-	-

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Unit not Eurovent certified because it exceeds 1500 kW

NSM - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	329,8	375,3	431,9	474,4	517,0	550,9	578,6	620,4	659,2	701,2	743,2	803,1	879,6	955,4
Input power	kW	98,1	113,1	127,6	144,8	160,4	168,7	178,2	190,1	204,5	217,3	231,1	247,6	270,2	292,6
Cooling total input current	Α	165,0	190,0	207,0	237,0	265,0	281,0	297,0	317,0	339,0	358,0	378,0	399,0	429,0	470,0
EER	W/W	3,36	3,32	3,38	3,28	3,22	3,27	3,25	3,26	3,22	3,23	3,22	3,24	3,26	3,27
Water flow rate system side	l/h	56717	64546	74260	81573	88881	94723	99476	106664	113329	120551	127777	138054	151226	164260
Pressure drop system side	kPa	16	15	19	21	24	28	30	25	27	29	26	25	30	37

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - N

	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
kW	1014,4	1086,1	1169,7	1219,0	1267,1	1317,0	1367,2	1452,6	-	-	-	-	-
kW	315,6	332,8	352,6	374,6	396,5	410,4	428,2	450,1	-	-	-	-	-
A	513,0	540,0	569,0	605,0	643,0	668,0	700,0	731,0	-	-	-	-	-
W/W	3,21	3,26	3,32	3,25	3,20	3,21	3,19	3,23	-	-	-	-	-
l/h	174394	186718	201086	209575	217799	226384	235022	249705	-	-	-	-	-
kPa	40	35	44	44	26	26	30	37	-	-	-	-	-
	kW A W/W I/h	kW 1014,4 kW 315,6 A 513,0 W/W 3,21 I/h 174394	kW 1014,4 1086,1 kW 315,6 332,8 A 513,0 540,0 W/W 3,21 3,26 l/h 174394 186718	kW 1014,4 1086,1 1169,7 kW 315,6 332,8 352,6 A 513,0 540,0 569,0 W/W 3,21 3,26 3,32 I/h 174394 186718 201086	kW 1014,4 1086,1 1169,7 1219,0 kW 315,6 332,8 352,6 374,6 A 513,0 540,0 569,0 605,0 W/W 3,21 3,26 3,32 3,25 I/h 174394 186718 201086 209575	kW 1014,4 1086,1 1169,7 1219,0 1267,1 kW 315,6 332,8 352,6 374,6 396,5 A 513,0 540,0 569,0 605,0 643,0 W/W 3,21 3,26 3,32 3,25 3,20 I/h 174394 186718 201086 209575 217799	kW 1014,4 1086,1 1169,7 1219,0 1267,1 1317,0 kW 315,6 332,8 352,6 374,6 396,5 410,4 A 513,0 540,0 569,0 605,0 643,0 668,0 W/W 3,21 3,26 3,32 3,25 3,20 3,21 I/h 174394 186718 201086 209575 217799 226384	kW 1014,4 1086,1 1169,7 1219,0 1267,1 1317,0 1367,2 kW 315,6 332,8 352,6 374,6 396,5 410,4 428,2 A 513,0 540,0 569,0 605,0 643,0 668,0 700,0 W/W 3,21 3,26 3,32 3,25 3,20 3,21 3,19 I/h 174394 186718 201086 209575 217799 226384 235022	kW 1014,4 1086,1 1169,7 1219,0 1267,1 1317,0 1367,2 1452,6 kW 315,6 332,8 352,6 374,6 396,5 410,4 428,2 450,1 A 513,0 540,0 569,0 605,0 643,0 668,0 700,0 731,0 W/W 3,21 3,26 3,32 3,25 3,20 3,21 3,19 3,23 1/h 174394 186718 201086 209575 217799 226384 235022 249705	kW 1014,4 1086,1 1169,7 1219,0 1267,1 1317,0 1367,2 1452,6 - kW 315,6 332,8 352,6 374,6 396,5 410,4 428,2 450,1 - A 513,0 540,0 569,0 605,0 643,0 668,0 700,0 731,0 - W/W 3,21 3,26 3,32 3,25 3,20 3,21 3,19 3,23 - I/h 174394 186718 201086 209575 217799 226384 235022 249705 -	kW 1014,4 1086,1 1169,7 1219,0 1267,1 1317,0 1367,2 1452,6 - - kW 315,6 332,8 352,6 374,6 396,5 410,4 428,2 450,1 - - A 513,0 540,0 569,0 605,0 643,0 668,0 700,0 731,0 - - W/W 3,21 3,26 3,32 3,25 3,20 3,21 3,19 3,23 - - I/h 174394 186718 201086 209575 217799 226384 235022 249705 - -	kW 1014,4 1086,1 1169,7 1219,0 1267,1 1317,0 1367,2 1452,6 - - - kW 315,6 332,8 352,6 374,6 396,5 410,4 428,2 450,1 - - - A 513,0 540,0 569,0 605,0 643,0 668,0 700,0 731,0 - - - W/W 3,21 3,26 3,32 3,25 3,20 3,21 3,19 3,23 - - - I/h 174394 186718 201086 209575 217799 226384 235022 249705 - - -	kW 1014,4 1086,1 1169,7 1219,0 1267,1 1317,0 1367,2 1452,6 - - - - kW 315,6 332,8 352,6 374,6 396,5 410,4 428,2 450,1 - - - - A 513,0 540,0 569,0 605,0 643,0 668,0 700,0 731,0 - - - - W/W 3,21 3,26 3,32 3,25 3,20 3,21 3,19 3,23 - - - - I/h 174394 186718 201086 209575 217799 226384 235022 249705 - - - -

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

559

ENERGY INDICES (REG. 2016/2281 EU)

Increased fan

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: M																
SEPR - (EN 14825: 2018) (1)																
	0	W/W	5,41	5,44	5,37	5,53	5,54	5,51	5,54	5,51	5,53	5,51	5,51	5,52	5,52	5,53
	A	W/W	5,70	5,67	5,57	5,54	5,61	5,60	5,62	5,62	5,65	5,51	5,52	5,53	5,60	5,61
SEPR	E	W/W	5,82	5,76	5,80	5,71	5,66	5,79	5,74	5,77	5,73	5,64	5,60	5,63	5,72	5,74
SEPK	L	W/W	5,62	5,59	5,48	5,54	5,53	5,52	5,56	5,54	5,60	5,52	5,52	5,52	5,55	5,54
	N	W/W	5,94	5,85	5,98	5,79	5,70	5,78	5,75	5,77	5,70	5,63	5,57	5,65	5,73	5,74
	U	W/W	5.91	5.85	5.89	5,81	5.77	5.88	5.84	5,87	5,83	5.75	5,68	5.74	5.82	5,84

Size			4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: M													
SEPR - (EN 14825: 2018) (1)													
	0	W/W	5,53	5,52	5,53	5,52	5,52	5,64	5,51	5,54	5,55	5,51	5,54
	A	W/W	5,60	5,57	5,60	5,60	5,57	5,66	5,61	5,71	5,69	5,62	5,68
SEPR	E	W/W	5,75	5,62	5,60	5,60	5,74	5,85	5,90	5,70	5,77	-	-
JETN	L	W/W	5,55	5,54	5,56	5,55	5,52	5,64	5,61	5,68	5,66	5,63	5,68
	N	W/W	5,73	5,79	5,65	5,67	5,65	5,79	-	-	-	-	-
	U	W/W	5,85	5,73	5,71	5,72	5,84	5,93	5,98	5,82	5,87	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate.

Inverter fan

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: J																
SEER - 12/7 (EN14825: 2018) (1)																
	0	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,44	4,40	4,55	4,56	4,56	4,56	4,57	4,55	4,56	4,56	4,57	4,57	4,56	4,56
CEED	E	W/W	4,48	4,47	4,57	4,57	4,58	4,58	4,58	4,58	4,58	4,59	4,59	4,59	4,59	4,60
SEER	L	W/W	4,43	4,39	4,53	4,55	4,56	4,56	4,56	4,55	4,56	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,54	4,51	4,60	4,60	4,61	4,59	4,60	4,61	4,60	4,61	4,60	4,60	4,60	4,60
	U	W/W	4,49	4,48	4,57	4,59	4,60	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,60
	0	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	174,50	172,80	179,00	179,20	179,40	179,40	179,70	179,10	179,50	179,50	179,70	179,60	179,50	179,40
Caranal officiana	E	%	176,30	175,60	179,60	179,80	180,20	180,00	180,10	180,00	180,20	180,60	180,40	180,40	180,50	180,80
Seasonal efficiency	L	%	174,00	172,40	178,30	179,00	179,30	179,20	179,20	179,00	179,40	179,20	179,30	179,30	179,30	179,20
	N	%	178,70	177,40	180,80	180,90	181,30	180,70	180,90	181,20	180,90	181,30	181,10	181,10	181,00	181,10
	U	%	176,60	176,10	179,80	180,40	180,90	180,50	180,70	180,60	180,70	180,60	180,60	180,40	180,50	180,90
SEPR - (EN 14825: 2018) (3)																
	0	W/W	5,41	5,44	5,37	5,53	5,54	5,51	5,54	5,51	5,53	5,51	5,51	5,52	5,52	5,53
	A	W/W	5,70	5,67	5,57	5,54	5,61	5,60	5,62	5,62	5,65	5,51	5,52	5,53	5,60	5,61
CEDD	E	W/W	5,82	5,76	5,80	5,71	5,66	5,79	5,74	5,77	5,73	5,64	5,60	5,63	5,72	5,74
SEPR	L	W/W	5,62	5,59	5,48	5,54	5,53	5,52	5,56	5,54	5,60	5,52	5,52	5,52	5,55	5,54
	N	W/W	5,94	5,85	5,98	5,79	5,70	5,78	5,75	5,77	5,70	5,63	5,57	5,65	5,73	5,74
	U	W/W	5,91	5,85	5,89	5,81	5,77	5,88	5,84	5,87	5,83	5,75	5,68	5,74	5,82	5,84

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: J															
SEER - 12/7 (EN14825: 2018) (1)															
	0	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,56	4,56	4,56	4,55	4,57	4,56	4,56	4,56	4,57	4,56	4,56	4,56	4,57
SEER	E	W/W	4,58	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,60	4,58	4,59	-	-
SEEK	L	W/W	4,55	4,56	4,55	4,56	4,56	4,57	4,56	4,57	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,60	4,60	4,60	4,60	4,60	4,61	4,60	4,61	-	-	-	-	-
	U	W/W	4,59	4,59	4,60	4,60	4,60	4,60	4,59	4,60	4,60	4,59	4,59	-	-
	0	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	179,50	179,40	179,40	179,10	179,80	179,40	179,40	179,20	179,60	179,20	179,40	179,50	179,70
Casanal officiana.	E	%	180,30	180,60	180,70	180,60	180,40	180,40	180,60	180,50	180,90	180,20	180,40	-	-
Seasonal efficiency	L	%	179,00	179,20	179,10	179,20	179,40	179,60	179,40	179,60	179,30	179,20	179,50	179,40	179,50
	N	%	180,80	181,00	181,10	181,00	181,10	181,20	180,80	181,40	-	-	-	-	-
	U	%	180,40	180,60	180,80	180,90	180,90	180,80	180,60	180,80	180,90	180,60	180,60	-	-
SEPR - (EN 14825: 2018) (3)															
	0	W/W	5,51	5,52	5,53	5,52	5,53	5,52	5,52	5,64	5,51	5,54	5,55	5,51	5,54
	A	W/W	5,56	5,60	5,60	5,57	5,60	5,60	5,57	5,66	5,61	5,71	5,69	5,62	5,68
CEDD	E	W/W	5,75	5,70	5,75	5,62	5,60	5,60	5,74	5,85	5,90	5,70	5,77	-	-
SEPR	L	W/W	5,51	5,53	5,55	5,54	5,56	5,55	5,52	5,64	5,61	5,68	5,66	5,63	5,68
	N	W/W	5,71	5,71	5,73	5,79	5,65	5,67	5,65	5,79	-	-	-	-	-
	U	W/W	5,85	5,81	5,85	5,73	5,71	5,72	5,84	5,93	5,98	5,82	5,87	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

FLECTRIC DATA

ELECTRIC DATA																
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
	0	Α	229,0	257,0	284,0	324,0	357,0	379,0	400,0	433,0	458,0	466,0	466,0	514,0	562,0	619,0
Maximum current (FLA)	A,L	Α	235,0	263,0	291,0	324,0	364,0	385,0	406,0	437,0	462,0	462,0	462,0	516,0	564,0	619,0
Maximum current (FLA)	E,U	Α	235,0	263,0	297,0	330,0	364,0	391,0	413,0	444,0	468,0	468,0	468,0	523,0	571,0	625,0
	N	Α	242,0	270,0	303,0	337,0	370,0	398,0	419,0	450,0	475,0	475,0	475,0	529,0	583,0	644,0
	0	Α	251,0	292,0	335,0	380,0	403,0	450,0	467,0	502,0	512,0	521,0	521,0	645,0	685,0	814,0
Dealt current (LDA)	A,L	Α	257,0	299,0	342,0	380,0	409,0	456,0	473,0	507,0	517,0	517,0	517,0	647,0	687,0	814,0
Peak current (LRA)	E,U	Α	257,0	299,0	348,0	386,0	409,0	462,0	480,0	513,0	523,0	523,0	523,0	653,0	693,0	821,0
	N	Α	263,0	305,0	354,0	392,0	415,0	469,0	486,0	519,0	529,0	529,0	529,0	660,0	706,0	839,0
Size			4202	4502	4802	5202	5602	600	02 6	402	6503	6703	6903	7203	8403	9603
Electric data																
	0	Α	667,0	714,0	753,0	805,0	848,0	882	2,0 9	24,0	949,0	997,0	1084,0	1137,0	1266,0	1368,0
Manimum current (FLA)	A,L	Α	667,0	712,0	751,0	813,0	865,0	913	3,0 9	47,0	955,0	1003,0	1094,0	1133,0	1268,0	1406,0
Maximum current (FLA)	E,U	Α	679,0	718,0	770,0	813,0	862,0	902	2,0 9	43,0	968,0	1022,0	1100,0	1145,0	-	-
	N	Α	692,0	743,0	789,0	838,0	887,0	921	,0 9	55,0	987,0	-	-	-	-	-
	0	Α	841,0	914,0	936,0	1100,0	1147,0	0 1259	9,0 12	264,0	1038,0	1065,0	1160,0	1197,0	1446,0	1552,0
Dook surrent (LDA)	A,L	Α	841,0	911,0	934,0	1108,0	1164,0	0 1290	0,0 12	287,0	1044,0	1071,0	1170,0	1193,0	1448,0	1590,0
Peak current (LRA)	E,U	А	854,0	918,0	953,0	1108,0	1161,0	0 1279	9,0 12	283,0	1056,0	1090,0	1176,0	1205,0	-	-

GENERAL TECHNICAL DATA

Size	·		1402	1602	1802	2002	2202	2352	2502	2652	2802
Compressor											
Туре	°,A,E,L,N,U	type					Screw				
Number	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type					R134a				
	0	kg	24,0	24,0	24,0	30,0	30,0	35,0	35,0 (2)	35,0	35,0
	A	kg	26,5	34,0 (2)	28,0	28,0	34,0	35,0	38,5	40,5	45,0
Deficience and local singuist 1 (1)	E	kg	28,0	30,0	41,0 (2)	41,0 (2)	46,0 (2)	43,0	41,0	46,0	45,0
Refrigerant load circuit 1 (1)	L	kg	24,0	34,0 (2)	37,0 (2)	28,0	34,0	35,0	38,5	40,0	42,0 (2)
	N	kg	36,0 (2)	38,0 (2)	44,0 (2)	44,0 (2)	49,0 (2)	53,0 (2)	56,0 (2)	60,0 (2)	64,0 (2)
	U	kg	32,0 (2)	34,0 (2)	34,0	35,0	46,0 (2)	49,0 (2)	49,0	46,0 (2)	45,0 (2)
	0	kg	24,0	25,0	25,0	41,0	33,0	38,0	37,0 (2)	37,5	36,5
	A	kg	28,0	34,0 (2)	29,5	36,0	34,0	49,0	40,5	45,0	47,5
D-6:	E	kg	30,0	31,5	41,0 (2)	46,0 (2)	46,0 (2)	45,0	46,0	52,0	53,0
Refrigerant load circuit 2 (1)	L	kg	27,0	34,0 (2)	37,0 (2)	36,0	34,0	40,0	40,5	43,0	46,0 (2)
	N	kg	36,0 (2)	38,0 (2)	44,0 (2)	49,0 (2)	49,0 (2)	56,0 (2)	56,0 (2)	64,0 (2)	64,0 (2)
	U	kg	32,0 (2)	34,0 (2)	36,0	41,5	46,0 (2)	53,0 (2)	54,0	52,0 (2)	48,5 (2)
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-
System side heat exchanger											
Туре	°,A,E,L,N,U	type					Shell and tube				
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) The refrigerant gas charge is approximate, for more	information contact the office.
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Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Compressor											
Туре	°,A,E,L,N,U	type					Screw				
Number	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type					R134a				
	0	kg	40,0	46,0	42,5	44,5	51,0	52,0	55,0	55,0 (2)	63,0 (2)
	A	kg	44,0 (2)	47,0	52,0 (2)	55,0	74,0 (2)	62,0	67,0	67,0	70,0
Deficience the design of 1 (1)	E	kg	45,0 (2)	57,0	54,0 (2)	74,0 (2)	60,0 (2)	70,0	89,0 (2)	80,0 (2)	100,0 (2)
Refrigerant load circuit 1 (1)	L	kg	44,0	47,0	52,0 (2)	54,0	56,0 (2)	62,0	67,0 (2)	67,0	70,0
	N	kg	64,0 (2)	55,0 (2)	72,0 (2)	81,0 (2)	85,0 (2)	92,0 (2)	99,0 (2)	110,0 (2)	114,0 (2)
	U	kg	60,0 (2)	54,5	58,0	58,0	60,0 (2)	70,0	89,0 (2)	80,0	85,0 (2)
	0	kg	50,0	48,0	46,0	46,0	59,0	59,0	64,0	64,0 (2)	70,0 (2)
	A	kg	52,0 (2)	50,0	55,0 (2)	60,0	81,0 (2)	70,0	78,0	78,0	82,0
D. 6	E	kg	53,0 (2)	59,0	59,0 (2)	74,0 (2)	77,0 (2)	85,0	96,0 (2)	90,0 (2)	110,0 (2)
Refrigerant load circuit 2 (1)	L	kg	52,0	50,0	55,0 (2)	58,0	72,0 (2)	70,0	79,0 (2)	78,0	82,0
	N	kg	69,0 (2)	57,0 (2)	77,0 (2)	81,0 (2)	92,0 (2)	92,0 (2)	107,0 (2)	110,0 (2)	124,0 (2)
	U	kg	65,0 (2)	59,0	62,0	63,0	77,0 (2)	85,0	96,0 (2)	90,0	103,0 (2)
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-
System side heat exchanger											
Туре	°,A,E,L,N,U	type					Shell and tube				
	°,A,E,L,U	no.	1	1	1	1	1	1	1	1	1
Number	N	no.	1	1	1	1	1	1	2	2	2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) The refrigerant gas charge is approximate, for more information contact the office.

Size			5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor											
Туре	°,A,E,L,N,U	type					Screw				
	°,A,L	no.	2	2	2	3	3	3	3	3	3
Number	E,U	no.	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	3	-	-	-	-	-
	°,A,L	no.	2	2	2	3	3	3	3	3	3
Circuits	E,U	no.	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	3	-	-	-	-	-
Refrigerant	°,A,E,L,N,U	type					R134a				
	0	kg	65,0 (2)	62,0	70,0 (2)	67,0 (2)	55,0	78,0 (2)	62,0 (2)	99,0 (2)	112,0 (2)
	A	kg	106,0 (2)	82,0	82,0 (2)	74,0 (2)	81,0 (2)	85,0 (2)	70,0	106,0 (2)	80,0
Definement land singuit 1 (1)	E	kg	113,0 (2)	86,0	95,0 (2)	77,0 (2)	89,0 (2)	89,0 (2)	100,0 (2)	-	-
Refrigerant load circuit 1 (1)	L	kg	106,0 (2)	82,0	82,0 (2)	74,0 (2)	81,0 (2)	85,0 (2)	70,0 (2)	106,0 (2)	80,0
	N	kg	128,0 (2)	128,0 (2)	138,0 (2)	85,0 (2)	-	-	-	-	-
	U	kg	113,0 (2)	86,0	95,0	77,0 (2)	89,0 (2)	89,0 (2)	100,0 (2)	-	-

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) The refrigerant gas charge is approximate, for more information contact the office.

Size			5602	6002	6402	6503	6703	6903	7203	8403	9603
	0	kg	71,0 (2)	73,0	80,0 (2)	74,0 (2)	61,0	85,0 (2)	70,0 (2)	99,0 (2)	112,0 (2)
	A	kg	106,0 (2)	99,0	99,0 (2)	81,0 (2)	81,0 (2)	92,0 (2)	75,0	106,0 (2)	95,0
Defrigarant load circuit 2 (1)	E	kg	113,0 (2)	98,0	97,0 (2)	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
Refrigerant load circuit 2 (1)	L	kg	106,0 (2)	99,0	99,0 (2)	81,0 (2)	81,0 (2)	92,0 (2)	75,0 (2)	106,0 (2)	95,0
	N	kg	128,0 (2)	138,0 (2)	138,0 (2)	92,0 (2)	-	-	-	-	-
	U	kg	113,0 (2)	98,0	97,0	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
	٥	kg	-	-	-	74,0 (2)	65,0	85,0 (2)	80,0 (2)	99,0 (2)	112,0 (2)
	A	kg	-	-	-	81,0 (2)	81,0 (2)	92,0 (2)	75,0	106,0 (2)	85,0
Refrigerant load circuit 3 (1)	E,U	kg	-	-	-	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
	L	kg	-	-	-	81,0 (2)	81,0 (2)	92,0 (2)	75,0 (2)	106,0 (2)	85,0
	N	kg	-	-	-	92,0 (2)	-	-	-	-	-
System side heat exchanger											
Туре	°,A,E,L,N,U	type					Shell and tube				
	0	no.	1	1	1	1	1	1	1	1	1
Number	A,L	no.	1	1	1	2	2	2	2	2	2
Number	E,U	no.	2	2	2	2	2	2	2	-	-
	N	no.	2	2	2	2	-	-	-	-	-

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) The refrigerant gas charge is approximate, for more information contact the office.

FANS DATA

Oversized

Oversized			4/00	1/00	1000	3000	3343	33.53	3500	3653	3000
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Fans: M											
Increased fan									-		
Туре	°,A,E,L,N,U	type					axials				
Fan motor	°,A,U	type					Asynchronous				
	E,L,N	type				Asyno	hronous with pha	ase cut			
Fan											
	- 0	no.	6	6	6	8	8	8	8	8	8
Number	A,L	no.	8	8	8	8	10	10	10	12	12
	E,U	no.	8	8	10	10	10	12	12	14	14
	N	no.	10	10	12	12	12	14	14	16	16
With static pressure											
		m³/h	96000	96000	96000	128000	128000	128000	128000	144000	144000
	A	m³/h	128000	128000	128000	128000	160000	160000	160000	192000	192000
Air flow rate	E	m³/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
All How rate	L	m³/h	92000	92000	92000	92000	115000	115000	115000	138000	138000
	N	m³/h	115000	115000	138000	138000	138000	161000	161000	184000	184000
	U	m³/h	128000	128000	160000	160000	160000	192000	192000	224000	224000
High static proceurs	•	Pa	50	50	50	50	50	50	50	-	-
High static pressure	A,E,L,N,U	Pa	50	50	50	50	50	50	50	50	50
Without Static pressure											
	٥	m³/h	108000	108000	108000	144000	144000	144000	144000	144000	144000
	A	m³/h	144000	144000	144000	144000	180000	180000	180000	216000	216000
1: 0 ·	E	m³/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
Air flow rate	L	m³/h	92000	92000	92000	92000	115000	115000	115000	138000	138000
	N	m³/h	115000	115000	138000	138000	138000	161000	161000	184000	184000
	U	m³/h	144000	144000	180000	180000	180000	216000	216000	252000	252000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0
With static pressure	,,,,,										
	٥	dB(A)	96,8	97,0	97,2	97,6	97,8	98,0	98,2	98,4	98,4
	A	dB(A)	97,3	97,4	97,8	97,9	98,2	98,3	98,4	98,8	98,9
	E	dB(A)	89,3	89,4	90,2	90,3	90,4	90,8	91,2	91,8	92,0
Sound power level	L	dB(A)	88,9	89,0	89,1	89,2	90,3	90,5	90,6	90,8	90,9
	N	dB(A)	90,0	90,4	90,9	91,0	91,1	91,4	91,4	92,1	92,2
	<u>U</u>	dB(A)	97,0	97,4	98,0	98,2	98,4	98,8	98,8	99,0	99,1
Without Static pressure	•	uD(rt)	71,0	77,1	70,0	70,2	70,1	70,0	70,0	,,,,,	,,,,
minout Static pressure	0	dB(A)	97,5	97,6	97,6	97,9	98,1	98,2	98,4	98,4	98,4
	A	dB(A)	98,2	98,2	98,6	98,7	99,1	99,2	99,2	99,7	99,8
	E	dB(A)	89,3	89,4	90,2	90,3	90,4	90,8	91,2	91,8	92,0
Sound power level	L	dB(A)	88,9	89,0	89,1	89,2	90,4	90,8	90,6	90,8	90,9
	N N	dB(A)	90,0	90,4	90,9	91,0	91,1	91,4	91,4	92,1	92,2
	N	dB(A)	97,9	98,2	98,9	99,1	99,2	99,7	99,7	100,0	100,1
	U	uv(A)						,			
Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Fans: M											
Increased fan											
Туре	°,A,E,L,N,U	type					axials				
Fan motor	°,A,U	type					Asynchronous				
ו מוו וווטנטו	E,L,N	type				Asyno	hronous with pha	ase cut			

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Fan											
		no.	10	10	10	10	12	12	14	14	16
Number	A,L	no.	12	12	14	14	16	16	18	18	18
Mulliper	E,U	no.	14	14	16	16	18	20	20	22	22
	N	no.	16	16	18	20	22	22	26	28	30
With static pressure											
	•	m³/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m³/h	192000	192000	224000	224000	256000	256000	288000	288000	324000
Air flow rate	E	m³/h	161000	161000	184000	184000	207000	230000	230000	253000	253000
	L	m³/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m³/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
	U	m³/h	224000	224000	256000	256000	288000	320000	320000	352000	352000
		Pa	-	-	-	-	-	-	-	-	-
High static pressure	A,L	<u>Pa</u>	50	50	50	50	50	50	50	50	-
und and	E,N,U	Pa	50	50	50	50	50	50	50	50	50
Without Static pressure	0	3 //	40000	400000	40000	40000		244000	25222		
		m³/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m³/h	216000	216000	252000	252000	288000	288000	324000	324000	324000
Air flow rate	E	m³/h	161000	161000	184000	184000	207000	230000	230000	253000	253000
	<u>L</u>	m³/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m³/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
10.1	U	m³/h	252000	252000	288000	288000	324000	360000	360000	396000	396000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0
With static pressure											
	•	dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,0	99,1	99,3	99,4	100,1	100,2	100,4	100,8	101,5
Sound power level	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
Journal Porter Teres	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	99,2	99,3	99,9	100,0	100,4	100,7	101,0	101,3	101,6
Without Static pressure											
		dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,9	100,0	100,2	100,3	101,0	101,1	101,3	101,7	101,5
Sound power level	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
Journa power rever	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	100,2	100,2	100,8	100,9	101,3	101,7	101,9	102,2	102,5
		uD(/1)	100,2	100,2	100,0	100,7	101,5	101,7			102,3
Size		ub(ri)	5602	100,2	6002	6402	6503	6703		6903	7203
Size Fans: M		идиј		100,2							
		ирин		100,2							
Fans: M Increased fan	°,A,E,L,N,U			100,2							
Fans: M Increased fan Type	°,A,E,L,N,U	type		100,2			6503	6703			
Fans: M Increased fan		type type		100,2		6402	6503 axials	6703			
Fans: M Increased fan Type Fan motor	°,A,E,L,N,U °,A,U	type		100,2		6402	6503 axials Asynchronous	6703			
Fans: M Increased fan Type	°,A,E,L,N,U °,A,U	type type		100,2		6402	6503 axials Asynchronous	6703			
Fans: M Increased fan Type Fan motor	°,A,E,L,N,U °,A,U E,L,N	type type type no.	5602	100,2	6002	6402 Asy	axials Asynchronous nchronous with ph	6703		6903	7203
Fans: M Increased fan Type Fan motor	°,A,E,L,N,U °,A,U E,L,N	type type type	5602	100,2	6002	6402 Asy	axials Asynchronous nchronous with ph	6703 nase cut		6903	7203
Fans: M Increased fan Type Fan motor	°,A,E,L,N,U°,A,UA,L	type type type no.	5602 16 20	100,2	16 22	Asy 18 22	axials Asynchronous nchronous with ph 18 24	6703 ase cut 18 24		20 28	7203 22 28
Fans: M Increased fan Type Fan motor	°,A,E,L,N,U	type type type no. no.	16 20 24	100,2	16 22 26	Asy 18 22 28	axials Asynchronous nchronous with ph 18 24 28	6703 ase cut 18 24		20 28	7203 22 28 32
Fans: M Increased fan Type Fan motor Fan Number	°,A,E,L,N,U	type type type no. no.	16 20 24		16 22 26	Asy 18 22 28	axials Asynchronous nchronous with ph 18 24 28	6703 ase cut 18 24		20 28	7203 22 28 32
Fans: M Increased fan Type Fan motor Fan Number	°,A,E,L,N,U	type type type no. no. no.	16 20 24 32		16 22 26 32	Asy 18 22 28 32	axials Asynchronous nchronous with ph 18 24 28 34	18 24 30 -		20 28 30	7203 22 28 32
Fans: M Increased fan Type Fan motor Fan Number With static pressure	°,A,E,L,N,U °,A,U E,L,N ° A,L E,U N	type type type no. no. no. m³/h	16 20 24 32 288000		16 22 26 32 288000	Asy 18 22 28 32 324000	axials Asynchronous nchronous with ph 18 24 28 34	18 24 30 - 324000		20 28 30 -	7203 22 28 32 -
Fans: M Increased fan Type Fan motor Fan Number	°,A,E,L,N,U	type type type no. no. no. m³/h m³/h	16 20 24 32 288000 360000		16 22 26 32 288000 396000	Asy 18 22 28 32 324000 396000	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000	18 24 30 - 324000 384000		20 28 30 - 360000 448000	22 28 32 - 396000 448000
Fans: M Increased fan Type Fan motor Fan Number With static pressure	°,A,E,L,N,U	type type type no. no. no. m³/h m³/h m³/h	16 20 24 32 288000 360000 276000		16 22 26 32 288000 396000 299000	Asy 18 22 28 32 324000 396000 322000	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 322000	18 24 30 - 324000 384000 345000		20 28 30 - 360000 448000 345000	7203 22 28 32 - 396000 448000 368000
Fans: M Increased fan Type Fan motor Fan Number With static pressure	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E	type type no. no. no. no. m³/h m³/h m³/h m³/h	16 20 24 32 288000 360000 276000 260000		16 22 26 32 288000 396000 299000 286000	Asy 18 22 28 32 324000 396000 322000 286000	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 322000 276000	18 24 30 - 324000 384000 376000 276000		20 28 30 - 360000 448000 345000 322000	7203 22 28 32 - 396000 448000 368000
Fans: M Increased fan Type Fan motor Fan Number With static pressure	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E L N	type type type no. no. no. no. m³/h m³/h m³/h m³/h	16 20 24 32 288000 360000 276000 260000 368000		16 22 26 32 288000 396000 299000 286000 368000	Asy 18 22 28 32 324000 396000 322000 286000 368000	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 322000 276000 391000	18 24 30 - 324000 384000 276000		20 28 30 - 360000 448000 345000 322000	7203 22 28 32 - 396000 448000 368000 322000
Fans: M Increased fan Type Fan motor Fan Number With static pressure Air flow rate	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E U	type type type no. no. no. no. m³/h m³/h m³/h m³/h m³/h m³/h	16 20 24 32 288000 360000 276000 260000 368000 384000		16 22 26 32 288000 396000 299000 286000 368000 416000	Asy 18 22 28 32 324000 396000 322000 286000 368000 448000	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 322000 276000 391000 448000	18 24 30 - 324000 384000 276000 - 480000		20 28 30 - 360000 448000 345000 322000 - 480000	7203 22 28 32 - 396000 448000 368000 322000
Fans: M Increased fan Type Fan motor Fan Number With static pressure	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E U O	type type type no. no. no. no. m³/h m³/h m³/h m³/h m³/h p³/h	16 20 24 32 288000 360000 276000 260000 368000 384000		16 22 26 32 288000 396000 299000 286000 368000 416000	Asy 18 22 28 32 324000 396000 322000 286000 368000 448000 -	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 322000 276000 391000 448000 -	324000 345000 276000 -		20 28 30 - 360000 448000 345000 322000 -	7203 22 28 32 - 396000 448000 368000 322000 - 512000
Fans: M Increased fan Type Fan motor Fan Number With static pressure Air flow rate	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E U A A,L A A A A A A A A A A A A A A A A A	type type type no. no. no. no. m³/h m³/h m³/h m³/h m³/h p³/h p³	16 20 24 32 288000 360000 276000 260000 368000 384000		16 22 26 32 288000 396000 299000 286000 368000 416000	Asy 18 22 28 32 324000 396000 322000 286000 448000 -	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 322000 276000 391000 448000 - 50	324000 345000 276000 - 480000 - 50		20 28 30 - 360000 448000 345000 322000 - 480000 - 50	7203 22 28 32 - 396000 448000 368000 322000 - 512000 - 50
Fans: M Increased fan Type Fan motor Fan Number With static pressure Air flow rate	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E L N U A,L E,U	type type type no. no. no. no. m³/h m³/h m³/h m³/h m³/h p³/h p³	16 20 24 32 288000 360000 276000 260000 368000 384000		16 22 26 32 288000 396000 299000 286000 368000 416000 - -	Asy 18 22 28 32 324000 396000 322000 286000 448000 50	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 322000 276000 391000 448000 - 50 50	324000 345000 276000 - 480000 - 50		20 28 30 - 360000 448000 345000 322000 - 480000 - 50 50	7203 22 28 32 - 396000 448000 368000 322000 - 512000 - 50 50
Fans: M Increased fan Type Fan motor Fan Number With static pressure High static pressure	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E L N U A,L E,U	type type type no. no. no. no. m³/h m³/h m³/h m³/h m³/h p³/h p³	16 20 24 32 288000 360000 276000 260000 368000 384000		16 22 26 32 288000 396000 299000 286000 368000 416000 - -	Asy 18 22 28 32 324000 396000 322000 286000 448000 50	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 322000 276000 391000 448000 - 50 50	324000 345000 276000 - 480000 - 50		20 28 30 - 360000 448000 345000 322000 - 480000 - 50 50	7203 22 28 32 - 396000 448000 368000 322000 - 512000 - 50 50
Fans: M Increased fan Type Fan motor Fan Number With static pressure High static pressure	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E L N U A,L E,U N	type type type no. no. no. no. m³/h m³/h m³/h m³/h p³/h p² Pa Pa	16 20 24 32 288000 360000 2760000 368000 384000 - - 50 50		16 22 26 32 288000 396000 299000 286000 368000 416000 - - 50 50	Asy 18 22 28 32 324000 396000 322000 286000 448000 50 50	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 322000 276000 391000 448000 - 50 50	324000 384000 276000 - 480000 - 50		20 28 30 - 360000 448000 345000 322000 - 480000 - 50 50	7203 22 28 32 - 396000 448000 368000 322000 - 512000 - 50 50
Fans: M Increased fan Type Fan motor Fan Number With static pressure High static pressure Without Static pressure	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E L N U A,L E,U N O A,L N O O O O O O O O O O O O O O O O O O	type type type no. no. no. no. m³/h m³/h m³/h m³/h pa Pa Pa Pa Pa Pa	288000 244 32 288000 360000 2760000 368000 384000 - - 50 50		16 22 26 32 288000 396000 299000 286000 368000 416000 - - 50 50	Asy 18 22 28 32 324000 396000 322000 286000 448000 50 50 324000	axials Asynchronous nchronous with ph 18 24 28 34 324000 3324000 276000 391000 448000 - 50 50 50 324000	324000 345000 - 480000 - 50 50 - 324000		20 28 30 - 360000 448000 345000 322000 - 480000 - 50 50 -	7203 22 28 32 - 396000 448000 368000 322000 - 512000 - 50 50 - 396000
Fans: M Increased fan Type Fan motor Fan Number With static pressure High static pressure	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E L N U A,L E,U N A A A A A A A A A A A A A A	type type type no. no. no. no. m³/h m³/h m³/h m³/h pa Pa Pa Pa Pa Pa Pa Pa Pa	16 20 24 32 288000 360000 276000 260000 368000 384000 - - 50 50 288000 360000		16 22 26 32 288000 396000 299000 286000 368000 416000 - - 50 50 288000 396000	Asy 18 22 28 32 324000 396000 322000 286000 448000 50 50 324000 396000	axials Asynchronous nchronous with ph 18 24 28 34 324000 332000 276000 391000 448000 - 50 50 50 324000 432000	324000 432000 432000		20 28 30 - 360000 448000 345000 322000 - 480000 - 50 50 -	7203 22 28 32 - 396000 448000 368000 322000 - 512000 - 50 50 - 396000 504000
Fans: M Increased fan Type Fan motor Fan Number With static pressure High static pressure Without Static pressure	°,A,E,L,N,U °,A,U E,L,N A,L E,U N A E L N U A,L E,U N A E L N U A A,L E,U N A E E L N C A,L E,U N N	type type type no. no. no. no. m³/h m³/h m³/h m³/h pa	288000 360000 276000 360000 276000 288000 384000 288000 360000 276000		16 22 26 32 288000 396000 299000 416000 - - 50 50 50 288000 396000 299000	Asy 18 22 28 32 32 324000 396000 322000 448000 50 50 324000 396000 322000	axials Asynchronous nchronous with ph 18 24 28 34 324000 332000 276000 391000 448000 - 50 50 50 50 324000 432000 332000 332000	324000 345000 345000 345000 345000 345000 345000 345000		20 28 30 - 360000 448000 345000 322000 - 480000 - 50 50 -	7203 22 28 32 - 396000 448000 368000 - 512000 - 50 50 - 396000 504000 368000
Fans: M Increased fan Type Fan motor Fan Number With static pressure High static pressure Without Static pressure	°,A,E,L,N,U °,A,U E,L,N ° A,L E,U N A E L N U A,L E,U N A E L N U A E L E,U N	type type type no. no. no. no. m³/h m³/h m³/h m³/h pa Pa Pa Pa Pa Pa Pa N³/h m³/h m³/h m³/h m³/h m³/h m³/h	16 20 24 32 288000 360000 276000 368000 384000 - - 50 50 288000 360000 276000 276000		16 22 26 32 288000 396000 299000 2 288000 396000 2 288000 396000 2299000 2286000	Asy 18 22 28 32 32 324000 396000 322000 286000 50 50 324000 396000 322000 286000 286000 286000	axials Asynchronous nchronous with ph 18 24 28 34 324000 3324000 276000 391000 448000 - 50 50 50 324000 432000 232000 276000 322000 276000	324000 345000 432000 345000 276000 345000 276000		20 28 30 - 360000 448000 345000 322000 - 50 50 - 360000 504000 345000 345000 322000	7203 22 28 32 - 396000 448000 368000 - 512000 - 50 50 - 396000 504000 368000 322000
Fans: M Increased fan Type Fan motor Fan Number With static pressure High static pressure Without Static pressure	°,A,E,L,N,U °,A,U E,L,N ° A,L E,U N A E L N U A,L E,U N A E L N U A E L N N N	type type type no. no. no. no. m³/h m³/h m³/h m³/h pa	5602 16 20 24 32 288000 360000 276000 368000 50 50 288000 360000 2760000 368000 368000		16 22 26 32 288000 396000 299000 286000 396000 299000 288000 396000 299000 286000 368000	Asy 18 22 28 32 32 324000 396000 322000 286000 50 50 324000 396000 322000 286000 322000 286000 332000 332000 332000 332000	axials Asynchronous nchronous with ph 18 24 28 34 324000 384000 276000 391000 448000 - 50 50 50 324000 432000 276000 332000 276000 331000	18 24 30 - 324000 384000 276000 - 480000 - 324000 432000 345000 276000		20 28 30 - 360000 448000 345000 322000 - 50 50 - 360000 504000 345000 322000 -	7203 22 28 32 - 396000 448000 368000 - 512000 - 50 50 - 396000 504000 368000 322000

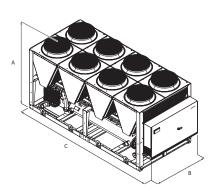
Size			5602		6002	6402	6503	6703		6903	7203
With static pressure									'		
	0	dB(A)	101,7		101,8	102,1	102,3	102,4		103,0	103,1
	A	dB(A)	101,7		101,9	102,0	102,0	102,1		102,3	102,4
	E	dB(A)	93,9		94,0	94,2	94,3	94,3		94,4	94,8
Sound power level		dB(A)	93,7		93,9	94,0	94,2	94,2		94,3	94,3
	N	dB(A)	95,0		95,2	95,3	95,4			-	-
	U	dB(A)	102,0		102,1	102,2	102,2	102,3		102,4	102,4
Without Static pressure		45(1)	.02/0			.02,2		.02/5			.02/.
	0	dB(A)	101,7		101,8	102,1	102,3	102,4		103,0	103,1
	A	dB(A)	101,7		101,9	102,0	102,9	103,0		103,2	103,3
	E	dB(A)	93,9		94,0	94,2	94,3	94,3		94,4	94,8
Sound power level	L	dB(A)	93,7		93,9	94,0	94,2	94,2		94,3	94,3
	N	dB(A)	95,0		95,2	95,3	95,4			-	-
	U	dB(A)	102,9		103,0	103,2	103,2	103,3		103,4	103,4
								'			
Inverter											
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Fans: J											
Fan											
Туре	°,A,E,L,N,U	type					axials				
Fan motor	°,A,E,L,N,U	type					Inverter				
		no.	6	6	6	8	8	8	8	8	8
Number	A,L	no.	8	8	8	8	10	10	10	12	12
······································	E,U	no.	8	8	10	10	10	12	12	14	14
	N	no.	10	10	12	12	12	14	14	16	16
Inverter fan		2									
	•	m³/h	96000	96000	96000	128000	128000	128000	128000	144000	144000
	A	m³/h	128000	128000	128000	128000	160000	160000	160000	192000	192000
Air flow rate	E	m³/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
	L	m³/h	92000	92000	92000	92000	115000	115000	115000	138000	138000
	N	m³/h	115000	115000	138000	138000	138000	161000	161000	184000	184000
	U	m³/h	128000	128000	160000	160000	160000	192000	192000	224000	224000
High static pressure	•	Pa	120	120	120	120	120	120	120	75	75
	A,E,L,N,U	Pa	120	120	120	120	120	120	120	120	120
Sound data calculated in cooling i	mode (1)	JD/A)	06.0	07.0	07.2	07.6	07.0	00.0	00.2	00.4	00.4
		dB(A)	96,8	97,0	97,2	97,6	97,8	98,0	98,2	98,4	98,4
	A	dB(A)	97,3	97,4	97,8	97,9	98,2	98,3	98,4	98,8	98,9
Sound power level	E	dB(A)	89,3	89,4	90,2	90,3	90,4	90,8	91,2	91,8	92,0
•	L	dB(A)	88,9	89,0	89,1	89,2	90,3	90,5	90,6	90,8	90,9
	N	dB(A)	90,0	90,4	90,9	91,0	91,1	91,4	91,4	92,1	92,2
(1) Cound navior calculated on the	U hasis of measurements m	dB(A)	97,0	97,4	98,0	98,2	98,4	98,8	98,8	99,0	99,1
(1) Sound power: calculated on the b	Dasis of fileasurefilefits fil	aue III accoruan									
Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Fans: J											
Fan Tuna	°,A,E,L,N,U	tuno					axials				
Type Fan motor		type									
Fan motor	°,A,E,L,N,U	type	10	10	10	10	Inverter 12	12	14	14	16
	A,L	no.	12	12	14	14	16	16	18	18	18
Number	A,L E,U	no.	14	14	16	16	18	20	20	22	22
	N	no.	16	16	18	20	22	22	26	28	30
Inverter fan		110.	10	10	10	20	22		20	20	30
inverter run	0	m³/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m³/h	192000	192000	224000	224000	256000	256000	288000	288000	324000
	E	m ³ /h	161000	161000	184000	184000	207000	230000	230000	253000	253000
Air flow rate	L	m³/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m³/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
	N	m³/h	224000	224000	256000	256000	288000	320000	320000	352000	352000
	0	Pa	75	75	75	75	75	75	75	75	75
High static pressure	A,L	Pa	120	120	120	120	120	120	120	120	75
ingn static pressure	E,N,U	Pa	120	120	120	120	120	120	120	120	120
Sound data calculated in cooling i		1 4	140	120	140	140	140	120	120	120	120
	o •	dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,0	99,1	99,3	99,4	100,7	100,0	100,4	100,8	101,5
	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
Sound power level	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	L N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	99,2	99,3	99,9	100,0	100,4	100,7	101,0	101,3	101,6
	U	uD(N)	JJIL	22,5	77,7	100,0	100,4	100,7	101,0	101,3	101,0

U dB(A) 99,2 99,3 99,9 100,0 100,4 100,7 101,0 101,3 101,6 (1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			5602	6002	6402	6503	6703	6903	7203
Fans: J									
Fan									
Туре	°,A,E,L,N,U	type				axials			
Fan motor	°,A,E,L,N,U	type				Inverter			
	0	no.	16	16	18	18	18	20	22
Number	A,L	no.	20	22	22	24	24	28	28
Number	E,U	no.	24	26	28	28	30	30	32
	N	no.	32	32	32	34	-	-	-
Inverter fan									
	0	m³/h	288000	288000	324000	324000	324000	360000	396000
	A	m³/h	360000	396000	396000	384000	384000	448000	448000
Air flow rate	E	m³/h	276000	299000	322000	322000	345000	345000	368000
AIT HOW rate	L	m³/h	260000	286000	286000	276000	276000	322000	322000
	N	m³/h	368000	368000	368000	391000	-	-	-
	U	m³/h	384000	416000	448000	448000	480000	480000	512000
	0	Pa	75	75	75	75	75	75	75
High static processo	A,L	Pa	75	75	75	120	120	120	120
High static pressure	E,U	Pa	120	120	120	120	120	120	120
	N	Pa	120	120	120	120	-	-	-
Sound data calculated in cooling	mode (1)								
	0	dB(A)	101,7	101,8	102,1	102,3	102,4	103,0	103,1
	A	dB(A)	101,7	101,9	102,0	102,0	102,1	102,3	102,4
Cound nower level	E	dB(A)	93,9	94,0	94,2	94,3	94,3	94,4	94,8
Sound power level	L	dB(A)	93,7	93,9	94,0	94,2	94,2	94,3	94,3
	N	dB(A)	95,0	95,2	95,3	95,4	-	-	-
	U	dB(A)	102,0	102,1	102,2	102,2	102,3	102,4	102,4

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	0	mm	3970	3970	3970	5160	5160	5160	5160	5160	5160	6350	6350	6350	6350	7140
	A,L	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330	9520
	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520	10710
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900	13090
Size			4202	4502	4802	5202	5602	600)2	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights																
	°,A,L	mm	2450	2450	2450	2450	2450	245	50	2450	2450	2450	2450	2450	2450	2450
A	E,U	mm	2450	2450	2450	2450	2450	245	50	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	245	50	2450	2450	-	-	-	-	-
	°,A,L	mm	2200	2200	2200	2200	2200	220	00	2200	2200	2200	2200	2200	2200	2200
В	E,U	mm	2200	2200	2200	2200	2200	220	00	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	220	00	2200	2200	-	-	-	-	-
	0	mm	7140	8330	8330	9520	9520	952	20 1	0710	11110	11110	11900	13090	13090	13090
	A,L	mm	9520	10710	10710	10710	11900	130	90 1	3090	14280	14280	16660	16660	17850	20230
C	E,U	mm	11900	11900	13090	13090	14280) 154	70 1	6660	16660	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	190	40 1	9040	20230	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00																
Weights																
	0	kg	3660	3702	3831	4670	5040	5053	5077	5273	5396	5922	5977	6410	6901	7477
Emptywaight	A,L	kg	4213	4249	4373	4699	5472	5488	5691	6228	6424	6477	6577	7656	8129	8647
Empty weight -	E,U	kg	4373	4394	4840	5431	5785	6333	6356	6805	6896	6914	6953	8149	8660	9431
	N	kg	4791	4812	5373	5965	6318	6741	6764	7254	7346	7416	7508	8882	9759	10383
_	0	kg	3753	3790	3962	4801	5171	5202	5226	5548	5671	6244	6299	6732	7214	7790
Weight functioning	A,L	kg	4306	4337	4505	4848	5621	5637	5966	6503	6747	6799	6871	8173	8645	9152
weight functioning	E,U	kg	4505	4543	4989	5753	6107	6655	6679	7118	7209	7279	7352	8718	9177	9936
	N	kg	4923	4962	5522	6287	6641	7063	7086	7567	7659	7729	7802	9399	10276	10888
Size			4202	4502	4802	5202	5602	60	02 6	402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00																
Weights																
	0	kg	7574	7993	8302	8826	8954	90	17 9	719	11612	11688	12216	12761	13047	13176
-	A,L	kg	8710	9428	9481	9902	10433	3 110)18 11	1060	13354	13417	14572	14625	15743	16934
Empty weight -	E,U	kg	9922	9983	10887	11013	11820) 122	261 17	2701	14514	15005	15119	16034	-	-
	N	kg	10456	11646	12355	12989	12721	1 136	566 13	3709	16119	-	-	-	-	-
	0	kg	7868	8287	8819	9342	9471	95	22 10	0224	12527	12603	13089	13633	13920	14048
Weight functioning	A,L	kg	9215	9922	9974	10795	11327	7 118	398 11	1940	14121	14184	15328	15381	16950	18126
Weight functioning	E,U	kg	10427	10476	11781	11907	12446	5 128	386 13	3327	15281	15772	15875	17190	-	-
_	N	ka	10961	12171	12880	13564	14249		292 14	4726	16937					

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSMI 1251-6102

Air-water chiller

Cooling capacity 285,6 ÷ 1342,6 kW



- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- · Low electrical consumption





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger. In the unit with desuperheater, it is also possible to produce free-hot water

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Unit with 1 / 2 cooling circuits

Unit with 1–2 refrigerant circuits.

The single circuit units have the inverter compressor, while the dual-circuit have an asynchronous compressor on/off switch and an inverter, the combination provides both high efficiency at part load and full load.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

Low noise version

Silenced versions "E" feature a special compressor jacket which ensures a further noise reduction of approximately 4dB.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in
 the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_: Anti-intrusion grid kit

KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
AER485P1	A,E	•	•	•												
AER485P1 x n° 2 (1)	A,E				•	•	•	•	•	•	•	•			•	•
AERBACP	A,E	•				•			•			•				
AERNET	A,E	•		•	•	•	•	•	•	•	•		•		•	•
MULTICHILLER EVO	A,E			•	•	•	•	•	•	•	•	•	•		•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A	AVX991	AVX992	AVX993	AVX996	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX997	AVX998	AVX998	AVX998	AVX998
E	AVX991	AVX992	AVX994	AVX996	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX997	AVX998	AVX998	AVX998	AVX998

Heater exchangers

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A,E	KRS23	KRS24													

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid kit

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A,E	GP4V	GP4V	GP5V	GP5V	GP6V	GP7V	GP7V	GP7V	GP8V	GP9V	GP10V	GP11V	GP11V	GP11V	GP11V

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	NSMI
5,6,7,8	Size 1251, 1601, 1801, 2352, 2652, 2802, 3202, 3402, 3802, 4102, 4402, 4802, 5202 5702, 6102
9	Model
0	Cooling only
10	Heat recovery
0	Without heat recovery
D	With desuperheater (1)
11	Version
Α	High efficiency
Е	Silenced high efficiency
12	Coils
0	Aluminium microchannel
0	Coated aluminium microchannel
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
13	Fans
0	Standard
J	Inverter
14	Power supply
0	400V∼3 50Hz with fuses
15,16	Integrated hydronic kit
	Without hydronic kit
00	Without hydronic kit
	Kit with n° 1 pump
P/	Pump A

Field	Description
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (2)
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (2)
	Kit with 2 pumps
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J (2)

 ⁽¹⁾ Minimum water temperature of 35 °C must always be ensured at heat exchanger inlet if working with low temperatures of water produced in the primary circuit.
 (2) For all configurations including pump J please contact the factory.

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PERFORMANCE SPECIFICATIONS

NSMI - A/E

Size		1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	285,6	382,0	464,0	519,1	605,4	659,4	725,2	802,4	842,6	948,0	1008,8	1110,4	1204,3	1253,0	1342,6
Input power	kW	91,3	120,2	149,5	167,1	194,3	212,3	232,7	257,5	269,9	304,8	324,7	356,2	397,4	415,9	454,6
Cooling total input current	А	155,0	200,0	245,0	293,0	337,0	360,0	393,0	431,0	443,0	517,0	547,0	619,0	665,0	728,0	761,0
EER	W/W	3,13	3,18	3,10	3,11	3,12	3,11	3,12	3,12	3,12	3,11	3,11	3,12	3,03	3,01	2,95
Water flow rate system side	l/h	49130	65700	79773	89247	104092	113376	124682	137945	144852	162983	173442	190903	207040	215409	230815
Pressure drop system side	kPa	45	15	21	18	25	28	33	27	30	39	45	38	44	49	55

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
SEER - 12/7 (EN14825:2018) with standar	rd fans (1)																
SEER	A,E	W/W	4,75	4,82	4,78	4,90	4,92	4,90	4,91	4,93	4,93	4,90	4,88	4,90	4,85	4,70	4,69
Seasonal efficiency	A,E	%	186,8%	189,7%	188,0%	193,1%	193,9%	193,0%	193,3%	194,2%	194,3%	192,8%	192,2%	192,9%	191,0%	185,1%	184,7%
SEER - (EN14825:2018) 12/7 with inverte	r fans (1)																
SEER	A,E	W/W	4,95	5,04	5,00	5,01	5,03	5,01	5,02	5,04	5,04	5,00	4,99	5,00	4,96	4,81	4,80
Seasonal efficiency	A,E	%	194,9%	198,4%	196,8%	197,3%	198,1%	197,2%	197,6%	198,5%	198,5%	197,1%	196,4%	197,1%	195,3%	189,2%	188,8%
SEPR - (EN14825: 2018) High temperatur	e with standa	rd fans (2))														
SEPR	A,E	W/W	5,70	5,62	5,59	6,56	6,43	6,42	6,77	6,94	7,21	6,96	7,47	6,88	7,21	6,69	7,01
SEPR - (EN14825: 2018) High temperatur	e with inverte	er fans (2)															
SEPR	A,E	W/W	5,70	5,62	5,59	6,56	6,43	6,42	6,77	6,94	7,21	6,96	7,47	6,88	7,21	6,69	7,01

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Electric data																	
Maximum current (FLA)	A,E	Α	251,3	291,3	377,7	442,0	473,0	519,4	519,4	567,4	653,8	708,1	753,5	874,8	917,2	1002,2	1036,2
Peak current (LRA)	A,E	A	51,3	51,3	57,7	571,7	605,0	651,4	651,4	775,4	861,8	989,1	1059,4	1180,2	1335,2	1420,2	1532,2

GENERAL TECHNICAL DATA

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Compressor																	
Туре	A,E	type								Screw							
Compressor regulation	A,E	Туре	1	- 1	- 1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+1	1+I	1+I
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type								R134a							
Refrigerant charge (1)	A,E	kg	28,0	28,0	30,0	81,0	92,0	110,0	114,0	107,0	131,0	146,0	163,0	183,0	183,0	195,0	195,0
System side heat exchanger																	
Туре	A,E	type							S	hell and tu	be						-
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Connections (in/out)	A,E	Туре							G	rooved joir	nts						
Sizes (in/out)	A,E	Ø	5"	6"	6"	6"	6"	6"	6"	8"	8"	8"	8"	10"	10"	10"	10"

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Fans

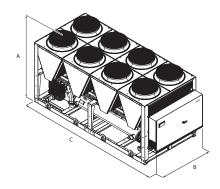
raiis																	
Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Fans: °																	
Fan																	
Туре	A,E	type								Axial							
Fan motor	A,E	type							Asynchro	nous with	phase cut						
Number	A,E	no.	8	8	10	10	12	14	14	14	16	18	20	22	22	22	22
Air flow rate	ΔF	m ³ /h	128000	128000	160000	160000	192000	224000	224000	224000	256000	288000	320000	396000	396000	396000	396000

Sound data

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Sound data calculated in cooling mode (1)																	
Countrational	Α	dB(A)	97,2	98,6	98,6	98,6	98,8	99,9	99,9	100,3	100,3	100,4	101,0	102,9	103,2	102,9	103,2
Sound power level —	E	dB(A)	92,9	95,8	95,9	94,7	95,1	96,1	96,1	97,3	97,4	97,7	98,0	99,9	99,9	99,9	99,9
County = ======= (10 ==)	Α	dB(A)	64,8	66,2	66,1	66,1	66,2	67,1	67,1	67,5	67,5	67,4	67,9	69,7	69,9	69,7	69,9
Sound pressure level (10 m) —	E	dB(A)	60,6	63,4	63,4	62,1	62,5	63,3	63,3	64,6	64,5	64,7	64,8	66,7	66,7	66,7	66,7

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Dimensions and weights																	
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
С	A,E	mm	4760	4760	5950	6400	7140	8330	8330	8330	9520	10710	11900	13090	13090	13090	13090
Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00																	
Dimensions and weights																	
Franktooninkk	Α	kg	3752	4162	4578	6039	6447	6896	6987	7635	8103	8872	9324	10798	10888	10918	10991
Empty weight -	Е	kg	4054	4464	4880	6642	7050	7499	7590	8239	8706	9475	9928	11637	11727	11757	11830
Weight functioning	Α	kg	3832	4416	4832	6360	6768	7206	7275	8165	8632	9389	9841	11730	11819	11835	11908
Weight functioning –	E	kg	4134	4718	5134	6964	7371	7809	7878	8768	9236	9993	10445	12568	12658	12674	12747

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NSH

Reversible air/water heat pump

Cooling capacity 251 ÷ 731 kW - Heating capacity 281 ÷ 786 kW



- · High efficiency also at partial loads
- Electronic expansion valve





DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -10 °C outside air temperature in winter, and up to 48°C in summer. Hot water production up to 55°C (for more details refer to the technical documentation).

Bi-tri circuit unit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

GP_M: Anti-intrusion grid.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

KRS: Electric heater for the heat exchanger

AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1	A,E	•	•		•		•											
AER485P1 x n° 2 (1)	A,E					•		•	•	•	•	•	•		•			•
AERBACP	A,E												•				•	
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•	•		•		•	•
MULTICHILLER_EVO	A,E	•	•	•	•	•	•	•	•		•		•		•		•	•
PRV3	A,E	•		•	•		•		•				•				•	

(1) x Indicates the quantity of accessories to match.

Condensation control temperature

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A	DCPX69	DCPX69	DCPX68	DCPX69	DCPX68	DCPX69	DCPX68	DCPX73	DCPX73
E	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
Ver	2352	2502	2652	2802		3002	3202	3402	3602
Ver A	2352 DCPX73	2502 DCPX73	2652 DCPX73	2802 DCPX73		3002 DCPX73	3202 DCPX73	3402 DCPX73	3602 DCPX73

Anti-intrusion grid

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A,E	GP300M	GP300M	GP300B	GP300M	GP300B	GP400M	GP400B	GP500B	GP500B
Ver	2352	2502	2652	2802	3	002	3202	3402	3602
A,E	GP500B	GP500B	GP500B	GP500B	GP300	M+300M	GP300M+300M	GP300M+400M	GP400M+400M

Antivibration

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Integrated hydro	nic kit: 00																
A,E	AVX536	AVX536	AVX537	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX549	AVX551	AVX551	AVX554	AVX556	AVX557	AVX559
Integrated hydro	Integrated hydronic kit: PA																
A,E	AVX536	AVX536	AVX537	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX550	AVX551	AVX551	AVX553	AVX553	AVX557	AVX559
Integrated hydro	nic kit: PC, PE,	PG, PJ															
A,E	AVX536	AVX536	AVX538	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX550	AVX551	AVX551	AVX553	AVX555	AVX557	AVX559

Heater exchangers

 acci caciiu	iigeis																
Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A,E	KRS11	KRS11	KRS19	KRS11	KRS19	KRS11	KRS19	KRS14	KRS14	KRS14	KRS14						

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Power factor correction

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202					
A,E	RIFNSH1251	RIFNSH1401	RIFNSH1402	RIFNSH1601	RIFNSH1602	RIFNSH1801	RIFNSH1802	RIFNSH2002	RIFNSH2202					
A grey background in	A grey background indicates the accessory must be assembled in the factory													
Ver	2352	2502	2652	2802		3002	3202	3402	3602					
A,E	RIFNSH2352	RIFNSH2502	RIFNSH2652	RIFNSH280	02 RI	FNSH3002	RIFNSH3202	RIFNSH3402	RIFNSH3602					

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A,E	AK (1)																

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

CONFIGUR	
Field	Description
1,2,3	NSH
4,5,6,7	Size 1251, 1401, 1402, 1601, 1602, 1801, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602
8	Operating field
Χ	Electronic thermostatic expansion valve
9	Model
Н	Heat pump
10	Heat recovery
0	Without heat recovery
D	With desuperheater
11	Version
Α	High efficiency
E	Silenced high efficiency
12	Coils
0	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
13	Fans
0	Standard
J	Inverter
14	Power supply
0	400V~3 50Hz with fuses
2	230V~3 50Hz with fuses (1)
4	230V~3 50Hz with magnet circuit breakers (1)
8	400V~3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
	Without hydronic kit
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PC	Pump C
PE	Pump E
PG	Pump G
PJ	Pump J (2)

⁽¹⁾ Not available for size from 1251 to 1801 and from 2352 to 3602 (2) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NS - HA

III III										
Size		1251	1401	1402	1601	1602	1801	1802	2002	2202
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	262,7	281,7	257,7	309,7	315,6	365,6	365,6	384,6	414,5
Input power	kW	86,9	95,0	94,9	107,8	108,3	128,3	125,3	132,5	138,8
Cooling total input current	A	149,0	164,0	168,0	185,0	186,0	215,0	216,0	227,0	233,0
EER	W/W	3,02	2,96	2,72	2,87	2,91	2,85	2,92	2,90	2,99
Water flow rate system side	l/h	45186	48451	44327	53262	54292	62883	62883	66147	71302
Pressure drop system side	kPa	38	41	36	27	50	43	43	47	53
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	281,4	297,4	281,4	332,3	342,5	393,5	395,5	412,5	450,6
Input power	kW	88,2	94,2	93,2	104,0	106,8	126,7	123,7	133,9	141,3
Heating total input current	A	150,0	163,0	165,0	180,0	182,0	212,0	213,0	229,0	236,0
COP	W/W	3,19	3,16	3,02	3,20	3,21	3,11	3,20	3,08	3,19
Water flow rate system side	l/h	48838	51618	48838	57701	59439	68303	68651	71605	78210
Pressure drop system side	kPa	47	49	47	33	64	54	54	58	67

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		2352	2502	2652	2802	3002	3202	3402	3602
Cooling performance 12 °C/7 °C(1)									
Cooling capacity	kW	454,6	499,5	524,5	547,5	591,5	619,6	675,5	731,4
Input power	kW	158,4	173,5	186,7	195,9	202,6	215,4	235,9	256,4
Cooling total input current	A	268,0	295,0	318,0	335,0	349,0	370,0	400,0	430,0
EER	W/W	2,87	2,88	2,81	2,80	2,92	2,88	2,86	2,85
Water flow rate system side	l/h	78174	85906	90201	94153	101712	106523	116144	125766
Pressure drop system side	kPa	37	38	40	43	34	27	35	43
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	502,5	541,5	563,6	585,6	629,5	664,5	725,6	786,7
Input power	kW	157,9	171,0	177,1	185,4	198,0	207,8	230,4	253,1
Heating total input current	А	267,0	292,0	303,0	318,0	342,0	359,0	391,0	423,0
COP	W/W	3,18	3,17	3,18	3,16	3,18	3,20	3,15	3,11
Water flow rate system side	l/h	87247	94025	97849	101673	109320	115403	126004	136606
Pressure drop system side	kPa	49	47	49	53	41	33	43	54

NS - HE

N2 - HE										
Size		1251	1401	1402	1601	1602	1801	1802	2002	2202
Cooling performance 12 °C/7 °C (1)										
Cooling capacity	kW	250,7	266,7	242,7	292,7	301,6	343,6	349,6	366,6	394,5
Input power	kW	91,8	101,9	100,8	115,7	116,2	136,1	132,2	140,3	146,5
Cooling total input current	A	161,0	178,0	181,0	202,0	202,0	234,0	233,0	246,0	254,0
EER	W/W	2,73	2,62	2,41	2,53	2,60	2,52	2,65	2,61	2,69
Water flow rate system side	l/h	43125	45874	41750	50341	51887	59103	60134	63055	67865
Pressure drop system side	kPa	32	37	33	24	46	38	39	43	48
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	281,4	297,4	281,4	332,3	342,5	393,5	395,5	412,5	450,6
Input power	kW	88,2	94,2	93,2	104,0	106,8	126,7	123,7	133,9	141,3
Heating total input current	A	150,0	163,0	165,0	180,0	182,0	212,0	213,0	229,0	236,0
COP	W/W	3,19	3,16	3,02	3,20	3,21	3,11	3,20	3,08	3,19
Water flow rate system side	l/h	48838	51618	48838	57701	59439	68303	68651	71605	78210
Pressure drop system side	kPa	47	49	47	33	64	54	54	58	67

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C/7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40°C/45°C; Outside air 7°C d.b./6°C w.b.

Size		2352	2502	2652	2802	3002	3202	3402	3602
Cooling performance 12 °C/7 °C (1)									
Cooling capacity	kW	435,6	487,6	506,5	517,5	559,6	585,6	636,5	687,5
Input power	kW	169,3	192,4	202,5	210,6	217,4	231,2	251,6	272,0
Cooling total input current	А	293,0	333,0	349,0	365,0	380,0	403,0	436,0	468,0
EER	W/W	2,57	2,53	2,50	2,46	2,57	2,53	2,53	2,53
Water flow rate system side	l/h	74910	83844	87108	88998	96214	100681	109444	118206
Pressure drop system side	kPa	34	35	37	39	30	24	31	38
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	502,5	541,5	563,6	585,6	629,5	664,5	725,6	786,7
Input power	kW	157,9	171,0	177,1	185,4	198,0	207,8	230,4	253,1
Heating total input current	А	267,0	292,0	303,0	318,0	342,0	359,0	391,0	423,0
COP	W/W	3,18	3,17	3,18	3,16	3,18	3,20	3,15	3,11
Water flow rate system side	l/h	87247	94025	97849	101673	109320	115403	126004	136606
Pressure drop system side	kPa	49	47	49	53	41	33	43	54

ENERGY DATA

Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
UE 813/2013 perform	UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)																		
Pdesignh	A,E	kW	185	195	185	218	225	259	260	271	297	330	356	370	385	325	342	374	400
SCOP	A,E	W/W	3,33	3,28	3,23	3,33	3,33	3,23	3,33	3,20	3,30	3,30	3,30	3,33	3,30	3,35	3,40	3,33	3,28
ηsh	A,E	%	130.0%	128.0%	126.0%	130.0%	130.0%	126.0%	130.0%	125.0%	129.0%	129.0%	129.0%	130.0%	129.0%	131.0%	133.0%	130.0%	128.0%
SEER - 12/7 (EN14825:	:2018) with s	tandard f	ans (2)																
SEER -	Α	W/W	3,88	3,81	3,46	3,76	3,68	3,71	3,73	3,70	3,80	3,72	3,74	3,66	3,64	3,81	3,76	3,73	3,72
SEEN	E	W/W	3,41	3,28	3,00	3,19	3,23	3,19	3,32	3,28	3,37	3,28	3,23	3,18	3,12	3,30	3,25	3,23	3,23
Seasonal efficiency —	Α	%	152.1%	149.4%	135.2%	147.4%	144.2%	145.2%	146.0%	145.0%	149.0%	145.7%	146.6%	143.5%	142.5%	149.5%	147.5%	146.1%	145.8%
seasonal enficiency —	E	%	133.4%	128.1%	116.8%	124.4%	126.2%	124.7%	129.7%	128.2%	131.8%	128.1%	126.3%	124.3%	121.7%	129.1%	126.9%	126.1%	126.2%

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

⁽¹⁾ Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

ELECTRIC DATA

Size			1251	1401	1402	1601	1602	1801	1802	2002	2202
Electric data											
Maximum current (FLA)	A,E	А	209,0	242,0	276,0	258,0	276,0	316,0	325,0	352,0	370,0
Peak current (LRA)	A,E	А	327,0	387,0	251,0	431,0	251,0	472,0	305,0	313,0	350,0
Size			2352	2502	2652	28	02	3002	3202	3402	3602
Electric data											
Maximum current (FLA)	A,E	Α	390,0	410,0	443,0	476	5,0	500,0	516,0	574,0	631,0
Peak current (LRA)	A,E	А	365,0	436,0	461,0	521	1,0	534,0	578,0	612,0	653,0

GENERAL TECHNICAL DATA

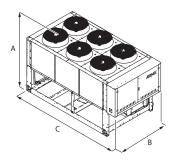
Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Compressor																			
Туре	A,E	type									Screw								
Compressor regulation	A,E	Туре									On/Off								
Number	A,E	no.	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2
Partialisation of the unit with	Α	%	40-100	40-100	20-100	40-100	20-100	40-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100
electronic thermostatic expansion	E	0/																	
valve	t	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigerant	A,E	type									R134a								
Defrigerant lead circuit 1 (1)	Α	kg	90,0	92,0	43,0	100,0	57,0	138,0	57,0	55,0	80,0	80,0	85,0	-	97,0	92,0	-	110,0	138,0
Refrigerant load circuit 1 (1)	E	kg	90,0	92,0	43,0	118,0	57,0	138,0	57,0	55,0	80,0	80,0	85,0	-	97,0	92,0	118,0	110,0	138,0
D. 6	А	kg	-	-	45,0	-	57,0	-	57,0	75,0	102,0	85,0	85,0	-	97,0	100,0	-	145,0	138,0
Refrigerant load circuit 2 (1)	E	kg	-	-	45,0	-	57,0	-	57,0	75,0	102,0	85,0	85,0	-	97,0	118,0	118,0	145,0	138,0
Total oil charge	A,E	kg	22,0	19,0	30,0	19,0	30,0	35,0	30,0	30,0	30,0	37,0	44,0	41,0	38,0	38,0	38,0	54,0	70,0
System side heat exchanger																			
Туре	A,E	type								SI	nell and tu	be							
Number	A,E	no.	1	1	2	1	2	1	2	2	1	1	1	1	1	2	2	2	2
Minimumton florer	А	l/h	22593	24226	22164	26631	27146	31442	31442	33074	35651	39087	42953	45101	47077	50856	53262	58072	62883
Minimum water flow rate —	E	l/h	21563	22937	20875	25171	25944	29552	30067	31528	33933	37455	41922	43554	44499	48107	50341	54722	59103
N	A	I/h	75310	80752	73878	88770	90487	104805	104805	110245	118837	130290	143177	150335	156922	169520	177538	193573	209610
Maximum water flow rate —	E	I/h	71875	76457	69583	83902	86478	98505	100223	105092	113108	124850	139740	145180	148330	160357	167802	182407	197010
Water content	A,E	I	96,0	101,2	96,0	98,1	101,2	132,9	132,9	132,9	159,8	159,8	149,9	220,7	220,7	199,3	196,2	231,0	265,8
System side hydraulic connection	ns																		
Connections (in/out)	A,E	Туре								G	rooved joir	nts							
Sizes (in/out)	A,E	Ø									6"								
Sound data calculated in cooling	mode (2)																		
	A	dB(A)	93,5	93,5	94,0	94,5	95,0	96,0	96,0	96,5	96,5	96,5	97,0	97,0	97,0	97,0	97,5	98,3	99,0
Sound power level —	E	dB(A)	88,5	88,5	89,0	89,5	90,0	91,0	91,0	91,5	91,5	91,5	92,0	92,0	92,0	92,0	92,5	93,3	94,0
	Α	dB(A)	61,3	61,3	61,8	62,3	62,8	63,6	63,6	64,0	64,0	64,0	64,5	64,5	64,5	64,4	64,9	65,6	66,2
Sound pressure level (10 m) —	E	dB(A)	56,3	56,3	56,8	57,3	57,8	58,6	58,6	59,0	59,0	59,0	59,5	59,5	59,5	57,4	59,9	60,6	61,2
	A	dB(A)	73,8	73,8	74,3	74,8	75,3	75,8	75,8	75,9	75,9	75,9	76,4	76,4	76,4	75,8	76,3	76,8	77,2
Sound pressure level (1 m) —	F	dB(A)	68.8	68.8	69.3	69.8	70.3	70.8	70.8	70.9	70.9	70.9	71.4	71.4	71.4	70.8	71.3	71.8	72.2

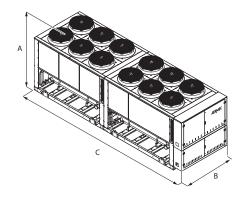
Sound pressure level (I m) E dB(A) 68,8 68,8 69,3 69,8 70,3 70,8 70,8 70,8 70,9 70,9 70,9 71,4 71,4 71,4 71,4 70,8 71,3 71,8 72,2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS





Cina			1351	1401	1402	1/01	1/02	1001	1003	2002	2202	2252	2502	3653	2002	2002	2202	2402	2602
Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions and weights																			
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3780	3780	3780	3780	3780	4770	4770	5750	5750	5750	5750	5750	5750	7160	7160	8150	8150
Size				1251	1401	1402	1601	1602	1801	1802	2002 2	202 23	52 250	2 2652	2802	3002	3202	3402	3602
Integrated hydronic k	it: 00																		
Dimensions and weights																			
Empty weight		A,E	kg	3245	3280	3570	3435	3835	4115	4005	4385 4	570 49	40 526	5 5470	5610	6540	6745	7425	8105



















NSG

Air-water chiller

Cooling capacity 228 ÷ 1580 kW



- Microchannel coil
- · High efficiency also at partial loads
- Night mode





DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger. In the unit with desuperheater, it is also possible to produce free-hot water

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

E Silenced high efficiency

L Standard silenced

N Silenced very high efficiency

U Very high efficiency

FEATURES

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:

da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430;

with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

Bi-tri circuit unit

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.
 Night Mode for standard versions is mandatory DCPX accessory (standard on all low noise versions) or "J" inverter fan

ACCESSORIES

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x n° 2 (1)	°,A,E,L,N,U	•	•	•	•			•	•	•	•			•	
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•				•	•	•		
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•		•	•	•
AERSET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•		•	•	•
MULTICHILLER_EVO	°,A,E,L,N,U		•	•			•	•	•	•	•	•	•	•	•
PRV3	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Model	Ver	4202	4502	4802	5202	5602	6002	2 64	402 (5503	6703	6903	7203	8403	9603
AER485P1 x n° 2 (1)	°,A,E,L,N,U	•	•	•	•	•			•						
	°,A,L									•			•	•	•
AER485P1 x n° 3 (1)	E,U									•	•	•	•		
	N									•					
	°,A,L	•	•						•	•	•	•	•		•
AERBACP	E,U	•	•	•	•				•	•	•		•		
	N	•	•	•	•		•		•	•					
	°,A,L	•	•	•	•				•	•		•	•	•	•
AERNET	E,U	•	•	•	•	•	•		•	•	•	•	•		
	N	•	•	•					•	•					
	°,A,L	•	•	•					•	•		•	•	•	•
AERSET	E,U	•	•	•	•		•		•	•	•	•	•		
	N	•	•	•			•		•	•					
	°,A,L	•	•	•	•		•		•	•	•	•	•	•	•
MULTICHILLER_EVO	E,U	•	•	•					•	•		•	•		
	N	•	•	•		•			•	•					
	°,A,L	•	•	•	•	•	•		•	•	•	•	•	•	•
PRV3	E,U	•	•	•		•	•		•	•	•	•	•		
	N	•				•			•						

⁽¹⁾ x Indicates the quantity of accessories to match.

Condensation control temperature

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
Fans: M										
0	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX111	DCPX111	DCPX112
A	DCPX111	DCPX111	DCPX111	DCPX111	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX113
E,L,N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX111	DCPX111	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX114	DCPX114
Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
Fans: M										-
0	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX115
A	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX116	DCPX116	DCPX116	DCPX117	DCPX118
E,L,N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX114	DCPX115	DCPX115	DCPX116	DCPX117	DCPX117	DCPX118	DCPX119	DCPX130	DCPX131
Ver	6402		6503	6703	69	03	7203	8403		9603
Fans: M										
0	DCPX116	DCPX1	35+DCPX113	DCPX135+DCPX113	DCPX125-	-DCPX114	DCPX114+DCPX136	DCPX114+DC	PX136	DCPX114+DCPX136
Α	DCPX118	DCPX1	15+DCPX136	DCPX115+DCPX136	DCPX116-	-DCPX136	DCPX116+DCPX136	DCPX117+DC	PX136	-
E,N	As standard	As	standard	As standard	As sta	ndard	As standard	-		-
L	As standard	As	standard	As standard	As sta	ndard	As standard	As standa	rd	As standard
U	DCPX132	DCPX1	16+DCPX137	DCPX117+DCPX137	DCPX117-	-DCPX137	DCPX118+DCPX137	-		-

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydror	nic kit: 00													
٥	AVX962	AVX962	AVX962	AVX963	AVX963	AVX963	AVX963	AVX968	AVX968	AVX966	AVX966	AVX966	AVX966	AVX965
A,L	AVX963	AVX963	AVX963	AVX963	AVX964	AVX964	AVX966	AVX965	AVX965	AVX970	AVX965	AVX967	AVX967	AVX969
E,U	AVX963	AVX963	AVX964	AVX966	AVX966	AVX965	AVX965	AVX967	AVX967	AVX967	AVX967	AVX969	AVX969	AVX971
N	AVX964	AVX964	AVX987	AVX965	AVX965	AVX967	AVX967	AVX969	AVX969	AVX969	AVX969	AVX971	AVX961	AVX972

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydroi	nic kit: 00												
0	AVX965	AVX967	AVX967	AVX969	AVX969	AVX969	AVX971	AVX978	AVX978	AVX983	AVX984	AVX984	AVX984
A,L	AVX969	AVX971	AVX971	AVX971	AVX961	AVX972	AVX972	AVX979	AVX979	AVX980	AVX980	AVX986	AVX981
E,U	AVX961	AVX961	AVX972	AVX972	AVX976	AVX973	AVX974	AVX980	AVX982	AVX982	AVX985	-	-
M	Δ\/ΥΩ72	ΔV/ΥΩ73	Δ\/ΥΩ7/	Δ\/Υ075	Δ\/ΥΩ77	Δ\/ΥΩ77	Δ\/ΥΩ77	Δ\/YQQ1	_			_	

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
° A F I N II	RIF (1)													

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
°,A,L	RIF (1)												
E,U	RIF (1)	-	-										
N	RIF (1)	_	_	_	_	_							

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
٥	GP3V	GP3V	GP3V	GP4V	GP4V	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP5V	GP6V
A	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E,U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
L	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
0	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP11V
A,L	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP5V+GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E,U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V+GP8V	GP6V+GP11V	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
°,A,L	KRS22	KRS22	KRS23							
E,N,U	KRS23									

A grey background indicates the accessory must be assembled in the factory

_											
_	Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
ı	0	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24
Ī	A,L	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
Ī	E,U	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23
	N	KBC23	KBC24	KBC24	KBC24	VC54X	VCSAN	KBC33TKBC33	KBC337KBC33	KBC33 ⁺ KBC33	KBC33 ⁺ KBC33

A grey background indicates the accessory must be assembled in the factory

Ver	6402	6503	6703	6903	7203	8403	9603
٥	KRS24						
A,L	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E,U	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

CONFIGURATOR

Field	Description
1,2,3	NSG
4,5,6,7	Size 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 360 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 840 9603
8	Operating field
Х	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	Model
0	Cooling only
10	Heat recovery
0	Without heat recovery
D	With desuperheater (3)
T	With total recovery (4)
11	Version
0	Standard
А	High efficiency
E	Silenced high efficiency
L	Standard silenced
N	Silenced very high efficiency
U	Very high efficiency
12	Coils
0	Aluminium microchannel
0	Coated aluminium microchannel
R	
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
13	Fans
J	Inverter
Ν	1 Oversized
14	Power supply
0	400V~3 50Hz with fuses
2	
4	
5	
8	
9	500V~3 50Hz with magnet circuit breakers (6)

Field	Description
15,16	Integrated hydronic kit
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (7)
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (7)
	Kit with 2 pumps
TF	Double pump F (8)
TG	Double pump G (8)
TH	Double pump H (8)
TI	Double pump I (8)
TJ	Double pump J (8)

- (1) Water produced from 0 °C ÷ 23 °C
 (2) Water produced from 0 °C ÷ -8 °C
 (3) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
 (4) The temperature of the water in the heat exchanger inlet must never drop below 35°C. The units from 1402° 1602° 1802° with total recovery are not configurable with the integrated hydronic kit. For all other sizes and versions it is to be evaluated at the order stage.
 (5) Only for sizes from 1402 to 2202
 (6) Only for sizes from 1402 to 3202
 (7) For all configurations including pump J please contact the factory.
 (8) The unit from 5603 to 9603 can only have hydronic kit "TF TG TH-TI TJ"

PERFORMANCE SPECIFICATIONS

NSG - °

1130															
Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	228,6	261,3	297,8	334,1	358,6	389,8	402,8	443,7	462,6	506,3	531,6	566,5	623,6	676,0
Input power	kW	74,3	85,8	100,4	108,3	119,9	129,9	138,2	151,6	162,6	167,0	175,7	193,9	214,9	228,2
Cooling total input current	A	138,0	156,0	174,0	192,0	214,0	233,0	248,0	271,0	289,0	297,0	309,0	332,0	359,0	390,0
EER	W/W	3,08	3,05	2,97	3,08	2,99	3,00	2,91	2,93	2,85	3,03	3,02	2,92	2,90	2,96
Water flow rate system side	l/h	39316	44954	51218	57461	61665	67027	69255	76286	79541	87045	91392	97398	107202	116226
Pressure drop system side	kPa	14	18	16	21	24	20	22	18	19	17	19	21	24	29
(1) Data EN 14511:2022; Heat exchanger water (serv	ices side) 12°0	/7°C; outsi	de air 35°C												
Size		4202	4502	4802	5202	560	2 60	02 6	402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)	· ·					<u> </u>									
Cooling canacity	LAM	720 5	702.4	025.2	0740	007	0 04	2.5 0	00 1	1060.2	1005 1	1215.2	1260 0	1222.1	1/10 0

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	739,5	792,4	835,2	874,9	897,0	942,5	989,1	1060,2	1095,1	1215,2	1268,8	1333,1	1410,0
Input power	kW	251,7	263,0	281,6	288,8	302,5	320,8	329,9	355,3	375,5	407,7	419,3	461,7	512,0
Cooling total input current	Α	434,0	454,0	482,0	500,0	524,0	558,0	581,0	609,0	649,0	701,0	728,0	805,0	900,0
EER	W/W	2,94	3,01	2,97	3,03	2,97	2,94	3,00	2,98	2,92	2,98	3,03	2,89	2,75
Water flow rate system side	l/h	127152	136250	143578	150403	154212	162036	170045	182263	188254	208871	218093	229141	242359
Pressure drop system side	kPa	33	38	28	31	33	38	42	29	31	20	22	25	28

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSG - L

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	227,7	261,7	298,7	335,0	373,6	386,8	415,2	446,3	476,8	498,0	546,8	602,0	645,3	707,0
Input power	kW	72,7	84,0	98,1	112,6	120,1	128,4	138,3	144,3	155,8	165,4	179,1	193,2	212,5	231,2
Cooling total input current	А	131,0	148,0	165,0	192,0	208,0	224,0	242,0	252,0	270,0	284,0	303,0	318,0	342,0	375,0
EER	W/W	3,13	3,12	3,04	2,97	3,11	3,01	3,00	3,09	3,06	3,01	3,05	3,12	3,04	3,06
Water flow rate system side	l/h	39167	45014	51371	57614	64237	66506	71390	76738	81966	85616	94000	103492	110929	121547
Pressure drop system side	kPa	15	18	17	15	19	20	16	19	16	17	19	15	18	22
(1) Data EN 14511:2022; Heat exchanger water (services	side) 12°0	C / 7°C; outsi	ide air 35°C												

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)	'													
Cooling capacity	kW	743,5	806,3	841,6	893,3	933,8	982,7	1023,0	1083,7	1120,2	1222,9	1269,4	1383,5	1517,2 (2)
Input power	kW	252,4	266,7	283,5	297,7	306,0	315,5	334,5	357,8	379,1	402,0	421,5	465,5	504,7
Cooling total input current	A	416,0	437,0	465,0	490,0	507,0	533,0	563,0	583,0	623,0	670,0	699,0	763,0	848,0
EER	W/W	2,95	3,02	2,97	3,00	3,05	3,12	3,06	3,03	2,96	3,04	3,01	2,97	3,01
Water flow rate system side	l/h	127821	138615	144692	153568	160522	168943	175872	186277	192550	210223	218211	237808	260789
Pressure drop system side	kPa	24	31	33	24	26	31	33	22	24	31	33	26	32

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Unit not Eurovent certified because it exceeds 1500 kW

NSG - A

	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
kW	233,0	267,3	306,8	346,4	383,4	397,6	429,0	458,6	491,7	511,7	561,1	619,9	669,1	731,1
kW	73,5	83,8	96,7	109,8	118,4	126,0	134,9	142,3	152,7	160,7	171,9	187,9	206,4	224,9
Α	139,0	155,0	170,0	195,0	214,0	229,0	246,0	260,0	276,0	287,0	303,0	322,0	344,0	380,0
W/W	3,17	3,19	3,17	3,15	3,24	3,16	3,18	3,22	3,22	3,18	3,26	3,30	3,24	3,25
l/h	40072	45975	52777	59582	65922	68370	73757	78851	84535	87974	96463	106561	115027	125681
kPa	15	19	18	16	20	22	17	20	16	18	20	16	19	24
	kW A W/W I/h	kW 233,0 kW 73,5 A 139,0 W/W 3,17 I/h 40072	kW 233,0 267,3 kW 73,5 83,8 A 139,0 155,0 W/W 3,17 3,19 I/h 40072 45975	kW 233,0 267,3 306,8 kW 73,5 83,8 96,7 A 139,0 155,0 170,0 W/W 3,17 3,19 3,17 I/h 40072 45975 52777	kW 233,0 267,3 306,8 346,4 kW 73,5 83,8 96,7 109,8 A 139,0 155,0 170,0 195,0 W/W 3,17 3,19 3,17 3,15 I/h 40072 45975 52777 59582	kW 233,0 267,3 306,8 346,4 383,4 kW 73,5 83,8 96,7 109,8 118,4 A 139,0 155,0 170,0 195,0 214,0 W/W 3,17 3,19 3,17 3,15 3,24 I/h 40072 45975 52777 59582 65922	kW 233,0 267,3 306,8 346,4 383,4 397,6 kW 73,5 83,8 96,7 109,8 118,4 126,0 A 139,0 155,0 170,0 195,0 214,0 229,0 W/W 3,17 3,19 3,17 3,15 3,24 3,16 I/h 40072 45975 52777 59582 65922 68370	kW 233,0 267,3 306,8 346,4 383,4 397,6 429,0 kW 73,5 83,8 96,7 109,8 118,4 126,0 134,9 A 139,0 155,0 170,0 195,0 214,0 229,0 246,0 W/W 3,17 3,19 3,17 3,15 3,24 3,16 3,18 I/h 40072 45975 52777 59582 65922 68370 73757	kW 233,0 267,3 306,8 346,4 383,4 397,6 429,0 458,6 kW 73,5 83,8 96,7 109,8 118,4 126,0 134,9 142,3 A 139,0 155,0 170,0 195,0 214,0 229,0 246,0 260,0 W/W 3,17 3,19 3,17 3,15 3,24 3,16 3,18 3,22 I/h 40072 45975 52777 59582 65922 68370 73757 78851	kW 233,0 267,3 306,8 346,4 383,4 397,6 429,0 458,6 491,7 kW 73,5 83,8 96,7 109,8 118,4 126,0 134,9 142,3 152,7 A 139,0 155,0 170,0 195,0 214,0 229,0 246,0 260,0 276,0 W/W 3,17 3,19 3,17 3,15 3,24 3,16 3,18 3,22 3,22 I/h 40072 45975 52777 59582 65922 68370 73757 78851 84535	kW 233,0 267,3 306,8 346,4 383,4 397,6 429,0 458,6 491,7 511,7 kW 73,5 83,8 96,7 109,8 118,4 126,0 134,9 142,3 152,7 160,7 A 139,0 155,0 170,0 195,0 214,0 229,0 246,0 260,0 276,0 287,0 W/W 3,17 3,19 3,17 3,15 3,24 3,16 3,18 3,22 3,22 3,18 I/h 40072 45975 52777 59582 65922 68370 73757 78851 84335 87974	kW 233,0 267,3 306,8 346,4 383,4 397,6 429,0 458,6 491,7 511,7 561,1 kW 73,5 83,8 96,7 109,8 118,4 126,0 134,9 142,3 152,7 160,7 171,9 A 139,0 155,0 170,0 195,0 214,0 229,0 246,0 260,0 276,0 287,0 303,0 W/W 3,17 3,19 3,17 3,15 3,24 3,16 3,18 3,22 3,22 3,18 3,26 I/h 40072 45975 52777 59582 65922 68370 73757 78851 84535 87974 96463	kW 233,0 267,3 306,8 346,4 383,4 397,6 429,0 458,6 491,7 511,7 561,1 619,9 kW 73,5 83,8 96,7 109,8 118,4 126,0 134,9 142,3 152,7 160,7 171,9 187,9 A 139,0 155,0 170,0 195,0 214,0 229,0 246,0 260,0 276,0 287,0 303,0 322,0 W/W 3,17 3,19 3,17 3,15 3,24 3,16 3,18 3,22 3,22 3,18 3,26 3,30 I/h 40072 45975 52777 59582 65922 68370 73757 78851 84535 87974 96463 106561	kW 233,0 267,3 306,8 346,4 383,4 397,6 429,0 458,6 491,7 511,7 561,1 619,9 669,1 kW 73,5 83,8 96,7 109,8 118,4 126,0 134,9 142,3 152,7 160,7 171,9 187,9 206,4 A 139,0 155,0 170,0 195,0 214,0 229,0 246,0 260,0 276,0 287,0 303,0 322,0 344,0 W/W 3,17 3,19 3,17 3,15 3,24 3,16 3,18 3,22 3,22 3,18 3,26 3,30 3,24 I/h 40072 45975 52777 59582 65922 68370 73757 78851 84535 87974 96463 106561 115027

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	770,4	833,7	872,2	923,2	961,9	1011,0	1053,8	1121,6	1160,9	1263,4	1313,4	1432,8	1580,6 (2)
Input power	kW	243,7	258,6	273,6	291,5	301,9	312,6	330,2	347,1	365,9	390,3	408,0	451,1	495,6
Cooling total input current	A	417,0	440,0	466,0	502,0	524,0	554,0	583,0	588,0	625,0	676,0	701,0	769,0	866,0
EER	W/W	3,16	3,22	3,19	3,17	3,19	3,23	3,19	3,23	3,17	3,24	3,22	3,18	3,19
Water flow rate system side	l/h	132447	143336	149960	158709	165357	173799	181161	192795	199561	217184	225782	246285	271702
Pressure drop system side	kPa	26	33	36	26	28	33	35	24	26	33	36	27	35

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C (2) Unit not Eurovent certified because it exceeds 1500 kW

NSG - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	243,5	281,0	317,4	359,0	387,6	413,2	428,5	471,9	494,2	514,3	550,0	608,1	654,7	714,4
Input power	kW	73,6	86,3	96,5	111,1	122,0	126,7	133,3	144,0	153,3	160,2	172,1	188,9	204,8	222,5
Cooling total input current	Α	133,0	152,0	163,0	189,0	211,0	222,0	237,0	251,0	267,0	279,0	293,0	310,0	334,0	368,0
EER	W/W	3,31	3,26	3,29	3,23	3,18	3,26	3,21	3,28	3,22	3,21	3,20	3,22	3,20	3,21
Water flow rate system side	l/h	41877	48309	54578	61723	66638	71045	73675	81134	84968	88414	94560	104538	112548	122817
Pressure drop system side	kPa	12	11	14	9	11	12	13	15	16	18	19	16	18	23
(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C															

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	764,3	813,2	877,0	900,7	944,8	1000,3	1028,9	1101,9	1151,7	1242,8	1300,9	-	-
Input power	kW	236,0	255,6	273,4	283,8	292,9	310,2	318,7	343,0	357,9	392,1	407,8	-	-
Cooling total input current	A	399,0	428,0	450,0	475,0	495,0	519,0	544,0	572,0	599,0	656,0	673,0	-	-
EER	W/W	3,24	3,18	3,21	3,17	3,23	3,22	3,23	3,21	3,22	3,17	3,19	-	-
Water flow rate system side	l/h	131397	139814	150755	154839	162399	171941	176857	189402	197982	213642	223617	-	-
Pressure drop system side	kPa	26	32	24	25	16	16	19	23	26	32	24	-	-

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSG - U

	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
kW	249,3	288,6	324,9	369,0	399,5	423,8	440,0	483,4	507,1	526,0	564,2	623,1	674,9	735,2
kW	74,1	85,8	96,9	110,1	120,0	126,0	132,1	143,6	152,2	157,5	167,5	185,9	201,2	218,7
Α	141,0	158,0	172,0	196,0	217,0	231,0	246,0	263,0	277,0	287,0	298,0	319,0	342,0	377,0
W/W	3,36	3,36	3,35	3,35	3,33	3,36	3,33	3,37	3,33	3,34	3,37	3,35	3,35	3,36
l/h	42866	49623	55869	63446	68694	72874	75659	83113	87181	90438	96990	107116	116011	126384
kPa	13	11	14	10	11	13	14	16	17	18	20	17	20	24
	kW A W/W I/h	kW 249,3 kW 74,1 A 141,0 W/W 3,36 I/h 42866	kW 249,3 288,6 kW 74,1 85,8 A 141,0 158,0 W/W 3,36 3,36 I/h 42866 49623	kW 249,3 288,6 324,9 kW 74,1 85,8 96,9 A 141,0 158,0 172,0 W/W 3,36 3,36 3,35 I/h 42866 49623 55869	kW 249,3 288,6 324,9 369,0 kW 74,1 85,8 96,9 110,1 A 141,0 158,0 172,0 196,0 W/W 3,36 3,36 3,35 3,35 I/h 42866 49623 55869 63446	kW 249,3 288,6 324,9 369,0 399,5 kW 74,1 85,8 96,9 110,1 120,0 A 141,0 158,0 172,0 196,0 217,0 W/W 3,36 3,36 3,35 3,35 3,33 I/h 42866 49623 55869 63446 68694	kW 249,3 288,6 324,9 369,0 399,5 423,8 kW 74,1 85,8 96,9 110,1 120,0 126,0 A 141,0 158,0 172,0 196,0 217,0 231,0 W/W 3,36 3,36 3,35 3,35 3,33 3,36 I/h 42866 49623 55869 63446 68694 72874	kW 249,3 288,6 324,9 369,0 399,5 423,8 440,0 kW 74,1 85,8 96,9 110,1 120,0 126,0 132,1 A 141,0 158,0 172,0 196,0 217,0 231,0 246,0 W/W 3,36 3,36 3,35 3,35 3,33 3,36 3,33 I/h 42866 49623 55869 63446 68694 72874 75659	kW 249,3 288,6 324,9 369,0 399,5 423,8 440,0 483,4 kW 74,1 85,8 96,9 110,1 120,0 126,0 132,1 143,6 A 141,0 158,0 172,0 196,0 217,0 231,0 246,0 263,0 W/W 3,36 3,36 3,35 3,35 3,33 3,36 3,33 3,37 I/h 42866 49623 55869 63446 68694 72874 75659 83113	kW 249,3 288,6 324,9 369,0 399,5 423,8 440,0 483,4 507,1 kW 74,1 85,8 96,9 110,1 120,0 126,0 132,1 143,6 152,2 A 141,0 158,0 172,0 196,0 217,0 231,0 246,0 263,0 277,0 W/W 3,36 3,36 3,35 3,35 3,33 3,36 3,33 3,37 3,33 I/h 42866 49623 55869 63446 68694 72874 75659 83113 87181	kW 249,3 288,6 324,9 369,0 399,5 423,8 440,0 483,4 507,1 526,0 kW 74,1 85,8 96,9 110,1 120,0 126,0 132,1 143,6 152,2 157,5 A 141,0 158,0 172,0 196,0 217,0 231,0 246,0 263,0 277,0 287,0 W/W 3,36 3,36 3,35 3,35 3,33 3,36 3,37 3,33 3,34 I/h 42866 49623 55869 63446 68694 72874 75659 83113 87181 90438	kW 249,3 288,6 324,9 369,0 399,5 423,8 440,0 483,4 507,1 526,0 564,2 kW 74,1 85,8 96,9 110,1 120,0 126,0 132,1 143,6 152,2 157,5 167,5 A 141,0 158,0 172,0 196,0 217,0 231,0 246,0 263,0 277,0 287,0 298,0 W/W 3,36 3,36 3,35 3,35 3,33 3,36 3,33 3,37 3,33 3,34 3,37 I/h 42866 49623 55869 63446 68694 72874 75659 83113 87181 90438 96990	kW 249,3 288,6 324,9 369,0 399,5 423,8 440,0 483,4 507,1 526,0 564,2 623,1 kW 74,1 85,8 96,9 110,1 120,0 126,0 132,1 143,6 152,2 157,5 167,5 185,9 A 141,0 158,0 172,0 196,0 217,0 231,0 246,0 263,0 277,0 287,0 298,0 319,0 W/W 3,36 3,36 3,35 3,35 3,33 3,36 3,33 3,37 3,33 3,34 3,37 3,35 I/h 42866 49623 55869 63446 68694 72874 75659 83113 87181 90438 96990 107116	kW 249,3 288,6 324,9 369,0 399,5 423,8 440,0 483,4 507,1 526,0 564,2 623,1 674,9 kW 74,1 85,8 96,9 110,1 120,0 126,0 132,1 143,6 152,2 157,5 167,5 185,9 201,2 A 141,0 158,0 172,0 196,0 217,0 231,0 246,0 263,0 277,0 287,0 298,0 319,0 342,0 W/W 3,36 3,36 3,35 3,35 3,33 3,36 3,33 3,37 3,33 3,34 3,37 3,35 3,35 I/h 42866 49623 55869 63446 68694 72874 75659 83113 87181 90438 9690 107116 116011

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	784,5	837,2	901,8	927,6	971,1	1026,7	1054,7	1133,1	1182,5	1280,2	1339,0	-	-
Input power	kW	232,3	250,1	268,3	277,9	288,3	306,2	315,5	337,3	352,2	383,1	399,1	-	-
Cooling total input current	A	411,0	437,0	461,0	486,0	509,0	536,0	564,0	586,0	617,0	668,0	689,0	-	-
EER	W/W	3,38	3,35	3,36	3,34	3,37	3,35	3,34	3,36	3,36	3,34	3,36	-	-
Water flow rate system side	I/h	134866	143931	155027	159459	166915	176480	181297	194780	203262	220062	230162	-	-
Pressure drop system side	kPa	28	34	25	27	17	17	20	24	28	34	25	-	-

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSG - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	245,2	283,6	318,2	364,5	394,3	417,2	432,9	475,2	498,1	517,4	552,6	613,0	669,6	727,4
Input power	kW	73,4	84,4	95,3	107,6	118,7	124,5	130,7	141,2	149,3	156,7	165,7	182,9	200,4	216,0
Cooling total input current	Α	132,0	149,0	162,0	185,0	207,0	219,0	234,0	249,0	264,0	274,0	287,0	306,0	324,0	359,0
EER	W/W	3,34	3,36	3,34	3,39	3,32	3,35	3,31	3,37	3,34	3,30	3,34	3,35	3,34	3,37
Water flow rate system side	l/h	42156	48766	54716	62663	67797	71743	74443	81707	85643	88946	95006	105378	115107	125049
Pressure drop system side	kPa	13	11	15	9	11	13	14	15	17	18	20	16	20	24

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	766,9	834,2	880,8	925,4	961,2	1003,2	1036,3	1120,4	-	-	-	-	-
Input power	kW	230,1	248,2	261,5	275,0	286,5	296,1	311,6	333,3	-	-	-	-	-
Cooling total input current	Α	395,0	413,0	435,0	458,0	480,0	509,0	537,0	557,0	-	-	-	-	-
EER	W/W	3,33	3,36	3,37	3,36	3,35	3,39	3,33	3,36	-	-	-	-	-
Water flow rate system side	l/h	131846	143411	151421	159089	165211	172435	178132	192584	-	-	-	-	-
Pressure drop system side	kPa	27	23	29	29	17	17	20	24	-	-	-	-	-

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: M																
SEER - 12/7 (EN14825: 2018) (1)																
SEER	°,A,E,L,N,U	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEPR - (EN 14825: 2018) (3)																
	0	W/W	5,32	5,40	5,30	5,46	5,46	5,50	5,52	5,51	5,51	5,51	5,54	5,53	5,51	5,52
	A	W/W	5,53	5,59	5,47	5,51	5,59	5,56	5,55	5,56	5,57	5,51	5,53	5,59	5,57	5,58
CEDD	E	W/W	5,69	5,72	5,77	5,64	5,58	5,71	5,65	5,72	5,67	5,65	5,67	5,64	5,66	5,68
SEPR	L	W/W	5,46	5,56	5,43	5,53	5,54	5,52	5,52	5,52	5,55	5,55	5,75	5,61	5,52	5,52
	N	W/W	5,75	5,77	5,89	5,69	5,58	5,66	5,62	5,68	5,61	5,59	5,63	5,64	5,64	5,65
	U	W/W	5,73	5,78	5,81	5,70	5,65	5,76	5,71	5,77	5,72	5,70	5,72	5,70	5,72	5,74

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: M															
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,A,E,L,N,U	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEPR - (EN 14825: 2018) (3)															
	0	W/W	5,53	5,52	5,52	5,52	5,52	5,51	5,52	5,53	5,52	5,52	5,55	5,52	5,52
	A	W/W	5,51	5,56	5,55	5,52	5,55	5,56	5,52	5,65	5,59	5,69	5,66	5,60	5,65
SEPR	E	W/W	5,69	5,64	5,69	5,56	5,56	5,56	5,69	5,81	5,86	5,67	5,72	-	-
JEFR	L	W/W	5,53	5,51	5,52	5,51	5,54	5,54	5,54	5,63	5,59	5,66	5,65	5,62	5,66
	N	W/W	5,61	5,62	5,64	5,69	5,57	5,60	5,56	5,71	-	-	-	-	-
	U	W/W	5,76	5,71	5,75	5,64	5,63	5,63	5,74	5,86	5,89	5,73	5,77	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: J																
SEER - 12/7 (EN14825: 2018) (1)																
	0	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,43	4,40	4,48	4,54	4,51	4,54	4,56	4,56	4,56	4,56	4,57	4,57	4,56	4,57
CEED	E	W/W	4,46	4,47	4,55	4,55	4,55	4,58	4,57	4,59	4,57	4,58	4,58	4,58	4,59	4,57
SEER	L	W/W	4,41	4,38	4,47	4,51	4,50	4,54	4,56	4,56	4,56	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,51	4,48	4,57	4,55	4,56	4,60	4,60	4,61	4,60	4,60	4,61	4,61	4,60	4,60
	U	W/W	4,48	4,47	4,56	4,57	4,56	4,58	4,57	4,59	4,58	4,59	4,59	4,59	4,60	4,58
SEPR - (EN 14825: 2018) (3)																
	0	W/W	5,32	5,40	5,30	5,46	5,46	5,50	5,52	5,51	5,51	5,51	5,54	5,53	5,51	5,52
	A	W/W	5,50	5,60	5,50	5,50	5,60	5,60	5,60	5,60	5,60	5,50	5,50	5,60	5,60	5,60
CEDD	E	W/W	5,70	5,70	5,80	5,60	5,60	5,70	5,70	5,70	5,70	5,70	5,70	5,60	5,70	5,70
SEPR	L	W/W	5,50	5,60	5,40	5,50	5,50	5,50	5,50	5,50	5,60	5,60	5,80	5,60	5,50	5,50
	N	W/W	5,80	5,80	5,90	5,70	5,60	5,70	5,60	5,70	5,60	5,60	5,60	5,60	5,60	5,70
	U	W/W	5.70	5,80	5,80	5.70	5.70	5,80	5.70	5,80	5.70	5.70	5.70	5.70	5.70	5.70

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C/7°C)
(3) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: J															
SEER - 12/7 (EN14825: 2018) (1)															
	0	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,57	4,57	4,56	4,56	4,56	4,57	4,56	4,57	4,57	4,58	4,57	4,57	4,58
SEER	E	W/W	4,58	4,56	4,59	4,57	4,59	4,57	4,58	4,60	4,61	4,58	4,60	-	-
DEEK	L	W/W	4,56	4,56	4,55	4,56	4,56	4,56	4,55	4,57	4,56	4,57	4,57	4,56	4,57
	N	W/W	4,60	4,59	4,61	4,60	4,60	4,59	4,60	4,62	-	-	-	-	-
	U	W/W	4,59	4,57	4,59	4,57	4,59	4,58	4,59	4,61	4,61	4,58	4,60	-	-
SEPR - (EN 14825: 2018) (3)															
	0	W/W	5,53	5,52	5,52	5,52	5,52	5,51	5,52	5,53	5,52	5,52	5,55	5,52	5,52
	A	W/W	5,50	5,60	5,60	5,50	5,60	5,60	5,50	5,70	5,60	5,70	5,70	5,60	5,70
SEPR	E	W/W	5,70	5,60	5,70	5,60	5,60	5,60	5,70	5,80	5,90	5,70	5,70	-	-
DELL	L	W/W	5,50	5,50	5,50	5,50	5,50	5,50	5,50	5,60	5,60	5,70	5,70	5,60	5,70
	N	W/W	5,60	5,60	5,60	5,70	5,60	5,60	5,60	5,70	-	-	-	-	-
	U	W/W	5,80	5,70	5,80	5,60	5,60	5,60	5.70	5,90	5,90	5,70	5,80	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502 26	52 2802	3002	3202	3402	3602	3902
			1402	1002	1002	2002	2202	2332	2302 20	32 2002	3002	3202	3402	3002	3902
Electric data															
		Α	223,7	241,3	264,3	300,3	327,4	346,4	365,4 38	6,4 407,4	431,3	446,3	470,3	494,3	543,1
Maximum current (FLA)	A,L	Α	232,6	250,2	273,2	300,3	336,3	355,3	374,3 40	4,1 425,1	440,1	455,1	488,0	512,0	560,9
Maximum current (FLA)	E,U	Α	232,6	250,2	282,1	309,2	336,3	364,1	383,1 41	3,0 434,0	449,0	464,0	496,9	520,9	569,8
	N	Α	241,5	259,1	290,9	318,0	345,1	373,0	392,0 42	1,9 442,9	457,9	472,9	505,8	538,7	593,4
	0	Α	252,0	287,1	329,4	376,3	395,0	442,0	459,0 48	6,0 493,7	597,6	636,2	665,2	661,2	791,0
Deals surrent (LDA)	A,L	Α	260,9	296,0	338,3	376,3	403,9	450,9	467,9 50	3,7 511,4	606,4	645,0	682,9	678,9	808,8
Peak current (LRA)	E,U	Α	260,9	296,0	347,2	385,2	403,9	459,7	476,7 51	2,6 520,3	615,3	653,9	691,8	687,8	817,7
	N	Α	269,8	304,9	356,0	394,0	412,7	468,6	485,6 52	1,5 529,2	624,2	662,8	700,7	705,6	841,3
Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
	0	А	583,1	625,0	6E0 0	(07.0	====	7/0/0	0010	004.0	074.0			1007.1	1102.4
				023,0	658,0	697,9	728,9	760,9	801,8	831,8	871,8	946,7	994,4	1087,4	1183,4
M	A,L	А	600,9	642,8	675,8	706,8	728,9 746,7			831,8	904,3	946,7 988,1	994,4 1021,1	1122,9	1236,7
Maximum current (FLA)	A,L E,U	A A						793,4	825,4						
Maximum current (FLA)			600,9	642,8	675,8	706,8	746,7	793,4 811,2	825,4 852,1	864,3	904,3	988,1	1021,1	1122,9	
Maximum current (FLA)	E,U	А	600,9 618,7	642,8 651,7	675,8 699,4	706,8 730,4	746,7 770,3	793,4 811,2 837,8	825,4 852,1 8 869,8	864,3 882,1	904,3	988,1	1021,1	1122,9	
	E,U N	A A	600,9 618,7 633,4	642,8 651,7 684,2	675,8 699,4 726,1	706,8 730,4 765,9	746,7 770,3 805,8 1097,9	793,4 811,2 837,8 9 1209,	825,4 852,1 8 869,8 9 1249,8	864,3 882,1 908,7	904,3 930,9	988,1 996,9 -	1021,1 1038,8 -	1122,9 - -	1236,7
Maximum current (FLA) Peak current (LRA)	E,U N	A A A	600,9 618,7 633,4 821,3	642,8 651,7 684,2 894,2	675,8 699,4 726,1 914,2	706,8 730,4 765,9 1078,1	746,7 770,3 805,8 1097,9 1115,7	793,4 811,2 837,8 9 1209, 7 1242,	825,4 852,1 8 869,8 9 1249,8 4 1273,4	864,3 882,1 908,7 993,9	904,3 930,9 - 1024,2	988,1 996,9 - 1117,1	1021,1 1038,8 - 1151,8	1122,9 - - 1346,4	1236,7 - - 1520,4

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Туре	°,A,E,L,N,U	type							Sc	rew						
Number	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type							R12	34ze						

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
	٥	kg	24,0	24,0	23,0	30,0	30,0	35,0	35,0	35,0	35,0	40,0	46,0	42,5	44,5	51,0
	A	kg	26,5	34,0	28,0	30,5	34,0	35,0	38,5	40,5	45,0	43,0	47,0	52,0	55,0	74,0
Refrigerant load	E	kg	29,0	30,0	41,0	34,0	40,0	43,0	43,0	46,0	45,0	45,0	57,0	54,0	74,0	60,0
circuit 1 (1)	L	kg	24,0	26,0	37,0	28,0	34,0	35,0	38,5	40,0	42,0	44,0	47,0	52,0	54,0	56,0
	N	kg	36,0	38,0	34,0	44,0	49,0	53,0	56,0	60,0	64,0	64,0	55,0	72,0	81,0	85,0
	U	kg	32,0	34,0	34,0	35,0	46,0	49,0	49,0	46,0	45,0	60,0	54,5	58,0	58,0	75,0
	0	kg	24,0	25,0	25,0	41,0	33,0	38,0	37,0	37,5	35,0	50,0	48,0	46,0	46,0	59,0
	A	kg	28,0	34,0	29,5	36,0	34,0	49,0	40,5	45,0	47,5	48,0	50,0	55,0	60,0	81,0
Refrigerant load	E	kg	29,0	31,5	41,0	40,0	40,0	45,0	45,0	52,0	53,0	53,0	59,0	59,0	74,0	77,0
circuit 2 (1)	L	kg	27,0	28,0	37,0	36,0	34,0	40,0	40,5	43,0	46,0	52,0	50,0	55,0	58,0	72,0
	N	kg	36,0	38,0	34,0	49,0	49,0	56,0	56,0	64,0	64,0	69,0	57,0	77,0	81,0	92,0
	U	kg	32,0	34,0	36,0	41,5	46,0	53,0	54,0	52,0	48,5	65,0	59,0	62,0	63,0	90,0
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
System side heat e	xchanger															
Туре	°,A,E,L,N,U	type							Braze	plate						
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor															
Туре	°,A,E,L,N,U	type							Screw						
	°,A,L	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Number	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
	°,A,L	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Circuits	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	°,A,E,L,N,U	type							R1234ze						
	0	kg	52,0	55,0	55,0	63,0	65,0	62,0	70,0	67,0	55,0	78,0	62,0	99,0	112,0
Dafrimanant land	A,L	kg	62,0	67,0	67,0	70,0	106,0	82,0	82,0	74,0	81,0	85,0	70,0	106,0	80,0
Refrigerant load circuit 1 (1)	E	kg	70,0	89,0	80,0	100,0	113,0	86,0	95,0	77,0	89,0	89,0	100,0	-	-
Circuit I (I)	N	kg	92,0	99,0	110,0	114,0	128,0	128,0	138,0	85,0	-	-	-	-	-
	U	kg	70,0	89,0	80,0	85,0	113,0	86,0	95,0	77,0	89,0	89,0	100,0	-	-
	0	kg	59,0	64,0	64,0	70,0	71,0	73,0	80,0	74,0	61,0	85,0	70,0	99,0	112,0
	A	kg	70,0	78,0	78,0	82,0	106,0	99,0	99,0	81,0	81,0	92,0	75,0	106,0	95,0
Refrigerant load	E	kg	85,0	96,0	90,0	110,0	113,0	98,0	97,0	85,0	89,0	96,0	100,0	-	-
circuit 2 (1)	L	kg	70,0	79,0	78,0	82,0	106,0	99,0	99,0	81,0	81,0	92,0	75,0	106,0	95,0
	N	kg	92,0	107,0	110,0	124,0	128,0	138,0	138,0	92,0	-	-	-	-	-
	U	kg	85,0	96,0	90,0	103,0	113,0	98,0	97,0	85,0	89,0	96,0	100,0	-	-
	0	kg	-	-	-	-	-	-	-	74,0	65,0	85,0	80,0	99,0	112,0
Refrigerant load	A,L	kg	-	-	-	-	-	-	-	81,0	81,0	92,0	75,0	106,0	85,0
circuit 3 (1)	E,U	kg	-	-	-	-	-	-	-	85,0	89,0	96,0	100,0	-	-
	N	kg	-	-	-	-	-	-	-	92,0	-	-	-	-	-
System side heat e	xchanger														
Туре	°,A,E,L,N,U	type							Brazed plate						
	0	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Number	A,L	no.	1	1	1	1	1	1	1	2	2	2	2	2	2
Number	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	-
	N	no.	1	2	2	2	2	2	2	2	-	-	-	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

FANS DATA

IANDUAIA																
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fan																
Туре	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial						
	0	no.	6	6	6	8	8	8	8	8	8	10	10	10	10	12
Nomekan	A,L	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
Number	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
Size			4202	4502	4802	5202	5602	60	02 6	402	6503	6703	6903	7203	8403	9603
Fan																
Туре	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Ax	ial <i>I</i>	xial	Axial	Axial	Axial	Axial	Axial	Axial
	0	no.	12	14	14	16	16	1	6	18	18	18	20	22	22	22
Normalism	A,L	no.	16	18	18	18	20	2:	2	22	24	24	28	28	30	34
Number	E,U	no.	20	20	22	22	24	2	б	28	28	30	30	32	-	-
	N N	nn	22	26	78	30	37	3	7	37	34					

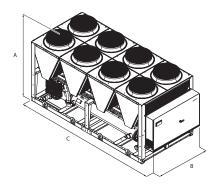
Oversized

Oversized																
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: M																
Increased fan	0.4.11															
Fan motor	°,A,U	type						Α		hronous						
Without Ctatic mysecure	E,L,N	type						AS)	nchronous	with pha	se cut					
Without Static pressure	0	m³/h	108000	108000	108000	144000	144000	144000	144000	144000	144000	180000	180000	100000	100000	216000
	A	m ³ /h	144000	144000	144000	144000	180000	180000	180000	216000				180000 252000	180000 252000	216000
	E	m³/h	92000	92000	115000	115000	115000	138000	138000	161000				184000	184000	207000
Air flow rate		m³/h	92000	92000	92000	92000	115000	115000	115000	138000				161000	161000	184000
	<u>L</u>	m³/h	115000	115000	138000	138000	138000	161000	161000	184000				207000	230000	253000
	U	m³/h	144000	144000	180000	180000	180000	216000	216000	252000		252000		288000	288000	32400
	0	dB(A)	98,0	98,0	98,0	98,0	98,0	98,0	98,0	98,0	98,0	99,0	99,0	100,0	100,0	101,0
	A	dB(A)	98,0	98,0	99,0	99,0	99,0	99,0	99,0	100,0	100,0	100,0	100,0	100,0	100,0	101,0
	E	dB(A)	89,0	89,0	90,0	90,0	90,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
Sound power level	L	dB(A)	89,0	89,0	89,0	89,0	90,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	92,0
	N	dB(A)	90,0	90,0	91,0	91,0	91,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
	U	dB(A)	98,0	98,0	99,0	99,0	99,0	100,0	100,0	100,0	100,0	100,0	100,0	101,0	101,0	101,0
Size			4202	4502	4802	5202	5602	2 60	02 6	402	6503	6703	6903	7203	8403	9603
Fans: M			7202	1302	1002	7202	3002		02	102	0303	0,03	0,03	7203	0103	7003
Increased fan																
	°,A,U	type							Asyno	hronous						
Fan motor	E,L,N															
Without Static pressure																
	0	m³/h	216000	252000	252000	288000	0 28800	00 288	000 32	4000	324000	324000	360000	396000	396000	396000
	A	m³/h	288000	324000	324000	324000	36000	00 396	000 39	6000	432000	432000	504000	504000	540000	612000
Air flaurrata	E	m³/h	230000	230000	253000	253000	27600	00 299	000 32	2000	322000	345000	345000	368000	-	-
Air flow rate	L	m³/h	184000	207000	207000	234000	0 26000	00 286	000 28	6000	276000	276000	322000	322000	345000	442000
	N	m³/h	253000	299000	322000	345000	36800	00 368	000 36	8000	391000	-	-	-	-	-
	U	m³/h	360000	360000	396000	396000	0 43200	00 468	000 50	4000	504000	540000	540000	576000	-	-
		dB(A)	101,0	101,0	101,0	102,0	102,	0 102	2,0 1	02,0	102,0	102,0	103,0	103,0	103,0	103,0
	A	dB(A)	101,0	101,0	102,0	101,0	102,0	0 102	2,0 1	02,0	103,0	103,0	103,0	103,0	104,0	104,0
Sound power level	E	dB(A)	94,0	94,0	94,0	94,0	94,0) 94	,0 9	94,0	94,0	94,0	94,0	95,0	-	-
Sound power level	L	dB(A)	93,0	93,0	93,0	93,0	94,0) 94		94,0	94,0	94,0	94,0	94,0	94,0	95,0
	N	dB(A)	93,0	94,0	94,0	95,0	95,0			95,0	95,0	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,0	102,0	103,0	0 103	3,0 1	03,0	103,0	103,0	103,0	103,0	-	-
Inverter																
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: J			1702	1002	1002	2002	2202	2332	2302	2032	2002	3002	3202	3402	3002	3702
Inverter fan																
Fan motor	°,A,E,L,N,U	type							Inv	erter						
14111110101	0	m³/h	96000	96000	96000	128000	128000	128000	128000	144000	144000	180000	180000	180000	180000	216000
	A	m³/h	128000	128000	128000	128000	160000	160000	160000	192000				224000	224000	256000
	E	m³/h	92000	92000	115000		115000	138000	138000	161000				184000	184000	207000
Air flow rate	L	m³/h	92000	92000	92000	92000	115000	115000	115000	138000				161000	161000	184000
	N	m³/h	115000	115000	138000		138000	161000	161000	184000				207000	230000	253000
	U	m³/h	128000	128000	160000	160000	160000	192000	192000	224000	224000	224000	224000	256000	256000	288000
Sound data calculated in cooling mod																
<u>-</u>	0	dB(A)	97,0	97,0	97,0	98,0	98,0	98,0	98,0	98,0	98,0	99,0	100,0	100,0	100,0	101,0
	A	dB(A)	97,0	97,0	98,0	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,0	99,0	99,0	100,0
Cound no ourselland	E	dB(A)	89,0	89,0	90,0	90,0	90,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
Sound power level	L	dB(A)	89,0	89,0	89,0	89,0	90,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	92,0
	N	dB(A)	90,0	90,0	91,0	91,0	91,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
			· · · · · ·													

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: J															
Inverter fan															
Fan motor	°,A,E,L,N,U	type							Inverter						
	0	m³/h	216000	252000	252000	288000	288000	288000	324000	324000	324000	360000	396000	396000	396000
	A	m³/h	256000	288000	288000	324000	360000	396000	396000	384000	384000	448000	448000	480000	612000
Air flow rate	Е	m³/h	230000	230000	253000	253000	276000	299000	322000	322000	345000	345000	368000	-	-
All flow fate	L	m³/h	184000	207000	207000	234000	260000	286000	286000	276000	276000	322000	322000	345000	442000
	N	m³/h	253000	299000	322000	345000	368000	368000	368000	391000	-	-	-	-	-
	U	m³/h	320000	320000	352000	352000	384000	416000	448000	448000	480000	480000	512000	-	-
Sound data calculated in cooling mode (1)														
	0	dB(A)	101,0	101,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	103,0	103,0	103,0	103,0
	A	dB(A)	100,0	100,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	103,0	104,0
Cound normal local	E	dB(A)	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0	-	-
Sound power level	L	dB(A)	93,0	93,0	93,0	93,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0
	N	dB(A)	93,0	94,0	94,0	95,0	95,0	95,0	95,0	95,0	-	-	-	-	-
	U	dB(A)	101,0	101,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	-	-

⁽¹⁾ Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	0	mm	3970	3970	3970	5160	5160	5160	5160	5160	5160	6350	6350	6350	6350	7540
	A,L	mm	5160	5160	5160	5160	6350	6350	6350	7540	7540	7540	7540	8730	8730	9920
	E,U	mm	5160	5160	6350	6350	6350	7540	7540	8730	8730	8730	8730	9920	9920	11110
	N	mm	6350	6350	7540	7540	7540	8730	8730	9920	9920	9920	9920	11110	12300	13490
Size			4202	4502	4802	5202	5602	60	02 (6402	6503	6703	6903	7203	8403	9603
Dimensions and weights																
	°,A,L	mm	2450	2450	2450	2450	2450	24	50	2450	2450	2450	2450	2450	2450	2450
A	E,U	mm	2450	2450	2450	2450	2450	24	50	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	24	50	2450	2450	-	-	-	-	-
	°,A,L	mm	2200	2200	2200	2200	2200	22	.00	2200	2200	2200	2200	2200	2200	2200
В	E,U	mm	2200	2200	2200	2200	2200	22	00	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	22	00	2200	2200	-	-	-	-	-
	0	mm	7540	8730	8730	9920	9920	99	20 1	1110	11110	11110	12300	13490	13490	13490
6	A,L	mm	9920	11110	11110	11110	12300	134	490 1	3490	15080	15080	17460	17460	18650	21030
C	E,U	mm	12300	12300	13490	13490	15080	162	270 1	7460	17460	18650	18650	19840	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00																
Single module unit																
	0	kg	4108	4153	4275	5137	5468	5476	5485	5680	5690	6659	7153	7163	7188	7854
_	Α	kg	4637	4684	4806	5137	5882	5890	6085	6696	6782	7261	7806	8486	8501	9029
Empty weight -	E	kg	4768	4800	5220	5814	6145	6755	6763	7198	7213	7707	7806	8940	8950	9719
Limpty weight	L	kg	4637	4684	4806	5137	5882	5890	6085	6696	6782	7261	8223	8486	8501	9029
_	N	kg	5179	5214	5822	6415	6746	7163	7177	7649	7659	8161	8223	9630	10062	10682
	U	kg	4768	4800	5220	5814	6145	6755	6763	7198	7213	7707	8672	8940	8950	9719
_	0	kg	4186	4225	4393	5256	5586	5614	5622	5953	5962	6982	7475	7485	7501	8166
	Α	kg	4714	4757	4925	5275	6019	6028	6357	6968	7105	7583	8098	9016	9030	9547
Weight functioning -	E	kg	4887	4937	5358	6137	6467	7077	7086	7510	7525	8019	8098	9470	9480	10237
weight functioning	L	kg	4714	4757	4925	5275	6019	6028	6357	6968	7105	7583	8515	9016	9030	9547
	N	kg	5298	5352	5959	6738	7069	7486	7500	7961	7971	8474	8515	10160	10592	11199
	U	kg	4887	4937	5358	6137	6467	7077	7086	7510	7525	8019	8964	9470	9480	10237
Size			4202	4502	4802	5202	5602	60	02 6	402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00																
Single module unit																
	0	kg	7947	8389	8704	9252	9347	94	05 10)170	11843	11931	12488	13081	13400	13552
-	A,L	kg	9090	9829	9892	10315	10836	5 114	141 1	1519	-	-	-	-	-	-
Empty weight	E,U	kg	10203	10282	11194	11284	-	-		-	-	-	-	-	-	-
_	N	kg	10748	-	-	-	-	-		-	-	-	-	-	-	-
	0	kg	8239	8681	9234	9781	9877	99	22 10	0687	12797	12885	13398	13990	14309	14462
Mainh finationin	A,L	kg	9608	10334	10397	11247	11767	7 123	358 12	2437	-	-	-	-	-	-
Weight functioning	E,U	kg	10720	10787	12125	12215	-	-		-	-	-	-	-	-	-
	N	kg	11265	-	-	-	-	-		-	-	-	-	-	-	-
Bimodule unit																
	0	kg	-	-	-	-	-	-		-	-	-	-	-	-	-
-	A,L	kg	-	-	-	-	-	-		-	9029	9090	9829	9892	10836	11519
Empty weight module 1	E,U	kg	-	-	-	-	6276	62	76 6	741	9719	10203	10282	11194	-	-
-	N	kg	_	6084	6517	6517	7126	71.	26 7	190	10880	_	-	-	-	-

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Francisco de la Companya de la Compa	A,L	kg	-	-	-	-	-	-	-	5068	5068	5512	5512	5675	6265
Empty weight module 2	E,U	kg	-	-	-	-	6207	6671	6671	5482	5482	5512	5512	-	-
	N	kg	-	6448	6448	7056	7056	7120	7120	6014	-	-	-	-	-
	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Total amounts sussiants	A,L	kg	-	-	-	-	-	-	-	14098	14159	15342	15405	16511	17784
Total empty weight	E,U	kg	-	-	-	-	12483	12948	13412	15202	15685	15795	16706	-	-
	N	kg	-	12531	12965	13573	14182	14246	14310	16894	-	-	-	-	-
	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Wainha fi matianin a madula 1	A,L	kg	-	-	-	-	-	-	-	9547	9608	10334	10397	11767	12437
Weight functioning module 1	E,U	kg	-	-	-	-	6589	6589	7053	10237	10720	10787	12125	-	-
	N	kg	-	6342	6776	6776	7438	7438	7502	11398	-	-	-	-	-
	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Wainha firmation in a modula 2	A,L	kg	-	-	-	-	-	-	-	5327	5327	5771	5771	5987	6577
Weight functioning module 2	E,U	kg	-	-	-	-	6519	6984	6984	5741	5741	5771	5771	-	-
	N	kg	-	6706	6706	7369	7369	7433	7433	6273	-	-	-	-	-
	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
Takalinht firmationing	A,L	kg	-	-	-	-	-	-	-	14874	14935	16105	16168	17755	19014
Total weight functioning	E,U	kg	-	-	-	-	13108	13572	14037	15978	16461	16558	17896	-	-
	N	kg	-	13049	13482	14144	14807	14871	14935	17670	-	-	-	-	-

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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TBA 1300-4325

Air-water chiller

Cooling capacity 328 ÷ 1404 kW



- · High efficiency also at partial loads
- Microchannel coil
- Low peak current (only 6 Amps!)
- Evaporator with low refrigerant charge
- Available also R513A (XP10) refrigerant gas





DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.

These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.

The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.

Compressor features:

- Operates without oil as bearings are magnetic levitation type
- Continuous load modulation by varying rpm (from 30% to 100%)
- Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

Further features:

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible

to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

XLATB: This kit allows to extend the working range of the unit from $\,0\,^{\circ}$ C to -10 $\,^{\circ}$ C ambient temperature, thanks to an additional electric heater and a special insulating material for the heat exchanger.

GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
AER485P1	•	•	•		•	•		•	•	
AER485P1 x n° 2 (1)				•			•			•
AERBACP	•	•	•	•	•	•	•	•	•	•
AERNET	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	•	•	•	•	•	•	•	•	•	•

⁽¹⁾ x Indicates the quantity of accessories to match.

Antivibration

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Integrated hydronic kit: 00, DA, DB,	DC, DD, DE, DF, DG, DH	, DI, DJ, IA, IB, IC	, ID, IE, IF, IG, IH,	II, IJ, JA, JB, JC, JI	D, JE, JF, JG, JH, JI,	, JJ, KF, KG, KH, KI	, KJ, PA, PB, PC,	PD, PE, PF, PG, PI	I, PI, PJ, TF, TG, TI	l, TI, TJ
A,E	AVX (1)	AVX500	AVX588	AVX592	AVX589	AVX (1)	AVX593	AVX (1)	AVX (1)	AVX (1)
N,U	AVX (1)	AVX500	AVX592	AVX589	AVX (1)	AVX593	AVX (1)	AVX (1)	AVX (1)	AVX (1)

(1) Contact us.

Kit low temperature

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
A,E	XLATB1	XLATB3	XLATB5	XLATB6	XLATB7	XLATB6	XLATB7	XLATB7	XLATB8	XLATB8
N,U	XLATB2	XLATB5	XLATB5	XLATB5	XLATB7	XLATB6	XLATB6	XLATB7	XLATB8	XLATB8

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
A,E	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP10T	GP11T
N,U	GP3T	GP4T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

CONFIGURATOR

CO	NFI	GURATOR
Field	d	Description
1,2,	3	TBA
4,5,	6,7	Size 1300, 1350, 2300, 2325, 2350, 3300, 3320, 3340, 3350, 4325
8		Model
	0	Cooling only
9		Heat recovery
	0	Without heat recovery
10		Version
	Α	High efficiency
	Ε	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
11		Coils
	0	Aluminium microchannel
	0	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	٧	Copper pieps-Coated aluminium fins
12		Fans
	J	Inverter
13		Power supply
	0	400V ~ 3 50Hz with magnet circuit breakers
14,1	5	Integrated hydronic kit
	00	Without hydronic kit
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (1)
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump

Fiel	4	Description
riei	DF	Description
_	DG	Pump F + stand-by pump
_	DH	Pump G + stand-by pump
		Pump H + stand-by pump
_	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (1)
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
_	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
_	IH	Pump H equipped with inverter device to work at fixed speed
	Ш	Pump I equipped with inverter device to work at fixed speed
	IJ	Pump J equipped with inverter device to work at fixed speed (1)
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (1)
	KF	Doble pump F with inverter device to work at fixed speed
	KG	Doble pump G with inverter device to work at fixed speed
	KH	Doble pump H with inverter device to work at fixed speed
	KI	Doble pump I with inverter device to work at fixed speed
	KJ	Doble pump J with inverter device to work at fixed speed (1)
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (1)
16		Refrigerant gas
	0	R134a
	G	R513A (XP10)

⁽¹⁾ For all configurations including pump J please contact the factory

PERFORMANCE SPECIFICATIONS

TBA - (A)

IDA - (A)											
Size	'	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C/7 °C (1)											
Cooling capacity	kW	330,7	437,3	633,9	741,5	871,9	974,8	1087,0	1155,9	1256,9	1404,1
Input power	kW	95,3	125,9	183,0	214,9	254,8	279,5	314,9	334,9	369,1	413,3
Cooling total input current	A	150,7	200,9	286,2	346,4	416,6	446,9	502,1	547,3	592,3	667,6
EER	W/W	3,47	3,47	3,46	3,45	3,42	3,49	3,45	3,45	3,41	3,40
Water flow rate system side	l/h	56903	75228	109011	127504	149890	167604	186876	198728	216075	241381
Pressure drop system side	kPa	60	55	48	42	30	52	45	54	36	42

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBA - (E)

IDA (L)											
Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	330,7	437,3	633,9	741,5	871,9	974,8	1087,0	1155,9	1256,9	1404,1
Input power	kW	95,3	125,9	183,0	214,9	254,8	279,5	314,9	334,9	369,1	413,3
Cooling total input current	A	150,7	200,9	286,2	346,4	416,6	446,9	502,1	547,3	592,3	667,6
EER	W/W	3,47	3,47	3,46	3,45	3,42	3,49	3,45	3,45	3,41	3,40
Water flow rate system side	I/h	56903	75228	109011	127504	149890	167604	186876	198728	216075	241381
Pressure drop system side	kPa	60	55	48	42	30	52	45	54	36	42

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBA - (U)

Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	328,1	443,8	633,5	758,5	876,4	985,0	1088,0	1154,9	1256,9	1342,4
Input power	kW	92,3	124,4	178,8	213,2	245,5	275,4	306,8	326,3	358,1	386,6
Cooling total input current	А	145,7	200,9	281,4	341,6	401,9	437,1	487,3	522,6	582,6	627,6
EER	W/W	3,56	3,57	3,54	3,56	3,57	3,58	3,55	3,54	3,51	3,47
Water flow rate system side	l/h	56452	76308	108940	130424	150669	169356	187070	198556	216075	230760
Pressure drop system side	kPa	51	25	49	50	30	53	56	53	36	38

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBA - (N)

Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	328,1	443,8	633,5	758,5	876,4	985,0	1088,0	1154,9	1256,9	1342,4
Input power	kW	92,3	124,4	178,8	213,2	245,5	275,4	306,8	326,3	358,1	386,6
Cooling total input current	А	145,7	200,9	281,4	341,6	401,9	437,1	487,3	522,6	582,6	627,6
EER	W/W	3,56	3,57	3,54	3,56	3,57	3,58	3,55	3,54	3,51	3,47
Water flow rate system side	l/h	56452	76308	108940	130424	150669	169356	187070	198556	216075	230760
Pressure drop system side	kPa	51	25	49	50	30	53	56	53	36	38

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
SEER - (EN14825:2018) 12/7 with inverte	r fans (1)											
CLLD	A,E	W/W	5,15	5,23	5,48	5,25	5,54	5,54	5,51	5,49	5,57	5,35
SEER	N,U	W/W	5,35	5,41	5,60	5,48	5,76	5,80	5,62	5,71	5,73	5,62
Seasonal efficiency	A,E	%	203,1%	206,0%	216,0%	206,8%	218,4%	218,4%	217,5%	216,5%	219,8%	211,0%
	N,U	%	211,0%	213,5%	221,0%	216,1%	227,3%	229,1%	221,9%	225,4%	226,3%	221,6%
SEPR - (EN14825: 2018) High temperatur	e with inverte	r fans (2)					-			-		
SEPR -	A,E	W/W	6,31	6,65	6,11	6,32	6,41	6,13	6,26	6,33	6,28	6,12
	N,U	W/W	6,47	6,61	6,52	6,80	6,49	6,62	6,57	6,50	6,47	6,40

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Electric data												
Marianama arrana (FLA)	A,E	Α	165,0	249,0	319,0	404,0	488,0	483,0	568,0	727,0	727,0	797,0
Maximum current (FLA)	N,U	А	165,0	249,0	329,0	413,0	498,0	493,0	577,0	737,0	737,0	797,0
Dools surrout (LDA)	A,E	А	36,0	45,0	200,0	210,0	305,0	374,0	470,0	565,0	565,0	720,0
Peak current (LRA)	N,U	А	36,0	45,0	210,0	305,0	315,0	384,0	479,0	575,0	575,0	720,0

GENERAL TECHNICAL DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325	
Compressor													
Туре	A,E,N,U	type					Centr	ifugal					
Compressor regulation	A,E,N,U	Type					Inve	erter					
Number	A,E,N,U	no.	1	1	2	2	2	3	3	3	3	4	
Circuits	A,E,N,U	no.	1	1	1	2	1	1	2	1	1	2	
Refrigerant	A,E,N,U	type					R1	34a					
Defrigerant charge (1)	A,E	kg	81,0	166,0	152,0	243,0	285,0	264,0	306,0	317,0	387,0	398,0	
Refrigerant charge (1)	N,U	kg	81,0	166,0	163,0	254,0	296,0	275,0	317,0	328,0	398,0	398,0	
System side heat exchanger													
Туре	A,E,N,U	type					Shell a	nd tube					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	
Hydraulic connections													
Connections (in/out)	A,E,N,U	Туре					Groove	d joints					
C: (:- (4)	A,E	Ø	3"	4"	6"	6"	6"	6"	6"	6"	8"	8"	
Sizes (in/out)	N,U	Ø	6"	6"	6"	6"	6"	6"	6"	6"	8"	8"	
Fan													
Туре	A,E,N,U	type					ax	ials					
Fan motor	A,E,N,U	type	Inverter										
Montheau	A,E	no.	6	8	10	12	14	16	18	20	20	22	
Number	N,U	no.	6	8	12	14	16	18	20	22	22	22	
Air A wate	A,E	m³/h	112920	150560	188200	225840	263480	301120	338760	376400	376400	414040	
Air flow rate	N,U	m³/h	112920	150560	225840	263480	301120	338760	376400	414040	414040	414040	

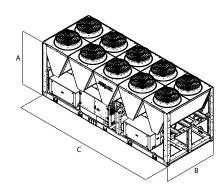
⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Sound data calculated in cooling mode (1)											
	Α	dB(A)	88,3	89,9	90,8	92,5	93,0	92,8	93,9	95,3	95,3	95,3
Cound nowar loval	E	dB(A)	82,3	83,9	84,8	86,5	87,0	86,8	87,9	89,3	89,3	89,3
Sound power level	N	dB(A)	82,3	84,0	85,3	86,8	87,1	87,1	88,1	89,5	89,5	89,3
	U	dB(A)	88,3	90,0	91,3	92,8	93,1	93,1	94,1	95,5	95,5	95,3
	Α	dB(A)	56,1	57,5	58,3	59,9	60,2	59,9	60,9	62,2	62,2	62,1
Cound procesure lovel (10 m)	E	dB(A)	50,1	51,5	52,3	53,9	54,2	53,9	54,9	56,2	56,2	56,1
Sound pressure level (10 m) N U	dB(A)	50,1	51,6	52,7	54,0	54,2	54,1	55,0	56,3	56,3	56,1	
	U	dB(A)	56,1	57,6	58,7	60,0	60,2	60,1	61,0	62,3	62,3	62,1

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Integrated hydronic kit: (00, DA, DB, DC	, DD, DE	, DF, DG, D	H, DI, DJ,	IA, IB, IC,	ID, IE, IF,	G, IH, II, I	J, JA, JB, J	C, JD, JE,	JF, JG, JH,	JI, JJ, KF	, KG, KH,
KI, KJ, PA, PB, PC, PD, PE,	PF, PG, PH, PI	, PJ, TF, 1	rg, TH, TI,	TJ								
Dimensions and weights												
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
(A,E	mm	3570	4760	5950	7140	8330	9520	10710	11900	11900	13090
	N,U	mm	3570	4760	7140	8330	9520	10710	11900	13090	13090	13090
Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Integrated hydronic kit: (00											
Weights												
	A	kg	2770	3480	4500	5550	6390	6760	7950	8240	8600	9700
Emptyusiaht	E	kg	2850	3590	4630	5720	6580	6980	8190	8510	8870	10000
Empty weight	N	kg	2880	3810	5120	5950	7060	7430	8200	8950	9320	10000
	U	kg	2800	3700	4950	5760	6840	7180	7920	8650	9010	9700
	A	kg	2840	3560	4630	5730	6650	6960	8210	8500	8940	9990
Weight functioning	E	kg	2920	3670	4760	5900	6840	7180	8450	8770	9210	10290
Weight functioning	N	kg	2960	3940	5250	6100	7320	7630	8410	9210	9660	10290
	U	kg	2880	3830	5080	5910	7100	7380	8130	8910	9350	9990



















TBG 1230-4310

Air-water chiller

Cooling capacity 200 ÷ 1165 kW



- · High efficiency also at partial loads
- Microchannel coil
- Low peak current (only 6 Amps!)
- Evaporator with low refrigerant charge
- Night mode





DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.

These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.

The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.

Compressor features:

- Operates without oil as bearings are magnetic levitation type
- Continuous load modulation by varying rpm (from 30% to 100%)

— Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:

da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430;

with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

Further features:

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MOD-BUS protocol.

AER485P1 x n° 4: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected

is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

XLATB: This kit allows to extend the working range of the unit from $\,0\,^{\circ}$ C to -10 $\,^{\circ}$ C ambient temperature, thanks to an additional electric heater and a special insulating material for the heat exchanger.

GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
AER485P1	A,E,N,U	•	•								
AER485P1 x n° 2 (1)	A,E,N,U			•	•	•					
AER485P1 x n° 3 (1)	A,E,N,U						•	•	•	•	
AER485P1 x n° 4 (1)	A,E,N,U										•
AERBACP	A,E,N,U	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U		•	•	•	•	•	•	•	•	
MULTICHILLER_EVO	A,E,N,U		•	•	•	•	•	•	•	•	•

⁽¹⁾ x Indicates the quantity of accessories to match.

Antivibration

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00, DA, DE	B, DC, DD, DE, DF, DG, DH	, DI, DJ, IA, IB, IC	, ID, IE, IF, IG, IH,	II, IJ, JA, JB, JC, JI	D, JE, JF, JG, JH, JI,	, JJ, KF, KG, KH, K	, KJ, PA, PB, PC,	PD, PE, PF, PG, PI	I, PI, PJ, TF, TG, TI	I, TI, TJ
A,E	AVX596	AVX (1)	AVX597	AVX588	AVX592	AVX (1)	AVX (1)	AVX593	AVX (1)	AVX (1)
N.U	AVX (1)	AVX500	AVX588	AVX592	AVX589	AVX (1)	AVX593	AVX (1)	AVX (1)	AVX (1)

⁽¹⁾ Contact us.

XLATB: Kit for low temperature

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A,E,N,U	XLATB1	XLATB3	XLATB4	XLATB5	XLATB5	XLATB6	XLATB6	XLATB6	XLATB7	XLATB7

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Anti-intrusion grid

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A,E	GP2T	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T
N,U	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Fiel	d	Description
1,2,	,3	TBG
4,5,		Size 1230, 1310, 2230, 2270, 2310, 3270, 3280, 3310, 4270, 4310
8		Model
	0	Cooling only
9		Heat recovery
	0	Without heat recovery
10		Version
	Α	High efficiency
	Ε	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
11		Coils
	0	Aluminium microchannel
	0	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	٧	Copper pieps-Coated aluminium fins
12		Fans
	J	Inverter
13		Power supply
	0	400V ~ 3 50Hz with magnet circuit breakers
14,1	15	Integrated hydronic kit
	00	Without hydronic kit
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (1)
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
		-

Field	Description
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (1)
IA	Pump A equipped with inverter device to work at fixed speed
IB	Pump B equipped with inverter device to work at fixed speed
IC	Pump C equipped with inverter device to work at fixed speedr
ID	Pump D equipped with inverter device to work at fixed speed
IE	Pump E equipped with inverter device to work at fixed speed
IF	Pump F equipped with inverter device to work at fixed speed
IG	Pump G equipped with inverter device to work at fixed speed
IH	Pump H equipped with inverter device to work at fixed speed
Ш	Pump I equipped with inverter device to work at fixed speed
IJ	Pump J equipped with inverter device to work at fixed speed (1)
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (1)
KF	Doble pump F with inverter device to work at fixed speed
KG	Doble pump G with inverter device to work at fixed speed
KH	Doble pump H with inverter device to work at fixed speed
KI	Doble pump I with inverter device to work at fixed speed
KJ	Doble pump J with inverter device to work at fixed speed (1)
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J (1)

⁽¹⁾ For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

TBG - (A)

()											
Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)	,										
Cooling capacity	kW	199,9	296,6	417,6	502,3	600,1	687,0	791,4	900,3	1033,3	1165,3
Input power	kW	57,7	86,1	121,5	146,6	174,8	199,1	231,3	262,2	305,7	345,1
Cooling total input current	A	95,5	140,7	200,9	241,2	291,4	326,6	386,9	437,1	502,3	577,6
EER	W/W	3,46	3,45	3,44	3,43	3,43	3,45	3,42	3,43	3,38	3,38
Water flow rate system side	I/h	34397	51028	71817	86370	103190	118120	136075	154785	177653	200332
Pressure drop system side	kPa	28	43	29	32	37	36	38	40	41	46
·											

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBG - (E)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	199,9	296,6	417,6	502,3	600,1	687,0	791,4	900,3	1033,3	1165,3
Input power	kW	57,7	86,1	121,5	146,6	174,8	199,1	231,3	262,2	305,7	345,1
Cooling total input current	А	95,5	140,7	200,9	241,2	291,4	326,6	386,9	437,1	502,3	577,6
EER	W/W	3,46	3,45	3,44	3,43	3,43	3,45	3,42	3,43	3,38	3,38
Water flow rate system side	I/h	34397	51028	71817	86370	103190	118120	136075	154785	177653	200332
Pressure drop system side	kPa	28	43	29	32	37	36	38	40	41	46

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBG - (U)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	230,7	324,2	439,6	511,1	604,5	709,0	807,9	906,9	1011,3	1112,5
Input power	kW	65,3	91,2	124,4	143,9	170,1	201,3	230,6	257,3	290,2	323,2
Cooling total input current	A	105,7	150,9	206,2	236,4	276,6	331,9	392,1	427,3	477,6	537,6
EER	W/W	3,53	3,55	3,53	3,55	3,55	3,52	3,50	3,52	3,49	3,44
Water flow rate system side	I/h	39688	55753	75597	87882	103946	121900	138909	155919	173873	191260
Pressure drop system side	kPa	37	32	32	33	38	39	39	41	39	42

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBG - (N)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	230,7	324,2	439,6	511,1	604,5	709,0	807,9	906,9	1011,3	1112,5
Input power	kW	65,3	91,2	124,4	143,9	170,1	201,3	230,6	257,3	290,2	323,2
Cooling total input current	А	105,7	150,9	206,2	236,4	276,6	331,9	392,1	427,3	477,6	537,6
EER	W/W	3,53	3,55	3,53	3,55	3,55	3,52	3,50	3,52	3,49	3,44
Water flow rate system side	I/h	39688	55753	75597	87882	103946	121900	138909	155919	173873	191260
Pressure drop system side	kPa	37	32	32	33	38	39	39	41	39	42

⁽¹⁾ Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
SEER - (EN14825:2018) 12/7 with invert	er fans (1)											
CLLD	A,E	W/W	5,44	5,52	5,76	5,44	5,85	5,70	5,77	5,78	5,61	5,60
SEER	N,U	W/W	5,63	6,03	5,97	5,71	6,04	5,80	5,89	5,93	5,81	5,71
Cassand officiana.	A,E	%	214,6%	217,6%	227,5%	214,6%	231,1%	225,1%	227,6%	228,3%	221,5%	220,8%
Seasonal efficiency	N,U	%	222,3%	238,0%	235,9%	225,2%	238,7%	229,0%	232,5%	234,0%	229,2%	225,5%
SEPR - (EN14825: 2018) High temperatu	ıre with inverte	r fans (2)					-					
CEDD	A,E	W/W	6,34	5,98	5,99	6,54	6,35	6,60	6,05	6,07	5,98	5,97
SEPR	N,U	W/W	6,47	6,21	6,18	6,78	6,56	6,73	6,20	6,23	6,17	6,09

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Electric data												
Maximum current (FLA)	A,E	Α	115,0	180,0	229,0	294,0	359,0	408,0	528,0	538,0	587,0	707,0
Maximum current (FLA)	N,U	Α	125,0	189,0	239,0	304,0	368,0	418,0	538,0	547,0	597,0	707,0
Deals surrent (LDA)	A,E	Α	26,0	36,0	151,0	220,0	230,0	180,0	249,0	424,0	209,0	608,0
Peak current (LRA)	N,U	A	36,0	45,0	161,0	230,0	239,0	190,0	259,0	433,0	219,0	608,0

GENERAL TECHNICAL DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Compressor												
Туре	A,E,N,U	type					Centi	ifugal				
Compressor regulation	A,E,N,U	Туре					Inv	erter				
Number	A,E,N,U	no.	1	1	2	2	2	3	3	3	3	4
Circuits	A,E,N,U	no.	1	1	1	2	1	2	1	1	2	2
Refrigerant	A,E,N,U	type					R12	34ze				
Definement shares (1)	A,E	kg	71,0	110,0	142,0	177,0	188,0	254,0	265,0	307,0	318,0	328,0
Refrigerant charge (1)	N,U	kg	82,0	121,0	153,0	188,0	198,0	265,0	276,0	286,0	328,0	328,0
System side heat exchanger												
Туре	A,E,N,U	type					Shell a	nd tube				
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E,N,U	Туре					Groove	d joints				
Sizes (in/out)	A,E,N,U	Ø	3"	4"	5"	6"	6"	6"	6"	6"	6"	6"
Fan												
Туре	A,E,N,U	type					ax	ials				
Fan motor	A,E,N,U	type					Inv	erter				
Normalian	A,E	no.	4	6	8	10	12	14	16	18	20	22
Number	N,U	no.	6	8	10	12	14	16	18	20	22	22
Air flann make	A,E	m³/h	75280	112920	150560	188200	225840	263480	301120	338760	376400	414040
Air flow rate	N,U	m³/h	112920	150560	188200	225840	263480	301120	338760	376400	414040	414040

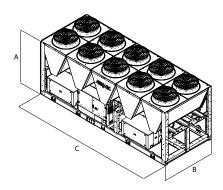
⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Sound data calculated in cooling mode (1)											
	A	dB(A)	85,2	88,4	88,2	90,1	91,4	91,3	92,9	93,1	93,1	94,2
Cound names lavel	E	dB(A)	82,2	85,4	85,2	87,1	88,4	88,3	89,9	90,1	90,1	91,2
Sound power level	N	dB(A)	83,3	85,9	85,8	87,5	88,7	88,6	90,1	90,3	90,3	91,2
	U	dB(A)	86,3	88,9	88,8	90,5	91,7	91,6	93,1	93,3	93,3	94,2
	Α	dB(A)	53,3	56,5	55,8	57,6	58,8	58,5	60,0	60,1	60,0	61,0
Cound procesure lovel (10 m)	E	dB(A)	50,3	53,5	52,8	54,6	55,8	55,5	57,0	57,1	57,0	58,0
Sound pressure level (10 m)	N	dB(A)	51,1	53,5	53,3	54,9	55,9	55,7	57,1	57,2	57,1	58,0
	U	dB(A)	54,1	56,5	56,3	57,9	58,9	58,7	60,1	60,2	60,1	61,0

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit	: 00											
Dimensions and weights												
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
ſ	A,E	mm	2780	3970	5160	5950	7140	8330	9520	10710	11900	13090
	N,U	mm	3570	4760	5950	7140	8330	9520	10710	11900	13090	13090
Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit	: DA, DB, DC, D	D, DE, DF,	DG, DH, I	DI, DJ, IA,	IB, IC, ID,	IE, IF, IG, I	H, II, IJ, J	A, JB, JC, J	D, JE, JF, J	IG, JH, JI, .	IJ, KF, KG,	KH, KI,
KJ, PA, PB, PC, PD, PE, P	F, PG, PH, PI, PJ	, TF, TG, 1	TH, TI, TJ									
Dimensions and weights												
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
(A,E	mm	3970	5160	5160	5950	7140	8330	9520	10710	11900	13090
	N,U	mm	3570	4760	5950	7140	8330	9520	10710	11900	13090	13090
Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit	: 00											
Weights												
	A	kg	2470	2980	4020	4800	5250	6490	6950	7440	8900	9510
Ftiht	E	kg	2520	3060	4130	4940	5410	6680	7170	7690	9170	9810
Empty weight	N	kg	2840	3590	4560	5420	5890	7150	7620	8130	9610	9800
	U	kg	2760	3480	4430	5250	5700	6930	7370	7850	9310	9500
	A	kg	2540	3050	4110	4930	5390	6670	7150	7650	9160	9780
Mainha fron ationin a	E	kg	2590	3130	4220	5070	5550	6860	7370	7900	9430	10080
Weight functioning	N	kg	2910	3670	4650	5550	6030	7330	7820	8340	9870	10070
	U	kg	2830	3560	4520	5380	5840	7110	7570	8060	9570	9770



AIR / WATER CHILLERS WITH FREE COOLING

When the cooling of the room is requested throughout the year, even during the winter season, such as in modern communication centers or in industrial applications, it is a waste to consume energy to produce cooling capacity. To meet these needs, Aermec offers a range of chillers capable of exploiting, free of charge, the external cold air to cool the liquid with a considerable energy saving.

Heat. Cap. Air flow rate Cool. Cap. Page **AIR / WATER CHILLERS WITH FREECOOLING** (m³/h) (kW) (kW) **Units with scroll compressors** NRG 0282-0754 F Air-water chiller with free-cooling 58-190 new NRG 0800-2400-F Air-water chiller with free-cooling Air-water chiller with free-cooling glycol free new NRG 0800-2400-B Air-water chiller with free-cooling 211-680 NRB 0800-2406 F Air-water chiller with free-cooling glycol free 211-680 NRB 0800-2406 B NRV 0550 F Air-water chiller with free-cooling Units with screw compressors NSM 1402-9603 F Air-water chiller with free-cooling 306-2028 NSM 1402-9603 B Air-water chiller with free-cooling glycol free 305,8-2028,1 -NSM-HWT-1402-9603-F Air-water chiller with free-cooling 306-2001 Air-water chiller with free-cooling glycol free NSM-HWT-1402-9603-B Air-water chiller with free-cooling and Inverter screw compressors NSMI 1251-6102 F TBA 1300-3350 F Air-water chiller with free-cooling TBG 1230-4310 F Air-water chiller with free-cooling 238-1110



















NRG 0282-0754 F

Air-water chiller with free-cooling

Cooling capacity 58 ÷ 190 kW



- · High efficiency also at partial loads
- Reduced amount of refrigerant
- Compact dimensions



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

These are outdoor units with streamlined scroll compressors used with R32 gas.

Condensing coil with copper pipes and aluminium louvers, plate heat exchanger.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to $48^{\circ}\text{C}\,$ external air temperature. Unit can produce chilled water up to -10 $^{\circ}\text{C}.$

For more information refer to the selection program and to to the dedicated documentation.

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 (A2L) refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ The leak detector is supplied as per standard.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.

It is available in different configurations with storage tank or with fixed pumps also inverter.

CONTRO

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Floating HP control: the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.

— **Night Mode:** it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

GP: Anti-intrusion grid. VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

 $\mbox{\bf RIF:}$ Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
AER485P1	A					•	•	•	•	•	0704 	•
AER4037 I	E	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A					•	•	•	•	•	•	•
AERDACP	E	•	•	•	•	•	•	•	•	•	•	•
AERNET	A					•	•	•	•	•		•
AERINET	E	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	A					•	•	•	•	•	•	•
MOLITCHILLER_EVO	E	•	•									
PGD1	A					•	•	•	•	•	•	•
ועטי	E	•	•	•	•	•						•
SGD	E	•										

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Integrated hydronic kit: 00, I3, I4, P3, I	P4										
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22	VT22
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT22	VT22	VT22
Integrated hydronic kit: 03, 04, K3, K4											
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT22	VT22	VT22

Anti-intrusion grid

	J											
_	Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
	A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)			
	E	GP4	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)			

(1) $\,x_{-}$ indicates the quantity to buy The accessory cannot be fitted on the configurations indicated with \cdot

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A	-	-	-	-	DRENRG502FC	DRENRG552FC	DRENRG554	DRENRG604	DRENRG654	DRENRG704	DRENRG754
E	DRENRG282FC	DRENRG302FC	DRENRG332FC	DRENRG352FC	DRENRG502FC	DRENRG552FC	DRENRG554	DRENRG604	DRENRG654	DRENRG704	DRENRG754

The accessory cannot be fitted on the configurations indicated with -A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A	-	-	-	-	RIFNRG502FC	RIFNRG552FC	RIFNRG554	RIFNRG604	RIFNRG654	RIFNRG704	RIFNRG754
E	RIFNRG282FC	RIFNRG302FC	RIFNRG332FC	RIFNRG352FC	RIFNRG502FC	RIFNRG552FC	RIFNRG554	RIFNRG604	RIFNRG654	RIFNRG704	RIFNRG754

The accessory cannot be fitted on the configurations indicated with -A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A,E	T6NRG2										

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	NRG
4,5,6,7	Size
7,3,0,7	0282, 0302, 0332, 0352, 0502, 0552, 0554, 0604, 0654, 0704, 0754
8	Operating field
X	Electronic thermostatic expansion valve
Z	Low temperature electronic thermostatic valve
9	Model
F	Free-cooling
S	Free-cooling with special 3-way valve
10	Heat recovery
0	Without heat recovery
D	With desuperheater
11	Version
Α	High efficiency
E	Silenced high efficiency (1)
12	Coils / free-cooling coils
0	Copper-aluminium / Copper-aluminium
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper - Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
13	Fans
0	Standard
J	Inverter (2)
14	Power supply
0	400V ~ 3N 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
00	Without hydronic kit
	Kit with storage tank and pump/s
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
13	Single high head pump + fixed speed inverter
14	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump

⁽¹⁾ The size 0282-0302-0332-0352 only available in low noise versions.

PERFORMANCE SPECIFICATIONS

NRG - A

MNG-A												
Size		0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Cooling performance chiller operation (1)												
Cooling capacity	kW	-	-	-	-	100,8	111,4	116,9	134,7	148,5	168,3	190,0
Input power	kW	-	-	-	-	31,5	35,1	38,4	43,2	49,0	58,5	67,0
Cooling total input current	А	-	-	-	-	60,0	63,0	63,0	83,0	94,0	114,0	123,0
EER	W/W	-	-	-	-	3,20	3,18	3,05	3,12	3,03	2,88	2,84
Water flow rate system side	l/h	-	-	-	-	17316	19137	20081	23139	25509	28916	32647
Pressure drop system side	kPa	-	-	-	-	43	52	44	60	72	84	85
Cooling performances with free-cooling (2)												
Cooling capacity	kW	-	-	-	-	73,2	75,6	76,6	89,6	92,2	95,1	97,5
Input power	kW	-	-	-	-	3,7	3,7	3,8	5,6	5,6	5,6	5,6
Free cooling total input current	A	-	-	-	-	7,0	6,6	6,3	11,0	11,0	11,0	10,0
EER	W/W	-	-	-	-	19,94	20,59	20,14	16,15	16,62	17,14	17,56
Water flow rate system side	l/h	-	-	-	-	17316	19137	20081	23139	25509	28916	32647
Pressure drop system side	kPa	-	-	-	-	63	76	71	65	78	90	93

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

⁽²⁾ As standard in sizes fom 0282 to 0352

NRG - E

Size		0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Cooling performance chiller operation (1)												
Cooling capacity	kW	58,5	64,5	71,8	81,3	98,0	108,0	112,6	131,2	144,0	162,0	181,4
Input power	kW	18,7	22,1	24,7	30,4	32,0	36,0	39,7	44,1	50,1	60,7	70,5
Cooling total input current	А	33,0	44,0	50,0	62,0	58,0	62,0	63,0	80,0	91,0	113,0	123,0
EER	W/W	3,13	2,92	2,91	2,67	3,06	3,00	2,83	2,98	2,87	2,67	2,57
Water flow rate system side	l/h	10057	11082	12338	13965	16843	18547	19341	22540	24736	27830	31164
Pressure drop system side	kPa	20	24	29	28	40	49	41	57	68	78	77
Cooling performances with free-cooling (2)												
Cooling capacity	kW	39,2	44,0	48,8	51,0	73,2	75,6	76,6	89,6	92,2	95,1	97,5
Input power	kW	0,8	0,8	1,1	1,1	3,7	3,7	3,8	5,6	5,6	5,6	5,6
Free cooling total input current	Α	1,5	1,7	2,2	2,2	6,6	6,3	6,1	10,0	10,0	10,0	9,7
EER	W/W	46,65	52,31	45,70	47,80	19,94	20,59	20,14	16,15	16,62	17,14	17,56
Water flow rate system side	l/h	10057	11082	12338	13965	16843	18547	19341	22540	24736	27830	31164
Pressure drop system side	kPa	35	31	40	41	59	71	66	61	74	84	85

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

ENERGY DATA BY TYPE OF FAN

Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
SEPR - (EN14825: 2018) High temperature	e with standa	ord fans (1)											
SEPR	Α	W/W	-	-	-	-	6,43	6,30	7,50	7,56	7,17	6,57	6,34
SELK	E	W/W	7,11	6,66	6,65	6,21	6,34	6,14	7,16	7,24	7,02	6,39	6,12

⁽¹⁾ Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Electric data													
Marrian arrant (FLA)	Α	Α	-	-	-	-	73,5	79,1	80,5	100,1	111,4	132,7	144,0
Maximum current (FLA)	E	А	42,3	50,7	58,0	68,7	73,5	79,1	80,5	100,1	111,4	132,7	144,0
Deals surrent (LDA)	А	А	-	-	-	-	276,8	282,5	200,8	224,2	226,7	287,7	353,0
Peak current (LRA)	E	Α	162,7	174,8	173,3	223,7	276,8	282,5	200,8	224,2	226,7	287,7	353,0

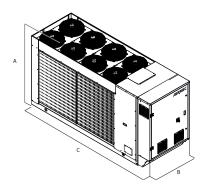
[■] Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Compressor													
Туре	A,E	type						Scroll	-	-	-		
Compressor regulation	A,E	Туре						On/Off					
Number	A,E	no.	2	2	2	2	2	2	4	4	4	4	4
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type						R32					
System side heat exchanger													
Туре	A,E	type						Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections													
Sizes (in/out)	A,E	Ø						2"1/2					
Fan													
Туре	A,E	type						Axial					
Number	Α	no.	-	-	-	-	2	2	2	3	3	3	3
Number	E	no.	6	6	8	8	2	2	2	3	3	3	3
Air flass make	А	m³/h	-	-	-	-	36079	36079	36079	54481	54481	54481	54481
Air flow rate	E	m³/h	23294	22734	26915	26915	27483	27483	27483	41449	41449	41449	41449
Sound data calculated in cooling mode (1	I)												
Cound namer lavel	A	dB(A)	-	-	-	-	85,1	85,6	84,2	86,4	86,4	86,4	86,4
Sound power level	E	dB(A)	73,0	73,9	74,3	74,5	81,3	82,1	76,1	77,5	77,5	77,5	77,5

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Dimensions and weights													
Λ.	A	mm	-	-	-	-	1907	1907	1907	1900	1900	1900	1900
A	E	mm	1658	1658	1658	1658	1907	1907	1907	1900	1900	1900	1900
D	A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100
D	E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
(A	mm	-	-	-	-	3567	3567	3567	4467	4467	4467	4467
	E	mm	3317	3317	3317	3317	3567	3567	3567	4467	4467	4467	4467

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NRG-0800-2400-F

Air-water chiller with free-cooling

Cooling capacity 224 ÷ 717 kW



- Microchannel coil
- Night mode
- · High efficiency also at partial loads



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

These are outdoor units with streamlined scroll compressors used with R32 gas axial fan, microchannel batteries and plate exchangers.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to $49\,^{\circ}\text{C}$ external air temperature. Unit can produce chilled water up to -10,0 $^{\circ}\text{C}$.

For more information refer to the selection program and to to the dedicated documentation.

Refrigerant HFC R32

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ The leak detector is supplied as per standard.

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.

It is available in different configurations with storage tank or with fixed pumps also inverter.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

CONFIGURATOR

CO	NFI	GURATOR
Fiel	d	Description
1,2,	,3	NRG
4,5,	6.7	Size
	,	0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400
8		Operating field
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9	_	Model
	F	Free-cooling
10	0	Heat recovery
_		Without heat recovery
	D	With desuperheater (3)
11	Λ.	Version
	A	High efficiency
	E	Silenced high efficiency Silenced very high efficiency
_	N U	Very high efficiency
12	U	Coils / free-cooling coils
12	0	Alluminium microchannel / Copper - aluminium
	1	Copper-aluminium / Copper-aluminium
	0	Painted alluminium microchannel / Copper painted aluminium
_	R	Copper-copper/Copper-copper
_	S	Copper-Tinned copper / Copper -Tinned copper
_	<u>ر</u> ۷	Copper-painted alumimium / Copper-painted alumimium
13	•	Fans
	0	Standard with DCPX
_	J	Inverter
14		Power supply
	0	400V ~ 3 50Hz with magnet circuit breakers
15,1	16	Integrated hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
_	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	Λ Λ	Kit with storage tank and n° 1 pump
_	AA AB	Storage tank and pump A (4) Storage tank and pump B (4)
	AC	Storage tank and pump 6 (4) Storage tank and pump C (4)
	AC	Storage tank and pump D (4)
	AE	Storage tank and pump E (4)
	AF	Storage tank and pump F (4)
_	AG	Storage tank and pump G (4)
	AH	Storage tank and pump H (4)
_	Al	Storage tank and pump I (4)
	/11	Kit with storage tank and n° 1 pump + stand-by pump
_	BA	Storage tank with pump A + stand-by pump (4)
	DI	Storage tank man paintp (+ Stanta by paintp (+)

eld	Description
BB	Storage tank with pump B + stand-by pump (4)
ВС	Storage tank with pump C + stand-by pump (4)
BD	Storage tank with pump D + stand-by pump (4)
BE	Storage tank with pump E + stand-by pump (4)
BF	Storage tank with pump F + stand-by pump (4)
BG	Storage tank with pump G + stand-by pump (4)
ВН	Storage tank with pump H + stand-by pump (4)
BI	Storage tank with pump I + stand-by pump (4)
	Kit with n° 1 inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed
IB	Pump B equipped with inverter device to work at fixed speed
IC	Pump C equipped with inverter device to work at fixed speedr
ID	Pump D equipped with inverter device to work at fixed speed
IE	Pump E equipped with inverter device to work at fixed speed
IF	Pump F equipped with inverter device to work at fixed speed
IG	Pump G equipped with inverter device to work at fixed speed
IH	_ · · · · · · ·
	Pump H equipped with inverter device to work at fixed speed
ll l	Pump I equipped with inverter device to work at fixed speed
14	Kit with n° 1 inverter pump + stand-by pump to fixed speed
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	Kit with storage tank and n° 1 inverter pump to fixed speed
CA	Buffer tank + pump A, equipped with inverter to work at fixed speed (4)
CB	Buffer tank + pump B, equipped with inverter to work at fixed speed (4)
CC	Buffer tank + pump C, equipped with inverter to work at fixed speed (4)
CD	Buffer tank + pump D, equipped with inverter to work at fixed speed (4)
EC	Buffer tank + pump E, equipped with inverter to work at fixed speed (4)
CF	Buffer tank + pump F, equipped with inverter to work at fixed speed (4)
CG	Buffer tank + pump G, equipped with inverter to work at fixed speed (4)
СН	Buffer tank + pump H, equipped with inverter to work at fixed speed (4)
Cl	Buffer tank + pump I, equipped with inverter to work at fixed speed (4)
	Kit with storage tank and n° 1 pump + stand-by pump to fixed speed
1/ A	Buffer tank+pump A+stand-by pump, both with inverter to work at fixed speed
KA	(4)
КВ	Buffer tank+pump B+stand-by pump, both with inverter to work at fixed speed (4)
KC	Buffer tank+pump C+stand-by pump, both with inverter to work at fixed speed (4)
KD	Buffer tank+pump D+stand-by pump, both with inverter to work at fixed speed (4)
KE	Buffer tank+pump E+stand-by pump, both with inverter to work at fixed speed (4)
KF	Buffer tank+pump F+stand-by pump, both with inverter to work at fixed speed (4)
KG	Buffer tank+pump G+stand-by pump, both with inverter to work at fixed speed (4)
KH	Buffer tank+pump H+stand-by pump, both with inverter to work at fixed speed (4)
KI	Buffer tank+pump I+stand-by pump, both with inverter to work at fixed speed

⁽¹⁾ Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C ÷ -10 °C
(3) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program. Desuperheater is not compatible with the hydronic kit with storage tank (AA-AI, BA-BI,CA-CI e KA-KI) on the unit 1400-2400°, 1100-1800 E/U, 0800-1600N.
(4) Additional module needed to contain the hydronic kit with "accumulation" option in sizes: 0800 A - 0900 A

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FL:** Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP: Anti-intrusion grid kit

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
AER485P1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U	•	•			•	•	•			•	•
AERNET	A,E,N,U	•	•			•	•	•			•	•
FL	A,E,N,U	•	•	•		•	•	•	•		•	•
MULTICHILLER_EVO	A,E,N,U	•	•	•	•		•	•	•	•	•	•
PGD1	A,E,N,U	•	•	•		•	•	•	•			•

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00, AA, AB, AC,	AD, AE, AF, AG, AH	I, AI, BA, BB, BO	, BD, BE, BF, BG,	, BH, BI, CA, CB	3, CC, CD, CE, CF,	CG, CH, CI, DA, D	B, DC, DD, DE, D	F, DG, DH, DI, IA	A, IB, IC, ID, IE, I	F, IG, IH, II, JA,	JB, JC, JD, JE,
JF, JG, JH, JI, KA, KB, KC, KD, KE, KF, KG, I	(H, KI, PA, PB, PC,	PD, PE, PF, PG,	PH, PI								
A.E.N.U	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)

(1) Contact us.

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A,E,N,U	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400
A grey background indicates the accessory	must be assembled in the factory				,	
Ver	1600	1800	2000		2200	2400
A.F.N.U	DRFNRG1600	DRFNRG1800	DRFNRG20	00	DRENRG2200	DRFNRG2400

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A,E,N,U	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400
A grey background indicates the accessor	y must be assembled in the factory					
Ver	1600	1800	2000		2200	2400
A,E,N,U	RIFNRG1600	RIFNRG1800	RIFNRG200	00	RIFNRG2200	RIFNRG2400

A grey background indicates the accessory must be assembled in the factory $\,$

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A,E,N,U	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3						

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

J												
Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI												
A	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G	
E,U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G	
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G	
Integrated hydronic kit: AA, AB, AC, A	ID, AE, AF, AG, AH, A	I, BA, BB, BC, B	D, BE, BF, BG, B	H, BI, CA, CB, CC	, CD, CE, CF, CG,	CH, CI, KA, KB, I	KC, KD, KE, KF, K	G, KH, KI				
A	GP2VNA	GP2VNA	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G	
E,U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G	
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G	

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

PERFORMANCE SPECIFICATIONS

NRG - A

IIII A												
Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	223,9	245,3	284,1	324,7	368,2	419,0	462,1	535,9	599,5	654,7	692,5
Input power	kW	73,0	82,9	91,3	106,0	122,2	134,8	152,7	172,3	197,6	212,9	230,2
Cooling total input current	А	129,0	146,0	160,0	184,0	209,0	229,0	254,0	293,0	337,0	356,0	381,0
EER	W/W	3,07	2,96	3,11	3,06	3,01	3,11	3,03	3,11	3,03	3,07	3,01
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	60	72	83	101	115	80	77	98	113	88	76
Cooling performances with free-cooling (2)												
Cooling capacity	kW	136,0	137,7	198,2	202,9	206,4	269,0	273,1	337,6	343,1	406,3	409,7
Input power	kW	7,5	7,5	11,2	11,2	11,2	15,0	15,0	18,7	18,7	22,4	22,4
Free cooling total input current	Α	13,0	13,0	20,0	20,0	19,0	25,0	25,0	32,0	32,0	38,0	37,0
EER	W/W	18,20	18,42	17,67	18,09	18,40	17,99	18,27	18,06	18,36	18,11	18,26
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	109	129	123	152	178	124	138	157	187	143	137

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

NRG - E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	251,9	274,9	324,9	370,2	416,7	456,6	531,6	606,0	638,0	691,8
Input power	kW	72,4	82,1	92,0	106,0	123,9	136,5	153,7	175,2	197,7	215,9	227,8
Cooling total input current	А	122,0	139,0	156,0	176,0	201,0	220,0	245,0	284,0	319,0	346,0	363,0
EER	W/W	3,12	3,07	2,99	3,06	2,99	3,05	2,97	3,03	3,07	2,95	3,04
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	62	65	74	103	72	65	76	92	116	66	72
Cooling performances with free-cooling (2)												
Cooling capacity	kW	158,4	161,9	164,2	214,5	219,3	269,7	273,4	326,8	379,6	383,0	434,0
Input power	kW	7,9	7,9	7,9	10,6	10,6	13,2	13,2	15,8	18,5	18,5	21,1
Free cooling total input current	А	13,0	13,0	13,0	18,0	17,0	21,0	21,0	26,0	30,0	30,0	34,0
EER	W/W	20,02	20,46	20,75	20,33	20,78	20,45	20,73	20,65	20,56	20,74	20,57
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	89	97	112	149	129	103	121	141	170	109	115

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

NRG - U

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	233,1	260,7	285,8	336,2	385,1	431,6	474,7	552,3	627,9	664,0	717,7
Input power	kW	72,7	81,3	90,2	105,2	121,2	135,0	151,0	173,5	195,9	212,0	225,5
Cooling total input current	A	129,0	145,0	160,0	183,0	206,0	228,0	250,0	291,0	330,0	353,0	374,0
EER	W/W	3,21	3,20	3,17	3,19	3,18	3,20	3,14	3,18	3,21	3,13	3,18
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	68	72	83	111	78	69	82	99	125	72	78
Cooling performances with free-cooling (2)												
Cooling capacity	kW	188,5	194,2	198,5	256,7	265,2	323,5	330,2	393,9	456,3	462,7	522,1
Input power	kW	11,2	11,2	11,2	15,0	15,0	18,7	18,7	22,4	26,2	26,2	29,9
Free cooling total input current	A	20,0	20,0	20,0	26,0	25,0	32,0	31,0	38,0	44,0	44,0	50,0
EER	W/W	16,81	17,32	17,70	17,17	17,74	17,31	17,66	17,56	17,44	17,68	17,46
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	95	104	121	159	139	110	130	152	182	118	123

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

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NRG - N

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	232,6	258,9	286,6	334,6	383,1	422,5	473,7	546,9	617,8	658,1	707,5
Input power	kW	71,7	81,1	90,4	104,8	120,5	134,5	150,6	174,0	195,5	210,5	225,7
Cooling total input current	А	121,0	136,0	152,0	173,0	195,0	221,0	238,0	277,0	314,0	338,0	357,0
EER	W/W	3,24	3,19	3,17	3,19	3,18	3,14	3,14	3,14	3,16	3,13	3,14
Water flow rate system side	l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side	kPa	69	73	85	109	77	62	77	96	121	69	75
Cooling performances with free-cooling (2)												
Cooling capacity	kW	195,9	202,9	208,3	255,5	264,7	270,1	319,5	371,9	423,9	429,3	478,8
Input power	kW	10,6	10,6	10,6	13,2	13,2	13,2	15,8	18,5	21,1	21,1	23,7
Free cooling total input current	A	18,0	18,0	18,0	22,0	21,0	22,0	25,0	29,0	34,0	34,0	38,0
EER	W/W	18,57	19,23	19,74	19,37	20,07	20,48	20,19	20,14	20,09	20,34	20,17
Water flow rate system side	l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side	kPa	94	104	121	150	128	101	117	141	171	108	114

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: °													
SEPR - (EN 14825: 2018) (1)													
	A	W/W	6,39	6,16	6,50	6,53	6,33	6,89	6,86	6,96	6,69	6,86	6,70
CEDD	E	W/W	6,86	6,69	6,71	6,78	6,61	7,18	7,14	7,02	6,95	7,05	7,11
SEPR	N	W/W	7,38	7,16	7,09	7,12	7,04	7,39	7,47	7,30	7,18	7,33	7,40
	U	W/W	7,05	6,91	6,80	6,93	6,80	7,30	7,30	7,17	7,04	7,18	7,20
(1) Calculation performed with FIXED water	flow rate.												
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
SEPR - (EN 14825: 2018) (1)													
	A	W/W	6,63	6,37	6,71	6,69	6,49	6,93	6,95	7,05	6,79	7,02	6,87
CEDD	E	W/W	7,12	6,91	6,90	6,94	6,79	7,41	7,34	7,24	7,19	7,28	7,30
SEPR	N	W/W	7,61	7,39	7,29	7,29	7,22	7,63	7,68	7,53	7,43	7,56	7,60
	U	W/W	7,27	7,12	7,02	7,09	6,96	7,33	7,39	7,27	7,14	7,34	7,36

⁽¹⁾ Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Electric data													
	A	Α	158,2	176,5	200,6	228,5	256,4	290,1	317,9	369,5	415,3	449,0	476,9
Maximum current (FLA)	E,U	Α	164,0	182,3	200,6	234,3	262,2	295,9	323,7	375,3	426,9	454,8	488,5
	N	Α	169,8	188,1	206,4	240,1	268,0	295,9	329,5	381,1	432,7	460,6	494,3
	A	Α	361,6	417,7	436,0	685,0	718,7	746,6	774,4	826,1	871,9	899,7	933,4
D I	E	Α	361,6	417,7	441,8	690,8	718,7	752,4	780,2	831,9	877,7	911,3	939,2
Peak current (LRA)	N	Α	350,0	406,1	424,4	673,4	701,3	729,2	757,0	802,9	848,7	876,5	904,4
	U	A	367,4	423,5	441,8	696,6	724,5	758,2	786,0	837,7	889,3	917,1	950,8

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Compressor					'								
Туре	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Туре						Asynchronous	5				
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R32	-				-
Potential global heating	A,E,N,U	GWP						675kgCO ₂ eq					
System side heat exchanger								_					
Туре	A,E,N,U	type						Brazed plate					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections without hydro	nic kit								-				-
Connections (in/out)	A,E,N,U	Туре						Grooved joints	5				
Cinco (in /out)	А	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
Sizes (in/out)	E,N,U	Ø	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"
Hydraulic connections with hydronic	kit												
Connections (in/out)	A,E,N,U	Туре						Grooved joint	5				
Cinca (in Inva)	A	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
Sizes (in/out)	E,N,U	Ø	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

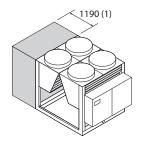
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: °, J													
Sound data calculated in cooling mode (1)												
	Α	dB(A)	90,5	90,5	90,5	90,8	91,1	92,1	92,3	93,1	93,4	94,2	94,3
Cound namer lavel	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2
Sound power level	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8	90,5	91,0
	U	dB(A)	90,8	90,8	90,8	92,2	92,5	93,5	93,6	94,3	94,9	95,0	95,6
	Α	dB(A)	58,4	58,4	58,2	58,6	58,9	59,7	59,9	60,5	60,9	61,5	61,7
Cound proceure level (10 m)	E	dB(A)	52,2	52,2	52,3	53,4	54,1	55,1	55,6	55,9	56,2	56,9	57,3
Sound pressure level (10 m)	N	dB(A)	52,9	53,0	53,0	54,4	55,0	55,6	56,3	56,6	56,9	57,6	58,0
	U	dB(A)	58,5	58,5	58,5	59,8	60,1	60,9	61,1	61,7	62,1	62,2	62,7

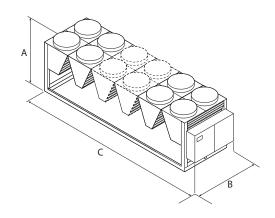
⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: °, J													
Fan													
Туре	A,E,N,U	type						Axial					
	Α	no.	4	4	6	6	6	8	8	10	10	12	12
Number	E,U	no.	6	6	6	8	8	10	10	12	14	14	16
	N	no.	8	8	8	10	10	10	12	14	16	16	18
	A	m³/h	57976	57976	86965	86965	86965	115954	115953	144941	144941	173929	173929
A: 0	E	m³/h	63933	63933	63933	85244	85244	106555	106555	127866	149177	149177	170487
Air flow rate	N	m³/h	85244	85244	85244	106555	106555	106555	127866	149177	170488	170488	191798
	U	m³/h	86963	86963	86963	115959	115959	144934	144934	173932	202921	202921	231902

DIMENSIONS





Key:

Additional module needed to contain the hydronic kit with "accumulation" option in sizes: 0800 A-0900 A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00,	DA, DB, D	C, DD, DE,	DF, DG,	DH, DI, I	A, IB, IC,	ID, IE, IF,	, IG, IH, II,	JA, JB, J	C, JD, JE,	JF, JG, JI	I, JI, PA,	PB, PC, P	D, PE, PF,
PG, PH, PI													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	А	mm	2780	2780	3970	3970	3970	5160	5160	6350	6350	7540	7540
C	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: AA,	AB, AC, A	D, AE, AF,	AG, AH,	AI, BA, B	B, BC, BI), BE, BF,	BG, BH,	BI, CA, CE	, CC, CD,	CE, CF, C	G, CH, C	I, KA, KB,	KC, KD,
KE, KF, KG, KH, KI													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	mm	3970	3970	3970	3970	3970	5160	5160	6350	6350	7540	7540
C	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRG-0800-2400-B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 224 ÷ 717 kW



- Microchannel coil
- Night mode
- · High efficiency also at partial loads



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

These are outdoor units with streamlined scroll compressors used with R32 gas axial fan, microchannel batteries and plate exchangers.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to $49\,^{\circ}\text{C}$ external air temperature. Unit can produce chilled water up to -10,0 $^{\circ}\text{C}$.

For more information refer to the selection program and to to the dedicated documentation.

Refrigerant HFC R32

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ The leak detector is supplied as per standard.

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:

- 1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
- 2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system. The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

 Night Mode: it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

CONFIGURATOR

Field		Description
1,2,3		NRG
4,5,6		Size 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400
8		Operating field
	Χ	Electronic thermostatic expansion valve
	Z	Low temperature electronic thermostatic valve
9		Model
	В	Free-cooling glycol free
10		Heat recovery
	0	Without heat recovery
	D	With desuperheater (1)
11		Version
	Α	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		Coils / free-cooling coils
	0	Alluminium microchannel / Copper - aluminium
	I	Copper-aluminium / Copper-aluminium
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
13		Fans
	0	Standard with DCPX
	J	Inverter
14		Power supply
	0	400V ~ 3 50Hz with magnet circuit breakers
15,16	5	Integrated hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E

JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the hanger. For more information about the unit operating range, refer to the Magellano selection

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FL:** Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

Field

PF

PG

PH

PI

DA

DC

DF

DF DG

DI

IF

IG

Description

Pump F

Pump G

Pump H

Pump I

Pump n° 1 pump + stand-by pump

Pump A + stand-by pump Pump B + stand-by pump Pump C + stand-by pump

Pump D + stand-by pump Pump E + stand-by pump

Pump F + stand-by pump

DG Pump G + stand-by pump
DH Pump H + stand-by pump

Pump I + stand-by pump

Kit with n° 1 inverter pump to fixed speed

Pump A equipped with inverter device to work at fixed speed Pump B equipped with inverter device to work at fixed speed Pump C equipped with inverter device to work at fixed speed Pump D equipped with inverter device to work at fixed speed Pump E equipped with inverter device to work at fixed speed

Pump F equipped with inverter device to work at fixed speed

Pump G equipped with inverter device to work at fixed speed Pump H equipped with inverter device to work at fixed speed Pump I equipped with inverter device to work at fixed speed **Kit with n°1 inverter pump + stand-by pump to fixed speed**

Pump A+stand-by pump, both equipped with inverter to work at fixed speed Pump B+stand-by pump, both equipped with inverter to work at fixed speed Pump C+stand-by pump, both equipped with inverter to work at fixed speed Pump D+stand-by pump, both equipped with inverter to work at fixed speed Pump E+stand-by pump, both equipped with inverter to work at fixed speed Pump F+stand-by pump, both equipped with inverter to work at fixed speed Pump G+stand-by pump, both equipped with inverter to work at fixed speed

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
AER485P1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U							•				
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	A,E,N,U		•	•	•	•	•	•	•	•		•
PGD1	ΔFNII						•					

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00, DA, DB, D	C, DD, DE, DF, DG, D	H, DI, IA, IB, IC,	ID, IE, IF, IG, IH,	II, JA, JB, JC, JI), JE, JF, JG, JH, .	JI, PA, PB, PC, P	D, PE, PF, PG, PI	l, Pl			
A,E,N,U	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)

(1) Contact us.

Device for peak current reduction

0800	0900	1000	1100	1200	1400
DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400
must be assembled in the factory					
1600	1800	2000		2200	2400
DRENRG1600	DRENRG1800	DRENRG200	0	DRENRG2200	DRENRG2400
	DRENRG0800 must be assembled in the factory 1600	DRENRG0800 DRENRG0900 must be assembled in the factory 1600 1800	DRENRG0800 DRENRG0900 DRENRG1000 must be assembled in the factory 1600 1800 2000	DRENRG0800 DRENRG0900 DRENRG1000 DRENRG1100 must be assembled in the factory 1600 1800 2000	DRENRG0800 DRENRG0900 DRENRG1000 DRENRG1100 DRENRG1200 must be assembled in the factory 1600 1800 2000 2200

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A,E,N,U	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400
A grey background indicates the accessor	y must be assembled in the factory					
Ver	1600	1800	2000		2200	2400
A,E,N,U	RIFNRG1600	RIFNRG1800	RIFNRG200	0	RIFNRG2200	RIFNRG2400

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A,E,N,U	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3						

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00											
A	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G
E,U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G
Integrated hydronic kit: DA, DB, DC, I	DD, DE, DF, DG, DH, I	DI, IA, IB, IC, ID,	IE, IF, IG, IH, II,	JA, JB, JC, JD, JE	, JF, JG, JH, JI, F	PA, PB, PC, PD, P	E, PF, PG, PH, P				
A	GP2VNA	GP2VNA	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G
E,U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRG - A

mig A												
Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	223,9	245,3	284,1	324,7	368,2	419,0	462,1	535,9	599,5	654,7	692,5
Input power	kW	73,0	82,9	91,3	106,0	122,2	134,8	152,7	172,3	197,6	212,9	230,2
Cooling total input current	Α	129,0	146,0	160,0	184,0	209,0	229,0	254,0	293,0	337,0	356,0	381,0
EER	W/W	3,07	2,96	3,11	3,06	3,01	3,11	3,03	3,11	3,03	3,07	3,01
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	70	85	99	111	116	92	88	107	125	115	105
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	122,1	122,1	178,1	179,1	179,8	241,5	241,5	302,6	302,5	368,7	368,6
Input power	kW	9,9	9,9	14,4	14,4	14,5	19,3	19,3	24,5	24,4	32,3	32,3
Free cooling total input current	Α	18,0	17,0	25,0	25,0	25,0	33,0	32,0	42,0	42,0	54,0	54,0
EER	W/W	12,32	12,32	12,36	12,41	12,44	12,54	12,54	12,37	12,37	11,40	11,40
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	70	85	99	111	116	92	88	107	125	115	105

NRG - E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	251,9	274,9	324,9	370,2	416,7	456,6	531,6	606,0	638,0	691,8
Input power	kW	72,4	82,1	92,0	106,0	123,9	136,5	153,7	175,2	197,7	215,9	227,8
Cooling total input current	А	122,0	139,0	156,0	176,0	201,0	220,0	245,0	284,0	319,0	346,0	363,0
EER	W/W	3,12	3,07	2,99	3,06	2,99	3,05	2,97	3,03	3,07	2,95	3,04
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	73	78	90	98	88	73	87	100	127	90	101
Cooling performances with free-cooling glycol-f	ree (2)											
Cooling capacity	kW	146,6	146,6	146,6	194,7	194,8	246,0	246,0	301,6	343,8	345,9	393,2
Input power	kW	11,1	11,1	11,1	14,8	14,8	18,9	18,9	25,6	29,3	29,7	32,5
Free cooling total input current	А	19,0	19,0	19,0	25,0	24,0	31,0	30,0	41,0	47,0	48,0	52,0
EER	W/W	13,20	13,20	13,20	13,18	13,18	13,00	13,00	11,79	11,73	11,64	12,12
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	73	78	90	98	88	73	87	100	127	90	101

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRG - U

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	233,1	260,7	285,8	336,2	385,1	431,6	474,7	552,3	627,9	664,0	717,7
Input power	kW	72,7	81,3	90,2	105,2	121,2	135,0	151,0	173,5	195,9	212,0	225,5
Cooling total input current	Α	129,0	145,0	160,0	183,0	206,0	228,0	250,0	291,0	330,0	353,0	374,0
EER	W/W	3,21	3,20	3,17	3,19	3,18	3,20	3,14	3,18	3,21	3,13	3,18
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	77	84	97	105	96	78	94	107	136	98	109
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	178,1	178,1	178,1	235,6	235,8	301,9	301,8	364,5	420,7	427,1	481,5
Input power	kW	14,4	14,4	14,4	19,2	19,2	24,4	24,4	32,2	37,0	37,4	41,3
Free cooling total input current	Α	26,0	26,0	26,0	33,0	33,0	41,0	40,0	54,0	62,0	62,0	68,0
EER	W/W	12,36	12,36	12,36	12,28	12,29	12,36	12,36	11,33	11,37	11,41	11,67
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	77	84	97	105	96	78	94	107	136	98	109

NRG - N

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	232,6	258,9	286,6	334,6	383,1	422,5	473,7	546,9	617,8	658,1	707,5
Input power	kW	71,7	81,1	90,4	104,8	120,5	134,5	150,6	174,0	195,5	210,5	225,7
Cooling total input current	Α	121,0	136,0	152,0	173,0	195,0	221,0	238,0	277,0	314,0	338,0	357,0
EER	W/W	3,24	3,19	3,17	3,19	3,18	3,14	3,14	3,14	3,16	3,13	3,14
Water flow rate system side	l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side	kPa	77	84	97	104	95	82	88	105	132	95	105
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	193,3	193,3	193,3	241,1	241,3	245,3	301,4	343,8	390,1	393,2	439,7
Input power	kW	14,7	14,7	14,7	18,5	18,5	18,8	25,6	29,3	32,0	32,5	35,2
Free cooling total input current	Α	25,0	25,0	25,0	30,0	30,0	31,0	40,0	47,0	51,0	52,0	56,0
EER	W/W	13,14	13,14	13,14	13,03	13,03	13,03	11,80	11,73	12,18	12,12	12,51
Water flow rate system side	l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side	kPa	77	84	97	104	95	82	88	105	132	95	105

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: °													
SEPR - (EN 14825: 2018) (1)													
	Α	W/W	5,90	5,74	6,12	6,07	5,96	6,48	6,48	6,41	6,34	6,27	6,18
SEPR	E	W/W	6,17	6,09	6,04	6,09	5,95	6,37	6,38	6,17	6,10	6,13	6,28
DELK	N	W/W	6,42	6,27	6,31	6,30	6,19	6,58	6,55	6,38	6,24	6,36	6,45
	U	W/W	6,34	6,27	6,22	6,30	6,19	6,72	6,63	6,53	6,43	6,39	6,40
(1) Calculation performed with FIXED water	flow rate.												
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
SEPR - (EN 14825: 2018) (1)													
	A	W/W	6,11	5,92	6,30	6,21	6,11	6,51	6,56	6,49	6,43	6,41	6,31
SEPR	E	W/W	6,39	6,28	6,20	6,22	6,10	6,56	6,54	6,35	6,30	6,31	6,44
JETR	N	W/W	6,64	6,46	6,47	6,44	6,34	6,77	6,72	6,56	6,44	6,54	6,61
	- 11	W/W	6,55	6,45	6,41	6,44	6,33	6,75	6,70	6,61	6,51	6,52	6,54

⁽¹⁾ Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Electric data													
	A	Α	158,2	176,5	200,6	228,5	256,4	290,1	317,9	369,5	415,3	449,0	476,9
Maximum current (FLA)	E,U	Α	164,0	182,3	200,6	234,3	262,2	295,9	323,7	375,3	426,9	454,8	488,5
	N	Α	169,8	188,1	206,4	240,1	268,0	295,9	329,5	381,1	432,7	460,6	494,3
	A	Α	361,6	417,7	436,0	685,0	718,7	746,6	774,4	826,1	871,9	899,7	933,4
Peak current (LRA)	E	Α	361,6	417,7	441,8	690,8	718,7	752,4	780,2	831,9	877,7	911,3	939,2
reak current (LNA)	N	Α	350,0	406,1	424,4	673,4	701,3	729,2	757,0	802,9	848,7	876,5	904,4
	U	A	367,4	423,5	441,8	696,6	724,5	758,2	786,0	837,7	889,3	917,1	950,8

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Compressor													
Туре	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Type						Asynchronous	S				
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R32					
	А	kg	11,3	10,9	11,0	15,0	15,8	18,0	21,0	20,6	24,0	24,4	26,3
Refrigerant load circuit 1 (1)	E,U	kg	15,4	15,0	16,1	19,5	19,9	24,0	23,3	25,9	28,1	33,8	30,8
	N	kg	16,0	16,0	17,3	24,2	26,3	26,3	30,8	30,0	37,5	34,1	34,1
	A	kg	11,3	10,9	11,0	15,0	15,8	20,5	22,5	20,6	24,0	24,4	26,3
Refrigerant load circuit 2 (1)	E,U	kg	15,4	15,0	16,1	20,5	19,9	25,5	23,3	25,9	28,1	33,8	30,8
	N	kg	16,0	16,0	18,8	25,4	26,3	26,3	30,8	30,0	37,5	34,1	34,1
Potential global heating	A,E,N,U	GWP						675kgCO₂eq		-	-		
System side heat exchanger													
Туре	A,E,N,U	type						Brazed plate		-	-		
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections without hydronic	kit												
Connections (in/out)	A,E,N,U	Туре						Grooved joints	S				
6: (: / .)	A	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
Sizes (in/out)	E,N,U	Ø	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"
Hydraulic connections with hydronic kit													
Connections (in/out)	A,E,N,U	Туре						Grooved joint	S				
Cinco (in fourt)	А	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
Sizes (in/out)	E,N,U	Ø	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

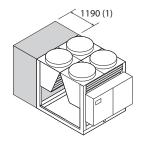
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: °, J													
Sound data calculated in cooling mode (1)												
	Α	dB(A)	90,5	90,5	90,5	90,8	91,1	92,1	92,3	93,1	93,4	94,2	94,3
Cound mouse lovel	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2
Sound power level –	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8	90,5	91,0
	U	dB(A)	90,8	90,8	90,8	92,2	92,5	93,5	93,6	94,3	94,9	95,0	95,6
_	Α	dB(A)	58,4	58,4	58,2	58,6	58,9	59,7	59,9	60,5	60,9	61,5	61,7
Cound procesure level (10 m)	E	dB(A)	52,2	52,2	52,3	53,4	54,1	55,1	55,6	55,9	56,2	56,9	57,3
Sound pressure level (10 m)	N	dB(A)	52,9	53,0	53,0	54,4	55,0	55,6	56,3	56,6	56,9	57,6	58,0
	U	dB(A)	58,5	58,5	58,5	59,8	60,1	60,9	61,1	61,7	62,1	62,2	62,7

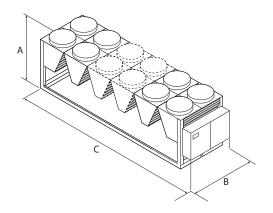
⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

TAINS DAIL	•												
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: °, J													
Fan													
Туре	A,E,N,U	type						Axial					
	Α	no.	4	4	6	6	6	8	8	10	10	12	12
Number	E,U	no.	6	6	6	8	8	10	10	12	14	14	16
	N	no.	8	8	8	10	10	10	12	14	16	16	18
	A	m³/h	57976	57976	86965	86965	86965	115954	115953	144941	144941	173929	173929
A: fla	E	m³/h	63933	63933	63933	85244	85244	106555	106555	127866	149177	149177	170487
Air flow rate	N	m³/h	85244	85244	85244	106555	106555	106555	127866	149177	170488	170488	191798
	U	m³/h	86963	86963	86963	115959	115959	144934	144934	173932	202921	202921	231902

DIMENSIONS





Key:

Additional module needed to contain the hydronic kit with "pumps" option in sizes: 0800 A- 0900 A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 0	00												
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	mm	2780	2780	3970	3970	3970	5160	5160	6350	6350	7540	7540
C	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Size Integrated hydronic kit: D	DA, DB, DC, D	D, DE, D											
	DA, DB, DC, D	D, DE, D											
Integrated hydronic kit: D	DA, DB, DC, D	D, DE, D											
Integrated hydronic kit: D PG, PH, PI	DA, DB, DC, D	D, DE, D I											
Integrated hydronic kit: D PG, PH, PI			F, DG, DH	, DI, IA, II	B, IC, ID, I	E, IF, IG,	IH, II, JA,	JB, JC, JI), JE, JF, .	JG, JH, JI,	, PA, PB, I	PC, PD, P	E, PF,
Integrated hydronic kit: D PG, PH, PI	A,E,N,U	mm	7, DG, DH	2450	B, IC, ID, I	E, IF, IG, 2450	IH, II, JA, 2450	2450	D, JE, JF, 2450	24 50	2450	2450	E, PF, 2450
Integrated hydronic kit: D PG, PH, PI	A,E,N,U A,E,N,U	mm mm	2450 2200	2450 2200	2450 2200	2450 2200	2450 2200	2450 2200	2450 2200	2450 2200	2450 2200	2450 2200	2450 2200





















NRB 0800-2406 F

Air-water chiller with free-cooling

Cooling capacity 211 ÷ 680 kW



- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- · High efficiency also at partial loads



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

Outdoor units with scroll compressors, axial flow fans, micro-channel coil (source side), plate heat exchanger and thermostatic expansion valve (mechanical or electronic, depending on the model).

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The

compressors are completely shut down, if possible, leading to considerable electrical savings.

A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.

Electronic expansion valve

The units from size 1805 to 2406 have an electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system.

The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

CONFIGURATOR

		GURATOR
Fiel		Description
1,2,	,3	NRB
4,5,	6,7	Size 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		Operating field
	0	Standard mechanic thermostatic valve (1)
	Χ	Electronic thermostatic expansion valve (2)
	Υ	Low temperature mechanic thermostatic valve
	Z	Low temperature electronic thermostatic valve
9		Model
	F	Free-cooling
	Р	Free-cooling plus (3)
10		Heat recovery
	0	Without heat recovery
	D	With desuperheater (4)
11		Version
	Α	High efficiency
	Е	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		Coils / free-cooling coils
	0	Alluminium microchannel / Copper - aluminium
		Copper-aluminium / Copper-aluminium
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	٧	Copper-painted alumimium / Copper-painted alumimium
13		Fans
	0	Standard
	J	Inverter
14		Power supply
	0	400 V/3/50 Hz with magnet circuit breakers
15,1	16	Integrated hydronic kit
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
		•

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

Field	Description
	Description
PG	Pump G
PH	Pump H
PI PI	Pump I
PJ	Pump J (5)
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (5)
	Kit with storage tank and n° 1 pump
AA	Storage tank and pump A
AB	Storage tank and pump B
AC	Storage tank and pump C
AD	Storage tank and pump D
AE	Storage tank and pump E
AF	Storage tank and pump F
AG	Storage tank and pump G
AH	Storage tank and pump H
AI	Storage tank and pump l
AJ	Storage tank and pump J (5)
	Kit with storage tank and n° 1 pump + stand-by pump
BA	Storage tank with pump A + stand-by pump
BB	Storage tank with pump B + stand-by pump
BC	Storage tank with pump C + stand-by pump
BD	Storage tank with pump D + stand-by pump
BE	Storage tank with pump E + stand-by pump
BF	Storage tank with pump F + stand-by pump
BG	Storage tank with pump G + stand-by pump
BH	Storage tank with pump H + stand-by pump
BI	Storage tank with pump I + stand-by pump
BJ	Storage tank with pump J + stand-by pump (5)

- (1) Water produced from 4 °C ÷ 18 °C
 (2) Electronic thermostatic as standard from size 1805÷2406.
 (3) Free cooling Plus models "P" are compatible only with "o" and "0" coils.
 (4) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
 (5) For all configurations including pump J please contact the factory.

FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.

FL: Flow switch

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP: Anti-intrusion grid kit

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	A,E,N,U	•	•	•	•	•	•	•		•	•	•
AERBACP	A,E,N,U	•	•	•	•	•	•	•		•	•	•
AERLINK	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E,N,U			•								
MULTICHILLER_EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E,N,U		•	•	•	•	•	•	•	•	•	•

Antivibration

Alltiviblation											
Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
A	AVX1066	AVX1066	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1074	AVX1074	AVX1052
E,U	AVX1070	AVX1070	AVX1070	AVX1072	AVX1072	AVX1072	AVX1074	AVX1052	AVX1052	AVX1054	AVX1054
N	AVX1072	AVX1072	AVX1072	AVX1074	AVX1074	AVX1074	AVX1052	AVX1054	AVX1054	AVX1057	AVX1057
Integrated hydronic kit: AA, AB, AC, AD, A	E, AF, AG, BA, B	B, BC, BD									
A	AVX1068	AVX1068	AVX1069	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1075	AVX1075	AVX1053
E,U	AVX1071	AVX1069	AVX1069	AVX1073	AVX1073	AVX1073	AVX1075	AVX1053	AVX1053	AVX1056	AVX1056
N	AVX1073	AVX1073	AVX1073	AVX1075	AVX1075	AVX1075	AVX1053	AVX1056	AVX1056	AVX1051	AVX1051
Integrated hydronic kit: AH, AI, BE, BF, BG	i	-									
A	AVX1068	AVX1068	AVX1069	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1075	AVX1075	AVX1053
E,U	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1073	AVX1075	AVX1053	AVX1053	AVX1056	AVX1056
N	AVX1073	AVX1073	AVX1073	AVX1075	AVX1075	AVX1075	AVX1053	AVX1056	AVX1056	AVX1051	AVX1051
Integrated hydronic kit: BH, BI											
A	AVX1069	AVX1069	AVX1069	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1075	AVX1075	AVX1053
E,U	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1073	AVX1075	AVX1053	AVX1053	AVX1056	AVX1056
N	AVX1073	AVX1073	AVX1073	AVX1075	AVX1075	AVX1075	AVX1053	AVX1078	AVX1056	AVX1051	AVX1051
Integrated hydronic kit: DA, DB, DC, DD, P	A, PB, PC, PD, I	PE, PF, PG									
A	AVX1066	AVX1066	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1074	AVX1074	AVX1052
E,U	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1072	AVX1074	AVX1052	AVX1052	AVX1054	AVX1054
N	AVX1072	AVX1072	AVX1072	AVX1074	AVX1074	AVX1074	AVX1052	AVX1054	AVX1054	AVX1050	AVX1050
Integrated hydronic kit: DE, DF, DG, PH, P	I										
A	AVX1066	AVX1066	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1074	AVX1074	AVX1052
E,U	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1072	AVX1076	AVX1052	AVX1052	AVX1054	AVX1054
N	AVX1072	AVX1072	AVX1072	AVX1074	AVX1074	AVX1074	AVX1052	AVX1055	AVX1054	AVX1050	AVX1050
Integrated hydronic kit: DH, DI											
A	AVX1067	AVX1067	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1079	AVX1076	AVX1052
E,U	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1072	AVX1076	AVX1052	AVX1052	AVX1055	AVX1055
N	AVX1072	AVX1072	AVX1072	AVX1076	AVX1076	AVX1076	AVX1052	AVX1077	AVX1055	AVX1050	AVX1050

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A,E,N,U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
A,E,N,U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E,U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401
	'					

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Ver	1600	1805	2006	2206	2406
A	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2416
E,N,U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0800	0900	1000	1100	1200	1400
A	T6NRB13	T6NRB13	T6NRB14	T6NRB14	T6NRB15	T6NRB15
E,N,U	T6NRB14	T6NRB14	T6NRB14	T6NRB14	T6NRB15	T6NRB15

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
A	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB16
E,U	T6NRB15	T6NRB17	T6NRB16	T6NRB19	T6NRB19
N	T6NRB18	T6NRB19	T6NRB19	T6NRB20	T6NRB20

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A	GP2VN	GP2VN	GP3VNF	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4G	GP5G	GP5G	GP6V
E,U	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

Units 0800A and 0900A with the optional "storage tank" are 3970 mm long and must have the GP2VNA grids installed.

PERFORMANCE SPECIFICATIONS

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	211,8	234,3	273,4	307,1	335,9	373,3	432,0	474,2	542,2	584,4	655,6
Input power	kW	76,0	88,0	93,9	108,9	124,8	145,6	157,1	185,1	201,0	229,4	243,7
Cooling total input current	А	134,0	152,0	165,0	189,0	215,0	248,0	270,0	316,0	347,0	394,0	423,0
EER	W/W	2,79	2,66	2,91	2,82	2,69	2,56	2,75	2,56	2,70	2,55	2,69
Water flow rate system side	l/h	36397	40249	46968	52762	57713	64138	74217	81471	93153	100403	112635
Pressure drop system side	kPa	49	50	68	76	91	99	64	68	88	96	122
Cooling performances with free-cooling (2)												
Cooling capacity	kW	139,8	142,0	203,2	208,4	211,6	214,7	280,5	284,4	350,8	354,8	421,5
Input power	kW	7,5	7,5	11,2	11,2	11,2	11,2	15,0	15,0	18,7	18,7	22,5
Free cooling total input current	A	13,0	13,0	20,0	20,0	19,0	19,0	26,0	26,0	32,0	32,0	39,0
EER	W/W	18,64	18,94	18,07	18,53	18,81	19,09	18,71	18,97	18,72	18,93	18,74
Water flow rate system side	I/h	36397	40249	46968	52762	57713	64138	74217	81471	93153	100403	112635
Pressure drop system side	kPa	88	97	101	117	139	158	112	125	144	161	188

⁽²⁾ System side water heat exchanger 12 °C / * °C; External air 2°C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	210,3	232,4	271,9	305,1	333,3	369,6	428,9	469,8	538,2	579,2	650,8
Input power	kW	76,8	89,2	94,8	110,0	126,2	147,6	158,7	187,5	203,2	232,3	246,6
Cooling total input current	А	135,0	154,0	167,0	191,0	217,0	251,0	272,0	320,0	351,0	399,0	427,0
EER	W/W	2,74	2,61	2,87	2,77	2,64	2,50	2,70	2,51	2,65	2,49	2,64
Water flow rate system side	l/h	36136	39921	46723	52411	57266	63506	73697	80717	92472	99510	111819
Pressure drop system side	kPa	48	49	67	75	89	97	63	66	87	95	120
Cooling performances with free-cooling (2)												
Cooling capacity	kW	149,8	152,0	217,8	223,3	226,6	229,5	300,5	304,3	375,9	379,8	451,6
Input power	kW	7,6	7,6	11,4	11,4	11,4	11,4	15,2	15,2	19,0	19,0	22,8
Free cooling total input current	А	13,0	13,0	20,0	20,0	20,0	19,0	26,0	26,0	33,0	33,0	40,0
EER	W/W	19,66	19,95	19,06	19,55	19,83	20,09	19,73	19,98	19,74	19,94	19,76
Water flow rate system side	l/h	36136	29921	46723	52411	57266	63506	73697	80717	92472	99510	111819
Pressure drop system side	kPa	86	95	100	116	137	155	110	123	142	158	185

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	220,6	242,6	265,3	310,3	344,7	379,2	438,5	498,2	546,9	610,1	652,9
Input power	kW	73,4	84,2	95,7	106,6	122,4	142,0	155,3	174,8	199,2	219,5	244,7
Cooling total input current	A	126,0	142,0	160,0	179,0	205,0	236,0	258,0	292,0	333,0	368,0	411,0
EER	W/W	3,00	2,88	2,77	2,91	2,82	2,67	2,82	2,85	2,75	2,78	2,67
Water flow rate system side	l/h	37902	41688	45573	53310	59226	65155	75344	85588	93960	104827	112169
Pressure drop system side	kPa	44	53	57	82	90	109	58	75	85	89	102
Cooling performances with free-cooling (2)												
Cooling capacity	kW	164,6	168,5	223,0	222,5	227,6	231,2	285,4	338,9	344,8	399,2	403,7
Input power	kW	7,9	7,9	7,9	10,5	10,5	10,5	13,1	15,8	15,8	18,4	18,4
Free cooling total input current	A	13,0	13,0	13,0	18,0	18,0	17,0	22,0	26,0	26,0	31,0	31,0
EER	W/W	20,90	21,39	21,78	21,18	21,67	22,02	21,74	21,51	21,89	21,72	21,97
Water flow rate system side	l/h	37902	41688	45573	53310	59226	65155	75344	85588	93960	104827	112169
Pressure drop system side	kPa	67	80	88	120	136	165	95	114	132	139	159

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	219,4	241,1	263,2	308,4	342,1	375,8	435,2	494,7	542,4	605,4	647,1
Input power	kW	74,1	85,1	96,8	107,7	123,7	143,8	157,0	176,7	201,6	222,1	247,8
Cooling total input current	A	126,0	144,0	162,0	181,0	206,0	238,0	260,0	294,0	336,0	372,0	415,0
EER	W/W	2,96	2,83	2,72	2,86	2,76	2,61	2,77	2,80	2,69	2,73	2,61
Water flow rate system side	I/h	37695	41419	45215	52979	58785	64562	74775	84990	93195	104013	111187
Pressure drop system side	kPa	44	53	56	81	89	107	57	74	84	88	100
Cooling performances with free-cooling (2)												
Cooling capacity	kW	175,0	179,4	182,7	236,7	242,4	246,2	304,0	360,9	367,2	425,1	429,9
Input power	kW	8,0	8,0	8,0	10,7	10,7	10,7	13,3	16,0	16,0	18,6	18,6
Free cooling total input current	A	14,0	13,0	13,0	18,0	18,0	18,0	22,0	27,0	27,0	31,0	31,0
EER	W/W	21,90	22,45	22,86	22,22	22,76	23,11	22,83	22,58	22,98	22,80	23,06
Water flow rate system side	I/h	37695	41419	45215	52979	58785	64562	74775	84990	93195	104013	111187
Pressure drop system side	kPa	66	79	87	118	134	162	94	113	130	137	156

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,3	250,9	275,8	320,4	357,9	396,3	455,4	515,9	569,2	633,7	680,9
Input power	kW	73,7	83,6	94,1	106,4	120,6	138,5	153,5	173,2	195,2	215,9	238,4
Cooling total input current	А	133,0	149,0	166,0	189,0	212,0	240,0	267,0	304,0	341,0	379,0	418,0
EER	W/W	3,08	3,00	2,93	3,01	2,97	2,86	2,97	2,98	2,92	2,94	2,86
Water flow rate system side	l/h	39046	43104	47382	55045	61497	68087	78245	88642	97793	108881	116982
Pressure drop system side	kPa	47	57	61	88	97	120	62	81	92	96	111
Cooling performances with free-cooling (2)												
Cooling capacity	kW	192,7	198,6	203,6	261,5	269,7	276,0	338,6	400,3	410,2	473,3	481,2
Input power	kW	11,2	11,2	11,2	15,0	15,0	15,0	18,7	22,5	22,5	26,2	26,2
Free cooling total input current	A	20,0	20,0	20,0	27,0	26,0	26,0	33,0	39,0	39,0	46,0	46,0
EER	W/W	17,13	17,66	18,11	17,44	17,99	18,41	18,07	17,80	18,24	18,04	18,34
Water flow rate system side	l/h	39046	43104	47382	55045	61497	68087	78245	88642	97793	108881	116982
Pressure drop system side	kPa	71	86	95	128	147	179	103	122	143	150	173
(1) System side water heat exchanger 12 °C/7 °C; Extern (2) System side water heat exchanger 12 °C/* °C; Extern		ler operation	100%; Free-co	oling 0%								
Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												

Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	249,6	274,2	318,8	356,0	393,8	452,9	513,3	565,9	630,2	676,8
Input power	kW	74,4	84,4	95,0	107,4	121,8	139,9	154,8	174,8	197,2	218,0	240,9
Cooling total input current	A	134,0	150,0	167,0	190,0	213,0	242,0	269,0	306,0	344,0	382,0	421,0
EER	W/W	3,04	2,96	2,89	2,97	2,92	2,82	2,93	2,94	2,87	2,89	2,81
Water flow rate system side	l/h	38871	42893	47115	54781	61158	67658	77819	88186	97229	108280	116278
Pressure drop system side	kPa	46	57	60	87	96	118	62	80	91	95	110
Cooling performances with free-cooling (2)												
Cooling capacity	kW	205,9	212,7	218,2	279,8	289,0	295,9	362,9	428,9	439,8	507,3	515,9
Input power	kW	11,4	11,4	11,4	15,2	15,2	15,2	19,0	22,8	22,8	26,7	26,7
Free cooling total input current	A	21,0	20,0	20,0	27,0	27,0	26,0	33,0	40,0	40,0	47,0	47,0
FFR	W/W	18.02	18 62	19 10	18 37	18 97	19 42	19.06	18 77	19 25	19.03	19 35

I/h

kPa

Water flow rate system side

Pressure drop system side (1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

Input power

EER

Free cooling total input current

Water flow rate system side

Pressure drop system side

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	228,3	252,4	278,0	320,3	358,3	397,2	454,4	510,9	563,3	628,5	675,3
Input power	kW	72,5	82,2	92,3	104,6	118,7	136,3	151,0	171,5	194,0	213,5	236,4
Cooling total input current	A	124,0	140,0	156,0	177,0	199,0	227,0	251,0	287,0	325,0	360,0	399,0
EER	W/W	3,15	3,07	3,01	3,06	3,02	2,91	3,01	2,98	2,90	2,94	2,86
Water flow rate system side	l/h	39222	43370	47761	55033	61559	68239	78074	87785	96785	107983	116017
Pressure drop system side	kPa	50	61	66	88	98	120	63	79	90	94	109
Cooling performances with free-cooling (2)												
Cooling capacity	kW	263,0	209,6	216,0	263,3	272,4	279,7	331,7	383,3	392,7	446,3	453,4
Input power	kW	10,5	10,5	10,5	13,1	13,1	13,1	15,8	18,4	18,4	21,0	21,0
Free cooling total input current	A	18,0	18,0	18,0	22,0	22,0	22,0	26,0	31,0	31,0	35,0	35,0
EER	W/W	25,04	19,96	20,57	20,06	20,75	21,30	21,06	20,85	21,37	21,25	21,59
Water flow rate system side	l/h	39222	43370	47761	55033	61559	68239	78074	87785	96785	107983	116017
Pressure drop system side	kPa	71	86	96	121	139	171	95	115	133	143	164
 (1) System side water heat exchanger 12 °C/7 °C; Exte (2) System side water heat exchanger 12 °C / * °C; Exte 	ernal air 35 °C; Chi ternal air 2°C	ller operation '	100%; Free-co	oling 0%								
Size	,	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,4	251,4	276,7	318,8	356,3	394,6	451,9	508,1	559,8	624,6	670,7
Input power	kW	73,1	82,8	93,1	105,5	119,8	137,7	152,4	173,0	195,9	215,7	239,0
Cooling total input current	A	125,0	141,0	157,0	178,0	201,0	229,0	253,0	289,0	328,0	362,0	402,0
EER	W/W	3,11	3,03	2,97	3,02	2,98	2,87	2,97	2,94	2,86	2,90	2,81
Water flow rate system side	l/h	39073	43187	47536	54768	61222	67801	77644	87290	96173	107317	115226
Pressure drop system side	kPa	50	60	65	87	97	119	62	78	89	93	108
Cooling performances with free-cooling (2)						,						
Cooling capacity	kW	213,1	221,8	229,3	278,7	289,4	297,7	352,9	407,4	418,1	475,0	482,9
Input nower	LAM	10.7	10.7	10.7	12.2	12.2	12.2	16.0	10.6	10.6	21.2	21.2

kW

Α

W/W

l/h

kPa

10,7

18,0

20,00

39073

70

10,7

18,0

20,82

43187

86

10,7

18,0

21,53

47536

96

13,3

22,0

20,93

54768

120

13,3

22,0

21,73

61222

138

13,3

22,0

22,36

67801

169

16,0

27,0

22,08

77644

94

18,6

31,0

21,85

87290

114

18,6

31,0

22,43

96173

132

21,3

36,0

22,30

107317

141

21,3

36,0

22,66

115226

162

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F													
SEPR - (EN14825: 2018) High temperatur	e with standa	ard fans (1)											
	A	W/W	6,24	5,77	6,03	6,11	5,82	5,27	6,09	5,55	5,79	5,55	5,70
SEPR	E	W/W	6,98	6,31	6,11	6,34	6,16	5,51	6,28	6,19	5,81	5,90	5,73
JLFN	N	W/W	7,33	7,13	6,84	6,84	6,70	6,12	6,70	6,57	6,21	6,29	6,07
	U	W/W	7,10	6,80	6,54	6,66	6,52	5,99	6,66	6,57	6,30	6,31	6,16
SEPR - (EN14825: 2018) High temperatur	e with invert	er fans (1)											
	A	W/W	6,24	5,77	6,03	6,11	5,82	5,27	6,09	5,55	5,79	5,55	5,70
SEPR	E	W/W	6,98	6,31	6,11	6,34	6,16	5,51	6,28	6,19	5,81	5,90	5,73
JLI II	N	W/W	7,33	7,13	6,84	6,84	6,70	6,12	6,70	6,57	6,21	6,29	6,07
	U	W/W	7,10	6,80	6,54	6,66	6,52	5,99	6,66	6,57	6,30	6,31	6,16
(1) Calculation performed with FIXED water	flow rate.												
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P													
SEPR - (EN14825: 2018) High temperatur	e with standa	ard fans (1)											
	A	W/W	6,09	5,62	5,91	5,97	5,68	5,13	5,95	5,51	5,65	5,51	5,57
SEPR	E	W/W	6,82	6,16	5,95	6,20	6,01	5,37	6,13	6,04	5,66	5,76	5,59
JLFN	N	W/W	7,22	6,98	6,71	6,69	6,54	5,98	6,55	6,42	6,07	6,14	5,92
	U	W/W	6,98	6,64	6,39	6,51	6,39	5,86	6,51	6,42	6,16	6,17	6,03
SEPR - (EN14825: 2018) High temperatur	e with invert	er fans (1)											
	A	W/W	6,09	5,62	5,91	5,97	5,68	5,13	5,95	5,51	5,65	5,51	5,57
SEPR	E	W/W	6,82	6,16	5,95	6,20	6,01	5,37	6,13	6,04	5,66	5,76	5,59
JELU	N	W/W	7,22	6,98	6,71	6,69	6,54	5,98	6,55	6,42	6,07	6,14	5,92
	U	W/W	6,98	6,64	6,39	6,51	6,39	5,86	6,51	6,42	6,16	6,17	6,03

⁽¹⁾ Calculation performed with FIXED water flow rate.

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
	A	Α	190,4	206,8	242,5	271,9	301,2	330,2	378,6	423,4	487,6	516,6	570,9
Maximum current (FLA)	E,U	A	209,8	226,2	242,5	291,3	320,6	349,6	398,0	468,1	512,9	561,3	590,3
	N	A	229,2	245,6	261,9	310,7	340,0	369,0	423,3	487,5	532,3	580,7	609,7
	A	А	379,0	434,2	469,9	522,6	551,9	664,4	712,8	757,6	821,8	850,8	905,1
Peak current (LRA)	E,U	A	398,4	453,6	469,9	542,0	571,3	683,8	732,2	802,3	847,1	895,5	924,5
	N	A	417,8	473,0	489,3	561,4	590,7	703,2	757,5	821,7	866,5	914,9	943,9

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Туре	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Туре						0n-0ff					
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R410A					
-	A	kg	14,5	15,0	20,0	22,0	21,5	21,5	25,0	25,0	31,0	31,0	44,0
Refrigerant load circuit 1 (1)	E,U	kg	20,5	20,0	21,5	26,0	26,0	26,0	30,0	36,0	36,0	56,5	56,0
-	N	kg	26,0	26,5	26,5	29,0	28,0	35,0	42,0	44,0	43,0	62,0	62,0
	A	kg	14,5	15,0	20,0	22,0	23,5	21,5	27,0	30,0	38,0	34,0	44,0
Refrigerant load circuit 2 (1)	E,U	kg	20,5	20,0	21,5	27,0	27,0	27,0	32,0	39,0	40,0	56,5	56,0
•	N	kg	26,0	26,5	26,5	30,0	31,0	35,0	42,0	47,0	47,0	62,0	62,0
Potential global heating	A,E,N,U	GWP						2088kgCO ₂ eq					
System side heat exchanger													
Туре	A,E,N,U	type						Brazed plate					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections													
Connections (in/out)	A,E,N,U	Туре						Grooved joints	;				
Hydraulic connections without hydror								,					
Sizes (in/out)	A,E,N,U	Ø	3"	3″	3"	3"	3"	3"	4"	4"	4"	4"	4"
Hydraulic connections with hydronic l	cit												
Sizes (in/out)	A,E,N,U	Ø	3"	3″	3"	3"	3"	3"	4"	4"	4"	4"	4"

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Sound data calculated in cooling mode (1))												
	Α	dB(A)	88,0	88,1	90,3	90,2	90,2	90,2	91,7	92,2	93,9	94,4	95,8
Cound naviar lavel	Е	dB(A)	85,0	85,1	85,1	86,5	86,5	86,5	87,7	89,2	89,7	91,0	91,5
Sound power level –	N	dB(A)	86,5	86,6	86,6	87,7	87,7	87,7	88,7	90,0	90,5	91,7	92,2
	U	dB(A)	90,2	90,3	90,3	91,7	91,7	91,7	92,9	94,4	94,9	96,2	96,7
	Α	dB(A)	55,9	56,0	58,0	57,9	57,9	57,9	59,3	59,8	61,3	61,8	63,2
Cound procesure level (10 m)	Е	dB(A)	52,7	52,8	52,8	54,2	54,2	54,2	55,2	56,5	57,0	58,2	58,7
Sound pressure level (10 m) —	N	dB(A)	54,2	54,3	54,3	55,2	55,2	55,2	56,0	57,2	57,7	58,8	59,3
	U	dB(A)	57,9	58,0	58,0	59,3	59,3	59,3	60,4	61,7	62,2	63,4	63,9

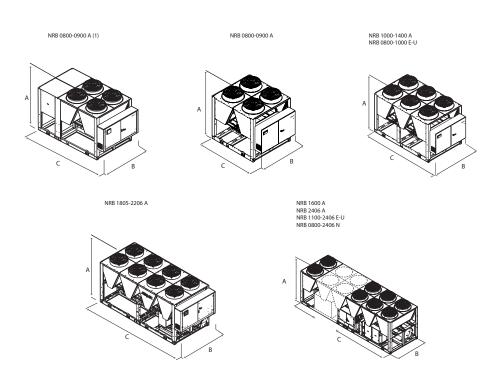
⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F													
Fan													
Туре	A,E,N,U	type						axials			,	,	
	A	no.	4	4	6	6	6	6	8	8	10	10	12
Number	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
	A	m³/h	57600	57600	86400	86400	86400	86400	115200	115200	144000	144000	172800
A: G	E	m³/h	64800	64800	64800	86400	86400	86400	108000	129600	129600	151200	151200
Air flow rate	N	m³/h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m³/h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P													
Fan													
Туре	A,E,N,U	type						axials					

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
	A	no.	4	4	6	6	6	6	8	8	10	10	12
Number	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
	A	m³/h	54800	54800	82200	82200	82200	82200	109600	109600	137000	137000	164400
A: G	E	m³/h	61800	61800	61800	82400	82400	82400	103000	123600	123600	144200	144200
Air flow rate	N	m³/h	82400	82400	82400	103000	103000	103000	123600	144200	144200	164800	164800
	U	m³/h	82200	82200	82200	109600	109600	109600	137000	164400	164400	191800	191800

DIMENSIONS



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes: NRB 0800A, 0900A

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	mm	2780	2780	3970	3970	3970	3970	4760	5160	6350	6350	7140
(E,U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520

■ Units 0800A and 0900A with the optional "storage tank" are 3970 mm long.

		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
)												
A	kg	2570	2620	3260	3330	3370	3420	4080	4290	5020	5100	5670
E,U	kg	3080	3130	3290	3990	4060	4080	4660	5350	5570	6330	6390
N	kg	3760	3800	3960	4530	4610	4630	5160	5940	6160	6870	6930
A	kg	2630	2680	3350	3420	3460	3510	4200	4410	5170	5250	5850
E,U	kg	3170	3220	3380	4110	4180	4200	4810	5530	5750	6540	6600
N	kg	3880	3920	4080	4680	4760	4780	5340	6150	6370	7110	7170
	N A	A kg E,U kg N kg A kg E,U kg	A kg 2570 E,U kg 3080 N kg 3760 A kg 2630 E,U kg 3170	A kg 2570 2620 E,U kg 3080 3130 N kg 3760 3800 A kg 2630 2680 E,U kg 3170 3220	A kg 2570 2620 3260 E,U kg 3080 3130 3290 N kg 3760 3800 3960 A kg 2630 2680 3350 E,U kg 3170 3220 3380	A kg 2570 2620 3260 3330 E,U kg 3080 3130 3290 3990 N kg 3760 3800 3960 4530 A kg 2630 2680 3350 3420 E,U kg 3170 3220 3380 4110	A kg 2570 2620 3260 3330 3370 E,U kg 3080 3130 3290 3990 4060 N kg 3760 3800 3960 4530 4610 A kg 2630 2680 3350 3420 3460 E,U kg 3170 3220 3380 4110 4180	A kg 2570 2620 3260 3330 3370 3420 E,U kg 3080 3130 3290 3990 4060 4080 N kg 3760 3800 3960 4530 4610 4630 A kg 2630 2680 3350 3420 3460 3510 E,U kg 3170 3220 3380 4110 4180 4200	A kg 2570 2620 3260 3330 3370 3420 4080 E,U kg 3080 3130 3290 3990 4060 4080 4660 N kg 3760 3800 3960 4530 4610 4630 5160 A kg 2630 2680 3350 3420 3460 3510 4200 E,U kg 3170 3220 3380 4110 4180 4200 4810	A kg 2570 2620 3260 3330 3370 3420 4080 4290 E,U kg 3080 3130 3290 3990 4060 4080 4660 5350 N kg 3760 3800 3960 4530 4610 4630 5160 5940 A kg 2630 2680 3350 3420 3460 3510 4200 4410 E,U kg 3170 3220 3380 4110 4180 4200 4810 5530	A kg 2570 2620 3260 3330 3370 3420 4080 4290 5020 E,U kg 3080 3130 3290 3990 4060 4080 4660 5350 5570 N kg 3760 3800 3960 4530 4610 4630 5160 5940 6160 A kg 2630 2680 3350 3420 3460 3510 4200 4410 5170 E,U kg 3170 3220 3380 4110 4180 4200 4810 5530 5750	A kg 2570 2620 3260 3330 3370 3420 4080 4290 5020 5100 E,U kg 3080 3130 3290 3990 4060 4080 4660 5350 5570 6330 N kg 3760 3800 3960 4530 4610 4630 5160 5940 6160 6870 A kg 2630 2680 3350 3420 3460 3510 4200 4410 5170 5250 E,U kg 3170 3220 3380 4110 4180 4200 4810 5530 5750 6540

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRB 0800-2406 B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 211 ÷ 680 kW



- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- · High efficiency also at partial loads



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

Outdoor units with scroll compressors, axial flow fans, micro-channel coil (source side), plate heat exchanger and thermostatic expansion valve (mechanical or electronic, depending on the model).

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The

compressors are completely shut down, if possible, leading to considerable electrical savings.

If a higher output is needed in free cooling, there is also the "G" free cooling plus model with boosted water coil.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:

- 1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
- 2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

The units from size 1805 to 2406 have an electronic expansion valve as standard.

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system. The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.

FL: Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	A,E	•	•	•	•	•	•					
AER403FT	N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•					
AERDACP	N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E	•	•	•	•	•	•					
AERLINK	N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•					
AEKNEI	N,U	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E	•		•	•	•	•					
rb i	N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E	•	•									
rL .	N,U		•	•	•	•	•	•	•	•	•	•
MULTICULUED EVO	A,E	•	•	•	•	•						
MULTICHILLER_EVO	N,U			•	•	•	•		•	•	•	
PGD1	A,E	•	•	•	•	•	•					
ועטי	N,U	•		•	•	•	•		•	•	•	•

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00, DA, DI	B, DC, DE, DF, DG, DH, D	OI, DJ, PA, PB, P	C, PD, PE, PF, PC	, PH, PI, PJ							
A,E	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	-	-	-	-	-
N,U	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)

⁽¹⁾ Contact us.

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A,E,N,U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
N,U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

A grey background indicates the accessory must be assembled in the la

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E,U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

${\bf A}$ grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
N,U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A	GP2VN	GP2VN	GP3VNF	GP3VNF	GP3VNF	GP3VNF	-	-	-	-	-
E	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	-	-	-	-	-
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V
U	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

CONFIGUR	AATOR
Field	Description
1,2,3	NRB
4,5,6,7	Size 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8	Operating field
0	Standard mechanic thermostatic valve
X	Electronic thermostatic expansion valve
Υ	Low temperature mechanic thermostatic valve
Z	Low temperature electronic thermostatic valve
9	Model
В	Free-cooling glycol free
G	Free-cooling glycol free plus (1)
10	Heat recovery
•	Without heat recovery
D	With desuperheater (2)
11	Version
A	High efficiency
E	Silenced high efficiency
N N	Silenced very high efficiency
U	Very high efficiency
12	Coils / free-cooling coils Alluminium microchannel / Copper - aluminium
	Copper-aluminium / Copper-aluminium
0	Painted alluminium microchannel / Copper painted aluminium
R	Copper-copper/Copper-copper
	Copper-Tinned copper / Copper - Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
13	Fans
	Standard
	Inverter
14	Power supply Power supply
	400V~3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
00	Without hydronic kit
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (3)
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (3)
	and the second of the second s

⁽¹⁾ The Free cooling Plus "G" models are only compatible with "°" and "0" coils.
(2) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(3) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B	'											
Cooling performance chiller operation (1)												
Cooling capacity	kW	211,8	234,3	273,4	307,1	335,9	373,3	-	-	-	-	-
Input power	kW	76,0	88,0	93,9	108,9	124,8	145,6	-	-	-	-	-
Cooling total input current	A	134,0	152,0	165,0	189,0	215,0	248,0	-	-	-	-	-
EER	W/W	2,79	2,66	2,91	2,82	2,69	2,56	-	-	-	-	-
Water flow rate system side	l/h	36397	40249	46968	52762	57713	64138	-	-	-	-	-
Pressure drop system side	kPa	53	58	66	74	88	100	-	-	-	-	-
Cooling performances with free-cooling glycol-	-free (2)											
Cooling capacity	kW	119,9	121,9	165,6	172,5	176,2	181,3	-	-	-	-	-
Input power	kW	9,8	9,8	14,3	14,3	14,4	14,4	-	-	-	-	-
Free cooling total input current	A	17,0	17,0	25,0	25,0	25,0	25,0	-	-	-	-	-
EER	W/W	12,21	12,41	11,56	12,02	12,26	12,60	-	-	-	-	-
(1) Sustain side water heat each anger 13 °C /7 °C. E	utornal air 25 °C, Chi	ller eneration	1000/ · F	-l: 00/								

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)		-										
Cooling capacity	kW	210,3	232,4	271,9	305,1	333,3	369,6	-	-	-	-	-
Input power	kW	76,8	89,2	94,8	110,0	126,2	147,6	-	-	-	-	-
Cooling total input current	A	135,0	154,0	167,0	191,0	217,0	251,0	-	-	-	-	-
EER	W/W	2,74	2,61	2,87	2,77	2,64	2,50	-	-	-	-	-
Water flow rate system side	I/h	36136	39921	46723	52411	57266	63506	-	-	-	-	-
Pressure drop system side	kPa	53	57	65	73	87	98	-	-	-	-	-
Cooling performances with free-cooling glycol-	-free (2)											
Cooling capacity	kW	125,4	127,6	172,1	179,6	183,6	189,2	-	-	-	-	-
Input power	kW	9,9	9,9	14,5	14,5	14,6	14,6	-	-	-	-	-
Free cooling total input current	A	17,0	17,0	25,0	25,0	25,0	25,0	-	-	-	-	-
EER	W/W	12,62	12,83	11,86	12,36	12,62	12,99	-	-	-	-	-

- (1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	220,6	242,6	265,3	310,3	344,7	379,2	-	-	-	-	-
Input power	kW	73,4	84,2	95,7	106,6	122,4	142,0	-	-	-	-	-
Cooling total input current	Α	126,0	142,0	160,0	179,0	205,0	236,0	-	-	-	-	-
EER	W/W	3,00	2,88	2,77	2,91	2,82	2,67	-	-	-	-	-
Water flow rate system side	l/h	37902	41688	45573	53310	59226	65155	-	-	-	-	-
Pressure drop system side	kPa	48	53	61	68	84	102	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)											
Cooling capacity	kW	139,1	141,5	143,7	187,8	192,4	195,3	-	-	-	-	-
Input power	kW	11,0	11,0	11,0	14,6	14,6	14,6	-	-	-	-	-
Free cooling total input current	Α	19,0	19,0	18,0	24,0	24,0	24,0	-	-	-	-	-
EER	W/W	12,69	12,92	13,11	12,89	13,17	13,37	-	-	-	-	-

- (1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	219,4	241,1	263,2	308,4	342,1	375,8	-	-	-	-	-
Input power	kW	74,1	85,1	96,8	107,7	123,7	143,8	-	-	-	-	-
Cooling total input current	Α	126,0	144,0	162,0	181,0	206,0	238,0	-	-	-	-	-
EER	W/W	2,96	2,83	2,72	2,86	2,76	2,61	-	-	-	-	-
Water flow rate system side	l/h	37695	41419	45215	52979	58785	64562	-	-	-	-	-
Pressure drop system side	kPa	47	52	61	67	83	100	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)											
Cooling capacity	kW	144,3	147,0	149,3	195,0	200,0	203,0	-	-	-	-	-
Input power	kW	11,1	11,1	11,1	14,7	14,8	14,8	-	-	-	-	-
Free cooling total input current	A	19,0	19,0	18,0	25,0	25,0	24,0	-	-	-	-	-
EER	W/W	13,03	13,28	13,48	13,24	13,55	13,75	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,3	250,9	275,8	320,4	357,9	396,3	455,4	515,9	569,2	633,7	680,9
Input power	kW	73,7	83,6	94,1	106,4	120,6	138,5	153,5	173,2	195,2	215,9	238,4
Cooling total input current	А	133,0	149,0	166,0	189,0	212,0	240,0	267,0	304,0	341,0	379,0	418,0
EER	W/W	3,08	3,00	2,93	3,01	2,97	2,86	2,97	2,98	2,92	2,94	2,86
Water flow rate system side	l/h	39046	43104	47382	55045	61497	68087	78245	88642	97793	108881	116982
Pressure drop system side	kPa	51	56	66	72	90	111	75	92	112	133	126
Cooling performances with free-cooling glycol-	free (2)											
Cooling capacity	kW	159,6	162,9	165,8	215,5	222,0	225,8	284,2	346,2	361,7	409,5	413,7
Input power	kW	14,3	24,3	14,3	19,1	19,1	19,1	24,1	31,6	32,0	36,8	36,8
Free cooling total input current	A	26,0	26,0	25,0	34,0	33,0	33,0	42,0	55,0	56,0	65,0	64,0
EER	W/W	11,14	11,37	11,57	11,31	11,62	11,82	11,80	10,97	11,29	11,14	11,26
(1) System side water heat exchanger 12 °C/7 °C; Ex	ternal air 35 °C: Chi	ller operation 1	100%: Free-co	olina 0%								

⁽¹⁾ System side water heat exchanger 12 C/7 C; External air 35 C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	249,6	274,2	318,8	356,0	393,8	452,9	513,3	565,9	630,2	676,8
Input power	kW	74,4	84,4	95,0	107,4	121,8	139,9	154,8	174,8	197,2	218,0	240,9
Cooling total input current	А	134,0	150,0	167,0	190,0	213,0	242,0	269,0	306,0	344,0	382,0	421,0
EER	W/W	3,04	2,96	2,89	2,97	2,92	2,82	2,93	2,94	2,87	2,89	2,81
Water flow rate system side	l/h	38871	42893	47115	54781	61158	67658	77819	88186	97229	108280	116278
Pressure drop system side	kPa	50	56	-	72	89	109	74	91	111	132	125
Cooling performances with free-cooling glycol-free	(2)											
Cooling capacity	kW	165,6	169,1	172,3	223,6	230,7	234,8	295,8	360,9	278,5	427,4	432,0
Input power	kW	14,5	14,5	14,5	19,3	19,3	19,3	24,4	31,9	32,4	37,2	37,2
Free cooling total input current	A	26,0	26,0	25,0	34,0	34,0	33,0	42,0	56,0	57,0	65,0	65,0
EER	W/W	11,42	11,66	11,88	11,59	11,93	12,14	12,13	11,31	11,68	11,50	11,62

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	228,3	252,4	278,0	320,3	358,3	397,2	454,4	510,9	563,3	628,5	675,3
Input power	kW	72,5	82,2	92,3	104,6	118,7	136,3	151,0	171,5	194,0	213,5	236,4
Cooling total input current	А	124,0	140,0	156,0	177,0	199,0	227,0	251,0	287,0	325,0	360,0	399,0
EER	W/W	3,15	3,07	3,01	3,06	3,02	2,91	3,01	2,98	2,90	2,94	2,86
Water flow rate system side	l/h	39222	43370	47761	55033	61559	68239	78074	87785	96785	107983	116017
Pressure drop system side	kPa	46	50	60	72	91	103	71	90	110	131	124
Cooling performances with free-cooling glycol-free (2)											
Cooling capacity	kW	173,9	177,9	181,5	218,5	225,6	235,0	293,7	331,4	347,7	386,9	390,8
Input power	kW	14,5	14,5	14,5	18,1	18,2	18,2	24,8	28,3	28,9	31,6	31,6
Free cooling total input current	A	25,0	25,0	25,0	31,0	31,0	30,0	41,0	47,0	48,0	53,0	53,0
EER	W/W	11,95	12,23	12,48	12,07	12,41	12,90	11,84	11,73	12,04	12,24	12,37

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,4	251,4	276,7	318,8	356,3	394,6	451,9	508,1	559,8	624,6	670,7
Input power	kW	73,1	82,8	93,1	105,5	119,8	137,7	152,4	173,0	195,9	215,7	239,0
Cooling total input current	Α	125,0	141,0	157,0	178,0	201,0	229,0	253,0	289,0	328,0	362,0	402,0
EER	W/W	3,11	3,03	2,97	3,02	2,98	2,87	2,97	2,94	2,86	2,90	2,81
Water flow rate system side	l/h	39073	43187	47536	54768	61222	67801	77644	87290	96173	107317	115226
Pressure drop system side	kPa	46	50	59	72	90	101	71	89	108	130	123
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	180,0	184,4	188,2	226,3	233,9	244,1	305,6	344,3	362,0	402,3	406,6
Input power	kW	14,7	14,6	14,7	18,3	18,4	18,4	25,0	28,5	29,2	31,9	31,9
Free cooling total input current	Α	25,0	25,0	25,0	31,0	31,0	31,0	42,0	48,0	49,0	54,0	54,0
EER	W/W	12,25	12,55	12,81	12,37	12,73	13,26	12,20	12,07	12,42	12,61	12,74

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

ENERGY DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B													
SEPR - (EN14825: 2018) High tempera	ature with standa	ord fans (1)											
	Α	W/W	5,61	5,25	5,27	5,43	5,25	5,05	-	-	-	-	-
CEDD	E	W/W	6,07	5,58	5,44	5,59	5,50	5,13	-	-	-	-	-
SEPR	N	W/W	6,38	6,09	5,91	5,92	5,78	5,41	5,67	5,51	5,56	5,58	5,53
	U	W/W	6,22	5,87	5,69	5,84	5,71	5,56	5,73	5,52	5,51 5,56 5,58 5,52 5,60 5,58	5,58	5,53
(1) Calculation performed with FIXED wa	ater flow rate.												
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G													
SEPR - (EN14825: 2018) High tempera	ature with standa	rd fans (1)				-			-	-			
	A	W/W	5,82	5,37	5,48	5,60	5,37	4,87	-	-	-	-	-
SEPR	E	W/W	6,42	5,83	5,62	5,85	5,69	5,10	-	-	-	-	-
	N,U	W/W	6,96	6,54	6,28	6,28	6,08	5,63	6,13	5,90	5,77	5,73	5,58

⁽¹⁾ Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
	A	Α	190,4	206,8	242,5	271,9	301,2	330,2	-	-	-	-	-
Marrian arrant (FLA)	E	Α	209,8	226,2	242,5	291,3	320,6	349,6	-	-	-	-	-
Maximum current (FLA)	N	A	229,2	245,6	261,9	310,7	340,0	369,0	423,3	487,5	532,3	- -,3 580,7 -,9 561,3 - - - -,5 914,9	609,7
	U	Α	209,8	226,2	242,5	291,3	320,6	349,6	398,0	468,1	512,9		590,3
	A	Α	379,0	434,2	469,9	522,6	551,9	664,4	-	-	-	-	-
Deals surrent (LDA)	E	Α	398,4	453,6	469,9	542,0	571,3	683,8	-	-	-	-	-
Peak current (LRA)	N	A	417,8	473,0	489,3	561,4	590,7	703,2	757,5	821,7	866,5	580,7 561,3 -	943,9
	U	A	398,4	453,6	469,9	542,0	571,3	683,8	732,2	802,3	847,1	895,5	924,5

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Туре	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Туре	-					On-Off					-
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R410A					
	A	kg	32,0	32,0	48,0	48,0	48,0	48,0	64,0	64,0	80,0	80,0	96,0
Refrigerant charge (1)	E,U	kg	48,0	48,0	48,0	64,0	64,0	64,0	80,0	96,0	96,0	112,0	112,0
	N	kg	64,0	64,0	64,0	80,0	80,0	80,0	96,0	112,0	112,0	128,0	128,0
Hydraulic connections		-											
Connections (in/out)	A,E,N,U	Туре						Grooved joints					
Hydraulic connections witho	ut hydronic kit							•					
Sizes (in/out)	A,E,N,U	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"
Hydraulic connections with I													
Sizes (in/out)	A,E,N,U	Ø	3"	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Sound data calculated in cooling mode (1)												
	Α	dB(A)	88,0	88,1	90,3	90,2	90,2	90,2	-	-	-	-	-
Cannad manner land	Е	dB(A)	85,0	85,1	85,1	86,5	86,5	86,5	-	-	-	-	-
Sound power level	N	dB(A)	86,5	86,6	86,6	87,7	87,7	87,7	88,7	90,0	90,5	91,7	92,2
	U	dB(A)	90,2	90,3	90,3	91,7	91,7	91,7	92,9	94,4	94,9	96,2	96,7
	Α	dB(A)	55,9	56,0	58,0	57,9	57,9	57,9	-	-	-	-	-
Cound proceure level (10 m)	Е	dB(A)	52,9	53,0	52,8	54,3	54,3	54,3	-	-	-	-	-
Sound pressure level (10 m)	N	dB(A)	54,4	54,5	54,4	55,4	55,4	55,4	56,3	57,6	58,0	59,2	59,6
	U	dB(A)	58,0	58,1	58,0	59,4	59,4	59,4	60,5	62,0	62,4	63,7	64,0

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B			0000	0700	1000	1100	1200	1400	1000	1003	2000	2200	2400
Fan													
	A,E	type	axials	axials	axials	axials	axials	axials		_	_	_	_
Туре		type	unuis	unuis	unuis	unuis	uxidis	axials					
	A	no.	4	4	6	6	6	6	-	-	_	-	-
	E	no.	6	6	6	8	8	8	-	-	_	-	-
Number	N	no.	8	8	8	10	10	10	12	14	14	16	16
	U	no.	6	6	6	8	8	8	10	12	12	14	14
	A	m³/h	57600	57600	86400	86400	86400	86400	-	-	-	-	-
A: 0	E	m³/h	64800	64800	64800	86400	86400	86400	-	-	-	-	-
Air flow rate	N	m³/h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m³/h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600
Size									4400	4005			
JIZC			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G Fan	A,E	type	0800 axials	axials	axials	axials	axials	axials	1600	1805	2006	- 2206	2406
Model: G	A,EN,U	type type											
Model: G Fan								axials					
Model: G Fan Type	N,U	type	axials	axials	axials	axials	axials	axials axials					
Model: G Fan	N,U A	type no.	axials 4	axials 4	axials 6	axials 6	axials 6	axials axials 6	-			-	- - - 16
Model: G Fan Type	N,U A E	type no. no. no.	axials 4 6	axials 4 6	axials 6 6	axials 6 8	axials 6 8	axials axials 6 8	-	-	-	-	-
Model: G Fan Type	N,U A E N	type no. no. no. no. mo. mo.	axials 4 6 8	axials 4 6 8	6 6 8	6 8 10	axials 6 8 10	axials axials 6 8	- - - 12	- - - 14	- - - 14	- - - 16	- - - 16
Model: G Fan Type Number	N,U A E N	type no. no. no.	axials 4 6 8 6	4 6 8 6	6 6 8 6	6 8 10 8	axials 6 8 10 8	axials axials 6 8 10	- - - 12 10	- - - 14 12	- - - 14 12	- - - 16 14	- - - 16 14
Model: G Fan Type	N,U A E N U A	type no. no. no. no. mo. mo.	axials 4 6 8 6 57600	axials 4 6 8 6 57600	6 6 8 6 8	6 8 10 8 86400	6 8 10 8 86400	axials axials 6 8 10 8	- - - 12 10	- - - 14 12	- - - 14 12	- - - 16 14 -	- - - 16 14

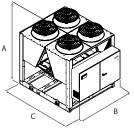
DIMENSIONS

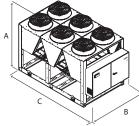
NRB 0800-0900 A

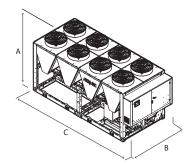
NRB 1000-1400 A NRB 0800-1000 E-U

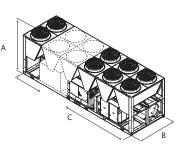
NRB 1100-1400 E-U NRB 0800-1000 N

NRB 1100-2406 N NRB 1600-2406 U









Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights													
Α	A,E	mm	2450	2450	2450	2450	2450	2450	-	-	-	-	-
A	N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
n	A,E	mm	2200	2200	2200	2200	2200	2200	-	-	-	-	-
Б	N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	mm	2780	2780	3970	3970	3970	3970	-	-	-	-	-
r	E	mm	3970	3970	3970	4760	4760	4760	-	-	-	-	-
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520
	U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330

■ For the weights please contact the factory.

 $\label{lem:continuous} \mbox{Aermec reserves the right to make any modifications deemed necessary.}$ All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRV 0550 F

Air-water chiller with free-cooling

Cooling capacity 99,9 ÷ 105,4 kW



- · Easy and quick to install compact
- · Reliability and modularity
- Microchannel coils



DESCRIPTION

NRV is comprised of independent 99.9 kW modules, that can be connected together up to a power of 900 kW. Each individual module is an outdoor chiller for the production of chilled water.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency **E** Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to 4°C .

Maximum yield at full load but even partial load, thanks to the partialisation steps that increase as the number of connected modules increases this ensures continuous adaptation to the actual system requirements.

Modularity

It is possible to couple up to 9 chillers designed to reduce the overall unit dimensions to a minimum.

The combination of the various chillers allows all the strengths of the individual module to be maintained.

Modularity allows you to adapt installation to the actual development needs of the system. This way the cooling capacity can be increased over time simply and affordably.

Modularity is essential when component redundancy is required, as it allows for a safer system design and increased reliability.

Microchannel coils

Microchannel heat exchanger that guarantees higher thermal exchange yield. Circuit that optimises the liquid distribution in the coil, which is arranged with V beam geometry with open angle.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode. Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Components

Already equipped with a water filter, differential pressure switch and butterfly check valves, useful to cut off the hydraulic circuit for maintenance; for instance, to clean the filter.

In the event of variable flow rate, the motorised hydronic valves can intercept one or more modules to reduce the flow rate in low heat load conditions

CONTROL PCO₅

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log. The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

Modalità Night Mode: it is possible to set a silenced operation profile.

Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERLINK: Wifi Gateway with an RS485 serial port that can be installed on all machines or on all controllers having an RS485 serial port themselves. The module is capable of simultaneously activating the AP WIFI (Access point) and WIFI Station functions, the latter making it possible to connect to the home or business LAN both with VMF-E5 and E6. To facilitate certain management and control operations of the unit, the AERAPP application is available both for Android and iOS systems.

FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.

GPNYB_BACK: kit with 1 anti-intrusion grid for the short side of the unit. **GPNYB_SIDE:** kit with 2 anti-intrusion grids for the long side of the unit. MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

KNYB: Pair of caps with grooved joints assembled on the unit manifold. **KREC:** Accessory kit to remote the electric power supply input to the back RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0550
AER485P1	A,E	•
AERBACP	A,E	•
AERLINK	A,E	•
FB1	A,E	•
GPNYB_BACK	A,E	•
GPNYB_SIDE	A,E	•
MULTICHILLER_EVO	A,E	•
PGD1	A,E	•

DRE: electronic device for peak current reduction

Ver	0550
A,E	DRE (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

KNYB: Pair of caps with grooved joints assembled on the unit manifold

Ver	0550
A,E	KNYB

A grey background indicates the accessory must be assembled in the factory

KREC: kit to remote the electric power supply input to the back

Ver	0550
A,E	KREC

A grey background indicates the accessory must be assembled in the factory

RIF: Power factor correction

Ver	0550	
A,E	RIF (1)	

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	NRV
4,5,6,7	Size 0550
8	Operating field
0	Standard mechanic thermostatic valve (1)
Х	Electronic thermostatic expansion valve
9	Model
F	Free-cooling
10	Heat recovery
0	Without heat recovery
D	With desuperheater
11	Version
Α	High efficiency
E	Silenced high efficiency

Field	Description						
12	Coils / free-cooling coils						
0	Alluminium microchannel / Copper - aluminium						
0	Painted alluminium microchannel / Copper painted aluminium						
R	Copper-copper/Copper-copper						
S	Copper-Tinned copper / Copper -Tinned copper						
٧	Copper-painted alumimium / Copper-painted alumimium						
13	Fans						
0	Standard						
J	Inverter						
14	Power supply						
0	400V ~ 3 50Hz with magnet circuit breakers						
15,16	Integrated hydronic kit						
00	Without hydronic kit						

⁽¹⁾ Water produced up to $+4\,^{\circ}\text{C}$

PERFORMANCE SPECIFICATIONS

NRV - FA/FE

Size			0550
Cooling performance chiller operatio	n (1)		
Cooling conscitu	A	kW	105,4
Cooling capacity	E	kW	99,9
Innut namer	A	kW	36,6
Input power	E	kW	38,2
Cooling total input current	A,E	A	65,0
EER	A	W/W	2,88
CCN	E	W/W	2,61
Water flow rate system side	A	l/h	18104
water now rate system side	E	l/h	17164
Pressure drop system side	A	kPa	31
riessule diop system side	E	kPa	27
Cooling performances with free-cool	ing (2)		
Cooling conscitu	A	kW	69,3
Cooling capacity	E	kW	57,7
Input nower	A	kW	3,7
Input power	E	kW	2,6
Free cooling total input current	A	A	6,7
riee cooling total input current	E	A	4,5
EER	A	W/W	18,48
LLN	E	W/W	21,98
Water flow rate system side	A	l/h	18104
water now rate system side	E	l/h	17164
Droccura dron custom cida	A	kPa	73
Pressure drop system side	E	kPa	66

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0550
SEER - 23/18 (EN14825: 2018) w	ith standard fans (1)		
C	A	%	184.2%
Seasonal efficiency	E	%	181.3%
SEER	A	W/W	4,68
JEEN	E	W/W	4,61
SEER - 23/18 (EN14825: 2018) w	ith inverter fans		
Concornal officioness	Α	%	191.5%
Seasonal efficiency	E	%	189.2%
CEED	A	W/W	4,86
SEER	E	W/W	4,81
SEPR - (EN14825: 2018) High ter	nperature with standard fans (1)		
CEDD	A	W/W	5,94
SEPR	E	W/W	5,60
SEPR - (EN14825: 2018) High ter	nperature with inverter fans (1)		
CEDD	A	W/W	5,94
SEPR	E	W/W	5,60

⁽¹⁾ Calculation performed with FIXED water flow rate.

ELECTRIC DATA

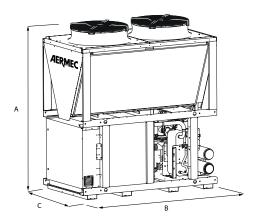
Size			0550
Electric data			
Maximum current (FLA)	A,E	A	95,6
Peak current (LRA)	A,E	A	280,6

GENERAL TECHNICAL DATA

Size			0550
Compressor			
Туре	A,E	type	Scroll
Number	A,E	no.	2
Circuits	A,E	no.	1
Refrigerant	A,E	type	R410A
System side heat exchanger			
Туре	A,E	type	Brazed plate
Number	A,E	no.	1
System side hydraulic connections	1		
Connections (in/out)	A,E	Туре	Grooved joints
Sizes (in/out)	A,E	Ø	6"
Fan			
Туре	A,E	type	axials
Fan motor	A,E	type	Asynchronous with phase cut
Number	A,E	no.	2
Air flow rate	A	m³/h	28600
Air now rate	E	m³/h	22000
Sound data calculated in cooling r	node (1)		
Causad manusus laural	A	dB(A)	86,9
Sound power level	E	dB(A)	81,8
Cound areasons lovel (10 m)	A	dB(A)	55,0
Sound pressure level (10 m)	E	dB(A)	49,9

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0550
Dimensions and weights			
A	A,E	mm	2480
В	A,E	mm	2200
(A,E	mm	1190
Empty weight	A,E	kg	1389























NSM 1402-9603 F

Air-water chiller with free-cooling

Cooling capacity 306 ÷ 2028 kW



- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- · High efficiency also at partial loads



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode. Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

 A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.

Electronic expansion valve

Electronic thermostatic as standard from size 5202 to 6402 and from 8403 to 9603.

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.

The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in
 the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x n° 2 (1)	A,E,N,U	•	.	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U	•	•	•		•		•		•		•	•		
AERNET	A,E,N,U	•	•	•				•		•		•			
MULTICHILLER_EVO	A,E,N,U	•	•	•		•	•	•				•	•		
PRV3	A,E,N,U	•	•	•	•		•	•	•	•	•	•		•	•
Model	Ver	4202	4502	4802	5202	5602	600	2 64	102 6	503	6703	6903	7203	8403	9603
AER485P1 x n° 2 (1)	A,E,N,U	•	•	•	•	•	•		•						
AER485P1 x n° 3 (1)	A,E,N,U									•	•			•	•
AERBACP	A,E,N,U	•	•	•	•				•		•		•	•	•
AERNET	A,E,N,U	•	•	•			•		•	•	•			•	•
MULTICHILLER_EVO	A,E,N,U	•	•						•	•					•
PRV3	A,E,N,U	•	•	•	•		•		•				•	•	•

⁽¹⁾ x Indicates the quantity of accessories to match.

Antivibration - NSM free - cooling

Alitivibration - NSM free	e - cooling													
Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00														
A	AVX929	AVX929	AVX929	AVX932	AVX933	AVX933	AVX933	AVX934	AVX937	AVX937	AVX937	AVX938	AVX938	AVX942
E,U	AVX929	AVX929	AVX930	AVX933	AVX933	AVX934	AVX934	AVX935	AVX935	AVX935	AVX935	AVX939	AVX939	AVX940
N	AVX930	AVX930	AVX931	AVX931	AVX934	AVX935	AVX935	AVX936	AVX936	AVX936	AVX936	AVX940	AVX941	AVX943
Ver	4202	4502	4802	5202	5602	6002	2 640)2	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00														
A	AVX942	AVX944	AVX944	AVX944	AVX94	5 AVX94	17 AVX	947 A	VX953	AVX953	AVX957	AVX954	AVX956	AVX955
E,U	AVX941	AVX945	AVX947	AVX947	AVX95	0 AVX95	52 AVX	948 A	VX954	AVX956	AVX956	AVX958	-	-
N	AVX943	AVX946	AVX948	AVX949	AVX95	1 AVX95	1 AVX	951 A	VX955	-	-	-	-	-

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E,U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Α	GP8V	GP9V	GP9V	GP9V	-	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E,U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V	GP6V+GP11V	-	_	_	-	_

The accessory cannot be fitted on the configurations indicated with -

A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	KRS22	KRS22	KRS23	KRS24	KRS24	KRS24								
E,N,U	KRS23	KRS24	KRS24	KRS24										

A grey background indicates the accessory must be assembled in the factory

	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Ī	A	KRS24	KRS24	KRS23	KRS23	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
	E,U	KRS24	KRS24	KRS23	KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
Ī	N	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A,E,U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description	
1,2,3	NSM	
4,5,6	, Size 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703 9603	
8	Operating field	
	° Standard mechanic thermostatic valve (1)	
	X Electronic thermostatic expansion valve (2)	
	Y Low temperature mechanic thermostatic valve (3)	
	Z Low temperature electronic thermostatic valve (3)	
9	Model	
	F Free-cooling	
	P Free-cooling plus (4)	
10	Heat recovery	
	° Without heat recovery	
	D With desuperheater	
11	Version	
	A High efficiency	
	E Silenced high efficiency	
	N Silenced very high efficiency	
	U Very high efficiency	
12	Coils / free-cooling coils	
	° Alluminium microchannel / Copper - aluminium	
	l Copper-aluminium / Copper-aluminium	
	O Painted alluminium microchannel / Copper painted aluminium	n
	R Copper-copper/Copper-copper	
	S Copper-Tinned copper / Copper -Tinned copper	
	V Copper-painted alumimium / Copper-painted alumimium	
13	Fans	
	° Standard	
	J Inverter	
14	Power supply	
	° 400V ~ 3 50Hz with fuses	
	2 230V ~ 3 50Hz with fuses (5)	

Field	Description
	Description (5)
4	230V ~ 3 50Hz with magnet circuit breakers (5)
8	400V ~ 3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
00	Without hydronic kit
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (6)
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (6)
TF	Double pump F (7)
TG	Double pump G (7)
TH	Double pump H (7)
TI	Double pump I (7)
TJ	Double pump J (7)

- (1) Water produced from 4 °C ÷ 15 °C
 (2) Water produced from 4 °C ÷ 18 °C
 (3) Water produced from 4 °C ÷ -6 °C
 (4) The Free-Cooling Plus "P" models are only compatible with"o" ed "0"
 (5) available only for size from 1402 to 2202
 (6) For all configurations including pump J please contact the factory.
 (7) The unit from 5603 to 9603 can only have hydronic kit "TF TG TH-TI TJ"

NSM-1402-9603-FC_Y_UN50_05 640 www.aermec.com

PERFORMANCE SPECIFICATIONS

NSM - A

NOW - A															
Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	306,5	350,2	396,8	450,5	505,3	522,5	556,5	600,8	649,8	678,4	726,3	813,3	872,8	954,1
Input power	kW	102,8	117,6	136,7	158,3	168,9	180,5	194,5	203,0	220,4	235,0	252,8	269,7	295,6	317,9
Cooling total input current	А	182,3	206,2	230,6	268,0	291,3	311,4	335,2	351,3	378,4	400,0	426,5	450,9	486,5	530,4
EER	W/W	2,98	2,98	2,90	2,85	2,99	2,90	2,86	2,96	2,95	2,89	2,87	3,02	2,95	3,00
Water flow rate system side	l/h	52654	60163	68174	77407	86812	89765	95621	103224	111642	116561	124785	139737	149958	163932
Pressure drop system side	kPa	45	59	54	36	45	48	54	63	67	73	65	43	50	61
Cooling performances with free-cooling (2)															
Cooling capacity	kW	347,7	362,0	373,1	381,9	468,1	471,2	476,5	560,7	569,1	573,2	578,8	671,5	677,9	770,2
Input power	kW	15,0	15,0	15,0	15,0	18,7	18,7	18,7	22,5	22,5	22,5	22,5	26,2	26,2	30,0
Free cooling total input current	А	30,4	30,4	30,4	30,4	38,0	38,0	38,0	45,6	45,6	45,6	45,6	53,2	53,2	60,8
EER	W/W	23,18	24,14	24,88	25,47	24,97	25,14	25,42	24,93	25,30	25,48	25,73	25,59	25,83	25,68
Water flow rate system side	l/h	60230	68250	77490	86910	89860	95730	103340	111770	116690	124920	139890	150120	164110	171460
Pressure drop system side	kPa	66	86	85	76	78	84	95	98	107	116	113	87	99	107
(4) 5 · · · · · · · · · · · · · · · · · ·	1 : 250		400		1: 00/										

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

<u> </u>		4400	4400	4000		2202		2502	2452		2002		2402	2/02	
Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	305,8	349,3	395,0	447,3	502,1	519,1	552,6	597,2	645,4	674,3	721,9	807,8	865,0	946,8
Input power	kW	103,7	118,8	138,1	160,2	170,8	182,6	197,0	205,3	223,1	238,4	257,1	273,3	299,3	321,8
Cooling total input current	A	182,3	206,2	230,6	268,0	291,3	311,4	335,2	351,3	378,4	400,0	426,5	450,9	486,5	530,4
EER	W/W	2,95	2,94	2,86	2,79	2,94	2,84	2,81	2,91	2,89	2,83	2,81	2,96	2,89	2,94
Water flow rate system side	l/h	52546	60019	67864	76853	86266	89180	94948	102598	110891	115859	124023	138789	148609	162675
Pressure drop system side	kPa	45	59	54	36	45	48	54	63	67	73	65	43	50	61
Cooling performances with free-cooling (2)															
Cooling capacity	kW	371,8	388,1	400,1	409,1	501,9	505,2	510,5	601,2	610,0	614,2	619,7	719,2	725,2	824,6
Input power	kW	15,2	15,2	15,2	15,2	19,0	19,0	19,0	22,9	22,9	22,9	22,9	26,7	26,7	30,5
Free cooling total input current	A	30,7	30,7	30,7	30,7	38,4	38,4	38,4	46,1	46,1	46,1	46,1	53,7	53,7	61,4
EER	W/W	24,41	25,48	26,27	26,86	26,36	26,53	26,81	26,31	26,69	26,88	27,12	26,98	27,20	27,07
Water flow rate system side	l/h	52710	60230	68250	77490	86910	89860	95730	103340	111770	116690	124920	139890	150120	164110
Pressure drop system side	kPa	66	86	86	76	79	84	95	98	107	117	114	87	100	108

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/7 °C; External air 2 °C

NSM - A

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	996,8	1082,3	1128,3	1167,3	1222,8	1304,9	1346,7	1459,2	1501,9	1659,0	1705,0	1838,1	2028,1
Input power	kW	346,1	365,7	391,9	422,5	438,9	452,7	472,4	492,1	520,2	557,2	583,3	659,0	704,1
Cooling total input current	Α	581,4	614,0	654,6	703,8	733,3	761,1	795,9	821,1	872,1	945,1	985,8	1100,0	1197,7
EER	W/W	2,88	2,96	2,88	2,76	2,79	2,88	2,85	2,97	2,89	2,98	2,92	2,79	2,88
Water flow rate system side	l/h	171269	185947	193855	200561	210092	224201	231379	250713	258050	285029	292937	315803	348457
Pressure drop system side	kPa	66	81	88	75	82	96	102	61	66	81	88	82	102
Cooling performances with free-cooling (2)														
Cooling capacity	kW	774,7	867,5	872,2	875,9	966,0	1058,3	1062,8	1158,4	1162,7	1346,7	1351,7	1449,5	1636,8
Input power	kW	30,0	33,7	33,7	33,7	37,5	41,2	41,2	45,0	45,0	52,5	52,5	56,2	63,7
Free cooling total input current	Α	60,8	68,4	68,4	68,4	76,0	83,6	83,6	91,2	91,2	106,4	106,4	114,0	129,2
EER	W/W	25,83	25,71	25,85	25,96	25,77	25,66	25,77	25,75	25,85	25,66	25,75	25,78	25,68
Water flow rate system side	l/h	186150	194070	200780	210330	224450	231640	250990	258340	285350	293260	316150	348840	348457
Pressure drop system side	kPa	117	130	141	131	134	145	154	107	117	130	141	134	154

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	988,7	1074,2	1119,1	1156,4	1212,7	1295,2	1336,2	1447,7	1489,6	1646,9	1691,9	1822,8	2013,1
Input power	kW	350,6	370,3	397,1	428,3	444,3	458,0	478,2	498,2	527,1	564,0	590,8	667,0	712,4
Cooling total input current	Α	581,4	614,0	654,6	703,8	733,3	761,1	795,9	821,1	872,1	945,1	985,8	1100,0	1197,7
EER	W/W	2,82	2,90	2,82	2,70	2,73	2,83	2,79	2,91	2,83	2,92	2,86	2,73	2,83
Water flow rate system side	l/h	169873	184553	192278	198678	208362	222522	229577	248739	255936	282961	290686	313186	345875
Pressure drop system side	kPa	66	81	88	75	82	96	102	61	66	81	88	82	102
Cooling performances with free-cooling (2)														
Cooling capacity	kW	828,9	928,7	933,1	936,5	1033,8	1133,1	1137,4	1239,8	1243,9	1442,0	1446,8	1551,1	1752,4
Input power	kW	30,5	34,3	34,3	34,3	38,1	41,9	41,9	45,7	45,7	53,3	53,3	57,1	64,7
Free cooling total input current	Α	61,4	69,1	69,1	69,1	76,8	84,5	84,5	92,1	92,1	107,5	107,5	115,2	130,5
EER	W/W	27,21	27,09	27,22	27,32	27,15	27,05	27,15	27,13	27,22	27,04	27,13	27,15	27,07
Water flow rate system side	l/h	171460	186150	194070	200780	210330	224450	231640	250990	258340	285350	293260	316150	348840
Pressure drop system side	kPa	117	130	141	131	134	146	155	108	117	130	141	134	155

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

NSM - E

113/11 -															
Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	319,8	365,8	417,7	473,0	509,1	549,8	568,8	618,6	646,3	675,1	715,5	796,7	851,7	929,6
Input power	kW	105,5	123,3	137,5	159,4	178,3	183,3	195,5	205,2	220,4	235,9	253,5	270,8	297,1	320,1
Cooling total input current	Α	177,3	205,7	223,1	261,0	294,5	304,8	325,9	341,6	365,4	388,5	414,7	437,5	474,1	516,8
EER	W/W	3,03	2,97	3,04	2,97	2,85	3,00	2,91	3,01	2,93	2,86	2,82	2,94	2,87	2,90
Water flow rate system side	l/h	54946	62848	71763	81260	87462	94455	97732	106280	111041	115993	122937	136886	146332	159723
Pressure drop system side	kPa	33	37	32	37	43	50	54	53	58	64	64	43	49	60
Cooling performances with free-cooling (2)															
Cooling capacity	kW	308,8	317,5	389,9	399,1	403,2	476,4	479,1	552,1	556,5	560,4	564,7	643,3	648,3	727,0
Input power	kW	11,0	11,0	13,7	13,7	13,7	16,5	16,5	19,2	19,2	19,2	19,2	22,0	22,0	24,7
Free cooling total input current	Α	15,9	15,9	19,9	19,9	19,9	23,9	23,9	27,9	27,9	27,9	27,9	31,8	31,8	35,8
EER	W/W	28,07	28,87	28,36	29,03	29,33	28,88	29,04	28,69	28,91	29,11	29,34	29,25	29,47	29,38
Water flow rate system side	l/h	55010	62920	71840	81350	87560	94560	97840	106400	111160	116120	123070	137040	146490	159900
Pressure drop system side	kPa	56	67	56	68	78	80	85	82	90	98	102	77	88	97

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

	heat exchanger 12	

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	316,7	363,1	414,5	469,5	504,1	545,4	564,0	613,8	640,8	669,8	710,9	790,6	843,5	921,3
Input power	kW	106,6	124,7	138,6	161,1	181,0	185,4	197,8	207,6	223,1	239,2	257,8	274,6	301,1	324,4
Cooling total input current	A	177,3	205,7	223,1	261,0	294,5	304,8	325,9	341,6	365,4	388,5	414,7	437,5	474,1	516,8
EER	W/W	2,97	2,91	2,99	2,91	2,79	2,94	2,85	2,96	2,87	2,80	2,76	2,88	2,80	2,84
Water flow rate system side	l/h	54406	62391	71215	80666	86616	93710	96909	105464	110105	115087	122135	135840	144915	158291
Pressure drop system side	kPa	33	37	32	37	43	50	54	54	59	64	65	43	49	60
Cooling performances with free-cooling (2)															
Cooling capacity	kW	328,8	338,7	415,7	425,8	429,8	508,2	511,0	589,0	593,7	597,7	602,1	686,0	690,6	774,8
Input power	kW	11,2	11,2	13,9	13,9	13,9	16,7	16,7	19,5	19,5	19,5	19,5	22,3	22,3	25,1
Free cooling total input current	А	16,1	16,1	20,1	20,1	20,1	24,1	24,1	28,1	28,1	28,1	28,1	32,2	32,2	36,2
EER	W/W	29,48	30,36	29,81	30,53	30,82	30,37	30,54	30,17	30,41	30,62	30,84	30,75	30,95	30,87
Water flow rate system side	l/h	55010	62920	71840	81350	87560	94560	97840	106400	111160	116120	123070	137040	146490	159900
Pressure drop system side	kPa	57	67	57	68	78	80	86	83	90	98	103	77	88	98

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	995,2	1051,6	1137,0	1159,2	1217,3	1279,4	1341,6	1434,0	1499,6	1598,6	1684,0	-	-
Input power	kW	339,9	370,0	389,4	418,0	436,6	448,9	461,2	491,1	510,9	568,9	588,3	-	-
Cooling total input current	Α	554,8	601,5	631,6	677,8	708,4	731,9	755,4	803,9	832,3	923,9	945,4	-	-
EER	W/W	2,93	2,84	2,92	2,77	2,79	2,85	2,91	2,92	2,93	2,81	2,86	-	-
Water flow rate system side	I/h	170980	180685	195353	199172	209139	219823	230507	246385	257643	274665	289333	-	-
Pressure drop system side	kPa	68	79	73	76	67	72	82	60	68	79	73	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	804,0	809,4	888,6	890,5	967,2	1043,7	1119,7	1129,8	1206,8	1215,8	1295,1	-	-
Input power	kW	27,5	27,5	30,2	30,2	33,0	35,7	38,5	38,5	41,2	41,2	44,0	-	-
Free cooling total input current	Α	39,8	39,8	43,8	43,8	47,8	51,7	55,7	55,7	59,7	59,7	63,7	-	-
EER	W/W	29,24	29,44	29,38	29,44	29,31	29,20	29,09	29,35	29,26	29,48	29,44	-	-
Water flow rate system side	I/h	171170	180890	195570	199390	209370	220070	230760	246660	257930	274970	289650	-	-
Pressure drop system side	kPa	104	119	113	117	107	110	119	97	104	119	113	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	987,5	1041,9	1127,1	1148,0	1206,7	1269,3	1332,0	1421,7	1487,9	1583,2	1668,4	-	-
Input power	kW	344,2	375,3	394,8	424,0	442,2	454,4	466,6	497,6	517,4	577,4	596,8	-	-
Cooling total input current	A	554,8	601,5	631,6	677,8	708,4	731,9	755,4	803,9	832,3	923,9	945,4	-	-
EER	W/W	2,87	2,78	2,86	2,71	2,73	2,79	2,85	2,86	2,88	2,74	2,80	-	-
Water flow rate system side	I/h	169667	179011	193652	197235	207320	218083	228845	244269	255645	272005	286645	-	-
Pressure drop system side	kPa	69	80	74	76	68	72	82	60	69	80	74	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	857,5	862,4	947,1	948,8	1031,1	1113,1	1194,5	1204,3	1286,9	1295,0	1379,9	-	-
Input power	kW	27,9	27,9	30,7	30,7	33,5	36,3	39,0	39,0	41,8	41,8	44,6	-	-
Free cooling total input current	A	40,2	40,2	44,2	44,2	48,2	52,3	56,3	56,3	60,3	60,3	64,3	-	-
EER	W/W	30,74	30,92	30,87	30,92	30,81	30,70	30,59	30,84	30,76	30,95	30,92	-	-
Water flow rate system side	l/h	171170	180890	195570	199390	209370	220070	230760	246660	257930	274970	289650	-	-
Pressure drop system side	kPa	105	119	113	117	107	111	120	98	105	119	113	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

NSM - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	328,1	378,5	429,3	491,9	531,3	568,6	589,0	638,0	667,8	695,1	735,8	824,8	891,0	967,9
Input power	kW	105,3	121,3	136,2	155,8	172,9	180,0	191,0	202,4	216,1	228,4	242,4	263,0	288,2	311,5
Cooling total input current	Α	185,8	211,5	232,0	266,3	297,1	312,9	332,3	352,6	374,2	392,3	413,0	442,7	477,2	522,6
EER	W/W	3,12	3,12	3,15	3,16	3,07	3,16	3,08	3,15	3,09	3,04	3,04	3,14	3,09	3,11
Water flow rate system side	l/h	56372	65027	73755	84508	91287	97691	101204	109611	114731	119418	126414	141715	153088	166304
Pressure drop system side	kPa	35	39	34	40	46	53	57	57	62	68	68	46	53	65
Cooling performances with free-cooling (2)															
Cooling capacity	kW	356,2	369,9	451,2	466,4	473,4	555,1	559,4	641,6	648,6	654,2	661,5	753,3	763,5	854,0
Input power	kW	15,0	15,0	18,7	18,7	18,7	22,5	22,5	26,2	26,2	26,2	26,2	30,0	30,0	33,7
Free cooling total input current	Α	30,4	30,4	38,0	38,0	38,0	45,6	45,6	53,2	53,2	53,2	53,2	60,8	60,8	68,4
EER	W/W	23,76	24,67	24,07	24,88	25,26	24,68	24,87	24,45	24,71	24,93	25,21	25,12	25,46	25,31
Water flow rate system side	l/h	56430	65100	73840	84600	91390	97800	101320	109730	114860	119550	126550	141870	153260	166490
Pressure drop system side	kPa	59	71	60	73	85	85	92	88	96	104	108	82	96	105

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,9	376,7	427,6	488,8	527,6	565,4	585,6	634,6	664,0	691,7	732,5	820,3	884,7	961,8
Input power	kW	106,3	122,5	137,6	157,4	174,8	181,8	193,0	204,4	218,3	231,1	245,7	266,0	291,3	314,8
Cooling total input current	Α	185,8	211,5	232,0	266,3	297,1	312,9	332,3	352,6	374,2	392,3	413,0	442,7	477,2	522,6
EER	W/W	3,08	3,07	3,11	3,10	3,02	3,11	3,03	3,10	3,04	2,99	2,98	3,08	3,04	3,06
Water flow rate system side	l/h	56168	64715	73458	83974	90642	97138	100613	109029	114089	118834	125850	140933	152002	165249
Pressure drop system side	kPa	35	40	34	40	47	54	58	57	63	68	69	46	54	65
Cooling performances with free-cooling (2)															
Cooling capacity	kW	381,5	396,7	483,5	500,0	507,4	595,1	599,9	687,8	695,4	701,6	709,4	807,7	818,0	915,4
Input power	kW	15,2	15,2	19,0	19,0	19,0	22,9	22,9	26,7	26,7	26,7	26,7	30,5	30,5	34,3
Free cooling total input current	Α	30,7	30,7	38,4	38,4	38,4	46,1	46,1	53,7	53,7	53,7	53,7	61,4	61,4	69,1
EER	W/W	25,04	26,04	25,39	26,26	26,65	26,05	26,25	25,80	26,09	26,32	26,61	26,51	26,85	26,71
Water flow rate system side	l/h	56430	65100	73840	84600	91390	97800	101320	109730	114860	119550	126550	141870	153260	166490
Pressure drop system side	kPa	60	72	60	74	85	86	92	88	96	104	109	83	96	106

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

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Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1031,1	1095,0	1181,2	1208,8	1265,8	1326,2	1386,6	1491,1	1554,3	1666,6	1752,7	-	-
Input power	kW	332,0	358,4	379,0	405,3	426,4	440,0	453,5	478,4	498,9	549,8	570,4	-	-
Cooling total input current	A	564,1	604,8	638,6	681,5	718,3	746,0	773,7	811,6	846,2	926,2	954,2	-	-
EER	W/W	3,11	3,06	3,12	2,98	2,97	3,01	3,06	3,12	3,12	3,03	3,07	-	-
Water flow rate system side	I/h	177155	188137	202935	207692	217477	227858	238239	256194	267046	286336	301135	-	-
Pressure drop system side	kPa	74	86	79	83	73	77	87	64	74	86	79	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	941,7	951,8	1043,5	1047,6	1134,8	1221,6	1307,8	1326,2	1413,8	1431,0	1522,9	-	-
Input power	kW	37,5	37,5	41,2	41,2	45,0	48,7	52,5	52,5	56,2	56,2	60,0	-	-
Free cooling total input current	A	76,0	76,0	83,6	83,6	91,2	98,8	106,4	106,4	114,0	114,0	121,6	-	-
EER	W/W	25,12	25,39	25,30	25,40	25,22	25,07	24,92	25,27	25,14	25,45	25,39	-	-
Water flow rate system side	l/h	177350	188350	203160	207920	217720	228110	238500	256480	267340	286650	301470	-	-
Pressure drop system side	kPa	112	129	122	127	115	119	128	105	112	129	122	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2)	Contain side contain	L 4 1 1	°C / * °C; External air 2°C
(-/	System side mater	meat extendinger in	c) c/ Enterman and E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1025,3	1088,1	1174,0	1200,9	1257,9	1318,5	1379,2	1482,0	1545,4	1655,7	1741,6	-	-
Input power	kW	335,5	362,4	383,1	409,7	430,7	444,3	457,9	483,4	504,1	556,1	576,8	-	-
Cooling total input current	Α	564,1	604,8	638,6	681,5	718,3	746,0	773,7	811,6	846,2	926,2	954,2	-	-
EER	W/W	3,06	3,00	3,06	2,93	2,92	2,97	3,01	3,07	3,07	2,98	3,02	-	-
Water flow rate system side	l/h	176150	186945	201699	206322	216119	226541	236963	254617	265517	284475	299229	-	-
Pressure drop system side	kPa	74	86	79	83	73	78	88	65	74	86	80	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	1009,7	1020,0	1118,5	1122,6	1216,5	1309,9	1402,4	1421,6	1515,9	1533,4	1632,1	-	-
Input power	kW	38,1	38,1	41,9	41,9	45,7	49,5	53,3	53,3	57,1	57,1	60,9	-	-
Free cooling total input current	Α	76,8	76,8	84,5	84,5	92,1	99,8	107,5	107,5	115,2	115,2	122,8	-	-
EER	W/W	26,51	26,78	26,70	26,80	26,62	26,46	26,30	26,66	26,54	26,84	26,78	-	-
Water flow rate system side	l/h	177350	188350	203160	207920	217720	228110	238500	256480	267340	286650	301470	-	-
Pressure drop system side	kPa	113	129	122	128	116	119	128	106	113	130	123	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

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Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F	-														
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,0	376,5	424,5	486,3	525,3	559,6	579,7	626,1	655,1	682,6	723,4	811,7	888,8	960,7
Input power	kW	103,6	119,3	134,4	153,8	170,9	178,3	189,4	200,8	214,8	227,9	242,9	263,8	283,0	307,1
Cooling total input current	A	174,8	199,9	218,4	252,6	283,3	297,4	316,9	335,2	357,1	376,5	398,7	426,6	452,0	496,6
EER	W/W	3,15	3,16	3,16	3,16	3,07	3,14	3,06	3,12	3,05	3,00	2,98	3,08	3,14	3,13
Water flow rate system side	l/h	56017	64687	72926	83554	90260	96150	99597	107568	112546	117285	124287	139460	152703	165051
Pressure drop system side	kPa	34	39	33	39	45	52	55	55	60	65	66	44	53	64
Cooling performances with free-cooling (2)															
Cooling capacity	kW	365,1	381,0	449,3	465,6	473,2	541,5	545,8	615,7	622,3	627,8	634,7	713,7	791,0	867,2
Input power	kW	13,7	13,7	16,5	16,5	16,5	19,2	19,2	22,0	22,0	22,0	22,0	24,7	27,5	30,2
Free cooling total input current	A	19,9	19,9	23,9	23,9	23,9	27,9	27,9	31,8	31,8	31,8	31,8	35,8	39,8	43,8
EER	W/W	26,56	27,71	27,24	28,22	28,69	28,13	28,36	27,99	28,29	28,54	28,86	28,84	28,77	28,67
Water flow rate system side	I/h	56080	64760	73010	83650	90360	96260	99710	107690	112670	117420	124420	139610	152870	165230
Pressure drop system side	kPa	51	61	51	63	73	76	82	79	87	94	98	74	83	93
(1) System side water heat exchanger 12 °C/7 °C: Ex	ternal air 35 °C	: Chiller op	eration 100	%: Free-coo	lina 0%										

⁽¹⁾ System side water heat exchanger 12 °C/ °C; External air 35 °C;(2) System side water heat exchanger 12 °C /* °C; External air 2°C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	325,1	375,2	422,9	483,6	522,0	556,8	576,7	623,1	651,8	679,6	720,3	807,0	882,8	955,1
Input power	kW	104,5	120,4	135,6	155,5	172,9	180,2	191,5	202,9	217,2	230,8	246,4	267,1	286,2	310,3
Cooling total input current	A	174,8	199,9	218,4	252,6	283,3	297,4	316,9	335,2	357,1	376,5	398,7	426,6	452,0	496,6
EER	W/W	3,11	3,12	3,12	3,11	3,02	3,09	3,01	3,07	3,00	2,94	2,92	3,02	3,09	3,08
Water flow rate system side	l/h	55859	64457	72661	83082	89692	95662	99076	107055	111979	116764	123749	138653	151682	164102
Pressure drop system side	kPa	35	39	33	39	46	52	56	55	61	66	67	45	54	64
Cooling performances with free-cooling (2)															
Cooling capacity	kW	387,5	406,1	478,1	496,6	505,0	577,5	582,4	656,5	663,9	670,1	677,6	761,7	844,0	925,5
Input power	kW	13,9	13,9	16,7	16,7	16,7	19,5	19,5	22,3	22,3	22,3	22,3	25,1	27,9	30,7
Free cooling total input current	А	20,1	20,1	24,1	24,1	24,1	28,1	28,1	32,2	32,2	32,2	32,2	36,2	40,2	44,2
EER	W/W	27,79	29,12	28,57	29,68	30,18	29,58	29,83	29,42	29,75	30,03	30,37	30,35	30,26	30,16
Water flow rate system side	I/h	56080	64760	73010	83650	90360	96260	99710	107690	112670	117420	124420	139610	152870	165230
Pressure drop system side	kPa	52	62	52	64	74	77	82	80	87	94	99	75	83	94

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

NSM - N

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1004,9	1098,6	1161,7	1218,0	1274,5	1318,1	1361,6	1478,4	-	-	-	-	-
Input power	kW	332,9	349,5	369,2	392,7	416,2	433,5	450,9	472,0	-	-	-	-	-
Cooling total input current	A	544,1	569,7	600,1	638,5	677,0	708,3	739,7	770,6	-	-	-	-	-
EER	W/W	3,02	3,14	3,15	3,10	3,06	3,04	3,02	3,13	-	-	-	-	-
Water flow rate system side	I/h	172652	188754	199587	209274	218966	226457	233947	254013	-	-	-	-	-
Pressure drop system side	kPa	70	71	84	88	74	78	85	64	-	-	-	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	874,3	1018,1	1092,1	1164,5	1236,6	1246,2	1254,9	1339,1	-	-	-	-	-
Input power	kW	30,2	35,7	38,5	41,2	44,0	44,0	44,0	46,7	-	-	-	-	-
Free cooling total input current	Α	43,8	51,7	55,7	59,7	63,7	63,7	63,7	67,7	-	-	-	-	-
EER	W/W	28,91	28,48	28,37	28,24	28,11	28,33	28,52	28,65	-	-	-	-	-
Water flow rate system side	l/h	172840	188960	199810	209510	219210	226710	234210	254300	-	-	-	-	-
Pressure drop system side	kPa	102	100	114	117	103	109	118	93	-	-	-	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	998,8	1092,7	1155,6	1211,7	1267,7	1310,9	1354,2	1470,0	-	-	-	-	-
Input power	kW	336,7	353,2	373,0	396,5	420,0	437,6	455,3	476,9	-	-	-	-	-
Cooling total input current	A	544,1	569,7	600,1	638,5	677,0	708,3	739,7	770,6	-	-	-	-	-
EER	W/W	2,97	3,09	3,10	3,06	3,02	3,00	2,97	3,08	-	-	-	-	-
Water flow rate system side	l/h	171604	187733	198553	208183	217806	225235	232663	252555	-	-	-	-	-
Pressure drop system side	kPa	70	71	85	89	75	78	85	64	-	-	-	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	933,0	1086,4	1165,3	1242,2	1318,7	1329,5	1339,1	1429,1	-	-	-	-	-
Input power	kW	30,7	36,3	39,0	41,8	44,6	44,6	44,6	47,4	-	-	-	-	-
Free cooling total input current	A	44,2	52,3	56,3	60,3	64,3	64,3	64,3	68,3	-	-	-	-	-
EER	W/W	30,41	29,96	29,84	29,69	29,55	29,79	30,01	30,14	-	-	-	-	-
Water flow rate system side	l/h	172840	188960	199810	209510	219210	226710	234210	254300	-	-	-	-	-
Pressure drop system side	kPa	102	101	114	118	104	109	118	94	-	-	-	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

ENERGY INDICES (RE	EG. 2010/22	ol EU)	4402	4400	4000	2002	2222	2252	2502	245	2000	2002	2202	2405	2405	
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F		16 (5)														
SEPR - (EN14825: 2018) High temp	erature with stand						. = 0									
	A	W/W	7,41	7,05	6,65	6,29	6,78	6,52	6,34	6,73	6,56	6,31	6,10	6,55	6,32	6,50
SEPR	E	W/W	7,22	6,77	7,10	6,65	6,30	6,89	6,59	6,81	6,69	6,42	6,09	6,28	6,23	6,44
	N	W/W	7,68	7,36	7,56	7,20	6,78	7,10	6,94	7,15	6,90	6,67	6,45	6,78	6,94	6,93
	U	W/W	7,50	7,13	7,47	7,13	6,79	7,22	6,97	7,28	7,03	6,82	6,62	6,97	6,75	6,86
SEPR - (EN14825: 2018) High temp	erature with invert															
	A	W/W	7,41	7,05	6,65	6,29	6,78	6,52	6,34	6,73	6,56	6,31	6,10	6,55	6,32	6,50
SEPR	E	W/W	7,22	6,77	7,10	6,65	6,30	6,89	6,59	6,81	6,69	6,42	6,09	6,28	6,23	6,44
JLIII	N	W/W	7,68	7,36	7,56	7,20	6,78	7,10	6,94	7,15	6,90	6,67	6,45	6,78	6,94	6,93
	U	W/W	7,50	7,13	7,47	7,13	6,79	7,22	6,97	7,28	7,03	6,82	6,62	6,97	6,75	6,86
(1) Calculation performed with FIXED) water flow rate.															
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P																
SEPR - (EN14825: 2018) High temp	erature with stand	ard fans (1)														
	A	W/W	7,38	7,12	6,67	6,25	6,79	6,49	6,27	6,71	6,49	6,23	5,99	6,51	6,26	6,44
CEDD	E	W/W	7,25	6,73	7,15	6,60	6,20	6,83	6,51	6,84	6,61	6,31	5,99	6,46	6,22	6,34
SEPR	N	W/W	7,71	7,39	7,62	7,22	6,83	7,18	6,91	7,16	6,88	6,63	6,39	6,75	6,90	6,88
	U	W/W	7,57	7,17	7,56	7,16	6,77	7,23	6,97	7,30	7,02	6,78	6,56	6,97	6,71	6,81
SEPR - (EN14825: 2018) High temp	erature with invert	er fans (1)														
	A	W/W	7,38	7,12	6,67	6,25	6,79	6,49	6,27	6,71	6,49	6,23	5,99	6,51	6,26	6,44
crop.	E	W/W	7,25	6,73	7,15	6,60	6,20	6,83	6,51	6,84	6,61	6,31	5,99	6,46	6,22	6,34
SEPR	N	W/W	7,71	7,39	7,62	7,22	6,83	7,18	6,91	7,16	6,88	6,63	6,39	6,75	6,90	6,88
	U	W/W	7,57	7.17	7,56	7,16	6,77	7,23	6,97	7,30	7.02	6,78	6,56	6,97	6,71	6,81
(1) Calculation performed with FIXED) water flow rate.				,,,,,	, .	-,			, , , , ,	,		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Size			4202	4502	4802	5202	5602	2 600)2 64	402	6503	6703	6903	7203	8403	9603
Model: F																
SEPR - (EN14825: 2018) High temp	erature with stand	ard fans (1)														
	A	W/W	6,18	6,40	6,17	5,87	6,04	6,2	4 6	,13	6,61	6,38	6,69	6,52	6,18	6,44
	E	W/W	6,52	6,28	6,63	5,98	6,02				6,72	6,84	6,22	6,46	-	
SEPR	N	W/W	6,65	6,88	7,12	7,03	6,96				7,28	-	-	-	-	
	U	W/W	6,92	6,60	7,04	6,52	6,54				7.17	7,22	6,87	7,00	-	_
SEPR - (EN14825: 2018) High temp	erature with invert	,	0//2	0,00	.,01	0,32	3/31	3,0	- 0	,	.,	- /	3,01	,,,,,		
	Λ	W/W	6,18	6,40	6,17	5,87	6,04	6,2	4 6	,13	6,61	6,38	6,69	6,52	6,18	6,44
									. 0	,	0,01	0,50	3,07	0,52	0,10	v, 17
	F				6.63	5 98	6.02	6.1	9 6	49	6.72	6.84	6.22	6.46	_	_
SEPR	E	W/W W/W	6,52 6,65	6,28	6,63 7,12	5,98 7,03	6,02				6,72 7,28	6,84	6,22	6,46	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P															
SEPR - (EN14825: 2018) High temperatur	e with stand	ard fans (1)													
	Α	W/W	6,09	6,31	6,06	5,76	5,95	6,14	6,01	6,57	6,32	6,64	6,44	6,13	6,37
SEPR	E	W/W	6,43	6,15	6,50	5,86	5,94	6,11	6,40	6,66	6,78	6,12	6,37	-	-
SERK	N	W/W	6,59	7,00	7,07	6,99	6,94	6,81	6,68	7,25	-	-	-	-	-
	U	W/W	6,89	6,70	6,99	6,45	6,50	6,66	6,80	7,15	7,19	6,83	6,96	-	-
SEPR - (EN14825: 2018) High temperatur	e with invert	er fans (1)													
	Α	W/W	6,09	6,31	6,06	5,76	5,95	6,14	6,01	6,57	6,32	6,64	6,44	6,13	6,37
SEPR	E	W/W	6,43	6,15	6,50	5,86	5,94	6,11	6,40	6,66	6,78	6,12	6,37	-	-
SERK	N	W/W	6,59	7,00	7,07	6,99	6,94	6,81	6,68	7,25	-	-	-	-	-
	U	W/W	6,89	6,70	6,99	6,45	6,50	6,66	6,80	7,15	7,19	6,83	6,96	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate.

ELECTRIC DATA

ELECTRIC DATA																
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
	A	Α	243,9	271,9	299,1	332,5	374,4	395,7	417,0	450,2	474,9	474,9	474,9	531,4	579,4	635,9
Maximum current (FLA)	E,U	Α	243,9	271,9	307,6	341,0	374,4	404,2	425,5	458,7	483,4	483,4	483,4	539,9	587,9	644,4
	N	Α	252,4	280,4	316,1	349,5	382,9	412,7	434,0	467,2	491,9	491,9	491,9	548,4	604,9	667,2
	A	Α	265,5	307,3	350,2	388,2	419,8	466,8	484,0	519,5	529,4	529,4	529,4	661,9	701,8	831,3
Peak current (LRA)	E,U	Α	265,5	307,3	358,7	396,7	419,8	475,3	492,5	528,0	537,9	537,9	537,9	670,4	710,3	839,8
	N	Α	274,0	315,8	367,2	405,2	428,3	483,8	501,0	536,5	546,4	546,4	546,4	678,9	727,3	862,6
Size			4202	4502	4802	5202	5602	2 600)2 6	402	6503	6703	6903	7203	8403	9603
Electric data																
	A	А	683,9	731,4	770,4	813,4	864,9	913	,2 9	47,2	980,7	1028,7	1123,7	1162,7	1300,2	1419,2
Maximum current (FLA)	E,U	А	700,9	739,9	793,2	836,2	887,7	7 930	,2 9	72,7	997,7	1054,2	1132,2	1179,7	-	-
	N	А	715,2	771,2	818,7	870,2	921,7	7 955	,7 9	89,7	1023,2	-	-	-	-	-
	A	А	858,2	930,7	953,4	1108,4	1163,	9 129	0,2 12	87,2	1069,4	1096,3	1200,0	1222,7	1480,2	1603,2
Peak current (LRA)	E,U	А	875,2	939,2	976,2	1131,2	1186,	7 130	7,2 13	12,7	1086,4	1121,8	1208,5	1239,7	-	-
	N	A	889,5	970.5	1001.7	1165.2	1220.	7 133	2.7 13	29.7	1111.9	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Туре	A,E,N,U	type							Scr	ew						
Compressor regulation	A,E,N,U	Type							0n-	-Off						
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type							R1:	34a						
	А	kg	31,0	31,0	28,0	31,0	38,0	36,0	38,0	43,0	44,0	44,0	50,0	58,0	55,0	61,0
Deficiency to a discovite 1 (1)	E	kg	28,0	30,0	45,0	39,0	38,0	46,0	46,0	54,0	54,0	54,0	59,0	66,0	61,0	65,0
Refrigerant load circuit 1 (1)	N	kg	39,0	39,0	46,0	34,0	46,0	54,0	54,0	61,0	61,0	61,0	66,0	66,0	76,0	84,0
	U	kg	31,0	30,0	35,0	34,0	32,0	46,0	46,0	54,0	54,0	54,0	59,0	66,0	61,0	65,0
	A	kg	31,0	31,0	28,0	31,0	42,0	36,0	40,0	45,0	48,0	52,0	55,0	60,0	60,0	61,0
Definement lead singuist 2 (1)	E	kg	30,0	30,0	45,0	39,0	42,0	46,0	46,0	54,0	54,0	59,0	59,0	61,0	61,0	77,0
Refrigerant load circuit 2 (1)	N	kg	39,0	39,0	46,0	42,0	50,0	54,0	54,0	61,0	61,0	66,0	66,0	76,0	76,0	84,0
	U	kg	31,0	30,0	35,0	42,0	32,0	46,0	46,0	54,0	54,0	59,0	59,0	61,0	61,0	77,0
System side heat exchanger																
Туре	A,E,N,U	type							Shell a	nd tube						
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor															
Туре	A,E,N,U	type							Screw						
Compressor regulation	A,E,N,U	Туре							On-Off						
	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Number	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Circuits	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	A,E,N,U	type							R134a						
	A	kg	64,0	70,0	68,0	69,0	76,0	84,0	84,0	61,0	61,0	72,0	69,0	78,0	84,0
Refrigerant load circuit 1 (1)	E,U	kg	76,0	75,0	84,0	76,0	91,0	91,0	106,0	65,0	76,0	76,0	84,0	-	-
	N	kg	84,0	91,0	106,0	106,0	121,0	121,0	121,0	84,0	-	-	-	-	-
	A	kg	74,0	80,0	83,0	69,0	76,0	84,0	84,0	61,0	61,0	79,0	69,0	87,0	84,0
Refrigerant load circuit 2 (1)	E,U	kg	76,0	85,0	84,0	91,0	91,0	106,0	106,0	70,0	76,0	76,0	84,0	-	-
	N	kg	84,0	106,0	106,0	121,0	121,0	121,0	121,0	84,0	-	-	-	-	-
	A	kg	-	-	-	-	-	-	-	61,0	61,0	73,0	76,0	75,0	91,0
Refrigerant load circuit 3 (1)	E,U	kg	-		-	-	-	-	-	70,0	76,0	76,0	76,0	-	-
	N	kg	-	-	-	-	-	-	-	91,0	-	-	-	-	-
System side heat exchanger	4 5 4/								ci ii						
Туре	A,E,N,U	type	4		4	4			Shell and tube						
N. I	A	no.	1	11	11	1	1	1	1	2	2	2	2	2	2
Number	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	
(1) The lead in diseased in the same is an easier	N	no.	1 . Th - 6 1 -	2	2	2	2	2	2	2	-	-	-	-	-
(1) The load indicated in the table is an estin	nated and prem	minary value													
Size			1402	1602	1802	2002	2202	2352 2	502 265	2 2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00														-	
Hydraulic connections															
Connections (in/out)	A,E,N,U	Туре		-"		-"			Grooved joints						
S: (:)	A	Ø	5"	5"	5"	5"	5"		5" 6"	6"	6"	6"	6"	6"	6"
Size (in)										- 11	- 11	- 11	-11	e11	
7	E,U	Ø	5"	5"	5"	5"	5"		6" 6"		6"	6"	6"	6"	6"
	N	Ø	5"	5"	6"	6"	6"	6"	6" 6"	6"	6"	6"	6"	6"	6"
	N A	Ø Ø	5" 5"	5" 5"	6" 5"	6" 5"	6" 5"	6" 5"	6" 6" 5" 6"	6" 6"	6" 6"	6" 6"	6" 6"	6" 6"	6" 6"
Size (out)	N A E,U	Ø Ø Ø	5" 5" 5"	5" 5" 5"	6" 5" 5"	6" 5" 5"	6" 5" 5"	6" 5" 6"	6" 6" 5" 6" 6" 6"	6" 6"	6" 6"	6" 6" 6"	6" 6" 6"	6" 6"	6" 6" 6"
	N A	Ø Ø	5" 5"	5" 5"	6" 5"	6" 5"	6" 5"	6" 5" 6"	6" 6" 5" 6"	6" 6"	6" 6"	6" 6"	6" 6"	6" 6"	6" 6"
Size (out) Size	N A E,U	Ø Ø Ø	5" 5" 5"	5" 5" 5"	6" 5" 5"	6" 5" 5"	6" 5" 5"	6" 5" 6"	6" 6" 5" 6" 6" 6"	6" 6"	6" 6"	6" 6" 6"	6" 6" 6"	6" 6"	6" 6" 6"
Size (out) Size Integrated hydronic kit: 00	N A E,U	Ø Ø Ø	5" 5" 5" 5"	5" 5" 5"	6" 5" 5" 6"	6" 5" 5" 6"	6" 5" 5" 6"	6" 5" 6"	6" 6" 5" 6" 6" 6"	6" 6" 6"	6" 6" 6" 6"	6" 6" 6"	6" 6" 6" 6"	6" 6" 6"	6" 6" 6"
Size (out) Size Integrated hydronic kit: 00 Hydraulic connections	N A E,U N	Ø Ø Ø	5" 5" 5" 5"	5" 5" 5"	6" 5" 5" 6"	6" 5" 5" 6"	6" 5" 5" 6"	6" 5" 6" 6" 6002	6" 6" 5" 6" 6" 6" 6" 6402	6" 6" 6" 6" 6503	6" 6" 6" 6"	6" 6" 6"	6" 6" 6" 6"	6" 6" 6"	6" 6" 6"
Size (out) Size Integrated hydronic kit: 00	N A E,U N	Ø Ø Ø Ø	5" 5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 5" 6" 6" 6002	6" 6" 5" 6" 6" 6" 6" 6" 6402	6" 6" 6" 6" 6503	6" 6" 6" 6"	6" 6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 6" 8403	6" 6" 6"
Size (out) Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out)	N A E,U N	Ø Ø Ø Type Ø	5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 5" 6" 6" 6002	6" 6" 5" 6" 6" 6" 6" 6402	6" 6" 6" 6" 6503	6" 6" 6" 6"	6" 6" 6"	6" 6" 6" 6"	6" 6" 6"	6" 6" 6"
Size (out) Size Integrated hydronic kit: 00 Hydraulic connections	N A E,U N A,E,N,U A E,U	0 0 0 0 Type 0	5" 5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 5" 6" 6" 6002	6" 6" 5" 6" 6" 6" 6" 6" 6402	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6	6" 6" 6" 6703	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 6" 8403	6" 6" 6" 9603
Size (out) Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out)	A,E,N,U A E,U N	0 0 0 0 0 Type 0 0	5" 5" 5" 4202	5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 5" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 6" 6" 6" 6" 6" 6402	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6	6" 6" 6" 6" 6703	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in)	A,E,N,U A E,U N A,E,N,U A E,U N A	0 0 0 0 0 Type 0 0 0	5" 5" 5" 4202	5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 5" 6" 6002	6" 6" 5" 6" 6" 6" 6" 6" 6402 Grooved joint 6" 8"	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6	6" 6" 6" 6703	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 6" 8403	6" 6" 6" 9603
Size (out) Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out)	A,E,N,U A E,U N A,E,N,U A E,U N A E,U	0 0 0 0 Type 0 0 0	5" 5" 5" 4202	5" 5" 5" 4502	6" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 5" 6002 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6" 6" 6402 Grooved joint 6" 8" -	6" 6" 6" 6503	6" 6" 6" 6703	6" 6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Size (out)	A,E,N,U A E,U N A,E,N,U A E,U N A	0 0 0 0 0 Type 0 0 0	5" 5" 5" 4202	5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 5" 6" 6002	6" 6" 5" 6" 6" 6" 6" 6" 6402 Grooved joint 6" 8"	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6	6" 6" 6" 6703	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in)	A,E,N,U A E,U N A,E,N,U A E,U N A E,U N N A E,U N	0 0 0 0 0 0 Type 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 4502	6" 5" 5" 6" 4802 6" 6" - 6" -	6" 5" 5" 6" 5202 6" 6" - 8" 8"	6" 5" 5" 6" 5602 6" - - 8" -	6" 5" 6" 6" 6002	6" 6" 5" 6" 6" 6" 6" 6402 Grooved joint 6" 8"	6" 6" 6" 6503	6" 6" 6" 6" 6	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Size (out) Module 1	A,E,N,U A E,U N A,E,N,U A E,U N A A,E,N,U A A A A A A A A A A A A A A A A A A A	0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202 6" 6" 6" 6" 6"	5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 6" 5602	6" 6" 6" 6002	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" - 8"	6" 6" 6" 6503	6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Size (out)	A,E,N,U A,E,U N A,E,U A E,U N A E,U N A E,U N A E,U N	0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 5" 6" 6" 6002	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 8" 6"	6" 6" 6" 6503	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Size (out) Module 1	A,E,N,U A E,U N A E,U N A E,U N A E,U N N A E,U N N A E,U N	0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 4502 6" 6" - 6" 6"	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 6" 6" 6" 6" - - 8" - - 6" 6" 6"	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 8" 6" 6"	6" 6" 6" 6503	6" 6" 6" 6 6 6 6" 6" 6" 6" 6" 6" 6"	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Module 1 Size (in)	A,E,N,U A E,U N A E,U N A E,U N A E,U N A A E,U N A A A A A A A A A A A A A A A A A A	0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 6" 6" 6" 8" - 6" 6" 6" 6" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 8" 6" 6" - " - 6" 6" 6"	6" 6" 6" 6503	6" 6" 6" 6 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Size (out) Module 1	A,E,N,U A,E,U N A,E,U N A E,U N	0 0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602 6" - - - 6" 6" - - 6"	6" 6" 6" 6" 8" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6" 6402 Grooved joint 6" 6" 6" 6" 6"	6" 6" 6503	6" 6" 6" 6703	6" 6" 6" 6903	6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Module 1 Size (in) Size (out)	A,E,N,U A E,U N A E,U N A E,U N A E,U N A A E,U N A A A A A A A A A A A A A A A A A A	0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602	6" 6" 6" 6" 8" - 6" 6" 6" 6" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 8" 6" 6" - " - 6" 6" 6"	6" 6" 6" 6503	6" 6" 6" 6 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 6" 6903	6" 6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Module 1 Size (in)	A,E,N,U A,E,U N A,E,U N A E,U N	0 0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602 6" - - - 6" 6" - 6" 6" 6"	6" 6" 6" 6" 8" 6" 6" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 6" 6" 6" 6"	6" 6" 6503	6" 6" 6" 6 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 6" 6903	6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Module 1 Size (in) Size (out) Module 2	A,E,N,U A E,U N A A E,U N A A A A A A A A A A A A A A A A A A	0 0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602 6" - - - 6" 6" - - 6" 6"	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 8" 6" 6" - 6" - 6" - 6" - 6" - 6" -	6" 6" 6503	6" 6" 6" 6" 6" 6" 6" 6" 5"	6" 6" 6" 6903	6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Module 1 Size (in) Size (out)	N A E,U N	0 0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602 6" - - - 6" 6" 6" - - - 6"	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 6" - 6" - 6" - 6" - 6" - 6" -	6" 6" 6503	6" 6" 6703	6" 6" 6" 6903	6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Module 1 Size (in) Size (out) Module 2	A,E,N,U A E,U N N A E,U N	0 0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602 6" 	6" 6" 6" 6" 8" 6" 6" 6" 6" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 6" 6" 6" 6" 6" - 6" 6" 6"	6" 6" 6503 6503 6503 6503	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 5" 5" -	6" 6" 6" 6903	6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Module 1 Size (in) Size (out) Module 2 Size (in)	A,E,N,U A E,U N A A E,U N A A A A A A A A A A A A A A A A A A	0 0 0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602 6" - - - 6" 6" - - 6" 6" 6"	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 6" 6" - 6" - 6" - 6" - 6" - 6	6" 6" 6503 6503 6503 6503 6503	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 5" 5" 5"	6" 6" 6" 6903	6" 6" 7203	6" 6" 8403	6" 6" 6" 9603
Size Integrated hydronic kit: 00 Hydraulic connections Connections (in/out) Size (in) Module 1 Size (in) Size (out) Module 2	A,E,N,U A E,U N N A E,U N	0 0 0 0 0 0 0 0 0 0 0 0 0	5" 5" 5" 4202	5" 5" 5" 5" 4502	6" 5" 5" 6" 4802 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"	6" 5" 5" 6" 5202	6" 5" 5" 6" 5602 6" 	6" 6" 6" 6" 8" 6" 6" 6" 6" 6" 6" 6"	6" 6" 5" 6" 6" 6" 6402 Grooved joint 6" 6" 6" 6" 6" 6" - 6" 6" - 6"	6" 6" 6503 6503 6503 6503	6" 6" 6" 6" 6" 6" 6" 6" 6" 6" 5" 5" -	6" 6" 6" 6903	6" 6" 7203	6" 6" 8403	6" 6" 6" 9603

SOUND DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Sound data calculated in cooling mode (1)															
	Α	dB(A)	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,7	99,7	99,7	99,7	100,4	100,4	101,1
Cound navor lovel	Е	dB(A)	91,0	91,0	91,7	91,9	92,1	92,6	92,5	93,0	93,0	93,0	93,0	93,7	93,9	94,6
Sound power level	N	dB(A)	91,7	91,7	92,3	92,5	92,6	93,1	93,0	93,5	93,5	93,5	93,5	94,1	94,6	95,2
	U	dB(A)	98,0	98,0	98,9	99,0	99,0	99,7	99,7	100,4	100,4	100,4	100,4	100,9	101,0	101,5
	Α	dB(A)	65,6	65,6	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,1	67,1	67,6	67,7	68,2
Cound proceure lovel (10 m)	E	dB(A)	58,6	58,6	59,2	59,4	59,5	59,9	59,9	60,3	60,3	60,3	60,3	60,8	61,0	61,6
Sound pressure level (10 m)	N	dB(A)	59,2	59,2	59,7	59,9	60,0	60,3	60,3	60,6	60,6	60,6	60,6	61,1	61,5	62,0
	U	dB(A)	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,6	67,6	67,6	67,6	68,1	68,1	68,5

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

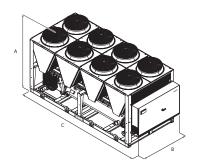
Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Sound data calculated in cooling mode (1)															
	Α	dB(A)	101,1	101,6	101,6	101,6	102,1	102,5	102,5	102,7	102,8	103,4	103,4	103,7	104,2
Cound nowar lovel	E	dB(A)	95,2	95,2	95,4	95,6	96,0	96,2	96,4	96,0	96,5	96,4	96,6	-	-
Sound power level —	N	dB(A)	95,5	96,0	96,2	96,6	96,9	96,9	96,9	96,7	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,4	102,4	102,8	103,1	103,4	103,4	103,7	103,7	103,9	-	-
_	Α	dB(A)	68,2	68,6	68,6	68,6	69,0	69,2	69,2	69,4	69,4	69,8	69,8	70,0	70,4
Cound proceure loyal (10 m)	E	dB(A)	62,1	62,0	62,2	62,3	62,7	62,8	62,9	62,5	62,8	62,8	62,8	-	-
Sound pressure level (10 m)	N	dB(A)	62,3	62,5	62,6	62,9	63,1	63,1	63,1	62,8	-	-	-	-	-
	U	dB(A)	68,9	68,9	69,1	69,2	69,5	69,7	69,9	69,8	70,0	70,0	70,2	-	-

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F																
Fan																
Туре	A,E,N,U	type							A	kial						
	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
Number	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
	A	m³/h	116000	116000	116000	116000	145000	145000	145000	174000	174000	174000	174000	203000	203000	232000
Air flow rate	E	m³/h	89600	89600	112000	112000	112000	134400	134400	156800	156800	156800	156800	179200	179200	201600
All flow fale	N	m³/h	112000	112000	134400	134400	134400	156800	156800	179200	179200	179200	179200	201600	224000	246400
	U	m³/h	116000	116000	145000	145000	145000	174000	174000	203000	203000	203000	203000	232000	232000	261000
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P																
Fan																
Туре	A,E,N,U	type							A	kial						
	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
Number	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
	A	m³/h	109600	109600	109600	109600	137000	137000	137000	164400	164400	164400	164400	191800	191800	219200
Air flour rata	E	m³/h	85600	85600	107000	107000	107000	128400	128400	149800	149800	149800	149800	171200	171200	192600
Air flow rate	N	m³/h	107000	107000	128400	128400	128400	149800	149800	171200	171200	171200	171200	192600	214000	235400
	U	m³/h	109600	109600	137000	137000	137000	164400	164400	191800	191800	191800	191800	219200	219200	246600
Size			4202	4502	4802	5202	5602	2 60	02 64	402 6	5503	6703	6903	7203	8403	9603
Model: F									-							
Fan																
Туре	A,E,N,U	type							A	xial						
	A	no.	16	18	18	18	20	2	2	22	24	24	28	28	30	34
Number	E,U	no.	20	20	22	22	24	2	6 .	28	28	30	30	32	-	-
	Ň	no.	22	26	28	30	32	3	2 :	32	34	-	-	-	-	-
	A	m³/h	232000	261000	261000	26100	0 29000	00 319	000 31	9000 34	18000 3	48000	406000	406000	435000	493000
A:- Q	E	m³/h	224000	224000	246400	24640	0 26880	00 291	200 31	3600 3	13600 3	36000	336000	358400	-	-
Air flow rate	N	m³/h	246400	291200	313600	33600	0 35840	00 358	400 35	8400 38	30800	-	-	-	-	-
	U	m³/h	290000	290000	319000	31900	0 34800	00 377	000 40	6000 40	06000 4	35000	435000	464000	-	-
Size			4202	4502	4802	5202	5602	2 60	02 64	402 6	5503	6703	6903	7203	8403	9603
Model: P									-							
Fan																
Туре	A,E,N,U	type							A	xial						
	Α	no.	16	18	18	18	20	2		22	24	24	28	28	30	34
Number	E,U	no.	20	20	22	22	24	2		28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	3		32	34	-	-	-	-	-
	A	m³/h	219200	246600	246600	24660						28800	383600	383600	411000	465800
A: A	E	m³/h	214000	214000	235400	23540	0 25680	00 278				21000	321000	342400	-	-
Air flow rate		3 /L	235400	278200	299600	32100	0 34240	00 342	100 31	2400 36	53800	-	-	-	-	
7111 HOW Tate	N	m³/h	233400	2/0200	277000	32100	0 34240	JU 342	100 34	2400 30	JJ000					

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330	9520
C	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520	10710
-	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900	13090
Size			4202	4502	4802	5202	5602	60	02	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights																
	A	mm	2450	2450	2450	2450	2450	24	50	2450	2450	2450	2450	2450	2450	2450
A	E,U	mm	2450	2450	2450	2450	2450	24	50	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	24	50	2450	2450	-	-	-	-	-
	А	mm	2200	2200	2200	2200	2200	22	00	2200	2200	2200	2200	2200	2200	2200
В	E,U	mm	2200	2200	2200	2200	2200	22	00	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	22	00	2200	2200	-	-	-	-	-
	Α	mm	9520	10710	10710	10710	11900	130)90	13090	14280	14280	16660	16660	17850	20230
C	E,U	mm	11900	11900	13090	13090	14280	154	170	16660	16660	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	190)40	19040	20230	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 \mbox{mm} are shipped separately. For more information, please refer to the technical manual and / or installation.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F			1702	1002	1002	2002	2242	2332	2302	2032	2002	3002	3202	3402	3302	3702
Single module unit																
	A	kg	4695	4730	4870	5200	6065	6080	6285	6950	7145	7200	7300	8500	8975	9590
Empty weight	E,U	kg	4855	4875	5435	6025	6380	7025	7045	7625	7715	7785	7880	9145	9605	10475
	N	kg	5370	5390	6065	6655	7010	7560	7585	8175	8265	8340	8430	9930	10905	11630
Size			4202	4502	4802	5202	5602	60	02 6	402	6503	6703	6903	7203	8403	9603
Model: F																
Single module unit																
	A	kg	9655	10475	10525	10945	11580	122	.65 12	2305	-	-	-	-	-	-
Empty weight	E,U	kg	11070	11130	12135	12260	-	-		-	-	-	-	-	-	-
	N	kg	11700	-	-	-	-	-		-	-	-	-	-	-	-
Bimodule unit		-														
	А	kg	-	-	-	-	-	-		-	9590	9655	10475	10525	11580	12305
Empty weight module 1	E,U	kg	-	-	-	-	6630	66	30 7	170	10475	11070	11130	12135	-	-
	N	kg	-	6210	6995	6995	7730	77.	30 7	775	11630	-	-	-	-	-
	А	kg	-	-	-	-	-	-		-	5225	5225	5765	5765	5930	6590
Empty weight module 2	E,U	kg	-	-	-	-	6630	71	70 7	170	5755	5755	5810	5820	-	-
	N	kg	-	6995	6995	7730	7730	77	75 7	775	6455	-	-	-	-	-

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSM 1402-9603 B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 305,8 ÷ 2028,1 kW



- Microchannel coil
- Night mode
- Operation up to 50 °C outdoor air
- · High efficiency also at partial loads



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

N Silenced very high efficiency

U Very high efficiency

FEATURES

Operating field

Operation at full load up to $50\,^{\circ}\text{C}$ external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:

- 1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
- 2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

Electronic thermostatic as standard from size 5202 to 6402 and from 8403 to 9603.

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

CONTRO

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol

AER485P1 x n° 3: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Mod-bus TCP/IP. SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

KRS: Electric heater for the heat exchanger

AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

KDI: Double thickness evaporator insulation. Provides stand-still protection down to -20°C. Must be ordered in conjunction with options KRS.

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x n° 2 (1)	A,E,N,U	•	.	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U	•	•		•	•	•		•	•	•	•	•		•
AERNET	A,E,N,U	•	•	•		•		•		•			•		
MULTICHILLER_EVO	A,E,N,U		•	•		•	•					•		•	
PRV3	A,E,N,U		•	•	•	•	•	•	•	•	•	•	•	•	•
Model	Ver	4202	4502	4802	5202	5602	6002	2 64	102 6	503	6703	6903	7203	8403	9603
AER485P1 x n° 2 (1)	A,E,N,U	•	•		•	•	•		•						
AER485P1 x n° 3 (1)	A,E,N,U									•			•	•	•
AERBACP	A,E,N,U	•	•	•	•		•		•		•		•	•	•
AERNET	A,E,N,U	•	•		•		•		•	•			•	•	•
MULTICHILLER_EVO	A,E,N,U		•				•		•	•				•	•
PRV3	A,E,N,U		•			· ·								•	

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver 1402 1602 1802 2002 2202 2352 2502 2652 2802 3002 3202 3402 3602 A AVX929 AVX929 AVX929 AVX932 AVX933 AVX933 AVX933 AVX933 AVX937 AVX937 AVX937 AVX938 AVX938	3902
A AVX929 AVX929 AVX929 AVX932 AVX933 AVX933 AVX933 AVX934 AVX937 AVX937 AVX937 AVX938 AVX938	
	AVX942
E,U AVX929 AVX929 AVX930 AVX933 AVX933 AVX934 AVX934 AVX935 AVX935 AVX935 AVX935 AVX939 AVX939	AVX940
N AVX930 AVX930 AVX931 AVX931 AVX934 AVX935 AVX935 AVX936 AVX936 AVX936 AVX936 AVX940 AVX941	AVX943
Ver 4202 4502 4802 5202 5602 6002 6402 6503 6703 6903 7203 8403	9603
A AVX942 AVX944 AVX944 AVX944 AVX945 AVX947 AVX947 AVX953 AVX953 AVX957 AVX954 AVX956	AVX955
E,U AVX941 AVX945 AVX947 AVX947 AVX950 AVX952 AVX954 AVX954 AVX956 AVX956 AVX958 -	-
N AVX943 AVX946 AVX948 AVX949 AVX951 AVX951 AVX955	

The accessory cannot be fitted on the configurations indicated with -

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A,E,U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E,U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Α	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP5V+GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E,U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V+GP8V	GP6V+GP11V	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	KRS22	KRS22	KRS23						
E,N,U	KRS23								

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A,E,U	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
N	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E,U	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
E,N	AK (1)													

(1) Available only in low noise version A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
E,N	AK (1)												

(1) Available only in low noise version A grey background indicates the accessory must be assembled in the factory

Double thickness evaporator insulation

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A,E,N,U	KDI (1)													

(1) Contact us.
A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A,E,N,U	KDI (1)												

(1) Contact us.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

l	Description
3	NSM
5,7	Size 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
	Operating field
0	Standard mechanic thermostatic valve (1)
Χ	Electronic thermostatic expansion valve (2)
Υ	Low temperature mechanic thermostatic valve (3)
Z	Low temperature electronic thermostatic valve (3)
	Model
В	Free-cooling glycol free
G	Free-cooling glycol free plus (4)
	Heat recovery
0	Without heat recovery
	Version
Α	High efficiency
Ε	Silenced high efficiency
N	Silenced very high efficiency
U	Very high efficiency
	» X Y Z B G

Field	Description
12	Coils / free-cooling coils
0	Alluminium microchannel / Copper - aluminium
0	Painted alluminium microchannel / Copper painted aluminium
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
13	Fans
0	Standard
J	Inverter
14	Power supply
0	400V ~ 3 50Hz with fuses
2	230V ~ 3 50Hz with fuses (5)
4	230V ~ 3 50Hz with magnet circuit breakers (5)
8	400V ~ 3 50Hz with magnet circuit breakers
15,16	Integrated hydronic kit
00	Without hydronic kit

- (1) Water produced up to +4 °C. (2) Water produced up to +4 °C (3) Water produced from +4 °C \div -6 °C (4) The Free cooling Plus "G" models are only compatible with " $^{\circ\circ}$ " and " $^{\circ}$ 0" coils. (5) Available only for size from 1402 to 2202

NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	306,5	350,2	396,8	450,5	505,3	522,5	556,5	600,8	649,8	678,4	726,3	813,3	872,8	954,1
Input power	kW	102,8	117,6	136,7	158,3	168,9	180,5	194,5	203,0	220,4	235,0	252,8	269,7	295,6	317,9
Cooling total input current	Α	182,0	206,0	231,0	268,0	291,0	311,0	335,0	351,0	378,0	400,0	427,0	451,0	487,0	530,0
EER	W/W	2,98	2,98	2,90	2,85	2,99	2,90	2,86	2,96	2,95	2,89	2,87	3,02	2,95	3,00
Water flow rate system side	l/h	52653	60163	68174	77407	86812	89765	95621	103224	111642	116561	124785	139737	149957	163932
Pressure drop system side	kPa	73	94	100	72	90	96	108	107	117	100	94	81	93	112
Cooling performances with free-cooling glycol-fro	ee (2)														
Cooling capacity	kW	201,2	207,2	212,6	221,0	271,8	273,9	277,4	334,0	337,2	352,7	355,8	414,1	417,7	460,7
Input power	kW	18,5	18,5	18,5	18,5	24,6	24,6	24,6	32,7	32,7	32,9	32,9	38,1	38,1	42,0
Free cooling total input current	A	33,0	32,0	31,0	31,0	42,0	42,0	42,0	57,0	56,0	56,0	56,0	64,0	63,0	70,0
EER	W/W	10.87	11,19	11,48	11.92	11,06	11,14	11,28	10,20	10,30	10,71	10,81	10.86	10,95	10,97

(2) System side water neat exchanger 12 °C / 8,7 °C; i	external air 2	-C; glycol n	yaraulic circ	cuit 30%; pr	rimary nya	raulic circun	t glycol 0%.								
Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	305,8	349,3	395,0	447,3	502,1	519,1	552,6	597,2	645,4	674,3	721,9	807,8	865,0	946,8
Input power	kW	103,7	118,8	138,1	160,2	170,8	182,6	197,0	205,3	223,1	238,4	257,1	273,3	299,3	321,8
Cooling total input current	A	184,0	208,0	233,0	271,0	294,0	315,0	339,0	355,0	382,0	405,0	433,0	456,0	492,0	536,0
EER	W/W	2,95	2,94	2,86	2,79	2,94	2,84	2,81	2,91	2,89	2,83	2,81	2,96	2,89	2,94
Water flow rate system side	l/h	52546	60019	67864	76853	86266	89180	94948	102598	110891	115859	124023	138789	148609	162675
Pressure drop system side	kPa	48	64	74	62	78	84	95	70	74	81	74	86	98	68
Cooling performances with free-cooling glycol-free	e (2)														
Cooling capacity	kW	213,5	220,0	226,6	237,8	288,8	291,7	294,5	353,1	360,2	374,3	378,1	439,1	443,5	495,5
Input power	kW	18,3	18,3	18,3	18,3	24,2	24,2	24,2	32,1	32,1	32,3	32,3	37,4	37,4	41,3
Free cooling total input current	A	32,0	32,0	31,0	31,0	42,0	42,0	42,0	55,0	55,0	55,0	54,0	62,0	61,0	69,0
EER	W/W	11,68	12,03	12,39	12,99	11,92	12,04	12,16	11,00	11,22	11,59	11,71	11,74	11,86	12,00

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - A

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	996,8	1082,3	1128,3	1167,3	1222,8	1304,9	1346,7	1459,2	1501,9	1659,0	1705,0	1838,1	2028,1
Input power	kW	346,1	365,7	391,9	422,5	438,9	452,7	472,4	492,1	520,2	557,2	583,3	659,0	704,1
Cooling total input current	Α	581,0	614,0	655,0	704,0	733,0	761,0	796,0	821,0	872,0	945,0	986,0	1100,0	1198,0
EER	W/W	2,88	2,96	2,88	2,76	2,79	2,88	2,85	2,97	2,89	2,98	2,92	2,79	2,88
Water flow rate system side	l/h	171269	185947	193855	200561	210092	224201	231379	250713	258050	285029	292937	315803	348457
Pressure drop system side	kPa	122	132	143	116	109	125	133	112	127	132	143	108	135
Cooling performances with free-cooling glycol-free (2)													
Cooling capacity	kW	464,4	522,4	524,0	526,5	571,2	612,5	614,9	684,4	688,1	798,8	801,4	867,6	965,2
Input power	kW	42,0	46,2	46,2	46,2	50,1	53,8	53,9	60,5	60,5	70,7	70,8	78,9	86,8
Free cooling total input current	A	71,0	77,0	77,0	77,0	84,0	91,0	91,0	101,0	101,0	120,0	120,0	132,0	148,0
EER	W/W	11,06	11,32	11,35	11,41	11,41	11,38	11,41	11,31	11,37	11,29	11,32	10,99	11,12

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	988,7	1074,2	1119,1	1156,4	1212,7	1295,2	1336,2	1447,7	1489,6	1646,9	1691,9	1822,8	2013,1
Input power	kW	350,6	370,3	397,1	428,3	444,3	458,0	478,2	498,2	527,1	564,0	590,8	667,1	712,4
Cooling total input current	A	588,0	621,0	663,0	713,0	741,0	769,0	805,0	830,0	882,0	956,0	998,0	1112,0	1211,0
EER	W/W	2,82	2,90	2,82	2,70	2,73	2,83	2,79	2,91	2,83	2,92	2,86	2,73	2,83
Water flow rate system side	l/h	169873	184553	192278	198678	208362	222522	229577	248739	255937	282961	290686	313186	345875
Pressure drop system side	kPa	74	91	98	86	95	109	116	84	84	110	110	101	116
Cooling performances with free-cooling glycol-free	2 (2)													
Cooling capacity	kW	500,3	559,0	564,4	569,9	610,4	656,1	662,5	737,9	742,7	856,4	861,8	926,6	1037,6
Input power	kW	41,3	45,5	45,5	45,5	49,3	53,1	53,1	59,6	59,6	69,7	69,7	77,6	85,4
Free cooling total input current	A	69,0	76,0	76,0	76,0	82,0	89,0	89,0	99,0	100,0	118,0	118,0	129,0	145,0
EER	W/W	12,12	12,30	12,42	12,54	12,38	12,36	12,48	12,38	12,46	12,29	12,37	11,95	12,15

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	319,8	365,8	417,7	473,0	509,1	549,8	568,8	618,6	646,3	675,1	715,5	796,7	851,7	929,6
Input power	kW	105,5	123,3	137,5	159,4	178,3	183,3	195,5	205,2	220,4	235,9	253,5	270,8	297,1	320,1
Cooling total input current	Α	177,0	206,0	223,0	261,0	295,0	305,0	326,0	342,0	365,0	389,0	415,0	438,0	474,0	517,0
EER	W/W	3,03	2,97	3,04	2,97	2,85	3,00	2,91	3,01	2,93	2,86	2,82	2,94	2,87	2,90
Water flow rate system side	l/h	54946	62848	71763	81260	87462	94455	97732	106280	111042	115993	122937	136886	146332	159723
Pressure drop system side	kPa	62	76	84	78	90	88	94	100	109	91	94	80	92	110
Cooling performances with free-cooling glycol-fre	e (2)														
Cooling capacity	kW	186,6	192,0	231,5	241,7	246,1	294,5	297,3	334,0	337,2	351,6	354,9	403,7	407,3	448,1
Input power	kW	15,5	15,5	19,5	19,6	19,6	26,8	26,8	30,6	30,6	31,0	31,0	34,0	34,0	36,8
Free cooling total input current	Α	26,0	26,0	32,0	32,0	32,0	44,0	45,0	51,0	51,0	51,0	51,0	55,0	54,0	59,0
EER	W/W	12,01	12,36	11,89	12,34	12,57	11,01	11,11	10,92	11,03	11,35	11,45	11,88	11,98	12,18
(1) System side water heat exchanger 12 °C/7 °C; Exter (2) System side water heat exchanger 12 °C / 8,7 °C; E						raulic circui	t glycol 0%.								

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	316,7	363,1	414,5	469,5	504,1	545,4	564,0	613,8	640,8	669,8	710,9	790,6	843,5	921,3
Input power	kW	106,6	124,7	138,6	161,1	181,0	185,4	197,8	207,6	223,1	239,2	257,8	274,6	301,1	324,4
Cooling total input current	Α	179,0	208,0	225,0	263,0	298,0	308,0	329,0	345,0	369,0	393,0	421,0	443,0	480,0	523,0
EER	W/W	2,97	2,91	2,99	2,91	2,79	2,94	2,85	2,96	2,87	2,80	2,76	2,88	2,80	2,84
Water flow rate system side	l/h	54406	62391	71215	80666	86616	93710	96910	105465	110105	115087	122135	135840	144915	158291
Pressure drop system side	kPa	36	42	54	66	76	54	58	59	65	71	73	47	54	66
Cooling performances with free-cooling glycol-free	e (2)														
Cooling capacity	kW	197,2	203,1	242,3	255,6	258,0	307,4	310,5	349,3	352,8	266,5	373,6	421,8	425,7	470,1
Input power	kW	15,2	15,2	19,1	19,2	19,2	26,1	26,1	29,9	29,9	30,3	30,3	33,3	33,3	36,1
Free cooling total input current	Α	26,0	25,0	31,0	31,0	32,0	43,0	44,0	50,0	50,0	50,0	49,0	54,0	53,0	58,0
EER	W/W	12,94	13,32	12,67	13,29	13,42	11,76	11,88	11,68	11,79	12,11	12,35	12,68	12,80	13,02

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; fhiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	995,2	1051,6	1137,0	1159,2	1217,3	1279,4	1341,6	1434,0	1499,6	1598,6	1684,0	-	-
Input power	kW	339,9	370,0	389,4	418,0	436,6	448,9	461,2	491,1	510,9	568,9	588,3	-	-
Cooling total input current	A	555,0	601,0	632,0	678,0	708,0	732,0	755,0	804,0	832,0	924,0	945,0	-	-
EER	W/W	2,93	2,84	2,92	2,77	2,79	2,85	2,91	2,92	2,93	2,81	2,86	-	-
Water flow rate system side	I/h	170980	180685	195353	199172	209139	219823	230507	246385	257643	274665	289333	-	-
Pressure drop system side	kPa	125	128	130	135	84	115	112	110	121	121	130	-	-
Cooling performances with free-cooling glycol-fr	ee (2)													
Cooling capacity	kW	495,6	509,3	549,8	551,2	600,1	640,5	682,5	692,0	739,5	761,7	802,2	-	-
Input power	kW	44,0	44,2	46,9	47,0	53,5	57,3	61,5	56,4	63,5	65,6	68,4	-	-
Free cooling total input current	A	72,0	72,0	76,0	76,0	87,0	93,0	100,0	92,0	104,0	107,0	110,0	-	-
EER	W/W	11,27	11,54	11,72	11,73	11,22	11,17	11,14	12,27	11,64	11,60	11,72	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G	,													
Cooling performance chiller operation (1)														
Cooling capacity	kW	987,5	1041,9	1127,1	1148,0	1206,7	1269,3	1332,0	1421,7	1487,9	1583,2	1668,4	-	-
Input power	kW	344,2	375,3	394,8	424,0	442,2	454,4	466,6	497,6	517,4	577,4	596,9	-	-
Cooling total input current	A	561,0	609,0	640,0	687,0	717,0	740,0	763,0	814,0	842,0	937,0	957,0	-	-
EER	W/W	2,87	2,78	2,86	2,71	2,73	2,79	2,85	2,86	2,88	2,74	2,80	-	-
Water flow rate system side	I/h	169667	179011	193651	197235	207320	218083	228846	244269	255645	272005	286645	-	-
Pressure drop system side	kPa	76	87	83	86	58	70	70	86	86	100	100	-	-
Cooling performances with free-cooling o	Jlycol-free (2)													
Cooling capacity	kW	523,4	531,6	576,1	581,5	627,1	669,8	712,5	728,1	781,4	795,8	840,2	-	-
Input power	kW	43,0	43,1	46,0	46,0	52,3	56,1	59,8	55,3	62,2	64,2	67,0	-	-
Free cooling total input current	A	70,0	70,0	74,0	74,0	85,0	91,0	98,0	91,0	101,0	104,0	107,0	-	-
EER	W/W	12,17	12,32	12,53	12,65	11,99	11,95	11,91	13,16	12,55	12,40	12,54	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NJM - O															
Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	328,1	378,5	429,3	491,9	531,3	568,6	589,0	638,0	667,8	695,1	735,8	824,8	891,0	967,9
Input power	kW	105,3	121,3	136,2	155,8	172,9	180,0	191,0	202,4	216,1	228,4	242,4	263,0	288,2	311,5
Cooling total input current	Α	186,0	212,0	232,0	266,0	297,0	313,0	332,0	353,0	374,0	392,0	413,0	443,0	477,0	523,0
EER	W/W	3,12	3,12	3,15	3,16	3,07	3,16	3,08	3,15	3,09	3,04	3,04	3,14	3,09	3,11
Water flow rate system side	l/h	56372	65027	73755	84508	91287	97691	101204	109611	114731	119419	126414	141715	153088	166304
Pressure drop system side	kPa	66	81	88	83	96	93	99	106	88	95	87	85	99	117
Cooling performances with free-cooling glycol-free	2 (2)														
Cooling capacity	kW	207,3	213,5	254,5	275,3	278,0	330,7	333,2	373,6	391,6	395,4	406,8	452,9	456,9	499,3
Input power	kW	19,5	19,5	24,5	26,5	26,5	32,7	32,8	37,6	38,0	38,0	38,1	42,0	42,0	45,8
Free cooling total input current	Α	34,0	34,0	42,0	45,0	46,0	57,0	57,0	65,0	66,0	65,0	65,0	71,0	70,0	77,0
EER	W/W	10,62	10,94	10,40	10,40	10,49	10,10	10,17	9,94	10,31	10,41	10,67	10,79	10,88	10,90
(1) System side water heat exchanger 12 °C/7 °C; Exter (2) System side water heat exchanger 12 °C / 8,7 °C; Ex						raulic circuit	t alvcol 0%.								
Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,9	376,7	427,6	488,8	527,6	565,4	585,6	634,6	664,0	691,7	732,5	820,3	884,7	961,8
Input power	kW	106,3	122,5	137,6	157,4	174,8	181,8	193,0	204,4	218,3	231,1	245,7	266,0	291,3	314,8
Cooling total input current	Α	187,0	213,0	234,0	269,0	300,0	316,0	335,0	356,0	377,0	396,0	418,0	447,0	482,0	528,0
EER	W/W	3,08	3,07	3,11	3,10	3,02	3,11	3,03	3,10	3,04	2,99	2,98	3,08	3,04	3,06
Water flow rate system side	l/h	56168	64715	73458	83974	90643	97138	100613	109029	114089	118834	125850	140933	152003	165249

kPa

kW

kW

W/W

45

228.8

19,2

33,0

11,90

39

219,8

19,2

34,0

11,43

58

272,7

24,1

41,0

11,30

72

291,1

26,0

44,0

11,20

84

297,0

26,0

45,0

11,42

59

349,6

32,1

56,0

10,89

63

353,1

32,1

56,0

11,00

64

394,9

36,9

64,0

10,71

70

414,0

37,3

64,0

11,11

76

418,2

37,3

64,0

11,22

78

430,6

37,4

64,0

11,51

51

479,9

41,3

69,0

11,63

59

489,3

41,3

68,0

11,86

72

530,2

45,1

75,0

11,77

NSM - U

Pressure drop system side

Free cooling total input current

Cooling capacity

Input power

Cooling performances with free-cooling glycol-free (2)

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1031,1	1095,0	1181,2	1208,8	1265,8	1326,2	1386,6	1491,1	1554,3	1666,6	1752,7	-	-
Input power	kW	332,0	358,4	379,0	405,3	426,4	440,0	453,5	478,4	498,9	549,8	570,4	-	-
Cooling total input current	A	564,0	605,0	639,0	682,0	718,0	746,0	774,0	812,0	846,0	926,0	954,0	-	-
EER	W/W	3,11	3,06	3,12	2,98	2,97	3,01	3,06	3,12	3,12	3,03	3,07	-	-
Water flow rate system side	I/h	177155	188137	202935	207692	217477	227858	238239	256194	267046	286336	301135	-	-
Pressure drop system side	kPa	119	137	138	145	104	124	113	117	119	137	138	-	-
Cooling performances with free-cooling glycol-fro	ee (2)													
Cooling capacity	kW	565,8	570,9	615,3	617,2	681,2	721,6	762,0	777,2	843,7	865,6	910,0	-	-
Input power	kW	54,1	54,1	57,9	58,0	67,5	71,3	75,2	72,3	80,6	83,9	87,7	-	-
Free cooling total input current	A	92,0	91,0	98,0	97,0	114,0	121,0	128,0	123,0	137,0	141,0	147,0	-	-
EER	W/W	10,46	10,55	10,62	10,65	10.10	10,12	10,14	10,75	10,47	10,32	10,38	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1025,3	1088,1	1174,0	1200,9	1257,9	1318,5	1379,2	1482,0	1545,4	1655,7	1741,6	-	-
Input power	kW	335,5	362,4	383,1	409,7	430,7	444,3	457,9	483,4	504,1	556,1	576,8	-	-
Cooling total input current	Α	569,0	611,0	645,0	688,0	725,0	752,0	780,0	819,0	854,0	936,0	963,0	-	-
EER	W/W	3,06	3,00	3,06	2,93	2,92	2,97	3,01	3,07	3,07	2,98	3,02	-	-
Water flow rate system side	I/h	176150	186945	201699	206322	216119	226541	236963	254617	265517	284475	299229	-	-
Pressure drop system side	kPa	81	94	90	94	63	70	75	85	92	103	113	-	-
Cooling performances with free-cooling glycol-free	(2)													
Cooling capacity	kW	600,3	606,3	654,1	660,5	720,3	764,2	808,1	827,1	897,3	920,4	968,2	-	-
Input power	kW	53,1	53,1	57,0	57,0	66,1	69,9	73,8	71,0	79,1	82,2	86,0	-	-
Free cooling total input current	Α	90,0	90,0	96,0	96,0	111,0	118,0	126,0	120,0	134,0	138,0	144,0	-	-
EER	W/W	11,30	11,41	11,48	11,60	10,90	10,93	10,95	11,64	11,34	11,20	11,25	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - N

NSW - N															
Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,0	376,5	424,5	486,3	525,3	559,6	579,7	626,1	655,1	682,6	723,4	811,7	888,8	960,7
Input power	kW	103,6	119,3	134,4	153,8	170,9	178,3	189,4	200,8	214,8	227,9	242,9	263,8	283,0	307,1
Cooling total input current	A	175,0	200,0	218,0	253,0	283,0	297,0	317,0	335,0	357,0	376,0	399,0	427,0	452,0	497,0
EER	W/W	3,15	3,16	3,16	3,16	3,07	3,14	3,06	3,12	3,05	3,00	2,98	3,08	3,14	3,13
Water flow rate system side	l/h	56017	64687	72926	83554	90260	96150	99597	107568	112546	117285	124287	139460	152704	165051
Pressure drop system side	kPa	54	65	67	83	96	92	98	79	86	93	86	84	100	106
Cooling performances with free-cooling glycol-free	ee (2)														
Cooling capacity	kW	220,8	232,6	273,9	282,2	286,3	327,6	330,8	378,1	381,7	385,4	396,5	442,9	482,6	528,7
Input power	kW	18,3	19,6	26,5	26,5	27,4	30,6	30,6	33,8	33,8	33,8	34,0	40,8	43,6	46,5
Free cooling total input current	A	31,0	33,0	43,0	44,0	45,0	51,0	51,0	56,0	56,0	56,0	56,0	66,0	70,0	75,0
EER	W/W	12,04	11,88	10,32	10,63	10,44	10,71	10,82	11,17	11,28	11,39	11,66	10,86	11,07	11,37
(1) System side water heat exchanger 12 °C/7 °C; Exte (2) System side water heat exchanger 12 °C / 8,7 °C; $^{\circ}$						raulic circui	t glycol 0%.								
Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	325,1	375,2	422,9	483,6	522,0	556,8	576,7	623,1	651,8	679,6	720,3	807,0	882,8	955,1
Input power	kW	104,5	120,4	135,6	155,5	172,9	180,2	191,5	202,9	217,2	230,8	246,4	267,1	286,2	310,3
Cooling total input current	A	176,0	201,0	220,0	255,0	286,0	300,0	320,0	338,0	360,0	381,0	404,0	431,0	457,0	501,0

W/W 12,79 12,66 10,98 11,34

W/W

I/h

kPa

kW

kW

3,11

55859

39

230,8

18,0

30,0

3,12

64457

46

243,4

19,2

32,0

3,12

72661

36

284,6

25,6

42,0

3,11

83082

44

294,0

25,9

43,0

3,02

89692

51

301,4

26,7

44,0

11,27

3,09

95662

58

342,3

29,9

50,0

11,44

3,01

99076

62

345,8

29,9

50,0

11,56

3,07

107055

40

395,2

33,1

55,0

11,93

3,00

111979

43

403,2

33,1

55,0

12,17

2,94

116764

47

407,2

33,1

55,0

12,29

2,92

123748

46

414,7

33,3

55,0

12,46

3,02

138653

50

463,0

39,8

64,0

11,62

3,09

151682

60

509,0

42,6

68,0

11,94

3,08

164102

72

554,0

45,6

74,0

12,15

NSM - N

EER

Water flow rate system side

Pressure drop system side

Free cooling total input current

Cooling capacity

Input power

Cooling performances with free-cooling glycol-free (2)

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1004,9	1098,6	1161,7	1218,0	1274,5	1318,1	1361,7	1478,4	-	-	-	-	-
Input power	kW	332,9	349,5	369,2	392,7	416,2	433,5	450,9	472,0	-	-	-	-	-
Cooling total input current	A	544,0	570,0	600,0	639,0	677,0	708,0	740,0	771,0	-	-	-	-	-
EER	W/W	3,02	3,14	3,15	3,10	3,06	3,04	3,02	3,13	-	-	-	-	-
Water flow rate system side	I/h	172652	188754	199587	209274	218966	226456	233947	254013	-	-	-	-	-
Pressure drop system side	kPa	116	112	104	109	72	78	81	105	-	-	-	-	-
Cooling performances with free-cooling glycol-fr	ee (2)													
Cooling capacity	kW	533,7	625,3	661,6	712,1	756,1	767,1	770,8	815,0	-	-	-	-	-
Input power	kW	46,5	57,3	61,2	64,4	67,7	67,7	67,7	73,9	-	-	-	-	-
Free cooling total input current	A	76,0	93,0	99,0	105,0	110,0	111,0	111,0	121,0	-	-	-	-	-
EER	W/W	11,47	10,91	10,82	11,05	11,17	11,34	11,39	11,03	-	-	-	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G	,													
Cooling performance chiller operation (1)														
Cooling capacity	kW	998,8	1092,7	1155,6	1211,7	1267,7	1310,9	1354,2	1470,0	-	-	-	-	-
Input power	kW	336,7	353,2	373,0	396,5	420,0	437,6	455,3	476,9	-	-	-	-	-
Cooling total input current	A	550,0	575,0	606,0	644,0	682,0	714,0	746,0	778,0	-	-	-	-	-
EER	W/W	2,97	3,09	3,10	3,06	3,02	3,00	2,97	3,08	-	-	-	-	-
Water flow rate system side	I/h	171604	187733	198553	208183	217806	225235	232663	252555	-	-	-	-	-
Pressure drop system side	kPa	79	67	76	76	41	44	47	72	-	-	-	-	-
Cooling performances with free-cooling	Jlycol-free (2)													
Cooling capacity	kW	559,3	653,2	691,6	748,6	798,5	804,6	806,4	852,3	-	-	-	-	-
Input power	kW	45,6	56,1	59,8	63,1	66,3	66,2	66,3	72,3	-	-	-	-	-
Free cooling total input current	A	74,0	91,0	97,0	102,0	108,0	108,0	109,0	118,0	-	-	-	-	-
EER	W/W	12,27	11,65	11,56	11,87	12,05	12,15	12,17	11,79	-	-	-	-	-

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / 8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/8,7 °C; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B																
SEPR - (EN14825: 2018) High temperatur	e with stand	ard fans (1)														
, , , , , , , , , , , , , , , , , , , ,	Α	W/W	6,16	5,97	5,71	5,54	5,80	5,60	5,52	5,67	5,57	5,55	5,52	5,72	5,57	5,66
	E	W/W	6,18	5,87	6,03	5,79	5,54	5,86	5,65	5,80	5,67	5,56	5,51	5,72	5,57	5,64
SEPR	N	W/W	6,43	6,20	6,09	5,96	5,71	5,94	5,78	6,01	5,85	5,70	5,61	5,76	5,86	5,88
	U	W/W	6,20	6,02	6,11	6,09	5,85	6,00	5,84	5,96	5,92	5,78	5,71	5,96	5,82	5,86
SEPR - (EN14825: 2018) High temperatur	re with invert		-,			-,	.,		.,,	,	.,				.,	.,
· · · · · · · · · · · · · · · · · · ·	A	W/W	6,16	5,97	5,71	5,54	5,80	5,60	5,52	5,67	5,57	5,55	5,52	5,72	5,57	5,66
	E	W/W	6,18	5,87	6,03	5,79	5,54	5,86	5,65	5,80	5,67	5,56	5,51	5,72	5,57	5,64
SEPR	N	W/W	6,43	6,20	6,09	5,96	5,71	5,94	5,78	6,01	5,85	5,70	5,61	5,76	5,86	5,88
	U	W/W	6,20	6,02	6,11	6,09	5,85	6,00	5,84	5,96	5,92	5,78	5,71	5,96	5,82	5,86
(1) Calculation performed with FIXED water	flow rate.		-,	-/		-,	-,	-,	-,	-,,,,,	-,,-		-,	-,		-,
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G			1702	1002	1002	2002	2202	2332	2302	2032	2002	3002	3202	3102	3002	3702
SEPR - (EN14825: 2018) High temperatur	re with stand	ard fans (1)														
, , , , , , , , , , , , , , , , , , ,	A	W/W	6,24	6,04	5,75	5,52	5,79	5,58	5,51	5,71	5,62	5,53	5,51	5,64	5,54	5,71
CEDD	E	W/W	6,21	5,91	6,07	5,76	5,51	5,87	5,66	5,84	5,71	5,53	5,51	5,71	5,56	5,66
SEPR	N	W/W	6,46	6,23	6,14	6,02	5,77	5,99	5,82	6,08	5,93	5,77	5,64	5,78	5,91	5,91
	U	W/W	6,27	6,11	6,19	6,07	5,83	6,05	5,89	6,04	5,93	5,78	5,68	6,01	5,88	5,92
SEPR - (EN14825: 2018) High temperatur	re with invert	er fans (1)						,	,		,					
	A	W/W	6,24	6,04	5,75	5,52	5,79	5,58	5,51	5,71	5,62	5,53	5,51	5,64	5,54	5,71
6500	E	W/W	6,21	5,91	6,07	5,76	5,51	5,87	5,66	5,84	5,71	5,53	5,51	5,71	5,56	5,66
SEPR	N	W/W	6,46	6,23	6,14	6,02	5,77	5,99	5,82	6,08	5,93	5,77	5,64	5,78	5,91	5,91
	U															
	U	W/W	6,27	6,11	6,19	6,07	5,83	6,05	5,89	6,04	5,93	5,78	5,68	6,01	5,88	5,92
(1) Calculation performed with FIXED water		W/W	6,27	6,11	6,19	6,07	5,83	6,05	5,89	6,04	5,93	5,78	5,68	6,01	5,88	5,92
•		W/W														
Size		W/W_	6,27 4202	6,11 4502	6,19 4802	6,07 5202	5,83			6,04	5,93 6503	5,78 6703	6903	7203	8403	9603
Size Model: B	flow rate.															
Size Model: B	flow rate.	ard fans (1)	4202	4502	4802	5202	5602	60	02 64	402	6503	6703	6903	7203	8403	9603
Size Model: B SEPR - (EN14825: 2018) High temperatur	flow rate.	ard fans (1)	4202 5,52	4502 5,60	4802 5,53	5202 5,53	5602 5,52	5,.	02 6 4	402 ,51	6503 5,73	6703 5,60	6903 5,77	7203 5,64		
Size Model: B SEPR - (EN14825: 2018) High temperatur	flow rate.	ard fans (1) W/W W/W	4202 5,52 5,61	4502 5,60 5,52	4802 5,53 5,59	5202 5,53 5,54	5,52 5,52	5,: 5,:	52 5 5 1 5	402 ,51 ,60	5,73 5,83	6703	6903	7203	8403 5,52	9603 5,58
Size Model: B SEPR - (EN14825: 2018) High temperatur	flow rate.	ard fans (1) W/W W/W W/W	5,52 5,61 5,69	5,60 5,52 5,85	4802 5,53 5,59 5,82	5,53 5,54 5,93	5,52 5,52 5,52 5,94	5,: 5,: 5,:	52 5 51 5 87 5	,51 ,60 ,81	5,73 5,83 6,05	5,60 5,85	5,77 5,55	7203 5,64 5,61	8403 5,52	9603 5,58
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR	re with stand	w/W W/W W/W W/W W/W	4202 5,52 5,61	4502 5,60 5,52	4802 5,53 5,59	5202 5,53 5,54	5,52 5,52	5,: 5,:	52 5 51 5 87 5	402 ,51 ,60	5,73 5,83	6703 5,60 5,85	6903 5,77 5,55	7203 5,64	5,52 - -	9603 5,58 -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR	re with stand	w/W W/W W/W W/W W/W	5,52 5,61 5,69 5,86	5,60 5,52 5,85 5,72	5,53 5,59 5,82 5,81	5,53 5,54 5,93 5,66	5,52 5,52 5,52 5,94 5,62	5,, 5,, 5,, 5,,	562 5 561 5 563 5	,51 ,60 ,81	5,73 5,83 6,05 6,04	5,60 5,85 - 6,05	5,77 5,55 - 5,78	7203 5,64 5,61 - 5,85	5,52 - -	9603 5,58 - -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur	re with standa A E N U re with invert	w/W W/W W/W W/W W/W	5,52 5,61 5,69	5,60 5,52 5,85 5,72 5,60	5,53 5,59 5,82 5,81	5,53 5,54 5,93 5,66 5,53	5,52 5,52 5,52 5,94 5,62 5,52	5,5 5,5 5,6 5,6 5,6	562 551 5537 5633 5562 552 552 552 552 552 564	,51 ,60 ,81	5,73 5,83 6,05 6,04	5,60 5,85	5,77 5,55	7203 5,64 5,61 - 5,85 5,64	5,52 - -	9603 5,58 -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur	re with stand. A E N U re with invert	w/W W/W W/W W/W W/W erfans (1)	5,52 5,61 5,69 5,86	5,60 5,52 5,85 5,72	5,53 5,59 5,82 5,81	5,53 5,54 5,93 5,66	5,52 5,52 5,52 5,94 5,62	5,, 5,, 5,, 5,,	52 5 51 5 53 5 53 5 51 5 51 5	,51 ,60 ,81 ,77	5,73 5,83 6,05 6,04	5,60 5,85 - 6,05	5,77 5,55 - 5,78	7203 5,64 5,61 - 5,85	5,52 - - - 5,52	5,58 - - - 5,58
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur	re with stand. A E N U re with invert A E	ard fans (1) W/W W/W W/W W/W W/W er fans (1) W/W W/W	5,52 5,61 5,69 5,86 5,52 5,61	5,60 5,52 5,85 5,72 5,60 5,52	5,53 5,59 5,82 5,81 5,53 5,53	5,53 5,54 5,93 5,66 5,53 5,54	5,52 5,52 5,52 5,94 5,62 5,52 5,52	5,3 5,3 5,6 5,6 5,7	52 5 53 5 53 5 53 5 54 5 55 5 57 5 57 5	,51 ,60 ,81 ,77	5,73 5,83 6,05 6,04 5,73 5,83	5,60 5,85 - 6,05 5,60 5,85	5,77 5,55 - 5,78 5,77 5,55	5,64 5,61 - 5,85 5,64 5,61	5,52 - - - 5,52 -	9603 5,58 - - - 5,58
Size	flow rate. re with stand. A B U re with invert A E N U re with invert N U U	w/W W/W W/W W/W W/W er fans (1) W/W W/W	5,52 5,61 5,69 5,86 5,52 5,61 5,69	5,60 5,52 5,85 5,72 5,60 5,52 5,85	5,53 5,59 5,82 5,81 5,53 5,59 5,82	5,53 5,54 5,93 5,66 5,53 5,54 5,93	5,52 5,52 5,62 5,62 5,52 5,52 5,52 5,52	5,,, 5,,, 5,,, 5,,, 5,,,	52 5 53 5 53 5 53 5 54 5 55 5 57 5 57 5	,51 ,60 ,81 ,77 ,51 ,60	5,73 5,83 6,05 6,04 5,73 5,83 6,05	5,60 5,85 - 6,05 5,60 5,85 -	5,77 5,55 - 5,78 5,77 5,55 -	5,64 5,61 - 5,85 5,64 5,61	5,52 - - - 5,52 - -	5,58 - - - 5,58 - -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water	flow rate. re with stand. A B U re with invert A E N U re with invert N U U	w/W W/W W/W W/W W/W er fans (1) W/W W/W	5,52 5,61 5,69 5,86 5,52 5,61 5,69	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72	5,53 5,59 5,82 5,81 5,53 5,59 5,82 5,81	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66	5,52 5,52 5,62 5,52 5,52 5,52 5,52 5,52	5,5 5,5 5,6 5,6 5,6 5,6	52 5 51 5 53 5 53 5 52 5 51 5 51 5 51 5	,51 ,60 ,81 ,77 ,51 ,60 ,81	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04	5,60 5,85 - 6,05 5,85 - 6,05	5,77 5,55 - 5,78 5,77 5,55 - 5,78	5,64 5,61 - 5,85 5,64 5,61 - 5,85	5,52 - - - 5,52 - - -	5,58 - - - 5,58 - -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR	flow rate. re with stand. A B U re with invert A E N U re with invert N U U	w/W W/W W/W W/W W/W er fans (1) W/W W/W	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86	5,60 5,52 5,85 5,72 5,60 5,52 5,85	5,53 5,59 5,82 5,81 5,53 5,59 5,82	5,53 5,54 5,93 5,66 5,53 5,54 5,93	5,52 5,52 5,62 5,62 5,52 5,52 5,52 5,52	5,5 5,5 5,6 5,6 5,6 5,6	52 5 51 5 53 5 53 5 52 5 51 5 51 5 51 5	,51 ,60 ,81 ,77 ,51 ,60 ,81	5,73 5,83 6,05 6,04 5,73 5,83 6,05	5,60 5,85 - 6,05 5,60 5,85 -	5,77 5,55 - 5,78 5,77 5,55 -	5,64 5,61 - 5,85 5,64 5,61	5,52 - - - 5,52 - -	5,58 - - - 5,58 - -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water Size	re with stand. A E N U re with invert A E N U flow rate.	ard fans (1) W/W W/W W/W W/W W/W er fans (1) W/W W/W W/W W/W	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72	5,53 5,59 5,82 5,81 5,53 5,59 5,82 5,81	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66	5,52 5,52 5,62 5,52 5,52 5,52 5,52 5,52	5,5 5,5 5,6 5,6 5,6 5,6	52 5 51 5 53 5 53 5 52 5 51 5 51 5 51 5	,51 ,60 ,81 ,77 ,51 ,60 ,81	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04	5,60 5,85 - 6,05 5,85 - 6,05	5,77 5,55 - 5,78 5,77 5,55 - 5,78	5,64 5,61 - 5,85 5,64 5,61 - 5,85	5,52 - - - 5,52 - - -	5,58 - - - 5,58 - -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water Size Model: G	re with stand. A E N U re with invert A E N U flow rate.	ard fans (1) W/W W/W W/W W/W er fans (1) W/W W/W W/W W/W Ard fans (1)	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72 4502	5,53 5,59 5,82 5,81 5,53 5,59 5,82 5,81 4802	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66	5,52 5,52 5,62 5,52 5,52 5,52 5,52 5,52	5,5 5,5 5,6 5,6 5,6 5,6	52 5 51 5 53 5 53 5 52 5 51 5 53 5	,51 ,60 ,81 ,77 ,51 ,60 ,81 ,77	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04 6503	5,60 5,85 - 6,05 5,85 - 6,05 6,05	5,77 5,55 - 5,78 5,77 5,55 - 5,78 6903	5,64 5,61 - 5,85 5,64 5,61 - 5,85	5,52 - - - 5,52 - - - -	9603 5,58 - - - 5,58 - - - - - 9603
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water Size Model: G SEPR - (EN14825: 2018) High temperatur	re with stand. A E N U re with invert A E N U flow rate.	ard fans (1) W/W W/W W/W W/W W/W er fans (1) W/W W/W W/W W/W W/W	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86 4202	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72 4502	5,53 5,59 5,82 5,81 5,53 5,59 5,82 5,81 4802	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66 5202	5,52 5,52 5,62 5,62 5,52 5,52 5,52 5,62 5,6	5,2,5,1,5,1,5,1,5,1,5,1,5,1,5,1,5,1,5,1,	52 55 51 55 53 5 53 5 52 5 51 5 57 5 53 5	,51 ,60 ,81 ,77 ,51 ,60 ,81 ,77	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04 6503	5,60 5,85 - 6,05 5,85 - 6,05 6,05 6703	5,77 5,55 - 5,78 5,77 5,55 - 5,78 6903	7203 5,64 5,61 - 5,85 5,64 5,61 - 5,85 7203	5,52 - - - 5,52 - - -	5,58 - - - 5,58 - -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water Size Model: G	re with stand. A E N U re with invert A E N U flow rate.	ard fans (1) W/W W/W W/W W/W W/W er fans (1) W/W W/W W/W W/W W/W W/W W/W	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86 4202	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72 4502	5,53 5,59 5,82 5,81 5,59 5,82 5,81 4802	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66 5202	5,52 5,52 5,62 5,62 5,52 5,52 5,94 5,62 5,62 5,62	5,2 5,3 5,4 5,1 5,2 5,2 5,4 5,4 60	52 55 53 5 53 5 547 5 53 5 547	,51 ,60 ,60 ,81 ,77 ,51 ,60 ,81 ,77 402	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04 6503	5,60 5,85 - 6,05 5,85 - 6,05 6,05	5,77 5,55 - 5,78 5,77 5,55 - 5,78 6903	7203 5,64 5,61 - 5,85 5,64 5,61 - 5,85 7203	5,52 - - - 5,52 - - - 8403	9603 5,58 - - - 5,58 - - - - - 9603
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water Size Model: G SEPR - (EN14825: 2018) High temperatur	re with stand. A B B U re with invert A E N U re with invert A E N U flow rate.	ard fans (1) W/W W/W W/W W/W W/W er fans (1) W/W W/W W/W W/W W/W	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86 4202	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72 4502	5,53 5,59 5,82 5,81 5,59 5,82 5,81 4802	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66 5202	5,52 5,52 5,62 5,62 5,52 5,52 5,62 5,62	5,2,5,1 5,1,5,1 5,1,5,1 5,1,5,1 5,1,5,1 5,1,5,1 5,1,5,1	52 55 53 5 53 5 547 5 53 5 547 5 53 5 547 5 53 5 547 5	,51 ,60 ,81 ,77 ,51 ,60 ,81 ,77 402	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04 6503	5,60 5,85 - 6,05 5,85 - 6,05 6,05 6703	5,77 5,55 - 5,78 5,77 5,55 - 5,78 6903	7203 5,64 5,61 - 5,85 5,64 5,61 - 5,85 7203	5,52 - - - 5,52 - - - - - - - - -	9603 5,58 5,58 5,58 5,58
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water Size Model: G SEPR - (EN14825: 2018) High temperatur SEPR	re with stand. A E N U re with invert A E N U flow rate.	ard fans (1) W/W W/W W/W W/W W/W er fans (1) W/W W/W W/W W/W W/W W/W W/W W	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86 4202	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72 4502	5,53 5,59 5,82 5,81 5,59 5,82 5,81 4802	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66 5202	5,52 5,52 5,62 5,62 5,52 5,52 5,94 5,62 5,62 5,62	5,2 5,3 5,4 5,1 5,2 5,2 5,4 5,4 60	52 55 53 5 53 5 547 5 53 5 547 5 53 5 547 5 53 5 547 5	,51 ,60 ,60 ,81 ,77 ,51 ,60 ,81 ,77 402	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04 6503	5,60 5,85 - 6,05 5,85 - 6,05 6,05 6703	5,77 5,55 - 5,78 5,77 5,55 - 5,78 6903	7203 5,64 5,61 - 5,85 5,64 5,61 - 5,85 7203	5,52 - - - 5,52 - - - - - - - - - - - - - - - - - - -	9603 5,58 - - - 5,58 - - - - - -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water Size Model: G SEPR - (EN14825: 2018) High temperatur SEPR	re with stand. A E N U re with invert A E N U flow rate.	ard fans (1) W/W W/W W/W W/W er fans (1) W/W W/W W/W W/W W/W W/W W/W W	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86 4202 5,57 5,65 5,72 5,91	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72 4502 5,64 5,52 5,90 5,76	5,53 5,59 5,82 5,81 5,53 5,59 5,82 5,81 4802	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66 5202 5,53 5,55 5,57 5,73	5,52 5,52 5,62 5,62 5,52 5,52 5,94 5,62 5,62 5,62 5,62	5,2,5,1 5,1,5,1,5,1,5,1,5,1,5,1,5,1,5,1,5,1	52 5 51 5 53 5 53 5 547 5 53 5 547 5 547 5 547 5 547 5 547 5 548 5 549 5	,51 ,60 ,81 ,77 ,51 ,60 ,81 ,77 ,77	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04 6503 5,75 5,81 6,08 6,09	5,60 5,85 - 6,05 5,85 - 6,05 6,05 6703	5,77 5,55 - 5,78 5,77 5,55 - 5,78 6903	7203 5,64 5,61 - 5,85 5,64 5,61 - 5,85 7203	5,52 - - - 5,52 - - - - - - - - - - - - - - - - - - -	9603 5,58 5,58 5,58
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water Size Model: G SEPR - (EN14825: 2018) High temperatur SEPR	re with stand. A E N U re with invert A E N U flow rate.	ard fans (1) W/W W/W W/W W/W er fans (1) W/W W/W W/W W/W W/W W/W W/W W	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86 4202 5,57 5,65 5,72 5,91	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72 4502 5,64 5,52 5,90 5,76	5,53 5,59 5,82 5,81 5,53 5,59 5,82 5,81 4802	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66 5202 5,53 5,55 5,97 5,73	5,52 5,52 5,62 5,62 5,52 5,52 5,54 5,62 5,62 5,62 5,62 5,51 5,49 5,69 5,67	5,2,5,5,5,6 5,1,0	52 5 51 5 53 5 53 5 54 5 55 5 50 5 50 5 50 5	,51 ,60 ,81 ,77 ,51 ,60 ,81 ,77 ,77 ,51 ,62 ,84 ,82	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04 6503 5,75 5,81 6,08 6,09 5,75	5,60 5,85 - 6,05 5,85 - 6,05 6,05 6703 5,64 5,87 - 6,09	5,77 5,55 - 5,78 5,77 5,55 - 5,78 6903 5,77 5,51 - 5,81	7203 5,64 5,61 - 5,85 5,64 5,61 - 5,85 7203 7203	5,52 - - - 5,52 - - - - - - - - - - - - - - - - - - -	9603 5,58 - - - 5,58 - - - - - -
Size Model: B SEPR - (EN14825: 2018) High temperatur SEPR SEPR - (EN14825: 2018) High temperatur SEPR (1) Calculation performed with FIXED water Size Model: G SEPR - (EN14825: 2018) High temperatur SEPR	re with stand. A B B N U re with invert A E N U flow rate.	ard fans (1) W/W W/W W/W W/W er fans (1) W/W W/W W/W W/W W/W W/W W/W W	5,52 5,61 5,69 5,86 5,52 5,61 5,69 5,86 4202 5,57 5,65 5,72 5,91	5,60 5,52 5,85 5,72 5,60 5,52 5,85 5,72 4502 5,64 5,52 5,90 5,76	5,53 5,59 5,82 5,81 5,53 5,59 5,82 5,81 4802	5202 5,53 5,54 5,93 5,66 5,53 5,54 5,93 5,66 5202 5,53 5,55 5,57 5,73	5,52 5,52 5,62 5,62 5,52 5,52 5,94 5,62 5,62 5,62 5,62	5,2,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5	52 5 51 5 53 5 53 5 54 5 53 5 54 5 55 5 56 5 57 5 58 5 58 5 58 5 58 5 58 5 58 5 58	,51 ,60 ,81 ,77 ,51 ,60 ,81 ,77 ,77	5,73 5,83 6,05 6,04 5,73 5,83 6,05 6,04 6503 5,75 5,81 6,08 6,09	5,60 5,85 - 6,05 5,85 - 6,05 6,05 6703	5,77 5,55 - 5,78 5,77 5,55 - 5,78 6903	7203 5,64 5,61 - 5,85 5,64 5,61 - 5,85 7203	5,52 - - - 5,52 - - - - - - - - - - - - - - - - - - -	9603 5,58 5,58 9603 5,58

⁽¹⁾ Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
	A	А	243,9	271,9	299,1	332,5	374,4	395,7	417,0	450,2	474,9	474,9	474,9	531,4	579,4	635,9
Maximum current (FLA)	E,U	Α	243,9	271,9	307,6	341,0	374,4	404,2	425,5	458,7	483,4	483,4	483,4	539,9	587,9	644,4
	N	Α	252,4	280,4	316,1	349,5	382,9	412,7	434,0	467,2	491,9	491,9	491,9	548,4	604,9	667,2
	A	Α	265,5	307,3	350,2	388,2	419,8	466,8	484,0	519,5	529,4	529,4	529,4	661,9	701,8	831,3
Peak current (LRA)	E,U	Α	265,5	307,3	358,7	396,7	419,8	475,3	492,5	528,0	537,9	537,9	537,9	670,4	710,3	839,8
	N	Α	274,0	315,8	367,2	405,2	428,3	483,8	501,0	536,5	546,4	546,4	546,4	678,9	727,3	862,6

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Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
	A	Α	683,9	731,4	770,4	813,4	864,9	913,2	947,2	980,7	1028,7	1123,7	1162,7	1300,2	1419,2
Maximum current (FLA)	E,U	Α	700,9	739,9	793,2	836,2	887,7	930,2	972,7	997,7	1054,2	1132,2	1179,7	-	-
	N	Α	715,2	771,2	818,7	870,2	921,7	955,7	989,7	1023,2	-	-	-	-	-
	А	Α	858,2	930,7	953,4	1108,4	1163,9	1290,2	1287,2	1069,4	1096,3	1200,0	1222,7	1480,2	1603,2
Peak current (LRA)	E,U	Α	875,2	939,2	976,2	1131,2	1186,7	1307,2	1312,7	1086,4	1121,8	1208,5	1239,7	-	-
	N	A	889,5	970,5	1001,7	1165,2	1220,7	1332,7	1329,7	1111,9	-	-	-	-	-

GENERAL TECHNICAL DATA

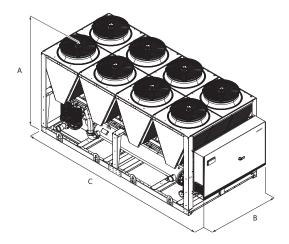
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Туре	A,E,N,U	type							Bi-	vite						
Compressor regulation	A,E,N,U	Туре							On-	-Off						
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type							R1:	34a						
System side heat exchanger																
Туре	A,E,N,U	type							Shell a	nd tube						
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E,N,U	Туре							Groove	d joints						
Fan																
Туре	A,E,N,U	type							Ax	rial						
	Α	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
Number	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
	Α	m³/h	116000	116000	116000	116000	145000	145000	145000	174000	174000	174000	174000	203000	203000	232000
A:	E	m³/h	89600	89600	112000	112000	112000	134400	134400	156800	156800	156800	156800	179200	179200	201600
Air flow rate	N	m³/h	112000	112000	134400	134400	134400	156800	156800	179200	179200	179200	179200	201600	224000	246400
	U	m³/h	116000	116000	145000	145000	145000	174000	174000	203000	203000	203000	203000	232000	232000	261000
Sound data calculated in cooling mode	(1)															
	Α	dB(A)	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,7	99,7	99,7	99,7	100,4	100,4	101,1
Cound nouse lovel	E	dB(A)	91,0	91,0	91,7	91,9	92,1	92,6	92,5	93,0	93,0	93,0	93,0	93,7	93,9	94,6
Sound power level	N	dB(A)	91,7	91,7	92,3	92,5	92,6	93,1	93,0	93,5	93,5	93,5	93,5	94,1	94,6	95,2
	U	dB(A)	98,0	98,0	98,9	99,0	99,0	99,7	99,7	100,4	100,4	100,4	100,4	100,9	101,0	101,5
	А	dB(A)	65,6	65,6	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,1	67,1	67,6	67,7	68,2
Cound proceure lovel (10 m)	E	dB(A)	58,6	58,6	59,2	59,4	59,5	59,9	59,9	60,3	60,3	60,3	60,3	60,8	61,0	61,6
Sound pressure level (10 m)	N	dB(A)	59,2	59,2	59,7	59,9	60,0	60,3	60,3	60,6	60,6	60,6	60,6	61,1	61,5	62,0
	U	dB(A)	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,6	67,6	67,6	67,6	68,1	68,1	68,5

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor															
Туре	A,E,N,U	type							Bi-vite						
Compressor regulation	A,E,N,U	Туре							0n-0ff						
	А	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Number	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Circuits	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	A,E,N,U	type							R134a						
System side heat exchanger															
Туре	A,E,N,U	type						2	hell and tub	e					
	A	no.	1	1	1	1	1	1	1	2	2	2	2	2	2
Number	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	-
	N	no.	1	2	2	2	2	2	2	2	-	-	-	-	-
Connections (in/out)	A,E,N,U	Туре						(rooved join	ts					
Fan									•						
Туре	A,E,N,U	type							Axial						
	А	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
Number	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-
	А	m³/h	232000	261000	261000	261000	290000	319000	319000	348000	348000	406000	406000	435000	493000
A:- G	E	m³/h	224000	224000	246400	246400	268800	291200	313600	313600	336000	336000	358400	-	-
Air flow rate	N	m³/h	246400	291200	313600	336000	358400	358400	358400	380800	-	-	-	-	-
	U	m³/h	290000	290000	319000	319000	348000	377000	406000	406000	435000	435000	464000	-	-
Sound data calculated in cooling mode (1)														
	А	dB(A)	101,1	101,6	101,6	101,6	102,1	102,5	102,5	102,7	102,8	103,4	103,4	103,7	104,2
Country and the same level	E	dB(A)	95,2	95,2	95,4	95,6	96,0	96,2	96,4	96,0	96,5	96,4	96,6	-	-
Sound power level	N	dB(A)	95,5	96,0	96,2	96,6	96,9	96,9	96,9	96,7	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,4	102,4	102,8	103,1	103,4	103,4	103,7	103,7	103,9	-	-
	А	dB(A)	68,2	68,6	68,6	68,6	69,0	69,2	69,2	69,4	69,4	69,8	69,8	70,0	70,4
6 1 1 1/40)	E	dB(A)	62,1	62,0	62,2	62,3	62,7	62,8	62,9	62,5	62,8	62,8	62,8	-	-
Sound pressure level (10 m)	N	dB(A)	62,3	62,5	62,6	62,9	63,1	63,1	63,1	62,8	-	-	-	-	-
	U	dB(A)	68,9	68,9	69,1	69,2	69,5	69,7	69,9	69,8	70,0	70,0	70,2	-	
		. ,													

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights			1402	1002	1002	2002	2202	2332	2302	2032	2002	3002	3202	3402	3002	3702
Δ	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
R	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200		2200	2200	2200	2200	2200	2200
	A	mm	5160	5160	5160	5160	6350	6350	6350		7140	7140	7140	8330	8330	9520
C	E,U	mm	5160	5160	6350	6350	6350	7140	7140		8330	8330	8330	9520	9520	10710
	N N	mm	6350	6350	7140	7140	7140	8330	8330		9520	9520	9520	10710	11900	13090
Size			4202	4502	4802	5202	5602	60	02	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights																
	A	mm	2450	2450	2450	2450	2450	24	50	2450	2450	2450	2450	2450	2450	2450
A	E,U	mm	2450	2450	2450	2450	2450	24	50	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	24	50	2450	2450	-	-	-	-	-
	A	mm	2200	2200	2200	2200	2200	22	00	2200	2200	2200	2200	2200	2200	2200
В	E,U	mm	2200	2200	2200	2200	2200	22	00	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	22	00	2200	2200	-	-	-	-	-
	A	mm	9520	10710	10710	10710	11900) 130)90	13090	14280	14280	16660	16660	17850	20230
C	E,U	mm	11900	11900	13090	13090	14280	154	170	16660	16660	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	190)40	19040	20230	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

 $\label{lem:continuous} \mbox{Aermec reserves the right to make any modifications deemed necessary.}$ All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSM-HWT-1402-9603-F

Air-water chiller with free-cooling

Cooling capacity 306 ÷ 2001 kW



- · High efficiency also at partial loads
- Microchannel coil
- Ideal in data center applications
- Water outlet temperatures up to 30°C
- Night mode



DESCRIPTION

The NSM are chillers, designed and manufactured to meet air conditioning requirements in residential/commercial buildings or to meet refrigeration requirements in industrial facilities.

These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers. The base, the structure and the panels are made of steel treated with rustproof polyester paint.

These chillers are also equipped with a Free cooling coil and are used when the refrigerant load request persists even during the winter months, or when the outdoor air temperature is below the temperature of the return liquid from the system. In Free cooling operation (mixed Free cooling and compressors, or Free cooling only), the fluid is cooled directly by the outdoor air, allowing even the complete shutdown of compressors with a significant energy saving.

Extremely reliable and flexible units which perfectly adapt themselves to all thermal load requests thanks to inverter technology, with high energy efficiencies both at full and partial load.

VERSIONS

NSM WF_A High Efficiency

NSM WF_E High efficiency low noise **NSM WF_U** Very high efficiency

NSM WF_N Very high efficiency low noise

FEATURES

- Unit with 1/2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
- The full range uses aluminium microchannel coils, ensuring very high levels of efficiency. This allows using less refrigerant compared to traditional copper coils.
- Electronic Thermostatic valve brings significant benefits, in particular when the refrigerant is working at partial loads to the benefit of energy efficiency of the unit.
- Standard differential pressure switch

- Throttle valve in the hydraulic circuit for water switching on the Free-Cooling coils
- Fans inverter
- Device for electronically controlling the series condensation, for operation even at low temperatures or in free cooling, which allows adjusting the air flow rate to actual system demand with resulting advantages in terms of consumption reduction.

CONTROLS

Microprocessor adjustment, that allows isolating the condenser coils to maximise the free cooling efficiency, even in mixed Free cooling and compressor operation

- Complete with latest generation Touch screen allowing real time graphics visualization showing water and external air temperatures, pressures and requested load.
- Ethernet communication is offered as standard and allows all information to be visualized on a PC connected to the controller (via IP and browser).
- The presence of a programmable timer allows setting time bands of operation and a possible second set-point
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

PRV3: Allows you to control the chiller at a distance.

FB1: Air filter

MULTICHILLER_EVO: Control system for multiple parallel installed constant flow chillers providing individual chiller on/off and control capability. **AVX:** Spring anti-vibration supports

ACCESSORIES FACTORY FITTED ONLY

KRS: Evaporator trace heating **GP:** Anti-intrusion grids.

AK: ACOUSTIC KIT. This accessory allows further sound reduction. Must be requested at time of order and is available factory fitted only. RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1		•(x2)												
AERNET				•	•	•	•	•	•					
PRV3		•	•	•	•		•	•	•	•	•	•	•	•
FB1		•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO		•	•	•	•		•	•	•	•	•	•	•	•
AVX	(1)	•	•	•	•	•	•	•	•	•	•	•	•	•
Size		3902	4202	4502	4802	5202	560	2	6002	6402	6903	7203	8403	9603
AER485P1		•(x2)	•(x2)	•(x2)	•(x2)	•(x2)	•(x2	2)	•(x2)	•(x2)	•(x3)	•(x3)	•(x3)	•(x3)
AERNET		•	•	•	•	•	•			•	•	•	•	•
PRV3		•	•		•				•	•	•	•	•	•
FB1		•	•							•	•	•		•
MULTICHILLER_EVO			•	•	•	•	•			•	•	•	•	•
AVX	(1)		•		•				•	•	•	•	•	•

⁽¹⁾ Accessories to be defined for compatibility

KRS: Evaporator trace heating

Ver		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
all	(1)	•	•	•	•	•	•	•	•	•	•	•	•	•
Ver		3902	4202	4502	4802	5202	56	02	6002	6402	6903	7203	8403	9603
all	(1)	•	•	•	•	•		•	•	•	•	•	•	•

GP: Anti-intrusion grids

Ver		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
all	(1)	•	•	•	•	•	•	•	•	•	•	•	•	•
Ver		3902	4202	4502	4802	5202	56	502	6002	6402	6903	7203	8403	9603
all	(1)	•	•					•	•	•	•	•	•	•

⁽¹⁾ Accessories to be defined for compatibility

AK: Acoustic kit

Ver		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
all	(2)	•	•	•	•	•	•	•	•	•	•	•	•	•
Ver		3902	4202	4502	4802	5202	5602	(6002	6402	6903	7203	8403	9603
all	(2)	•	•	•	•	•	•		•	•	•	•	•	•

RIF: Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
all	RIFNSM1402	RIFNSM1602	RIFNSM1802	RIFNSM2002	RIFNSM2202	RIFNSM2352	RIFNSM2502	RIFNSM26	52 RIFNSM2802	RIFNSM3002	RIFNSM3202	RIFNSM3402	RIFNSM3602
Ver	3902	4202	4502	4802	2 52	02 5	602	6002	6402	6903	7203	8403	9603
all	RIFNSM3902	2 RIFNSM420	D2 RIFNSM4	502 RIFNSM4	802 RIFNSA	Л5202 RIFN	SM5602 RIF	NSM6002	RIFNSM6402	RIFNSM6903	RIFNSM7203	RIFNSM8403	RIFNSM9603

A grey background indicates the accessory must be assembled in the factory $% \left(1\right) =\left(1\right) \left(1\right)$

⁽x2) Indicates the amount to order

⁽¹⁾ Accessories to be defined for compatibility
A grey background indicates the accessory must be assembled in the factory

A grey background indicates the accessory must be assembled in the factory

⁽²⁾ The accessory is only available for the "E/N" silenced versions
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	
1,2,3	Description NSM
1,2,3	Nom Size
4,5,6,7	1402-1602-1802-2002-2202-2352-2502-2652-2802-3002-3202-3402-3602-3902-4202-4502-4802-5202-5602-6002-6402-6903-7203-8403-9603
8	Operating field
W	Electronic thermostatic valve (temperature of water produced from 5°C to 30 °C)
9	Model
F	Free-cooling
P	Free-cooling plus (1)
11	Version
A	High efficiency
E	Silenced high efficiency
U	Very high efficiency
N	Silenced very high efficiency
12	Condensing coils / Free cooling water coils
•	Aluminium microchannel / Copper Aluminium
0	Painted aluminium microchannel / Painted Aluminium Copper
R	Copper - Copper (1) / Copper Copper
S	Copper - Thinned (1) / Copper - Thinned
V	Epoxy paint (only free cooling coil)(1) / Epoxy paint (only free cooling coil)
13	Fans
J	Inverter
14	Power supply
•	400V/3/50Hz
15,16	Integrated hydronic kit
00	Without hydronic kit
PA	Pumping unit (pump A)
PB	Pumping unit (pump B)
PC	Pumping unit (pump C)
PD	Pumping unit (pump D)
PE	Pumping unit (pump E)
PF	Pumping unit (pump F)
PG	Pumping unit (pump G)
PH	Pumping unit (pump H)
PI	Pumping unit (pump I)
PJ	Pumping unit (pump J)
DA	Pumping unit (pump A and stand-by pump)
DB	Pumping unit (pump B and stand-by pump)
DC	Pumping unit (pump C and stand-by pump)
DD	Pumping unit (pump D and stand-by pump)
DE	Pumping unit (pump E and stand-by pump)
DF	Pumping unit (pump F and stand-by pump)
DG	Pumping unit (pump G and stand-by pump)
DH	Pumping unit (pump H and stand-by pump)
DI	Pumping unit (pump I and stand-by pump)
DJ	Pumping unit (pump J and stand-by pump)
TF	Double static, pressure pump (pump F)
TG	Double static, pressure pump (pump G)
TH	Double static, pressure pump (pump h)
TI	Double static, pressure pump (pump i)
TJ	Double static, pressure pump (pump J)
- 17	pounte statief bressure barrily (barrily 1)

⁽¹⁾ The free cooling plus models can have coils only in options $^{\mbox{\tiny "O"}}$ and $^{\mbox{\tiny "O"}}$

NSMW - FA - PA

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Free-cooling														
Cooling performance chiller operation (1)														
Cooling capacity	kW	306	351	400	441	479	505	546	589	638	653	687	753	792
Input power	kW	82	95	109	118	125	135	147	155	167	172	179	192	205
Cooling total input current	A	146	166	187	200	208	224	242	258	277	290	306	327	348
EER	W/W	3,75	3,69	3,69	3,73	3,83	3,73	3,71	3,79	3,81	3,80	3,84	3,92	3,86
Water flow rate system side	I/h				75940		86790	93850	101330					136230
		52650	60360	68820		82440				109680			129500	
Pressure drop system side	kPa	60	80	95	76	89	99	116	85	91	96	84	93	103
Cooling performances with free-cooling (2)	LAM	226	251	2/2	270	440	454	462	542	FF1	554	FF0	644	(51
Cooling capacity	kW	336	351	363	370	449	454	462	542	551	554	559	644	651
Input power	kW	19,3	19,3	19,3	19,3	24,1	24,1	24,1	28,9	28,9	28,9	28,9	33,7	33,7
Free cooling total input current	A	30,0	30,0	30,0	30,0	37,6	37,6	37,6	45,1	45,1	45,1	45,1	52,6	52,6
EER	W/W	17,43	18,20	18,82	19,20	18,63	18,86	19,16	18,74	19,06	19,15	19,32	19,11	19,29
Water flow rate system side	l/h	52650	60360	68820	75940	82440	86790	93850	101330	109680			129500	136230
Pressure drop system side	kPa	87	115	139	129	133	147	171	128	141	147	141	146	161
Free-cooling Plus														
Cooling performance chiller operation (1)														
Cooling capacity	kW	305	349	398	439	477	502	543	587	635	650	683	749	788
Input power	kW	82	96	109	120	126	136	148	157	169	174	181	194	207
Cooling total input current	А	147	167	188	201	210	226	244	260	279	292	308	330	351
EER	W/W	3,70	3,64	3,64	3,68	3,78	3,68	3,66	3,74	3,76	3,74	3,78	3,86	3,80
Water flow rate system side	I/h	52410	60090	68480	75580	82100	86410	93420	100950	109190	111820	117510	128910	135580
Pressure drop system side	kPa	59	79	94	75	89	98	115	84	90	95	83	92	102
Cooling performances with free-cooling (2)														
Cooling capacity	kW	361	378	391	399	484	490	497	584	594	597	602	694	701
Input power	kW	19,7	19,7	19,7	19,7	24,6	24,6	24,6	29,5	29,5	29,5	29,5	34,4	34,4
Free cooling total input current	A	30,6	30,6	30,6	30,6	38,2	38,2	38,2	45,9	45,9	45,9	45,9	53,5	53,5
EER	W/W	18,35	19,22	19,89	20,29	19,69	19,93	20,25	19,81	20,15	20,24	20,41	20,19	20,38
Water flow rate system side	I/h	52410	60090	68480	75580	82100	86410	93420	100950	109190			128910	135580
Pressure drop system side	kPa	86	114	138	128	131	145	169	127	139	146	139	145	160
ressure drop system side	KI d	00	114	130	120	131	143	107	127	137	140	137	140	100
Size		3902	4202	4502	4802	5202	2 560	02 6	002	5402	6903	7203	8403	9603
		3902	4202	4502	4802	5202	2 560	02 6	002	5402	6903	7203	8403	9603
Free-cooling		3902	4202	4502	4802	5202	2 560	02 6	002	5402	6903	7203	8403	9603
Free-cooling Cooling performance chiller operation (1)	kW													
Free-cooling Cooling performance chiller operation (1) Cooling capacity	kW	853	882	959	1014	1082	116	59 1	262	1327	1476	1531	1758	2001
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power	kW	853 216	882 228	959 244	1014	1082 281	116	59 1 5 :	262 319	1327 343	1476 373	1531 388	1758 442	2001 512
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A	853 216 362	882 228 377	959 244 416	1014 260 453	1082 281 478	116 29 49	59 1 5 :	262 319 531	1327 343 567	1476 373 646	1531 388 683	1758 442 740	2001 512 854
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W	853 216 362 3,95	882 228 377 3,87	959 244 416 3,92	1014 260 453 3,90	1082 281 478 3,86	116 29 49 3,9	59 1 5 : 4 :	1262 319 531 3,95	1327 343 567 3,87	1476 373 646 3,96	1531 388 683 3,94	1758 442 740 3,97	2001 512 854 3,91
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h	853 216 362 3,95 146650	882 228 377 3,87 151620	959 244 416 3,92 165010	1014 260 453 3,90 174350	1082 281 478 3,86 18619	116 29 49 3,9 0 2011	59 1 5 : 4 : 77 : 150 21	262 319 531 3,95	1327 343 567 3,87 28220	1476 373 646 3,96 253930	1531 388 683 3,94 263260	1758 442 740 3,97 302310	2001 512 854 3,91 344170
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W	853 216 362 3,95	882 228 377 3,87	959 244 416 3,92	1014 260 453 3,90	1082 281 478 3,86	116 29 49 3,9	59 1 5 : 4 : 77 : 150 21	1262 319 531 3,95	1327 343 567 3,87	1476 373 646 3,96	1531 388 683 3,94	1758 442 740 3,97	2001 512 854 3,91
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2)	kW A W/W I/h kPa	853 216 362 3,95 146650 69	882 228 377 3,87 151620 74	959 244 416 3,92 165010 91	1014 260 453 3,90 174350	1082 281 478 3,86 18619 94	116 29 49 3,9 0 2011	59 1 5 : 4 : 17 : 150 21	262 319 531 3,95 17040 2	1327 343 567 3,87 28220	1476 373 646 3,96 253930 116	1531 388 683 3,94 263260 116	1758 442 740 3,97 302310 117	2001 512 854 3,91 344170 138
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa	853 216 362 3,95 146650 69	882 228 377 3,87 151620 74	959 244 416 3,92 165010 91	1014 260 453 3,90 174350 101	1082 281 478 3,86 18619 94	110 29 49 3,9 0 2011 11	55 150 21 55 21 57 32 50 21	262 319 531 3,95 17040 2 130	1327 343 567 3,87 28220 144	1476 373 646 3,96 253930 116	1531 388 683 3,94 263260 116	1758 442 740 3,97 302310 117	2001 512 854 3,91 344170 138
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power	kW A W/W I/h kPa kW	853 216 362 3,95 146650 69 735 38,5	882 228 377 3,87 151620 74 740 38,5	959 244 416 3,92 165010 91 827 43,4	1014 260 453 3,90 174350 101 836 43,4	1082 281 478 3,86 18619 94 845 43,4	110 29 49 3,9 0 2011 11 93 48,	55 1 5 21 0 5 1 150 21 0 5 1	262 3319 5331 3,95 17040 2 130	1327 343 567 3,87 28220 144	1476 373 646 3,96 253930 116	1531 388 683 3,94 263260 116	1758 442 740 3,97 302310 117 1402 72,3	2001 512 854 3,91 344170 138 1590 81,9
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A	853 216 362 3,95 146650 69 735 38,5 60,1	882 228 377 3,87 151620 74 740 38,5 60,1	959 244 416 3,92 165010 91 827 43,4 67,6	1014 260 453 3,90 174350 101 836 43,4 67,6	1082 281 478 3,86 18619 94 845 43,4 67,6	116 29 49 3,9 0 2011 11 93 48,	55 1 150 21 0 5 1 150 21 150 21	1262 3319 5331 3,95 17040 2 130	1327 343 567 3,87 28220 144 1033 53,0 82,6	1476 373 646 3,96 253930 116 1284 67,5 105,1	1531 388 683 3,94 263260 116 1293 67,5 105,1	1758 442 740 3,97 302310 117 1402 72,3 112,7	2001 512 854 3,91 344170 138 1590 81,9
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW kW A W/W	853 216 362 3,95 146650 69 735 38,5 60,1 19,07	882 228 377 3,87 151620 74 740 38,5 60,1 19,19	959 244 416 3,92 165010 91 827 43,4 67,6 19,07	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27	1082 281 478 3,86 1 18619 94 845 43,4 67,6	116 29 49 3,9 0 2011 11 93 48, 75,	59 155 5 177 3 178 179 179 179 179 179 179 179 179 179 179	1262 319 531 3,95 17040 2 130 1025 53,0 82,6 9,33	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620	959 244 416 3,92 165010 91 827 43,4 67,6 19,07	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27	1082 281 478 3,86 1 18619 94 845 43,4 67,6 19,48	110 29 49 3,9 0 2011 11 93 48, 75, 8 19,,0	59 1 5 4 4 9 77 3 150 21 0 0 5 1 5 1 8 2 9 2 1 8 3 9 1	1262 319 5531 3,95 17040 2 1130 1025 533,0 82,6 9,33 17040 2	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W	853 216 362 3,95 146650 69 735 38,5 60,1 19,07	882 228 377 3,87 151620 74 740 38,5 60,1 19,19	959 244 416 3,92 165010 91 827 43,4 67,6 19,07	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27	1082 281 478 3,86 1 18619 94 845 43,4 67,6	110 29 49 3,9 0 2011 11 93 48, 75, 8 19,,0	59 1 5 4 4 9 77 3 150 21 0 0 5 1 5 1 8 2 9 2 1 8 3 9 1	1262 319 531 3,95 17040 2 130 1025 53,0 82,6 9,33	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus	kW A W/W I/h kPa kW kW A W/W I/h	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620	959 244 416 3,92 165010 91 827 43,4 67,6 19,07	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27	1082 281 478 3,86 1 18619 94 845 43,4 67,6 19,48	110 29 49 3,9 0 2011 11 93 48, 75, 8 19,,0	59 1 5 4 4 9 77 3 150 21 0 0 5 1 5 1 8 2 9 2 1 8 3 9 1	1262 319 5531 3,95 17040 2 1130 1025 533,0 82,6 9,33 17040 2	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1)	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 18619	116 29 49 3,9 0 2011 11 93 48, 75, 3 19,70 0 2011	59 1 5 21 67 3 150 21 0 5 1 5 1 7 2 2 1,1 8 339 1 150 21	262 319 531 3,95 17040 2 1130 1025 53,0 82,6 9,33 17040 2	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 1159	116 29 49 3,9 0 2011 11 93 48, 75, 8 19,0 0 2011	59 1 5 2 77 3 150 21 0 5 1 5 1 6 2 2 1 8 339 1 150 21	262 319 531 3,95 17040 2 1130 1025 53,0 82,6 9,33 17040 2 194	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 18619	116 29 49 3,9 0 2011 11 93 48, 75, 8 19,0 0 2011	59 1 5 2 77 3 150 21 0 5 1 5 1 6 2 2 1 8 339 1 150 21	262 319 531 3,95 17040 2 1130 1025 53,0 82,6 9,33 17040 2	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 1159	116 29 49 3,9 0 2011 11 93 48, 75, 8 19,70 0 2011 17	59 1 5 21 77 3 150 21 0 5 1 2 2 1 1 8 339 1 150 21 3 3 4 1 8 8 8 8	262 319 531 3,95 17040 2 130 1025 53,0 82,6 9,33 17040 2 194	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 18619 159	116 29 49 3,9 0 2011 11 93 48, 75, 8 19,70 0 2011 17	59 1 5 21 77 3 150 21 0 5 1 2 2 1 1 8 339 1 150 21 3 3 4 1 8 8 8 8	262 319 531 3,95 17040 2 130 1025 53,0 82,6 9,33 17040 2 194	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 1159 1077 284 482 3,80	116 29 49 3,9 0 2011 11 93 48, 75, 8 19,70 0 2011 17	59 1 5 21 77 3 150 21 0 5 1 2 2 1 1 8 339 1 150 21 3 3 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	262 319 531 3,95 17040 2 130 1025 53,0 82,6 9,33 17040 2 194 256 322 536 33,90	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213 1320 346 571 3,81	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127 878 230 381 3,81	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 1159 1077 284 482 3,80	116 29 49 3,9 0 2011 11 93 48, 75, 8 19,70 0 2011 17	59 1 5 21 77 3 150 21 0 5 1 2 2 1 1 8 339 1 150 21 3 3 4 1 8 8 8 91 3 1 120 21	262 319 531 3,95 17040 2 130 1025 53,0 82,6 9,33 17040 2 194 256 322 536 33,90	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213 1320 346 571 3,81	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652 3,90	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688 3,89	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747 3,91	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127 878 230 381 3,81 150930	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142 955 247 420 3,87 164290	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158 1009 262 456 3,84 173550	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 159 1077 284 482 3,80 18523	116 29 49 3,9 0 2011 11 93 48, 75, 3 19, 0 2011 17 116 29 49 3,5	59 1 5 21 77 3 150 21 0 5 1 2 2 1 1 8 339 1 150 21 3 3 4 1 8 8 8 91 3 1 120 21	262 319 531 3,95 17040 2 130 1025 53,0 82,6 9,33 17040 2 194 256 322 536 3,90 15990 2	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213 1320 346 571 3,81 27050	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652 3,90 252860	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688 3,89 262120	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747 3,91 300800	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207 1991 517 861 3,85 342450
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127 878 230 381 3,81 150930	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142 955 247 420 3,87 164290	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158 1009 262 456 3,84 173550	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 159 1077 284 482 3,80 18523	116 29 49 3,9 0 2011 11 93 48, 75, 3 19, 0 2011 17 116 29 49 3,5 0 2000	59 1 5 1 77 3 150 21 0 5 1 2 2 1 1 8 339 1 150 21 13 8 8 91 3 120 21	262 319 531 3,95 17040 2 130 1025 53,0 82,6 9,33 17040 2 194 256 322 536 3,90 15990 2	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213 1320 346 571 3,81 27050	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652 3,90 252860	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688 3,89 262120	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747 3,91 300800	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207 1991 517 861 3,85 342450
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Precooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Free-cooling Plus Cooling performance swith free-cooling (2) Cooling performances with free-cooling (2) Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa kW kW A kW kW A kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119 849 218 365 3,90 146000 69	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127 878 230 381 3,81 150930 73	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142 955 247 420 3,87 164290 90	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158 1009 262 456 3,84 173550 100	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 159 1077 284 482 3,80 18523 93	116 29 49 3,9 0 2011 11 93 48, 75, 8 19, 0 2011 17 116 29 49 3,5 0 2000	59 1 5 21 77 3 150 21 0 5 1 2 2 1 1 8 39 1 150 21 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1262	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213 1320 346 571 3,81 27050 142	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652 3,90 252860 115	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688 3,89 262120 115	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747 3,91 300800 115	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207 1991 517 861 3,85 342450 136
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Precooling Pus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kPa kW kW A kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119 849 218 365 3,90 146000 69	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127 878 230 381 3,81 150930 73 797 39,3	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142 955 247 420 3,87 164290 90 891 44,2	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158 1009 262 456 3,84 173550 100 900 44,2	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 159 1077 284 482 3,80 18523 93	116 29 49 3,9 0 2011 11 93 48, 75, 3 19, 0 2011 17 116 29 49 3,5,9 0 2000	59 1 5 1 77 3 150 21 0 5 1 2 2 1 8 339 1 150 21 33	1262	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213 1320 346 571 3,81 27050 142	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652 3,90 252860 115 1384 68,8	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688 3,89 262120 115	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747 3,91 300800 115 1510 73,7	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207 1991 517 861 3,85 342450 136
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Precooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kPa kW kW A W/W I/h kPa kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119 849 218 365 3,90 146000 69 792 39,3 61,2	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127 878 230 381 3,81 150930 73 797 39,3 61,2	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142 955 247 420 3,87 164290 90 891 44,2 68,8	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158 1009 262 456 3,84 173550 100 900 44,2 68,8	1082 281 478 3,86 18619 94 845 43,4 67,6 19,48 159 1077 284 482 3,80 18523 93	116 29 49 3,9 0 2011 11 93 48, 75, 3 19, 0 2011 17 116 29 49 3,5 0 2000 10 10 49	59 1 5 1 77 3 150 21 0 5 1 2 2 1 8 339 1 150 21 33 3 64 1 88 8 120 21 19 007 1 1,1 4 1,5 8	1262 319 531 3,95 17040 2 130 1025 533,0 82,6 9,33 17040 2 194 1256 3322 536 3,90 15990 2 129	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213 1320 346 571 3,81 27050 142 1113 54,0 84,1	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652 3,90 252860 115 1384 68,8 107,0	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688 3,89 262120 115 1393 68,8 107,0	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747 3,91 300800 115 1510 73,7 114,7	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207 1991 517 861 3,85 342450 136 1713 83,5 130,0
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Precooling Puls Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performance chiller operation (2) Cooling capacity Input power Free cooling total input current EER Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119 849 218 365 3,90 146000 69 792 39,3 61,2 20,16	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127 878 230 381 3,81 150930 73 797 39,3 61,2 20,28	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142 955 247 420 3,87 164290 90 891 44,2 68,8 20,16	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158 1009 262 456 3,84 173550 100 900 44,2 68,8 20,36	1082 281 478 3,86 1 18619 94 845 43,4 67,6 19,48 1 18619 159 1077 284 482 3,80 9 1 18523 9 3	116 29 49 3,9 0 2011 11 93 48, 75,8 19,0 0 2011 17 116 29 49 3,9 0 2001 10 10 49 49 76,8	59 1 5 2 4 2 17 3 150 21 0 5 1 2 2 1 8 339 1 150 21 33 2 120 21 9 21 9 21	1262 319 531 3,95 17040 2 130 1025 533,0 82,6 9,33 17040 2 1194 1256 3322 536 3,90 15990 2 129	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213 1320 346 571 3,81 27050 142 1113 54,0 84,1 20,59	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652 3,90 252860 115 1384 68,8 107,0 20,12	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688 3,89 262120 115 1393 68,8 107,0 20,25	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747 3,91 300800 115 1510 73,7 114,7 20,49	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207 1991 517 861 3,85 342450 136 1713 83,5 130,0 20,51
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Precooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kPa kW kW A W/W I/h kPa kW A W/W I/h kPa	853 216 362 3,95 146650 69 735 38,5 60,1 19,07 146650 119 849 218 365 3,90 146000 69 792 39,3 61,2	882 228 377 3,87 151620 74 740 38,5 60,1 19,19 151620 127 878 230 381 3,81 150930 73 797 39,3 61,2	959 244 416 3,92 165010 91 827 43,4 67,6 19,07 165010 142 955 247 420 3,87 164290 90 891 44,2 68,8	1014 260 453 3,90 174350 101 836 43,4 67,6 19,27 174350 158 1009 262 456 3,84 173550 100 900 44,2 68,8	1082 281 478 3,86 1 18619 94 845 43,4 67,6 19,48 1 18619 159 1077 284 482 3,80 9 1 18523 9 3	116 29 49 3,9 0 2011 11 93 48, 75,3 19,0 0 2011 17 116 29 49 3,9 0 2000 100 49,76,8	59 1 5 2 10 21 150 21 150 21 150 21 150 21 150 21 150 21 164 1 175 21 175 2	1262 319 531 3,95 17040 2 130 1025 533,0 82,6 9,33 17040 2 1194 1256 3322 536 3,90 15990 2 129	1327 343 567 3,87 28220 144 1033 53,0 82,6 19,49 28220 213 1320 346 571 3,81 27050 142 1113 54,0 84,1 20,59	1476 373 646 3,96 253930 116 1284 67,5 105,1 19,03 253930 165 1470 377 652 3,90 252860 115 1384 68,8 107,0	1531 388 683 3,94 263260 116 1293 67,5 105,1 19,17 263260 165 1524 392 688 3,89 262120 115 1393 68,8 107,0	1758 442 740 3,97 302310 117 1402 72,3 112,7 19,40 302310 179 1749 447 747 3,91 300800 115 1510 73,7 114,7	2001 512 854 3,91 344170 138 1590 81,9 127,7 19,42 344170 207 1991 517 861 3,85 342450 136 1713 83,5 130,0

⁽¹⁾ System side water heat exchanger 25°C/20°C, External air 35°C; 0% Free-cooling (2) System side water heat exchanger 25°C; External air 12°C

NSMW - FE - PE

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Free-cooling		1102	1002	1002							3002	3202	3102	
Cooling performance chiller operation (1)														
Cooling capacity	kW	315	362	415	456	478	524	551	599	626	641	667	735	772
Input power	kW	75	91	101	112	120	127	138	145	156	161	169	178	192
Cooling total input current	A	134	158	175	189	199	210	227	240	258	272	288	303	325
EER	W/W	4,19	3,97	4,09	4,07	3,98	4,13	4,00	4,12	4,02	3,97	3,95	4,13	4,03
Water flow rate system side	I/h	54220	62220	71300	78430	82240	90170	94830	102950	107680	110230	114670	126390	132800
Pressure drop system side	kPa	42	49	64	76	85	61	66	68	74	79	80	51	58
Cooling performances with free-cooling (2)														
Cooling capacity	kW	267	273	337	342	344	408	411	474	478	479	482	548	551
Input power	kW	6,4	6,4	7,9	7,9	7,9	9,5	9,5	11,1	11,1	11,1	11,1	12,7	12,7
Free cooling total input current	Α	9,4	9,4	11,8	11,8	11,8	14,1	14,1	16,5	16,5	16,5	16,5	18,8	18,8
EER	W/W	41,99	43,01	42,41	43,05	43,31	42,79	43,10	42,64	42,94	43,08	43,29	43,10	43,35
Water flow rate system side	l/h	54220	62220	71300	78430	82240	90170	94830	102950	107680	110230	114670	126390	132800
Pressure drop system side	kPa	71	86	97	115	127	95	104	102	112	118	122	89	99
Free-cooling Plus														
Cooling performance chiller operation (1)														
Cooling capacity	kW	314	360	412	453	474	521	548	595	622	637	662	730	767
Input power	kW	76	92	102	113	122	128	139	147	157	163	170	180	194
Cooling total input current	А	134	159	176	190	201	211	229	242	260	274	291	306	328
EER	W/W	4,14	3,92	4,03	4,00	3,90	4,07	3,93	4,06	3,96	3,90	3,88	4,06	3,95
Water flow rate system side	I/h	53990	61890	70890	77860	81600	89640	94230	102360	107020	109540	113890	125570	131860
Pressure drop system side	kPa	42	49	63	75	83	60	65	67	73	78	79	51	57
Cooling performances with free-cooling (2)														
Cooling capacity	kW	285	292	360	365	367	435	438	506	509	511	513	584	587
Input power	kW	6,5	6,5	8,1	8,1	8,1	9,7	9,7	11,3	11,3	11,3	11,3	12,9	12,9
Free cooling total input current	Α	9,6	9,6	11,9	11,9	11,9	14,3	14,3	16,7	16,7	16,7	16,7	19,1	19,1
EER	W/W	44,05	45,10	44,49	45,14	45,38	44,88	45,19	44,73	45,03	45,17	45,36	45,18	45,42
Water flow rate system side	I/h	53990	61890	70890	77860	81600	89640	94230	102360	107020	109540	113890	125570	131860
Pressure drop system side	kPa	70	86	96	113	125	94	102	101	110	116	120	88	98
Size		3902	4202	4502	4802	5202	2 560)2 60	002 6	6402	6903	7203	8403	9603
Size Free-cooling		3902	4202	4502	4802	5202	. 560)2 60	002 6	6402	6903	7203	8403	9603
		3902	4202	4502	4802	5202	. 560)2 60	002 6	6402	6903	7203	8403	9603
Free-cooling	kW	3902 823	4202 870	4502 932	4802	5202	2 560			5 402	6903	7203	8403	9603
Free-cooling Cooling performance chiller operation (1)	kW kW							2 12	226					
Free-cooling Cooling performance chiller operation (1) Cooling capacity		823	870	932	1011	1070	115	2 12 5 2	226 96	1300	1423	1502	-	-
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power	kW	823 202	870 210	932 228	1011	1070 260	115	2 12 5 2 0 4	226 96 93	1300 318	1423 350	1502 364	-	-
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A	823 202 339	870 210 348	932 228 388	1011 241 421	1070 260 443 4,12	115 275 460 4,1	2 12 5 2 0 4	226 96 93 ,14	1300 318 526 4,09	1423 350 601	1502 364 631	- - -	- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W	823 202 339 4,07	870 210 348 4,15	932 228 388 4,09	1011 241 421 4,19	1070 260 443 4,12	115 275 460 4,1	2 12 5 2 0 4 9 4 20 210	226 96 93 ,14	1300 318 526 4,09	1423 350 601 4,07	1502 364 631 4,13		- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h	823 202 339 4,07 141610	870 210 348 4,15 149590	932 228 388 4,09 160240	1011 241 421 4,19 173870	1070 260 443 4,12 18406	115 275 460 4,11 0 1981	2 12 5 2 0 4 9 4 20 210	226 96 93 ,14	1300 318 526 4,09 23620	1423 350 601 4,07 244770	1502 364 631 4,13 258380		- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W I/h	823 202 339 4,07 141610	870 210 348 4,15 149590	932 228 388 4,09 160240	1011 241 421 4,19 173870	1070 260 443 4,12 18406	115 275 460 4,11 0 1981	2 12 55 2 0 4 9 4 20 210	226 96 93 ,14	1300 318 526 4,09 23620	1423 350 601 4,07 244770	1502 364 631 4,13 258380		- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2)	kW A W/W I/h kPa	823 202 339 4,07 141610 69	870 210 348 4,15 149590 78	932 228 388 4,09 160240 91	1011 241 421 4,19 173870 86	1070 260 443 4,12 18406 94	115 275 460 4,1' 0 1981	2 12 5 25 0 4 9 4 9 20 210	226 96 93 ,14 1870 2	1300 318 526 4,09 23620 81	1423 350 601 4,07 244770	1502 364 631 4,13 258380 105		- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa	823 202 339 4,07 141610 69	870 210 348 4,15 149590 78	932 228 388 4,09 160240 91	1011 241 421 4,19 173870 86	1070 260 443 4,12 184060 94	115 275 460 4,10 0 1981 65	2 12 5 25 0 4 9 4 9 20 210 6 8 6 8 1 2	96 96 93 ,14 0870 2 31	1300 318 526 4,09 23620 81	1423 350 601 4,07 244770 105	1502 364 631 4,13 258380 105		- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power	kW A W/W I/h kPa kW	823 202 339 4,07 141610 69 616 14,3	870 210 348 4,15 149590 78 680 15,9	932 228 388 4,09 160240 91 686 15,9	1011 241 421 4,19 173870 86 753	1070 260 443 4,12 184060 94 759	115 275 460 4,1' 0 1981 65 820 19,	2 12 5 25 0 4 9 4 20 21 6 8 6 8 1 2 3	226 96 93 ,14 0870 2 31 93 0,7	1300 318 526 4,09 23620 81 960	1423 350 601 4,07 244770 105	1502 364 631 4,13 258380 105		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A	823 202 339 4,07 141610 69 616 14,3 21,2	870 210 348 4,15 149590 78 680 15,9 23,5	932 228 388 4,09 160240 91 686 15,9 23,5	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10	1070 260 443 4,12 18406 94 759 17,5 25,9	115 279 460 4,11 0 1981 65 820 19, 28,	2 13 5 2 2 10 4 9 4 220 210 8 8 6 8 1 2 2 3 2 3 3 3 2 4 3	226 96 93 ,14 0870 2 31 93 90,7 0,6 3,24	1300 318 526 4,09 23620 81 960 22,3 32,9	1423 350 601 4,07 244770 105 1031 23,8 35,3	1502 364 631 4,13 258380 105 1099 25,4 37,6	-	
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW kW A W/W	823 202 339 4,07 141610 69 616 14,3 21,2	870 210 348 4,15 149590 78 680 15,9 23,5 42,76	932 228 388 4,09 160240 91 686 15,9 23,5 43,17	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10	1070 260 443 4,12 18406 94 759 17,5 25,9	115 275 460 4,1' 0 1981 65 820 19, 28,	2 12 5 2 2 0 4 9 4 8 8 6 8 1 2 2 3 32 4 332 4 320 210	96 97 987 987 287 287 298 207 208 208 208 208 208 208 208 208	1300 318 526 4,09 23620 81 960 22,3 32,9	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus	kW A W/W I/h kPa kW kW A W/W I/h	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39	1155 275 460 4,11 0 1981 65 820 19, 28, 43,3 0 1981	2 12 5 2 2 0 4 9 4 8 8 6 8 1 2 2 3 32 4 332 4 320 210	96 97 987 987 287 287 298 207 208 208 208 208 208 208 208 208	1300 318 526 4,09 23620 81 960 22,3 32,9 13,16 23620	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39	1155 275 460 4,11 0 1981 65 820 19, 28, 43,3 0 1981	2 12 5 2 2 0 4 9 4 8 8 6 8 1 2 2 3 32 4 332 4 320 210	96 97 987 987 287 287 298 207 208 208 208 208 208 208 208 208	1300 318 526 4,09 23620 81 960 22,3 32,9 13,16 23620	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39	115 275 460 4,11 0 1981 65 820 19, 28, 43,3 0 1981	2 1: 5 2 3 9 4 220 21(6 8 11 2 3 32 43 220 21(6 1	96 97 98 98 98 98 98 98 98 98 98 98	1300 318 526 4,09 23620 81 960 22,3 32,9 13,16 23620	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling total input current EER Water flow rate system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39 18406	115 275 460 4,11 0 1981 65 820 19, 28, 43,3 0 1981	2 1: 5 2 3 4 4 2 2 2 2 1 1 2 2 3 3 2 4 3 2 2 0 2 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	226 96 93 ,14 0870 2 31 93 0,7 0,6 3,24 0870 2 21	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39 18406 140	115 275 460 4,11 0 1981 65 820 19, 28, 43,3 0 1981 100	2 1: 5 2 9 4 9 4 20 210 6 8 1 22 3 32 43 32 43 44 1: 44 1:	226 96 93 ,14 0870 2 31 93 0,7 0,6 3,24 0870 2 21	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39 18406 140	115 275 460 4,11 0 1981 65 820 19, 28, 43,3 0 1981 100	2 1. 5 2 9 4 9 4 20 210 6 8 1 2 2 3 82 43 20 210 6 1	96 97 98 98 98 98 98 98 98 98 98 98	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39 18406 140	115 275 466 4,11 0 1981 65 826 19, 28, 1 43,3 0 1981 106	2 1. 5 2 9 4 9 4 9 4 8 8 3 8 2 4 3 8 8 3 8 4 4 4 4 2 4 4	9226 96 93 ,14 0870 2 31 93 00,7 00,6 3,24 0870 2 21 218 00 997 ,07	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121 1292 321 531 4,02	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150 1493 368 636		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39 18406 140	115 275 466 4,11 0 1981 65 826 19, 28, 1 43,3 0 1981 106	2 1.7	9226 96 93 ,14 0870 2 31 93 00,7 00,6 3,24 0870 2 21 218 00 997 ,07	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121 1292 321 531 4,02	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150 1414 354 607 3,99	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150 1493 368 636 4,06		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h kPa kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107 818 204 342 4,00 140680	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114 865 212 351 4,08 148750	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133 926 230 392 4,02 159230	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39 18406 140 1063 263 448 4,04	115 275 466 4,1° 0 1981 65 826 19, 28, 43,3° 0 1981 106 114 275 46- 4,1° 0 1967	2 1.7	226 96 93 ,14 0870 2 31 93 0,7 0,6 3,24 0870 2 21 218 000 997 ,07	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121 1292 321 531 4,02 22190	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150 1414 354 607 3,99 243180	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150 1493 368 636 4,06 256800		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Free-cooling Plus Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107 818 204 342 4,00 140680	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114 865 212 351 4,08 148750	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133 926 230 392 4,02 159230	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39 18406 140 1063 263 448 4,04	115 275 466 4,1° 0 1981 65 826 19, 28, 43,3° 0 1981 106 114 275 46- 4,1° 0 1967	2 1.25 2.25 2.20 2.10 4.4 1.2	226 96 93 ,14 0870 2 31 93 0,7 0,6 3,24 0870 2 21 218 000 997 ,07 9470 2	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121 1292 321 531 4,02 22190	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150 1414 354 607 3,99 243180	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150 1493 368 636 4,06 256800		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2)	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107 818 204 342 4,00 140680 68	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114 865 212 351 4,08 148750 77	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133 926 230 392 4,02 159230 90	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128 1005 244 425 4,12 172870 85	1070 260 443 4,12 18406 94 759 17,5 25,9 43,39 18406 140 1063 263 448 4,04 18279 93	115 279 466 4,11 0 1981 65 820 19, 28, 1 43,3 0 1981 100 114 273 466 4,1 0 1967 64	2 1.7	226 96 93 ,14 0870 2 31 93 0,7 0,6 8,24 0870 2 21 218 000 997 ,07 9470 2 80	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121 1292 321 531 4,02 222190 80	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150 1414 354 607 3,99 243180 104	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150 1493 368 636 4,06 256800 104		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Prescooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107 818 204 342 4,00 140680 68	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114 865 212 351 4,08 148750 77	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133 926 230 392 4,02 159230 90	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128 1005 244 425 4,12 172870 85	1070 260 443 4,12 184060 94 759 17,5 25,9 43,39 184060 140 1063 263 448 4,04 18279 93	115 275 460 4,11 0 1981 65 820 19, 28, 1 43,3 0 1981 100 114 276 46- 4,1 0 1967 64	2 17. 25. 25. 26. 26. 26. 26. 26. 26. 26. 26. 26. 26	226 96 93 ,14 0870 2 81 93 0,7 0,6 8,24 60 997 ,07 99470 2 80 152 1,0	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121 1292 321 531 4,02 222190 80	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150 1414 354 607 3,99 243180 104	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150 1493 368 636 4,06 256800 104		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Free-cooling Plus Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling performances with free-cooling (2) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa kW kW A W/W I/h kPa kW kW KW KW KW	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107 818 204 342 4,00 140680 68	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114 865 212 351 4,08 148750 77	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133 926 230 392 4,02 159230 90 732 16,2	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128 1005 244 425 4,12 172870 85	1070 260 443 4,12 184060 94 759 17,5 25,9 43,39 18406 140 1063 263 448 4,04 18279 93	115 279 466 4,11 0 1981 65 826 19, 28, 1 43,3 0 1981 106 46,4 4,1 0 1967 64 886 19, 28,	2 1: 5 2 0 4 9 4 9 4 6 8 1 2 2 3 82 43 22 210 6 1	226 96 93 ,14 0870 2 81 93 0,7 0,6 8,24 000 997 0,07 9470 2 80 152 1,0 1,0	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121 1292 321 531 4,02 22190 80	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150 1414 354 607 3,99 243180 104 1099 24,2	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150 1493 368 636 4,06 256800 104		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Prescooling total input current EER Water flow rate system side Cooling capacity Input power Cooling performances with free-cooling (2) Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa kW kW A W/W I/h kPa kW A W/W I/h kPa	823 202 339 4,07 141610 69 616 14,3 21,2 43,07 141610 107 818 204 342 4,00 140680 68 657 14,5 21,5	870 210 348 4,15 149590 78 680 15,9 23,5 42,76 149590 114 865 212 351 4,08 148750 77 725 16,2 23,9	932 228 388 4,09 160240 91 686 15,9 23,5 43,17 160240 133 926 230 392 4,02 159230 90 732 16,2 23,9	1011 241 421 4,19 173870 86 753 17,5 25,9 43,10 173870 128 1005 244 425 4,12 172870 85 803 17,8 26,3 45,19	1070 260 443 4,12 184060 94 759 17,5 25,9 43,39 18406 140 1063 263 448 4,04 18279 93 808 17,8 26,3 45,45	115 275 460 4,11 0 1981 65 820 19, 28, 1 43,3 0 1981 100 114 276 46- 4,1 0 1967 64 880 19,	2 12 5 2 2 9 4 9 4 6 8 1 2 2 2 3 32 4 32 20 210 6 1	226 96 93 ,14)870 2 81 93 0,7 0,6 3,24 21 218 000 997 ,07 9470 2 80 1,0 1,0 5,32	1300 318 526 4,09 23620 81 960 22,3 32,9 43,16 23620 121 1292 321 531 4,02 22190 80 1024 22,6 33,4 45,24	1423 350 601 4,07 244770 105 1031 23,8 35,3 43,27 244770 150 1414 354 607 3,99 243180 104 1099 24,2 35,8	1502 364 631 4,13 258380 105 1099 25,4 37,6 43,21 258380 150 1493 368 636 4,06 256800 104 1171 25,9 38,2		

⁽¹⁾ System side water heat exchanger 25°C/20°C, External air 35°C; 0% Free-cooling (2) System side water heat exchanger 25°C; External air 12°C

NSMW - FU - PU

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Free-cooling														
Cooling performance chiller operation (1)														
Cooling capacity	kW	328	381	435	482	506	550	580	627	657	674	703	772	814
Input power	kW	84	98	112	121	128	138	148	159	168	172	178	191	203
Cooling total input current	A	148	170	192	204	212	229	244	263	279	291	305	326	345
EER	W/W	3,93	3,90	3,89	3,99	3,97	3,99	3,92	3,94	3,91	3,91	3,95	4,05	4,02
Water flow rate system side	I/h	56440	65570	74810	82890	87080	94670	99780	107790	113080	115880	120880	132770	139960
Pressure drop system side	kPa	46	54	71	84	94	66	72	74	81	86	87	56	64
Cooling performances with free-cooling (2)														
Cooling capacity	kW	344	359	437	450	455	533	540	617	625	629	635	719	728
Input power	kW	19,3	19,3	24,1	24,1	24,1	28,9	28,9	33,7	33,7	33,7	33,7	38,5	38,5
Free cooling total input current	A	30,0	30,0	37,6	37,6	37,6	45,1	45,1	52,6	52,6	52,6	52,6	60,1	60,1
EER	W/W	17,84	18,61	18,16	18,66	18,87	18,43	18,67	18,31	18,54	18,65	18,84	18,66	18,89
Water flow rate system side	l/h	56440	65570	74810	82890	87080	94670	99780	107790	113080	115880	120880	132770	139960
Pressure drop system side	kPa	77	95	107	127	142	104	114	111	122	129	134	97	109
Free-cooling Plus														
Cooling performance chiller operation (1)														
Cooling capacity	kW	327	380	433	480	504	548	578	624	655	671	700	769	810
Input power	kW	84	99	113	122	129	139	149	160	170	174	180	192	205
Cooling total input current	A													
EER	W/W	3,88	3,84	3,84	3,93	3,91	3,94	3,87	3,89	3,86	3,86	3,89	4,00	3,96
Water flow rate system side	I/h	56250	65300	74510	82510			99370	107380	112630			132250	139380
Pressure drop system side	kPa	46	54	70	83	93	66	72	73	80	85	86	55	63
Cooling performances with free-cooling (2)	1144	270	201			100		500			470			705
Cooling capacity	kW	370	386	471	484	490	574	582	665	674	678	685	775	785
Input power	kW	19,7	19,7	24,6	24,6	24,6	29,5	29,5	34,4	34,4	34,4	34,4	39,3	39,3
Free cooling total input current	A	10.02	10.66	10.17	10.72	10.04	10.47	10.73	10.24	40.50	40.74	10.01	10.72	10.07
EER	W/W	18,82	19,66	19,17	19,72			19,73	19,34	19,59	19,71	19,91	19,72	19,97
Water flow rate system side	I/h	56250	65300	74510	82510			99370	107380	112630			132250	139380
Pressure drop system side	kPa	77	94	106	126	140	103	113	111	121	128	133	96	108
Size		3902	4202	4502	4802	5202	5602	2 60	02 6	5402	6903	7203	8403	9603
Free-cooling		3902	4202	4502	4802	5202	5602	2 60	02 6	5402	6903	7203	8403	9603
Free-cooling Cooling performance chiller operation (1)													8403	9603
Free-cooling Cooling performance chiller operation (1) Cooling capacity	kW	864	909	978	1059	1127	1213	12	89	1365	1495	1576	8403	9603
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power	kW	864 216	909	978 243	1059 260	1127 276	1213 293	31	89 17	1365 341	1495 372	1576 388		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A	864 216 363	909 228 378	978 243 414	1059 260 454	1127 276 472	1213 293 493	123 31 52	89 17	1365 341 566	1495 372 639	1576 388 677	-	-
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W	864 216 363 3,99	909 228 378 3,99	978 243 414 4,02	1059 260 454 4,08	1127 276 472 4,09	1213 293 493 4,14	31 52 4,0	89 17 29	1365 341 566 4,00	1495 372 639 4,02	1576 388 677 4,06	-	-
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h	864 216 363 3,99 148610	909 228 378 3,99 156340	978 243 414 4,02 168140	1059 260 454 4,08 182140	1127 276 472 4,09 193790	1213 293 493 4,14 0 20861	31 52 4,0 0 221	89 17 29 06 670 2	1365 341 566 4,00 34730	1495 372 639 4,02 257070	1576 388 677 4,06 271060	- -	-
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W	864 216 363 3,99	909 228 378 3,99	978 243 414 4,02	1059 260 454 4,08	1127 276 472 4,09	1213 293 493 4,14	31 52 4,0	89 17 29 06 670 2	1365 341 566 4,00	1495 372 639 4,02	1576 388 677 4,06	- - -	- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2)	kW A W/W I/h kPa	864 216 363 3,99 148610 75	909 228 378 3,99 156340 84	978 243 414 4,02 168140 99	1059 260 454 4,08 182140 94	1127 276 472 4,09 193790 103	1213 293 493 4,14 0 20861 71	31 31 52 4,0 40 221	889 177 199 06 670 2	1365 341 566 4,00 34730 88	1495 372 639 4,02 257070 116	1576 388 677 4,06 271060 116	- - -	- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa	864 216 363 3,99 148610 75	909 228 378 3,99 156340 84	978 243 414 4,02 168140 99	1059 260 454 4,08 182140 94	1127 276 472 4,09 193790 103	1213 293 493 4,14 0 20861 71	31 52 4,0 8	89 17 19 06 6670 2 8	1365 341 566 4,00 34730 88	1495 372 639 4,02 257070 116	1576 388 677 4,06 271060 116	- - -	- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power	kW A W/W I/h kPa kW	864 216 363 3,99 148610 75 808 43,4	909 228 378 3,99 156340 84 886 48,2	978 243 414 4,02 168140 99 902 48,2	1059 260 454 4,08 182140 94 989 53,0	1127 276 472 4,09 193790 103 1003 53,0	1213 293 493 4,14 0 20861 71 1091 57,8	31 52 4,0 0 221 8 1 11	89 17 19 9 06 670 2 8	1365 341 566 4,00 34730 88	1495 372 639 4,02 257070 116	1576 388 677 4,06 271060 116 1446 77,1		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A	864 216 363 3,99 148610 75 808 43,4 67,6	909 228 378 3,99 156340 84 886 48,2 75,1	978 243 414 4,02 168140 99 902 48,2 75,1	1059 260 454 4,08 182140 94 989 53,0 82,6	1127 276 472 4,09 193790 103 1003 53,0 82,6	1213 293 493 4,14 0 20861 71 1091 57,8	31 31 52 4,4 0 221 8 1111 62 97	89 17 19 19 106 670 2 8	1365 341 566 4,00 34730 88 1262 67,5	1495 372 639 4,02 257070 116 1359 72,3 112,7	1576 388 677 4,06 271060 116 1446 77,1 120,2	-	
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW kW A W/W	864 216 363 3,99 148610 75 808 43,4 67,6 18,64	909 228 378 3,99 156340 84 886 48,2 75,1 18,38	978 243 414 4,02 168140 99 902 48,2 75,1 18,72	1059 260 454 4,08 182140 94 989 53,0 82,6	1127 276 472 4,09 193790 103 1003 53,0 82,6 18,92	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86	8 12: 52 52 4,0 4,0 221: 8: 1 11: 62 97 55 18,6	889 17 29 006 6670 2 8 8	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h	864 216 363 3,99 148610 75 808 43,4 67,6 18,64	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65	1127 276 472 4,09 193790 103 53,0 82,6 18,92	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86	8 123 31 52 4,0 2210 8 8 1111 62 97 5 18,0 2210	89 17 19 106 1670 2 18 177 166 166 178 178 178 178 178 178 178 178	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W	864 216 363 3,99 148610 75 808 43,4 67,6 18,64	909 228 378 3,99 156340 84 886 48,2 75,1 18,38	978 243 414 4,02 168140 99 902 48,2 75,1 18,72	1059 260 454 4,08 182140 94 989 53,0 82,6	1127 276 472 4,09 193790 103 1003 53,0 82,6 18,92	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86	8 123 31 52 4,0 2210 8 8 1111 62 97 5 18,0 2210	89 17 19 106 1670 2 18 177 166 166 178 178 178 178 178 178 178 178	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus	kW A W/W I/h kPa kW kW A W/W I/h	864 216 363 3,99 148610 75 808 43,4 67,6 18,64	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65	1127 276 472 4,09 193790 103 53,0 82,6 18,92	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86	8 123 31 52 4,0 2210 8 8 1111 62 97 5 18,0 2210	89 17 19 106 1670 2 18 177 166 166 178 178 178 178 178 178 178 178	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1)	kW A W/W I/h kPa kW kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140	1127 276 472 4,09 193790 103 1003 53,0 82,6 18,92 193790 154	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861	8 12: 31 52 4,4,0 221: 8: 1 11: 6 62: 97 97 13:	889 17 199 006 6670 2 8 77 1,6 6,6 78 6670 2	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140	1127 276 472 4,09 193790 103 1003 53,0 82,6 18,92 193790 154	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116	8 12: 9 4,4 10 221: 8: 1 11: 6 62: 97: 97: 13: 13: 13:	889 77 29 206 6670 2 8 77 2,6 6,6 7,78 6670 2 32	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140	1127 276 472 4,09 193790 103 1003 53,0 82,6 18,92 193790 154	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116	3 12: 31 31: 52 4,4,60 221: 8: 1 11: 6 62: 97: 13: 13: 13: 3 12: 3 32:	889 177 199 106 6670 2 8 8 8 777 1,6 6 6,6 2,2 3,2 3,2 3,2 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116	3 12: 31 31: 52 4,4 0 221: 8: 1 11: 6 62: 97: 97: 13: 13: 3 12: 5 32: 5 32: 5 32: 5 33: 5 32: 5 33: 5 33: 5 33: 5 4,4 6 5 5 6 7: 6 6 7: 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	889 17 19 106 106 107 107 108 108 108 108 108 108 108 108	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145 974 245 418 3,97	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475 4,03	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116	3 12: 31 31: 52 4,0 221: 8: 1 11: 6 62: 97 97: 13: 13: 13: 13: 14: 14: 15: 16: 17: 18: 18: 18: 18: 18: 18: 18: 18	889 17 19 106 106 107 107 108 108 108 108 108 108 108 108	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570 3,95	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166 1489 375 644 3,97	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124 906 230 381 3,94 155780	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145 974 245 418 3,97 167500	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475 4,03 193010	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116 1208 296 497 4,08	3 12: 31 31: 52 4,, 4, 60 221: 8: 1 11: 6 62: 97: 97: 13: 13: 3 12: 5 32: 5 34: 4 4,60 220:	889	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570 3,95 33810	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166 1489 375 644 3,97 256070	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165 1570 392 682 4,01 270020		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145 974 245 418 3,97	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475 4,03	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116	3 12: 31 31: 52 4,, 4, 60 221: 8: 1 11: 6 62: 97: 97: 13: 13: 3 12: 5 32: 5 34: 4 4,60 220:	889	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570 3,95	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166 1489 375 644 3,97	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2)	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117 861 218 366 3,94 148030 75	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124 906 230 381 3,94 155780 84	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145 974 245 418 3,97 167500 99	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140 1055 262 457 4,03 181460 93	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475 4,03 193010 102	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116 1208 296 497 4,08 0 20775 70	3 12: 31 31: 52 4,, 4, 60 221: 8: 1 11: 6 62: 97: 6 18, 10 221: 13: 3 32: 5 33: 4 4,, 650 220: 8	889 17 19 106 106 107 108 108 108 108 108 108 108 108	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570 3,95 33810 87	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166 1489 375 644 3,97 256070 115	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165 1570 392 682 4,01 270020 115		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Prescooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W KW A W/W KW A W/W KW A W/W KW A	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117 861 218 366 3,94 148030 75	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124 906 230 381 3,94 155780 84	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145 974 245 418 3,97 167500 99	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140 1055 262 457 4,03 181460 93	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475 4,03 193010 102	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116 1208 296 497 4,08 0 20775 70	3 12: 31 31: 52 4,4,60 221: 8: 1 11: 6 62: 97 55 18,60 221: 13: 3 32: 5 33: 4 4,60 220: 8	889 177 199 106 107 107 108 108 108 108 108 108 108 108	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570 3,95 33810 87	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166 1489 375 644 3,97 256070 115	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165 1570 392 682 4,01 270020 115		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa kW kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117 861 218 366 3,94 148030 75	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124 906 230 381 3,94 155780 84	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145 974 245 418 3,97 167500 99 972 49,1	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140 1055 262 457 4,03 181460 93	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475 4,03 193010 102	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116 1208 296 497 4,08 0 20775 70	3 12: 31 31 52 52 4, 4, 60 221: 8 62 97 55 18, 10 221: 13 32 53 53 4 4, 650 2200 8	889	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570 3,95 33810 87	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166 1489 375 644 3,97 256070 115 1465 73,7	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165 1570 392 682 4,01 270020 115 1558 78,6		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Prescooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W A W/W A W/W A W/W A KPA	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117 861 218 366 3,94 148030 75 871 44,2 68,8	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124 906 230 381 3,94 155780 84	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145 974 245 418 3,97 167500 99 972 49,1 76,5	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140 1055 262 457 4,03 181460 93	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475 4,03 193010 102	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116 1208 296 497 4,08 0 20775 70	3 12: 31: 52: 4,0 221: 8: 11: 62: 13: 13: 13: 13: 14: 15: 16: 17: 18: 18: 18: 18: 18: 18: 18: 18	889 177 199 106 107 107 108 108 108 108 108 108 108 108 108 108	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570 3,95 33810 87	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166 1489 375 644 3,97 256070 115 1465 73,7 114,7	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165 1570 392 682 4,01 270020 115 1558 78,6 122,3		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Presure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performances with free-cooling (2) Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa kW kW A W/W I/h kPa	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117 861 218 366 3,94 148030 75 871 44,2 68,8 19,70	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124 906 230 381 3,94 155780 84 954 49,1 76,5	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145 974 245 418 3,97 167500 99 972 49,1 76,5 19,79	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140 1055 262 457 4,03 181460 93 1066 54,0 84,1 19,71	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475 4,03 193010 102 1081 54,0 84,1 20,00	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116 1208 296 497 4,08 0 20775 70 1176 59,0 91,8 19,94	31 31 52 4,0 0 221 8 8 11 11 62 97 5 18,0 221 13 3 22 53 6 4,0 8 8 8 9 9 8 8 10 10 10 10 10 10 10 10 10 10	889 177 199 106 107 107 108 108 108 108 108 108 108 108 108 108	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570 3,95 33810 87 1360 68,8 107,0 19,77	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166 1489 375 644 3,97 256070 115 1465 73,7 114,7 19,88	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165 1570 392 682 4,01 270020 115 1558 78,6 122,3 19,82		
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W A W/W A W/W A W/W A KPA	864 216 363 3,99 148610 75 808 43,4 67,6 18,64 148610 117 861 218 366 3,94 148030 75 871 44,2 68,8	909 228 378 3,99 156340 84 886 48,2 75,1 18,38 156340 124 906 230 381 3,94 155780 84	978 243 414 4,02 168140 99 902 48,2 75,1 18,72 168140 145 974 245 418 3,97 167500 99 972 49,1 76,5	1059 260 454 4,08 182140 94 989 53,0 82,6 18,65 182140 140 1055 262 457 4,03 181460 93	1127 276 472 4,09 193790 103 53,0 82,6 18,92 193790 154 1122 278 475 4,03 193010 102 1081 54,0 84,1 20,00	1213 293 493 4,14 0 20861 71 1091 57,8 90,1 18,86 0 20861 116 1208 296 497 4,08 0 20775 70 1176 59,0 91,8 19,94	3 12: 31 31: 52 4,00 221: 8: 11 11: 62 97: 5 18,00 221: 13 32: 8 4,00 22: 8 32: 8 4,00 22: 8 32: 8 4,00 22: 8 32: 8 99: 9 4 19,00 22:	889	1365 341 566 4,00 34730 88 1262 67,5 105,1 18,71 34730 132 1359 344 570 3,95 33810 87	1495 372 639 4,02 257070 116 1359 72,3 112,7 18,80 257070 166 1489 375 644 3,97 256070 115 1465 73,7 114,7	1576 388 677 4,06 271060 116 1446 77,1 120,2 18,75 271060 165 1570 392 682 4,01 270020 115 1558 78,6 122,3		

⁽¹⁾ System side water heat exchanger 25°C/20°C, External air 35°C; 0% Free-cooling (2) System side water heat exchanger 25°C; External air 12°C

NSMW - FN - PN

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Free-cooling							-							
Cooling performance chiller operation (1)														
Cooling capacity	kW	324	376	428	473	497	538	567	614	643	659	687	751	803
Input power	kW	74	88	99	109	116	124	134	142	152	157	163	174	184
Cooling total input current	A	132	154	172	184	192	206	222	235	252	265	280	297	313
EER	W/W	4,41	4,27	4,31	4,35	4,29	4,33	4,21	4,32	4,24	4,21	4,22	4,32	4,38
Water flow rate system side	I/h	55800	64730	73570	81410	85540	92510	97450	105570	110670	113400	118220	129100	138190
Pressure drop system side	kPa	46	54	42	49	56	65	71	45	49	53	51	54	64
Cooling performances with free-cooling (2)	KI U	70	JT	72	עד	30	0.5	/ 1	UTJ	, T	22		77	UT
Cooling capacity	kW	318	330	391	401	404	465	470	531	536	539	543	607	670
	kW		7,9	9,5	9,5	9,5	11,1	11,1			12,7	12,7		15,9
Input power		7,9							12,7	12,7			14,3	
Free cooling total input current	A W/W	12	12	14	14	14	16	16	19	19	19	19	21	24
EER		39,96	41,57	41,02	42,00	42,41	41,76	42,22	41,75	42,17	42,36	42,67	42,46	42,16
Water flow rate system side	I/h	55800	64730	73570	81410	85540	92510	97450	105570	110670	113400	118220	129100	138190
Pressure drop system side	kPa	67	81	66	78	87	93	102	72	79	84	84	87	95
Free-cooling Plus									-					
Cooling performance chiller operation (1)														
Cooling capacity	kW	323	374	426	471	494	535	564	611	640	656	683	746	799
Input power	kW	74	89	100	110	117	125	136	143	153	158	164	175	185
Cooling total input current	A	132	155	173	185	194	207	224	237	254	267	282	300	316
EER	W/W	4,36	4,22	4,26	4,29	4,23	4,27	4,15	4,26	4,18	4,15	4,16	4,26	4,32
Water flow rate system side	I/h	55590	64410	73210	80970	85050	92040	96930	105040	110080	112780	117540	128400	137510
Pressure drop system side	kPa	45	53	42	49	55	64	70	44	49	52	50	54	63
Cooling performances with free-cooling (2)														
Cooling capacity	kW	337	352	417	427	431	495	501	566	572	575	579	648	715
Input power	kW	8,1	8,1	9,7	9,7	9,7	11,3	11,3	12,9	12,9	12,9	12,9	14,5	16,2
Free cooling total input current	A	12	12	14	14	14	17	17	19	19	19	19	21	24
EER	W/W	41,76	43,58	42,96	44,05	44,49	43,79	44,29	43,78	44,23	44,44	44,76	44,54	44,22
Water flow rate system side	I/h	55590	64410	73210	80970	85050	92040	96930	105040	110080	112780	117540	128400	137510
Pressure drop system side	kPa	66	80	65	77	86	92	101	71	78	83	83	86	94
Size		3902	4202	4502	4802	5202	560	2 60	002 (5402	6903	7203	8403	9603
Free-cooling		3902	4202	4502	4802	5202	560	2 60	002	5402	6903	7203	8403	9603
		3902	4202	4502	4802	5202	2 560	2 60	002 (5402	6903	7203	8403	9603
Free-cooling	kW	3902 852	4202 881	4502 969	4802	5202	2 560			5 402 1329	6903	7203	8403	9603
Free-cooling Cooling performance chiller operation (1)	kW kW							8 1.						
Free-cooling Cooling performance chiller operation (1) Cooling capacity		852	881	969	1033	1115	119	8 12 5 2	263	1329	-	-	-	-
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power	kW	852 195	881 207	969 218	1033 232	1115 249	119 265	8 1. 5 2	263 188 181	1329 311	-	-	-	-
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A	852 195 328	881 207 343	969 218 374	1033 232 408	1115 249 427 4,49	119 265 447 4,5	8 1. 5 2 7 4 1 4	263 288 181	1329 311 516		- - -	-	- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W	852 195 328 4,37	881 207 343 4,26	969 218 374 4,44	1033 232 408 4,46	1115 249 427 4,49	119 265 447 4,5	8 1: 5 2 7 4 1 4 10 21:	263 288 181	1329 311 516 4,27		- - -		- - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W I/h	852 195 328 4,37 146560	881 207 343 4,26 151590	969 218 374 4,44 166730	1033 232 408 4,46 177640	1115 249 427 4,49	119 265 447 4,5 0 2060	8 1: 5 2 7 4 1 4 10 21:	263 !88 !81 ,38 7280 2	1329 311 516 4,27 28590			- - -	- - - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h	852 195 328 4,37 146560	881 207 343 4,26 151590	969 218 374 4,44 166730	1033 232 408 4,46 177640	1115 249 427 4,49	119 265 447 4,5 0 2060	8 1. 5 2 7 4 1 4 10 21:	263 1888 181 1,38 7280 2	1329 311 516 4,27 28590			- - -	- - - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa	852 195 328 4,37 146560 75	881 207 343 4,26 151590 81	969 218 374 4,44 166730 80	1033 232 408 4,46 177640 80	1115 249 427 4,49 19182(80	119. 265 447 4,5 0 2060 45	8 1. 5 2 7 4 11 4 110 21:	263 888 881 811 ,38 77280 2	1329 311 516 4,27 28590 53			- - -	- - - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power	kW A W/W I/h kPa kW	852 195 328 4,37 146560 75 731 17,5	881 207 343 4,26 151590 81 737 17,5	969 218 374 4,44 166730 80 857 20,7	1033 232 408 4,46 177640 80	1115 249 427 4,49 191820 80	119 265 447 4,5 0 2060 45	8 1.7 5 2.7 4 1 4 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1	263 888 881 811 ,38 77280 2	1329 311 516 4,27 28590 53			- - -	- - - -
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A	852 195 328 4,37 146560 75 731 17,5 26	881 207 343 4,26 151590 81 737 17,5 26	969 218 374 4,44 166730 80 857 20,7	1033 232 408 4,46 177640 80 921 22,3 33	1115 249 427 4,49 19182 80 988 23,8	119 265 447 4,5 0 2060 45 105 25,4	8 1.5 2 7 4 1 4 11 0 21 6 11 4 2	263 1888 181 181,38 77280 2 553 068 5,4	1329 311 516 4,27 28590 53 1079 25,4 38				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW kW A W/W	852 195 328 4,37 146560 75 731 17,5 26 41,84	881 207 343 4,26 151590 81 737 17,5 26 42,13	969 218 374 4,44 166730 80 857 20,7 31 41,48	1033 232 408 4,46 177640 80 921 22,3 33 41,37	1115 249 427 4,49 19182i 80 988 23,8 35 41,45	119 269 447 4,5 0 2060 45 105 25,4 38 41,5	8 1: 5 2 7 4 11 4 110 21: 6 1: 4 2 62 4:	263 188 181 1,38 77280 2 53 068 5,4 38 2,01	1329 311 516 4,27 28590 53 1079 25,4 38 42,42				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640	1115 249 427 4,49 19182 80 988 23,8 35 41,45	1199 2659 4477 4,5° 0 2060 45 105 25,4 38 41,5° 0 2060	8 1: 5 2 7 4 11 4 110 21: 66 1: 64 2 52 42: 110 21:	263 188 181 181 182 183 27280 2 2 53 068 5,4 38 2,01	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W	852 195 328 4,37 146560 75 731 17,5 26 41,84	881 207 343 4,26 151590 81 737 17,5 26 42,13	969 218 374 4,44 166730 80 857 20,7 31 41,48	1033 232 408 4,46 177640 80 921 22,3 33 41,37	1115 249 427 4,49 19182i 80 988 23,8 35 41,45	119 269 447 4,5 0 2060 45 105 25,4 38 41,5	8 1: 5 2 7 4 11 4 110 21: 66 1: 64 2 52 42: 110 21:	263 188 181 1,38 77280 2 53 068 5,4 38 2,01	1329 311 516 4,27 28590 53 1079 25,4 38 42,42			-	
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus	kW A W/W I/h kPa kW kW A W/W I/h	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640	1115 249 427 4,49 19182 80 988 23,8 35 41,45	1199 2659 4477 4,5° 0 2060 45 105 25,4 38 41,5° 0 2060	8 1: 5 2 7 4 11 4 110 21: 66 1: 64 2 52 42: 110 21:	263 188 181 181 182 183 27280 2 2 53 068 5,4 38 2,01	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1)	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640	1115 249 427 4,49 19182 80 988 23,8 35 41,45 19182	1199 265 447 4,5 0 2060 45 105 25,4 38 41,5 0 2060 71	8 1.5 2 7 4 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	263 288 481 38 77280 2 553 068 55,4 38 2,01 77280 2	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106	1115 249 427 4,49 19182 80 988 23,8 35 41,45 19182	1199 265 447 4,5 0 2060 45 105 25,4 38 41,5 0 2060 71	8 1.5 2 7 4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	263 288 881 38 77280 2 53 068 55,4 38 2,01 77280 2 84	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106	1115 249 427 4,49 19182 80 988 23,8 35 41,45 19182 106	1199 265 447 4,5 0 2060 45 105 25,4 38 41,5 0 2060 71	8 1.5 2 7 4 1 4 1 10 21: 66 11 1 1 2 1: 62 4 2	263 288 381 38 77280 2 53 068 55,4 38 2,01 77280 2 84	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106	1115 249 427 4,49 19182 80 988 23,8 35 41,45 19182 106	1199 265 447 4,5 0 2060 45 105 25,4 38 41,5 0 2060 71 119 268 450	8 1.3 5 2 7 4 1 4 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1	263 288 381 38 77280 2 53 068 55,4 38 2,01 77280 2 84	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106	1115 249 427 4,49 19182 80 988 23,8 35 41,45 19182 106	1199 265 447 4,5 0 2060 45 105 25,4 38 41,5 0 2060 71 119 268 450 4,4	8 1.35 22 7 44 11 44 110 211 1	263 288 881 381 38 7280 2 53 068 5,4 38 2,01 77280 2 84 257 291 185	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20 150820	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106	1115 249 427 4,49 19182 80 988 23,8 35 41,45 19182 106 1110 251 430 4,43	1199 265 447 4,5 0 2060 45 105 25,4 38 41,5 0 2060 71 119 268 450 4,4	8 1.35 22 7 44 11 44 110 21.36 110 2	263 288 881 381 38 7280 2 53 068 5,4 38 2,01 77280 2 84 257 291 185 ,32 66210 2	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21 27390				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Prescooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106	1115 249 427 4,49 19182 80 988 23,8 35 41,45 19182 106	1199 265 447 4,5 0 2060 45 105 25,4 38 41,5 0 2060 71 119 268 450 4,4	8 1.35 22 7 44 11 44 110 21.36 110 2	263 288 881 381 38 7280 2 53 068 5,4 38 2,01 77280 2 84 257 291 185	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Prescooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Cooling performances with free-cooling (2)	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105 848 197 330 4,31 145850 74	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20 150820 80	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106 965 220 377 4,38 165970	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106	1115 249 427 4,49 19182 80 988 23,8 35 41,45 19182 106 1110 251 430 4,43 19095 79	1199 265 447 4,5 0 2060 45 105 25,4 38 41,5 0 2060 71 119 268 450 4,4 0 2050	8 1.5 2 7 4 1 4 1 10 21	263 288 288 281 38 27280 2 253 268 26,01 27280 2 84 257 291 185 32 66210 2 553	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21 27390 53				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Prescooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kW A kW	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105 848 197 330 4,31 145850 74	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20 150820 80	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106 965 220 377 4,38 165970 79	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106	1115 249 427 4,49 19182 80 988 23,8 35 41,45 19182 106 1110 251 430 4,43 19095 79	119 263 447 4,5' 0 2060 45 105 25,4 38 41,5' 0 2060 71 119 268 450 4,4' 0 2050 45	8 1.5 2 7 4 1 4 1 10 21: 6 11 6 11 6 11 6 11 6 11 6 11 6 11	263 288 288 281 38 27280 2 53 068 5,4 38 2,01 77280 2 84 257 291 185 ,32 66210 2 53	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21 27390 53				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kW A kW kW KW A W/W KW	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105 848 197 330 4,31 145850 74	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20 150820 80 786 17,8	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106 965 220 377 4,38 165970 79	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106 1028 234 411 4,40 176870 79	1115 249 427 4,49 19182i 80 988 23,8 35 41,45 19182i 106 1110 251 430 4,43 19095 79	119 265 447 4,5' 0 2060 45 105 25,4 38 41,5 0 2060 71 119 268 454 44,4 0 2050 45	8 1: 5 2 7 4 1 4 10 21: 6 11 4 2 2 2 1: 6 2 4: 10 21: 10	263 288 181 ,38 7280 2 53 068 5,4 38 2,01 77280 2 84 257 291 185 ,32 6210 2 53 139	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21 27390 53				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Prescooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A kPa kW kW A W/W I/h kPa kW KW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105 848 197 330 4,31 145850 74	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20 150820 80	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106 965 220 377 4,38 165970 79	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106	1115 249 427 4,49 19182i 80 988 23,8 35 41,45 19182i 106 1110 251 430 4,43 19095 79	1199 265 447 4,5° 0 2060 45 105 25,4 38 41,50 0 2060 71 1199 268 450 440 450 450 450 450 450 450	8 1: 5 2 7 4 1 4 10 21: 6 1: 6 1: 6 2 4: 7 4 2 2 1: 8 2 4: 8 2 2 1: 8 3 2 3 2 3 2 3 2 3 2 3 3 2 3 3 2 3 3 2 3	263 288 181 ,38 7280 2 53 068 5,4 38 2,01 77280 2 84 2257 191 185 ,32 6210 2 53 139 15,9 38	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21 27390 53 1151 25,9 38				
Free-cooling Cooling performance chiller operation (1) Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling Pelus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kW A kW kW KW A W/W KW	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105 848 197 330 4,31 145850 74 780 17,8 26 43,88	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20 150820 80 786 17,8 26 44,20	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106 965 220 377 4,38 165970 79	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106 1028 234 411 4,40 176870 79 981 22,6 33 43,37	1115 249 427 4,49 19182i 80 988 23,8 35 41,45 19182i 106 11100 251 430 4,43 1 19095 79	1199 265 447 4,5° 0 2060 45 105 25,4 38 41,5° 0 2060 71 1199 268 450 450 450 41,5° 105 2060 105 21,6° 21,6° 22,6° 23,6° 24,6° 24,5° 25,6° 26,6	8 1: 5 2 7 4 1 4 10 21: 6 1: 6 1: 6 2 4: 7 4 2 2 1: 8 2 2 4: 8 2 2 4: 8 3 2 3 2 3 2 3 2 3 2 3 3 2 3 3 2 3 3 3 4 3 3 3 3	263 288 181 ,38 7280 2 53 068 5,4 38 2,01 77280 2 84 2257 291 185 ,32 6210 2 53 139 15,9 38 4,06	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21 27390 53 1151 25,9 38 44,51				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A kPa kW kW A W/W I/h kPa kW KW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105 848 197 330 4,31 145850 74 780 17,8 26	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20 150820 80 786 17,8 26	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106 965 220 377 4,38 165970 79	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106 1028 234 411 4,40 176870 79 981 22,6 33 43,37	1115 249 427 4,49 19182i 80 988 23,8 35 41,45 19182i 106 11100 251 430 4,43 1 19095 79	1199 265 447 4,5° 0 2060 45 105 25,4 38 41,5° 0 2060 71 1199 268 450 450 450 41,5° 105 2060 105 21,6° 21,6° 22,6° 23,6° 24,6° 24,5° 25,6° 26,6	8 1: 5 2 7 4 1 4 10 21: 6 1: 6 1: 6 2 4: 7 4 2 2 1: 8 2 2 4: 8 2 2 4: 8 3 2 3 2 3 2 3 2 3 2 3 3 2 3 3 2 3 3 3 4 3 3 3 3	263 288 181 ,38 7280 2 53 068 5,4 38 2,01 77280 2 84 2257 291 185 ,32 6210 2 53 139 15,9 38 4,06	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21 27390 53 1151 25,9 38				
Free-cooling Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performance chiller operation (2) Cooling performances with free-cooling (2) Cooling performances with free-cooling (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 146560 75 731 17,5 26 41,84 146560 105 848 197 330 4,31 145850 74 780 17,8 26 43,88	881 207 343 4,26 151590 81 737 17,5 26 42,13 151590 113 877 209 346 4,20 150820 80 786 17,8 26 44,20	969 218 374 4,44 166730 80 857 20,7 31 41,48 166730 106 965 220 377 4,38 165970 79	1033 232 408 4,46 177640 80 921 22,3 33 41,37 177640 106 1028 234 411 4,40 176870 79 981 22,6 33 43,37	1115 249 427 4,49 19182i 80 988 23,8 35 41,45 19182i 106 11100 251 430 4,43 1 19095 79	1199 265 447 4,5° 0 2060 45 105 25,4 38 41,5° 0 2060 71 1199 268 450 450 450 41,5° 105 2060 105 21,6° 21,6° 22,6° 23,6° 24,6° 24,5° 25,6° 26,6	8 1: 5 2 7 4 1 4 10 21: 6 1: 6 1: 6 2: 7 4 4 2 2 2 1: 8 2 4: 8 2 2 4: 8 3 2 4: 9 2 2 1: 8 3 2 3 4 4: 9 2 2 1: 9 2 1: 9 2 1: 9 2 1: 9 2 2 1: 9	263 288 181 ,38 7280 2 53 068 5,4 38 2,01 77280 2 84 2257 291 185 ,32 6210 2 53 139 15,9 38 4,06	1329 311 516 4,27 28590 53 1079 25,4 38 42,42 28590 84 1322 314 520 4,21 27390 53 1151 25,9 38 44,51				

⁽¹⁾ System side water heat exchanger 25°C/20°C, External air 35°C; 0% Free-cooling (2) System side water heat exchanger 25°C; External air 12°C

ELECTRIC DATA

Size				1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Electrical data																
	FA-PA	(1)	Α	204	226	251	257	273	290	306	335	355	380	405	428	440
Marrian company (FLA)	FE-PE	(1)	Α	204	226	261	267	273	299	316	345	364	390	415	437	450
Maximum current (FLA)	FU-PU	(1)	Α	204	226	261	267	273	299	316	345	364	390	415	437	450
	FN-PN	(1)	Α	214	236	270	277	283	309	325	354	374	399	425	447	469
	FA-PA	(1)	Α	277	285	299	336	350	346	359	439	451	515	568	622	592
Dook current (LDA)	FE-PE	(1)	Α	277	285	308	345	350	356	368	449	461	525	578	632	601
Peak current (LRA)	FU-PU	(1)	Α	277	285	308	345	350	356	368	449	461	525	578	632	601
	FN-PN	(1)	A	287	295	318	355	360	366	378	458	471	535	588	641	621
Size				3902	4202	4502	480	2 52	202	5602	6002	6402	6903	7203	8403	9603

Size				3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Electrical data															
	FA-PA	(1)	Α	473	497	538	570	590	620	668	701	831	863	933	1051
Maximum surrent (FLA)	FE-PE	(1)	Α	483	516	548	595	615	645	688	730	841	882	-	-
Maximum current (FLA)	FU-PU	(1)	Α	483	516	548	595	615	645	688	730	841	882	-	-
	FN-PN	(1)	Α	508	531	583	624	654	683	716	749	-	-	-	-
	FA-PA	(1)	Α	601	625	680	710	846	886	965	958	902	932	1137	1205
Dook surrout (LDA)	FE-PE	(1)	Α	611	644	690	735	871	911	984	986	911	951	-	-
Peak current (LRA)	FU-PU	(1)	Α	611	644	690	735	871	911	984	986	911	951	-	-
	FN-PN	(1)	A	636	659	724	764	910	949	1013	1006	-	-	-	-

 $^{(1) \} Unit \ standard \ configuration \ without \ hydronic \ kit$

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Compressors													-		
Compressors	All	Туре							Screw						
Compressors / Circuit	All	n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2
Refrigerant	All	Туре			-				R134a						
System side heat exchanger															
Exchanger	All	Туре	-						Shell&tu	be					
Exchanger	All	n°	1	1	1	1	1	1	1	1	1	1	1	1	1
Fans															
Fans	All	Туре	Axial	Axial	Axial	Axial	Axial	Axial	Axial						
	FA-PA	n°	8	8	8	8	10	10	10	12	12	12	12	14	14
-	FE-PE	n°	8	8	10	10	10	12	12	14	14	14	14	16	16
Fans	FU-PU	n°	8	8	10	10	10	12	12	14	14	14	14	16	16
	FN-PN	n°	10	10	12	12	12	14	14	16	16	16	16	18	20
Sound data calculated in cooling m			-												-
-	FA-PA	dB(A)	97	97	97	97	98	98	98	98	98	99	99	100	101
Cound manual land (1)	FE-PE	dB(A)	93	93	93	94	94	93	93	93	93	95	96	98	98
Sound power level (1)	FU-PU	dB(A)	97	97	98	98	98	99	99	99	99	99	100	101	102
	FN-PN	dB(A)	93	93	94	94	94	94	93	93	93	94	96	98	99
Size			3902	4202	4502	4802	520)2	5602	6002	6402	6903	7203	8403	9603
Compressors															
Compressors	All	Туре							Screv						
	FA-PA	n°	2/2	2/2	2/2	2/2	2/.		2/2	2/2	2/2	3/3	3/3	3/3	3/3
Compressors / Circuit	FE-PE	n°	2/2	2/2	2/2	2/2	2/.		2/2	2/2	2/2	3-3	3-3	-	
compressors / circuit	FU-PU	n°	2/2	2/2	2/2	2/2	2/.		2/2	2/2	2/2	3-3	3-3	-	-
	FN-PN	n°	2/2	2/2	2/2	2/2	2/.	2	2/2	2/2	2/2	-	-	-	-
Refrigerant	All	Туре							R134a	3					
System side heat exchanger															
Exchanger	All	Туре							Shell&tu	ıbe					
	FA-PA	n°	1	1	1	1	1		1	1	1	2	2	2	2
Exchanger	FE-PE	n°	1	1	1	1	1		1	1	1	2	2	-	-
Exchange	FU-PU	n°	1	1	1	1	1		2	2	2	2	2	-	-
	FN-PN	n°	1	1	2	2	2		2	2	2	-	-	-	-
Fans															
Fans	All	Туре	Axial	Axial	Axial	Axial	Axi		Axial	Axial	Axial	Axial	Axial	Axial	Axial
	FA-PA	n°	16	16	18	18	18	3	20	22	22	28	28	30	34
Fanc	FE-PE	n°	18	20	20	22	22		24	26	28	30	32	-	-
Fans	FU-PU	n°	18	20	20	22	22	2	24	26	28	30	32	-	-
	FN-PN	n°	22	22	26	28	3()	32	32	32	-	-	-	-
Sound data calculated in cooling m	ode														
	FA-PA	dB(A)	101	100	101	101	10	1	102	102	102	104	104	105	105
	EE DE	JD(A)	00	0.0	07	07	0(100	100	00	00	00		

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNIEN ISO 9614-2, as required for Eurovent certification

Sound power level (1)

FE-PE

FU-PU

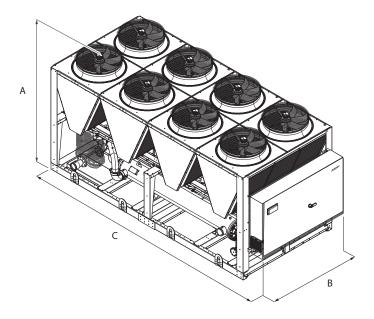
FN-PN

dB(A)

dB(A)

dB(A)

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions and	weights														
A	mm	All	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	mm	All	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
		Α	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330
c	mm	Е	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520
C	mm -	U	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520
		N	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900
Size			3902	4202	4502	4802	520	2	5602	6002	6402	6903	7203	8403	9603

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Dimensions and weig	jhts													
A	mm	All	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	mm	All	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
		Α	9520	9520	10710	10710	10710	11900	13090	13090	16660	16660	17850	20230
c		E	10710	11900	11900	13090	13090	14280	15470	16660	17850	19040	-	-
C	mm	U	10710	11900	11900	13090	13090	14280	15470	16660	17850	19040	-	-
		N	13090	13090	15470	16660	17850	19040	19040	19040	-	-	-	-

For transport reasons, units with depth greater than 13090 mm are shipped separately. For further information, refer to the technical and/or installation manual.





















NSM-HWT-1402-9603-B

Air-water chiller with free-cooling glycol free

Cooling capacity 306 ÷ 1991 kW



- · High efficiency also at partial loads
- Microchannel condenser technology
- Ideal in data center applications
- Water outlet temperatures up to 30°C
- Night mode function



DESCRIPTION

NSM chillers are designed and manufactured to meet air conditioning requirements in residential/commercial buildings or to meet refrigeration requirements in industrial facilities.

These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers. The base, the structure and the panels are made of steel treated with rustproof polyester paint.

These chillers are also equipped with a Free cooling coil and are used when the refrigerant load request persists even during the winter months, or when the outdoor air temperature is below the temperature of the return liquid from the system. In Free cooling operation (mixed Free cooling and compressors, or Free cooling only), the fluid is cooled directly by the outdoor air, allowing even the complete shutdown of compressors with a significant energy saving.

VERSIONS

A High Efficiency

E High efficiency low noise

U Very high efficiency

N Very high efficiency low noise

FEATURES

- Unit with 2 or 3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
- An intermediate plate heat exchanger provides two circuits: a glycol circuit, where glycol is added to protect the chiller's coils from freezing, and the chilled water circuit without glycol.
- The full range uses aluminium microchannel coils, ensuring very high levels of efficiency. This allows using less refrigerant compared to traditional copper coils.
- Electronic Thermostatic valve brings significant benefits, in particular when the refrigerant is working at partial loads to the benefit of energy efficiency of the unit.

- Standard differential pressure switch
- Throttle valve in the hydraulic circuit for water switching on the Free-Cooling coils
- Fans inverter
- Device for electronically controlling the series condensation, for operation even at low temperatures or in free cooling, which allows adjusting the air flow rate to actual system demand with resulting advantages in terms of consumption reduction.

CONTROL

Microprocessor adjustment, that allows isolating the condenser coils to maximise the free cooling efficiency, even in mixed Free cooling and compressor operation

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FR1:** Air filter

MULTICHILLER_EVO: Control system for multiple parallel installed constant flow chillers providing individual chiller on/off and control capability. **AVX:** Spring anti-vibration mounts.

ACCESSORIES FACTORY FITTED ONLY

KRS: Evaporator trace heating

RIFNSM: Current power factor correction. Connected in parallel to the motor, it allows a reduction of the input current (approx. 10%).

GP: Anti-intrusion grids.

AK: ACOUSTIC KIT. This accessory allows further sound reduction. Must be requested at time of order and is available factory fitted only.

ACCESSORIES COMPATIBILITY

Size		vers.	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1			•(x2)												
AERNET			•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3			•					•					•		•
MULTICHILLER_EVO			•	•	•	•	•	•	•	•	•	•	•		•
AVX	(1)		•	•	•	•	•	•	•	•	•	•	•	•	•
Size			3902	4202	4502	4802	5202	2 50	602	6002	6402	6903	7203	8403	9603
AER485P1			•(x2)	•(x2)	•(x2)	•(x2)	•(x2)) •((x2)	•(x2)	•(x2)	•(x3)	•(x3)	•(x3)	•(x3)
AERNET			•	•	•	•			•		•	•		•	•
PRV3			•		•	•			•			•	•	•	•
MULTICHILLER_EVO			•	•	•	•			•	•	•	•	•	•	•
AVX	(1)		•	•	•	•			•	•				•	•

⁽¹⁾ Accessories to be defined for compatibility

Evaporator trace heating

Vers.		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
	(1)	KRS												
Vers.		3902	4202	4502	4802	5202	56	02	6002	6402	6903	7203	8403	9603
	(1)	KRS	KRS	KRS	KRS	KRS	KF	RS	KRS	KRS	KRS	KRS	KRS	KRS

Power factor correction

Vers.	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
	RIFNSM1402	RIFNSM1602	RIFNSM1802	RIFNSM2002	RIFNSM2202	RIFNSM2352	RIFNSM2502	RIFNSM2652	RIFNSM2802	RIFNSM3002	RIFNSM3202	RIFNSM3402	RIFNSM3602
Vers.	3902	4202	4502	4802	520	2 56	i02	6002	6402	6903	7203	8403	9603
	RIFNSM3902	RIFNSM420	2 RIFNSM45	02 RIFNSM4	802 RIFNSN	5202 RIFNS	M5602 RIFI	ISM6002 RII	NSM6402 R	IFNSM6903 F	RIFNSM7203	RIFNSM8403	RIFNSM9603

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grids

Vers.		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
	(1)	GP												
Vers.		3902	4202	4502	4802	5202	5	602	6002	6402	6903	7203	8403	9603
	(1)	GP	GP	GP	GP	GP		GP						

Acoustic kit

Vers.		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
	(2)	AK												
Vers.		3902	4202	4502	4802	5202	5(602	6002	6402	6903	7203	8403	9603
	(2)	AK	AK	AK	AK	AK		AK						

CONFIGURATOR

Description
NSM
Size
1402-1602-1802-2002-2202-2352-2502-2652-2802-3002-3202
3402-3602-3902-4202-4502-4802-5202-5602-6002-6402
6903-7203-8403-9603
Operational limits
Electronic thermostatic valve (temperature of water produced from 5°C to 30°C)
Model
Free cooling Glycol Free
Free cooling Glycol Free Plus (1)
Versions
High efficiency
Low noise high efficency
Very high efficiency
Low noise very high efficiency

⁽¹⁾ The free cooling plus models can have coils only in options "o" and "O" $\,$

Field	Description
11	Condensing coils/ Free cooling water coils
0	Aluminium microchannel/ Copper Aluminium
0	Painted aluminium microchannel/ Painted Aluminium Copper
R	Copper - Copper/Copper - Copper (1)
S	Copper - Thinned/Copper - Thinned (1)
٧	Epoxy paint (only free cooling coil)/Epoxy paint (only free cooling coil) (1)
12	Fans
J	Inverter
13	Power supply
٥	400V/3/50Hz
14-15	Integrated hydronic kit
0	Without hydronic kit

⁽x2) Indicates the amount to order

⁽¹⁾ Accessories to be defined for compatibility
A grey background indicates the accessory must be assembled in the factory

⁽¹⁾ Accessories to be defined for compatibility
A grey background indicates the accessory must be assembled in the factory

⁽²⁾ The accessory is only available for the "E/N" silenced versions A grey background indicates the accessory must be assembled in the factory

NSMW - BA - GA

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Free-cooling glycol free		1402	1002	1002	2002	2202	2332	2302	2032	2002	3002	3202	3402	3002
Cooling performance chiller operation (1)													-	
Cooling capacity	kW	306	351	400	441	479	505	546	589	638	653	687	753	792
Input power	kW	82	95	109	118	125	135	147	155	167	172	179	192	205
Cooling total input current	A	146	166	187	200	208	224	242	258	277	290	306	327	348
EER	W/W	3,75	3,69	3,69	3,73	3,83	3,73	3,71	3,79	3,81	3,8	3,84	3,92	3,86
Water flow rate system side	I/h	52824	60556	69042	76187	82709	87074	94164	101663	110040		118488	129925	136678
Pressure drop system side	kPa	91	120	119	91	107	118	139	135	152	133	130	99	110
Cooling performances with glycol-free (2)							-							
Cooling capacity	kW	303	276	281	292	360	363	367	437	441	454	456	541	542
Input power	kW	22,6	22,6	22,6	22,6	29,7	29,7	29,7	38,6	38,6	38,7	38,7	44,8	44,8
Free cooling total input current	A	36,1	36,1	36,1	36,1	47	47	47	61,5	61,5	61,7	61,7	71,2	71,2
EER	W/W	13,43	12,22	12,46	12,93	12,14	12,23	12,36	11,32	11,43	11,73	11,79	12,07	12,11
Water flow rate system side	I/h	52824	60556	69042	76187	82709	87074	94164	101663	110040	112699	118488	129925	136678
Pressure drop system side	kPa	91	120	119	91	107	118	139	135	152	133	130	99	110
Free-cooling glycol free Plus														
Cooling performance chiller operation (1)														
Cooling capacity	kW	305	349	398	439	477	502	543	587	635	650	683	749	788
Input power	kW	82	96	109	120	126	136	148	157	169	174	181	194	207
Cooling total input current	А	147	167	188	201	210	226	244	260	279	292	308	330	351
EER	W/W	3,70	3,64	3,64	3,68	3,78	3,68	3,66	3,74	3,76	3,74	3,78	3,86	3,80
Water flow rate system side	l/h	52588	60291	68707	75829	82367	86693	93725	101283	109546	112184	117898	129336	136024
Pressure drop system side	kPa	90	119	118	90	106	117	137	134	151	132	129	98	108
Cooling performances with glycol-free (2)														
Cooling capacity	kW	314	287	293	305	377	380	384	459	463	478	481	570	572
Input power	kW	23	22,9	22,9	23	30,1	30,1	30,1	39,2	39,2	39,3	39,3	45,5	45,5
Free cooling total input current	A	36,6	36,6	36,6	36,6	47,7	47,7	47,7	62,3	62,3	62,5	62,5	72,1	72,1
EER	W/W	13,67	12,52	12,77	13,30	12,51	12,60	12,74	11,72	11,84	12,18	12,25	12,53	12,58
Water flow rate system side	I/h	52588	60291	68707	75829	82367	86693	93725	101283	109546		117898	129336	136024
Pressure drop system side	kPa	90	119	118	90	106	117	137	134	151	132	129	98	108
Size		3902	4202	4502	4802	5202	560	2 6	002	6402	6903	7203	8403	9603
		3902	4202	4502	4802	5202	560	2 6	002	6402	6903	7203	8403	9603
Free-cooling glycol free		3902	4202	4502	4802	5202	560	2 6	002	6402	6903	7203	8403	9603
	kW	3902 853	4202 882	4502 959	4802	5202				6402 1327	6903	7203	8403 1758	9603 2001
Free-cooling glycol free Cooling performance chiller operation (1)	kW kW							9 1						
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power		853	882	959	1014	1082	116	9 1.	262	1327	1476	1531	1758	2001
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity	kW	853 216	882 228	959 244	1014 260	1082 281	116 295 494	9 1. 5 3	262 119	1327 343	1476 373	1531 388	1758 442	2001 512
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A	853 216 362	882 228 377	959 244 416	1014 260 453	1082 281 478 3,86	116 295 494 3,93	9 1. 5 3 4 5 7 3	262 319 331 ,95	1327 343 567 3,87	1476 373 646	1531 388 683	1758 442 740	2001 512 854
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W	853 216 362 3,95	882 228 377 3,87	959 244 416 3,92	1014 260 453 3,9	1082 281 478 3,86	116 295 494 3,93	9 1. 5 3 4 5 7 3	262 319 331 ,95	1327 343 567 3,87	1476 373 646 3,96	1531 388 683 3,94	1758 442 740 3,97	2001 512 854 3,91
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h	853 216 362 3,95 147129	882 228 377 3,87 152124	959 244 416 3,92 165550	1014 260 453 3,9 174920	1082 281 478 3,86 18680	116 295 49 ² 3,9; 2 2018	9 1. 5 3 4 5 7 3	262 119 531 ,95 7758 2	1327 343 567 3,87 28975	1476 373 646 3,96 254763	1531 388 683 3,94 264131	1758 442 740 3,97 303311	2001 512 854 3,91 345300
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W I/h	853 216 362 3,95 147129	882 228 377 3,87 152124	959 244 416 3,92 165550	1014 260 453 3,9 174920	1082 281 478 3,86 18680	116 295 49 ² 3,9; 2 2018	9 1. 5 3 4 5 7 3 111 21 6 1	262 119 531 ,95 7758 2	1327 343 567 3,87 28975	1476 373 646 3,96 254763	1531 388 683 3,94 264131	1758 442 740 3,97 303311	2001 512 854 3,91 345300
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2)	kW A W/W I/h kPa	853 216 362 3,95 147129 128	882 228 377 3,87 152124 137	959 244 416 3,92 165550 148	1014 260 453 3,9 174920 165	1082 281 478 3,86 18680 155	116 295 492 3,91 2 2018	9 1. 55 3. 55 3. 77 3. 77 3. 111 21. 66 1.	262 119 131 ,95 7758 2	1327 343 567 3,87 28975 190	1476 373 646 3,96 254763 126	1531 388 683 3,94 264131 141	1758 442 740 3,97 303311 111	2001 512 854 3,91 345300 144
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity	kW A W/W I/h kPa	853 216 362 3,95 147129 128	882 228 377 3,87 152124 137	959 244 416 3,92 165550 148	1014 260 453 3,9 174920 165	1082 281 478 3,86 18680 155	116 295 494 3,9; 2 2018 146	9 1. 55 35 44 55 77 33 111 21 166 1	262 119 131 195 77758 2 171	1327 343 567 3,87 28975 190	1476 373 646 3,96 254763 126	1531 388 683 3,94 264131 141	1758 442 740 3,97 303311 111	2001 512 854 3,91 345300 144
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW	853 216 362 3,95 147129 128 598 49,8	882 228 377 3,87 152124 137 599	959 244 416 3,92 165550 148 674	1014 260 453 3,9 174920 165 675	1082 281 478 3,86 18680 155 675	116 295 494 3,93 2 2018 146 748 60	9 1. 55 3 77 3 711 21 66 1 88 8 8 6 6 1	262 619 631 ,95 77758 2 171 802 4,9	1327 343 567 3,87 28975 190	1476 373 646 3,96 254763 126	1531 388 683 3,94 264131 141 1039 84,7	1758 442 740 3,97 303311 111 1134 93,7	2001 512 854 3,91 345300 144 1263 103,6
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h	853 216 362 3,95 147129 128 598 49,8 78,9	882 228 377 3,87 152124 137 599 49,8 78,9	959 244 416 3,92 165550 148 674 55 87,1	1014 260 453 3,9 174920 165 675 55 87,1 12,28	1082 281 478 3,86 1 18680 155 675 55 87,1 12,28	116 295 494 3,93 2 2018 146 748 60 95	9 1. 5 3 7 3 111 21 6 1 8 8 8 8 1 6 1 14 14 14 15	262 619 631 ,95 77758 2 171 802 4,9 02,6 2,36	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43	1476 373 646 3,96 254763 126 1038 84,7 134,1	1531 388 683 3,94 264131 141 1039 84,7 134,1	1758 442 740 3,97 303311 111 1134 93,7 148,7	2001 512 854 3,91 345300 144 1263 103,6 164,3
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W	853 216 362 3,95 147129 128 598 49,8 78,9 12,03	882 228 377 3,87 152124 137 599 49,8 78,9	959 244 416 3,92 165550 148 674 55 87,1 12,26	1014 260 453 3,9 174920 165 675 55 87,1 12,28	1082 281 478 3,86 1 18680 155 675 55 87,1 12,28	116 295 494 3,9: 2 2018 146 748 60 95 8 12,4 2 2018	9 1. 5 3 4 5 7 3 111 21 11 21 8 8 8 8 1 6 1 11 146 1.	262 619 631 ,95 77758 2 171 802 4,9 02,6 2,36	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27	1758 442 740 3,97 303311 111 1134 93,7 148,7	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus	kW A W/W I/h kPa kW kW A W/W I/h	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550	1014 260 453 3,9 174920 165 675 55 87,1 12,28	1082 281 478 3,86 18680 155 675 55 87,1 12,28	116 295 494 3,9: 2 2018 146 748 60 95 8 12,4 2 2018	9 1. 5 3 4 5 7 3 111 21 11 21 8 8 8 8 1 6 1 11 146 1.	262 119 131 195 17758 2 171 1802 14,9 102,6 103,6	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescouling total input current EER Water flow rate system side Prescouling glycol free Plus Cooling performance chiller operation (1)	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550	1014 260 453 3,9 174920 165 675 55 87,1 12,28	1082 281 478 3,86 18680 155 675 55 87,1 12,28	1166 295 494 3,91 2 2018 146 60 95 8 12,4 2 2018	9 1. 5 3 4 5 7 3 111 21 6 1 11 1 11 21 11 21 11 21	262 319 331 ,95 77758 2 171 302 4,9 202,6 2,36 77758 2	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescouling total input current EER Water flow rate system side Prescouling glycol free Plus Cooling performance chiller operation (1) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155	1166 295 494 3,91 2 2018 146 60 95 8 12,4 2 2018 146	9 1. 5 3 4 5 7 3 111 21 6 1 1 1 16 1 11 21 16 1 16 1 16	262 319 331 ,95 77758 2 171 802 4,9 02,6 2,36 77758 2	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975 190	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescouling total input current EER Cooling performance chiller operation (1) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165	1082 281 478 3,86 18680 155 675 55 87,1 12,28 0 18680 155	1166 295 494 3,91 2 2018 146 60 95 8 12,4 2 2018	9 1. 5 3 4 5 7 3 111 21 6 1 1 1 16 1 11 21 16 1 16 1 16	262 319 331 ,95 77758 2 171 302 4,9 202,6 2,36 77758 2	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975 190	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescouling total input current EER Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155	1166 295 494 3,9,9 2 2018 146 60 95 8 12,4 2 2018 146 116 298	9 1. 5 3 6 4 5 7 3 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1	262 319 331 ,95 77758 2 171 802 4,9 02,6 2,36 77758 2	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975 190	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescouling total input current EER Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155	1166 295 494 3,91 2 2018 146 60 95 8 12,4 2 2018 146 116 298 498 3,9	9 1. 5 3 4 5 7 3 111 21 6 1 11 21 16 1 11 21 16 1 11 3 11 3	262 319 331 ,95 77758 2 171 302 4,9 02,6 2,36 77758 2 171 256 332 336 ,90	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975 190 1320 346 571 3,81	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126 1470 377 652 3,90	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141 1524 392 688 3,89	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749 447 747 3,91	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144 1991 517 861 3,85
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165 1009 262 456 3,84	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155	1166 295 494 3,91 2 2018 146 60 95 8 12,4 2 2018 146 116 298 498 3,9	9 1. 5 3 4 5 7 3 111 21 6 1 11 21 16 1 11 21 16 1 11 3 11 3	262 319 331 ,95 77758 2 171 302 4,9 02,6 2,36 77758 2 171 256 332 336 ,90	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975 190 1320 346 571 3,81 227798	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126 1470 377 652 3,90 253695	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141 1524 392 688	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749 447 747	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144 1991 517 861 3,85 343582
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128 849 218 365 3,90	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137 878 230 381 3,81	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165 1009 262 456 3,84	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155	1166 295 494 3,9,9 2 2018 146 60 95 8 12,4 2 2018 146 116 298 498 3,9 8 2007	9 1. 5 3 4 5 7 3 111 21 6 1 11 21 6 1 11 21 6 1 11 3 14 1 15 1 16 1 17 1 18 8 3 18 8 3 18 8 4 21	262 319 331 ,95 77758 2 171 302 4,9 02,6 2,36 77758 2 171 256 332 336 ,90	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975 190 1320 346 571 3,81	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126 1470 377 652 3,90	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141 1524 392 688 3,89	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749 447 747 3,91	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144 1991 517 861 3,85
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128 849 218 365 3,90 146478 127	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137 878 230 381 3,81 151430 136	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148 955 247 420 3,87 164829	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165 1009 262 456 3,84 174121 164	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155 1077 284 482 3,80 18583 153	1166 295 494 3,91 2 2018 146 60 95 8 12,4 2 2018 146 116 298 498 3,9 8 2007	9 1. 5 3 4 5 7 3 111 21 6 1 11 21 6 1 11 21 16 1 11 3 11 3 11 3 11 3	262 319 331 ,95 77758 2 171 302 4,9 02,6 2,36 77758 2 171 256 332 336 ,90 6706 2	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975 190 1320 346 571 3,81 227798 188	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126 1470 377 652 3,90 253695	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141 1524 392 688 3,89 262987 140	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749 447 747 3,91 301787	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144 1991 517 861 3,85 343582 143
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W KW A W/W KW A W/W KW A W/W KW A	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128 849 218 365 3,90 146478 127	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137 878 230 381 3,81 151430 136	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148 955 247 420 3,87 164829 147	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165 1009 262 456 3,84 174121 164	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155 1077 284 482 3,80 18583 153	1166 295 494 3,9;2 2018 146 60 95 8 12,4 2 2018 146 298 498 3,9 8 2007 144	9 1. 5 3 4 5 7 3 611 21 6 1 6 1 6 1 6 1 6 1 6 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7	262 319 331 ,95 77758 2 171 302 4,9 02,6 2,36 77758 2 171 256 332 336 ,90 6706 2 170	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975 190 1320 346 571 3,81 227798 188	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126 1470 377 652 3,90 253695 125	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141 1524 392 688 3,89 262987 140	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749 447 747 3,91 301787 110	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144 1991 517 861 3,85 343582 143
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kW A kW KW A W/W KW A W/W KW KW KW KW KW KW KW KW	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128 849 218 365 3,90 146478 127	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137 878 230 381 3,81 151430 136	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148 955 247 420 3,87 164829 147 708 55,8	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165 1009 262 456 3,84 174121 164	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155 1077 284 482 3,80 1 18583 153	1166 295 494 3,93 2 2018 146 60 95 8 12,4 2 2018 146 1166 298 498 3,9 8 2007 144	9 1. 5 3 6 4 5 7 3 7 8 8 8 8 6 6 10 8 6 11 8 8 3 8 8 3 8 8 4 1 8 8 3 8 8 4 2 1 4 5 8 8 6 6 6 6	262 319 331 ,95 7758 2 771 302 4,9 20,6 2,36 77758 2 171 256 322 336 390 6706 2 170	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 228975 190 1320 346 571 3,81 227798 188 844 66,0	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126 1470 377 652 3,90 253695 125	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141 1524 392 688 3,89 262987 140	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749 447 747 3,91 301787 110 1192 95,1	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144 1991 517 861 3,85 343582 143
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W A W/W A W/W A W/W A A W/W A A A A	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128 849 218 365 3,90 146478 127	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137 878 230 381 3,81 151430 136	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148 955 247 420 3,87 164829 147	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165 1009 262 456 3,84 174121 164	1082 281 478 3,86 1 18680 155 675 55 87,1 12,28 1 18680 155 1077 284 482 3,80 1 18583 153 709 55,8	1166 295 494 3,93 2 2018 146 60 95 8 12,4 2 2018 146 298 498 3,9 8 2007 144 785 61,	9 1. 5 3 6 4 5 7 3 7 8 8 8 8 6 6 10 8 6 11 8 8 3 8 8 3 8 8 4 1 1 8 8 3 8 8 4 21 8 7 8 8 21 8 8 4 21 8 7 8 8 4 21 8 7 8 8 4 21 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	262 319 331 ,95 7758 2 771 302 4,9 20,6 2,36 77758 2 171 256 332 336 390 66706 2 170 339 66,0 04,1	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 28975 190 1320 346 571 3,81 227798 188	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126 1470 377 652 3,90 253695 125	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141 1524 392 688 3,89 262987 140	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749 447 747 3,91 301787 110 1192 95,1 150,8	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144 1991 517 861 3,85 343582 143
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling capacity Input power Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performance chiller operation (1) Cooling capacity Input power Cooling performances with glycol-free (2) Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW KW A W/W I/h kPa kW kW A kW A W/W I/h kPa kW KW A W/W I/h kPa	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128 849 218 365 3,90 146478 127	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137 878 230 381 3,81 151430 136 629 50,5 80,0 12,45	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148 955 247 420 3,87 164829 147 708 55,8 88,3 12,68	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165 1009 262 456 3,84 174121 164 709 55,8 88,3 12,70	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155 1077 284 482 3,80 1 18583 153 709 55,8 88,3 12,70	1166 295 494 3,93 2 2018 146 60 95 8 12,4 2 2018 146 1166 298 3,9 8 2007 144 783 61,1 96,0 0 12,8	9 1. 5 3 6 4 5 7 3 7 3 111 21 6 1 8 8 8 1 6 6 11 11 21 16 1 11 21 16 1 17 17 18 1 1 21 18 1 21 18 1 3 18 3 18 4 21 18 4 1 18 3 18 4 21 18 4 1 18 5 8 18 6 6 18 6 7 18 7 18 8 6 7 18 8 7 18 8 7 18 8 8 8 8 18 8 8 18 8 1	262 319 331 ,95 7758 2 771 302 4,9 202,6 2,36 77758 2 171 256 332 336 ,90 66706 2 170 339 66,0 04,1 2,72	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 128975 190 1320 346 571 3,81 127798 188 844 66,0 104,1 12,80	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126 1470 377 652 3,90 253695 125 1089 86,0 136,0 12,67	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141 1524 392 688 3,89 262987 140 1090 86,0 136,0 12,68	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749 447 747 3,91 301787 110 1192 95,1 150,8 12,54	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144 1991 517 861 3,85 343582 143 1325 105,2 166,6 12,59
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W A W/W A W/W A W/W A A W/W A A A A	853 216 362 3,95 147129 128 598 49,8 78,9 12,03 147129 128 849 218 365 3,90 146478 127	882 228 377 3,87 152124 137 599 49,8 78,9 12,04 152124 137 878 230 381 3,81 151430 136 629 50,5 80,0	959 244 416 3,92 165550 148 674 55 87,1 12,26 165550 148 955 247 420 3,87 164829 147 708 55,8 88,3	1014 260 453 3,9 174920 165 675 55 87,1 12,28 174920 165 1009 262 456 3,84 174121 164 709 55,8 88,3 12,70	1082 281 478 3,86 18680 155 675 55 87,1 12,28 18680 155 1077 284 482 3,80 1 18583 153 709 55,8 88,3 12,70	1166 295 494 3,97 2 2018 146 60 95 8 12,4 2 2018 146 1166 298 3,9 8 2007 144 783 61,1 96,0 0 12,8 8 2007	9 1. 5 3 4 5 7 3 111 21 6 1 8 8 8 1 6 6 114 11 21 16 1 11 21 16 1 17 1 18 1 18 21 18 3 18 4 18 3 18 4 18 3 18 4 18 3 18 4 18 3 18 4 18 4 18 8 18 8 18 8 18 8 18 8 18 8	262 319 331 ,95 7758 2 771 302 4,9 202,6 2,36 77758 2 171 256 332 336 ,90 66706 2 170 339 66,0 04,1 2,72	1327 343 567 3,87 28975 190 807 64,9 102,6 12,43 128975 190 1320 346 571 3,81 127798 188 844 66,0 104,1 12,80	1476 373 646 3,96 254763 126 1038 84,7 134,1 12,26 254763 126 1470 377 652 3,90 253695 125 1089 86,0 136,0	1531 388 683 3,94 264131 141 1039 84,7 134,1 12,27 264131 141 1524 392 688 3,89 262987 140 1090 86,0 136,0	1758 442 740 3,97 303311 111 1134 93,7 148,7 12,1 303311 111 1749 447 747 3,91 301787 110 1192 95,1 150,8	2001 512 854 3,91 345300 144 1263 103,6 164,3 12,18 345300 144 1991 517 861 3,85 343582 143 1325 105,2 166,6

⁽¹⁾ System side water heat exchanger 25°C/20°C, External air 35°C; 0% Free-cooling (2) System side water heat exchanger 25°C; External air 12°C

NSMW - BE - GE

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Free-cooling glycol free														
Cooling performance chiller operation (1)														
Cooling capacity	kW	315	362	415	456	478	524	551	599	626	641	667	735	772
Input power	kW	75	91	101	112	120	127	138	145	156	161	169	178	192
Cooling total input current	A	134	158	175	189	199	210	227	240	258	272	288	303	325
EER	W/W	4,19	3,97	4,09	4,07	3,98	4,13	4,00	4,12	4,02	3,97	3,95	4,13	4,03
Water flow rate system side	l/h	54400	62421	71530	78692	82506	90469	95144	103288	108035	110595	115049	126808	133234
Pressure drop system side	kPa	81	100	101	95	104	105	116	127	139	121	125	96	106
Cooling performances with glycol-free (2)														
Cooling capacity	kW	260	228	276	285	287	343	345	389	391	402	403	469	471
Input power	kW	10,6	10,6	13,4	13,5	13,5	19,2	19,2	21,9	21,9	22,1	22,1	23,9	23,9
Free cooling total input current	A	16,7	16,6	21,0	21,2	21,2	30,5	30,5	34,5	34,5	34,9	34,9	37,6	37,6
EER	W/W	24,39	21,44	20,58	21,09	21,21	17,84	17,94	17,79	17,87	18,15	18,22	19,61	19,67
Water flow rate system side	I/h	54400	62421	71530	78692	82506	90469	95144	103288	108035			126808	133234
Pressure drop system side	kPa	81	100	101	95	104	105	116	127	139	121	125	96	106
Free-cooling glycol free Plus													-	-
Cooling performance chiller operation (1)														
Cooling capacity	kW	314	360	412	453	474	521	548	595	622	637	662	730	767
Input power	kW	76	92	102	113	122	128	139	147	157	163	170	180	194
Cooling total input current	A	134	159	176	190	201	211	229	242	260	274	291	306	328
EER	W/W	4,14	3,92	4,03	4,00	3,90	4,07	3,93	4,06	3,96	3,90	3,88	4,06	3,95
Water flow rate system side	I/h	54167	62091	71121	78115	81864	89932	94544	102700	107375			125980	132294
Pressure drop system side	kPa	81	99	99	94	103	103	114	126	138	119	123	94	104
Cooling performances with glycol-free (2)	1	277		205	200	200	250	245						
Cooling capacity	kW	270	237	288	298	300	358	360	406	408	419	421	491	492
Input power	kW	10,8	10,7	13,5	13,7	13,7	19,4	19,4	22,1	22,1	22,3	22,3	24,1	24,1
Free cooling total input current	A	16,8	16,8	21,2	21,4	21,4	30,8	30,8	34,8	34,8	35,2	35,2	37,9	37,9
EER	W/W	25,10	22,15	21,24	21,80	21,93	18,48	18,59	18,39	18,48	18,80	18,87	20,33	20,39
Water flow rate system side		54167	62091	71121	78115	81864	89932	94544	102700	107375			125980	132294
Pressure drop system side	kPa	81	99	99	94	103	103	114	126	138	119	123	94	104
Size		3902	4202	4502	4802	5202	5602	2 60	002	6402	6903	7203	8403	9603
Free-cooling glycol free		3902	4202	4502	4802	5202	5602	2 60	002	6402	6903	7203	8403	9603
Free-cooling glycol free Cooling performance chiller operation (1)														9603
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity	kW	823	870	932	1011	1070	1152	2 12	226	1300	1423	1502	-	-
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power	kW	823 202	870 210	932 228	1011 241	1070 260	1152 275	2 12	226	1300 318	1423 350	1502 364	-	-
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A	823 202 339	870 210 348	932 228 388	1011 241 421	1070 260 443	1152 275 460	2 12 i 2	226 96	1300 318 526	1423 350 601	1502 364 631		- - -
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W	823 202 339 4,07	870 210 348 4,15	932 228 388 4,09	1011 241 421 4,19	1070 260 443 4,12	1152 275 460 4,19	2 12 5 2 1 4	226 96 93 ,14	1300 318 526 4,09	1423 350 601 4,07	1502 364 631 4,13	- - -	-
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h	823 202 339 4,07 142081	870 210 348 4,15 150081	932 228 388 4,09 160772	1011 241 421 4,19 174443	1070 260 443 4,12 184665	1152 275 460 4,19 5 19876	2 12 5 2 1 4 9 4 68 21	226 96 93 ,14	1300 318 526 4,09 24359	1423 350 601 4,07 245581	1502 364 631 4,13 259231	- - - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W	823 202 339 4,07	870 210 348 4,15	932 228 388 4,09	1011 241 421 4,19	1070 260 443 4,12	1152 275 460 4,19	2 12 5 2 1 4 9 4 68 21	226 96 93 ,14	1300 318 526 4,09	1423 350 601 4,07	1502 364 631 4,13	- - -	- - -
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2)	kW A W/W I/h kPa	823 202 339 4,07 142081 121	870 210 348 4,15 150081 135	932 228 388 4,09 160772 142	1011 241 421 4,19 174443 152	1070 260 443 4,12 184665 170	1152 275 460 4,19 5 19876 81	2 12 3 2 1 4 9 4 68 21	226 96 93 ,14 1564 2	1300 318 526 4,09 24359	1423 350 601 4,07 245581 119	1502 364 631 4,13 259231 123	- - - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity	kW A W/W I/h kPa	823 202 339 4,07 142081 121	870 210 348 4,15 150081 135	932 228 388 4,09 160772 142	1011 241 421 4,19 174443 152	1070 260 443 4,12 184669 170	1152 275 460 4,19 5 19876 81	2 13 3 2 3 4 1 4 4 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	226 96 93 ,14 1564 2	1300 318 526 4,09 24359 110	1423 350 601 4,07 245581 119	1502 364 631 4,13 259231 123	- - - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power	kW A W/W I/h kPa kW	823 202 339 4,07 142081 121 515 25,6	870 210 348 4,15 150081 135 578 31,3	932 228 388 4,09 160772 142 588 31,5	1011 241 421 4,19 174443 152 633 33,1	1070 260 443 4,12 18466: 170 634 33,1	1152 275 460 4,19 5 1987(81 693 38,4	2 12 3 2 4 4 4 9 4 68 21 1 1	226 96 93 ,14 1564 2 28	1300 318 526 4,09 24359 110 788 43,7	1423 350 601 4,07 245581 119 880 46,8	1502 364 631 4,13 259231 123 924 48,5		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A	823 202 339 4,07 142081 121 515 25,6 40,1	870 210 348 4,15 150081 135 578 31,3 48,8	932 228 388 4,09 160772 142 588 31,5	1011 241 421 4,19 174443 152 633 33,1 51,6	1070 260 443 4,12 18466: 170 634 33,1 51,6	1152 275 460 4,19 5 1987(81 693 38,4 61,1	2 12 3 2 3 4 4 9 4 68 21 1 1 4 4 4 4 1 6	226 196 193 14 1564 2 28 42 1,1	1300 318 526 4,09 24359 110 788 43,7 69,0	1423 350 601 4,07 245581 119 880 46,8 73,4	1502 364 631 4,13 259231 123 924 48,5 75,9	- - - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW kW A W/W	823 202 339 4,07 142081 121 515 25,6 40,1 20,11	870 210 348 4,15 150081 135 578 31,3 48,8 18,44	932 228 388 4,09 160772 142 588 31,5 49,1 18,68	1011 241 421 4,19 174443 152 633 33,1 51,6	1070 260 443 4,12 184665 170 634 33,1 51,6	1152 2755 460 4,19 5 19876 81 693 38,4 61,1	22 12 3 2 4 4 9 4 668 21 1 4 7 4 4 4 4 1 6 2 18	226 196 193 14 1564 2 28 28 42 1,1 5,0	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09	1070 260 443 4,12 184669 170 634 33,1 51,6 19,12	1152 2755 460 4,19 5 19876 81 693 38,4 61,1 1 18,0.5 5 19876	22 12 3 2 4 4 9 4 668 21 1 4 7 4 4 4 1 66 2 18	2226 996 993 ,14 1564 2 28 142 1,1 5,0 8,06 1564 2	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W	823 202 339 4,07 142081 121 515 25,6 40,1 20,11	870 210 348 4,15 150081 135 578 31,3 48,8 18,44	932 228 388 4,09 160772 142 588 31,5 49,1 18,68	1011 241 421 4,19 174443 152 633 33,1 51,6	1070 260 443 4,12 184665 170 634 33,1 51,6	1152 2755 460 4,19 5 19876 81 693 38,4 61,1	22 12 3 2 4 4 9 4 668 21 1 4 7 4 4 4 1 66 2 18	2226 996 993 ,14 1564 2 28 142 1,1 5,0 8,06 1564 2	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus	kW A W/W I/h kPa kW kW A W/W I/h	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09	1070 260 443 4,12 184669 170 634 33,1 51,6 19,12	1152 2755 460 4,19 5 19876 81 693 38,4 61,1 1 18,0.5 5 19876	22 12 3 2 4 4 9 4 668 21 1 4 7 4 4 4 1 66 2 18	2226 996 993 ,14 1564 2 28 142 1,1 5,0 8,06 1564 2	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1)	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09 174443	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170	1152 275 460 4,19 5 19876 81 693 38,4 61,1 1 18,0 5 19876	2 1.3 3 2 4 4 9 4, 668 21.1 1 1 6 6 2 18 668 21.1	2226 296 293 ,14 1564 2 28 28 42 1,1 5,0 8,06 1564 2	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09 174443 152	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170	1152 275 460 4,19 5 19876 81 693 38,4 61,1 2 18,0,0 5 19876 81	2 1: 3 2 4 9 4, 668 21: 1 1 6 6 2 18 68 21: 1 1	2226 296 293 ,14 1564 2 28 28 42 1,1 5,0 3,06 1564 2 28	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09 174443 152	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170	1152 275 460 4,19 5 19876 81 693 38,4 61,1 2 18,00,5 5 19876 81	2 12 3 2 4 9 4 9 4 668 21 1 1 4 1 6 68 21 1 1 4 1 1 3 3	2226 1996 1993 1,14 1564 2 28 142 1,1 5,0 3,06 1564 2 28	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09 174443 152	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170	1152 275 460 4,19 5 19876 81 693 38,4 61,1 2 18,0,0 5 19876 81	2 12 3 2 4 9 4 668 21 1 1 6 7 4 4 1 6 2 18 68 21 1 1 4 13 3 3 4 4	2226 296 293 ,14 1564 2 28 242 1,1 5,0 3,06 1564 2 28 218 100 197	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110 1292 321 531	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121 818 204 342 4,00	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09 174443 152	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170	1152 275 460 4,19 5 19876 81 693 38,4 61,1 18,0,0 5 19876 81 1144 278 464 4,12	2 12 3 2 4 9 4 68 21 1 1 6 68 21 1 1 6 68 21 1 1 6 68 21 1 1 6 68 21 1 1 4 12 4 4 12 4 4	2226 296 293 ,14 1564 2 28 242 1,1 5,0 3,06 1564 2 28 218 100 197 ,07	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110 1292 321 531 4,02	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636 4,06		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121 818 204 342 4,00 141148	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135 865 212 351 4,08 149240	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142 926 230 392 4,02 159755	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09 174443 152 1005 244 425 4,12 173439	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170 1063 263 448 4,04 18339	1152 275 460 4,19 5 19876 81 693 38,4 61,1 1149 278 81 1144 278 464 4,12 4 19739	2 12 3 2 4 9 4 68 21 1 1 6 68 21 1 1 6 68 21 1 1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2226 296 293 ,14 1564 2 28 242 1,1 5,0 3,06 1564 2 28 218 1900 1997 ,07 00159 2	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110 1292 321 531 4,02 22920	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119 1414 354 607 3,99 243982	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636 4,06 257648		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121 818 204 342 4,00	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09 174443 152	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170	1152 275 460 4,19 5 19876 81 693 38,4 61,1 18,0,0 5 19876 81 1144 278 464 4,12	2 12 3 2 4 9 4 68 21 1 1 6 68 21 1 1 6 68 21 1 1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2226 296 293 ,14 1564 2 28 242 1,1 5,0 3,06 1564 2 28 218 100 197 ,07	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110 1292 321 531 4,02	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636 4,06		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2)	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121 818 204 342 4,00 141148 120	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135 865 212 351 4,08 149240 134	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142 926 230 392 4,02 159755 140	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09 174443 152 1005 244 425 4,12 173439 150	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170 1063 263 448 4,04 183394	1152 275 460 4,19 5 19876 81 693 38,4 61,1 2 18,0,0 5 19876 81 1144 278 464 4,12 4 19739 80	2 12 3 2 4 9 4 668 21 1 1 6 68 21 1 1 6 68 21 1 1 1 6 68 21 1 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2226 296 293 ,14 1564 2 28 242 1,1 5,0 3,06 1564 2 28 218 100 197 ,07 0159 2 227	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110 1292 321 531 4,02 22920	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119 1414 354 607 3,99 243982	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636 4,06 257648		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Prescooling total input current EER Cooling performance with glycol-free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121 818 204 342 4,00 141148 120	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135 865 212 351 4,08 149240 134	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142 926 230 392 4,02 159755 140	1011 241 4,19 174443 152 633 33,1 51,6 19,09 174443 152 1005 244 425 4,12 173439 150	1070 260 443 4,12 18466! 170 634 33,1 51,6 19,12 18466! 170 1063 263 448 4,04 183394 168	1152 275 460 4,19 5 19876 81 693 38,4 61,1 5 19876 81 1144 278 464 4,12 4 19739 80	2 1: 3 2 1: 4 9 4, 668 21: 1 1 6 2 18 68 21: 1 4 1: 4 1: 3 3 3 4 4 2 4 998 21: 1 7	2226 1996 1993 14 1564 228 242 1,1 1,1 1,5,0 3,06 1564 2 28 218 100 1997 1,07 10159 2 227	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 224359 110 1292 321 531 4,02 22920 109	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119 1414 354 607 3,99 243982 118	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636 4,06 257648 122		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Presevent drop system side Prescooling total input current EER Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kW A kW	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121 818 204 342 4,00 141148 120 538 25,8	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135 865 212 351 4,08 149240 134	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142 926 230 392 4,02 159755 140 615 31,7	1011 241 4,19 174443 152 633 33,1 51,6 19,09 174443 152 1005 244 425 4,12 173439 150 661 33,4	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170 1063 263 448 4,04 183394 168	1152 275 460 4,19 5 19876 81 693 38,4 61,1 5 19876 81 1144 278 464 4,12 4 19733 80	2 1: 2 2 1: 3 2 4 4 9 4 9 4 9 1 1 1 1 1 1 1 1 1 1 1 1 1	2226 1996 1993 14 1564 228 242 1,1 1,1 5,0 8,06 1564 2 28 218 100 1997 1,07 10159 2 27 2775 1,4	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 224359 110 1292 321 531 4,02 22920 109 822 44,1	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119 1414 354 607 3,99 243982 118	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636 4,06 257648 122		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling performance with glycol-free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performance swith glycol-free (2) Cooling capacity Input power Free cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa kW KW A W/W I/h kPa kW KW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121 818 204 342 4,00 141148 120 538 25,8 40,5	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135 865 212 351 4,08 149240 134	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142 926 230 392 4,02 159755 140 615 31,7 49,4	1011 241 4,19 174443 152 633 33,1 51,6 19,09 174443 152 1005 244 425 4,12 173439 150 661 33,4 52,0	1070 260 443 4,12 18466! 170 634 33,1 51,6 19,12 18466! 170 1063 263 448 4,04 183394 168 662 33,4 52,0	1152 275 460 4,19 5 19876 81 693 38,4 61,1 1144 278 464 4,12 4 19739 80	2 1: 2 2 1: 3 2 4 4 9 4 9 4 9 1 1 1 1 1 1 1 1 1 1 1 1 1	2226 1996 1993 14 1564 228 242 1,1 1,1 1,5,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 224359 110 1292 321 531 4,02 22920 109 822 44,1 69,5	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119 1414 354 607 3,99 243982 118 920 46,8 73,9	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636 4,06 257648 122 966 48,9 76,5		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performances with glycol-free (2) Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kW A kW	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121 818 204 342 4,00 141148 120 538 25,8 40,5 20,80	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135 865 212 351 4,08 149240 134 604 31,6 49,2 19,11	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142 926 230 392 4,02 159755 140 615 31,7 49,4 19,38	1011 241 421 4,19 174443 152 633 33,1 51,6 19,09 174443 152 1005 244 425 4,12 173439 150 661 33,4 52,0 19,78	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170 1063 263 448 4,04 18339 168 662 33,4 52,0 19,80	1152 275 460 4,19 5 19876 81 693 38,4 61,1 1144 278 464 4,12 4 19736 80 724 38,6 61,2 1144 278 464 4,12 4 19736 80	2 1: 2 2 1: 3 2 4 4 9 4 68 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2226 1996 1993 14 1564 228 242 142 1,1 1,5,0 1,00 1564 2 28 218 100 1997 1,07 10159 2 27 175 1,4 1,4 1,5,5 1,4 1,4 1,4 1,5 1,6 1,6 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110 1292 321 531 4,02 22920 109 822 44,1 69,5 18,64	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119 1414 354 607 3,99 243982 118 920 46,8 73,9 19,65	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636 4,06 257648 122 966 48,9 76,5 19,74		
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling performance with glycol-free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performance swith glycol-free (2) Cooling capacity Input power Free cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW KW A W/W I/h kPa kW KW A W/W I/h kPa kW KW A W/W I/h kPa	823 202 339 4,07 142081 121 515 25,6 40,1 20,11 142081 121 818 204 342 4,00 141148 120 538 25,8 40,5	870 210 348 4,15 150081 135 578 31,3 48,8 18,44 150081 135 865 212 351 4,08 149240 134	932 228 388 4,09 160772 142 588 31,5 49,1 18,68 160772 142 926 230 392 4,02 159755 140 615 31,7 49,4	1011 241 4,19 174443 152 633 33,1 51,6 19,09 174443 152 1005 244 425 4,12 173439 150 661 33,4 52,0	1070 260 443 4,12 184665 170 634 33,1 51,6 19,12 184665 170 1063 263 448 4,04 18339 168 662 33,4 52,0 19,80	1152 275 460 4,19 5 19876 81 693 38,4 61,1 1144 278 464 4,12 4 19736 80 724 38,6 61,2 1144 278 464 4,12 4 19736 80	2 1: 2 2 1: 3 2 4 4 9 4 1 1 6 6 8 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2226 1996 1993 14 1564 228 242 142 1,1 1,5,0 1,00 1564 2 28 218 100 1997 1,07 10159 2 27 175 1,4 1,4 1,5,5 1,4 1,4 1,4 1,5 1,6 1,6 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7	1300 318 526 4,09 24359 110 788 43,7 69,0 18,01 24359 110 1292 321 531 4,02 22920 109 822 44,1 69,5 18,64	1423 350 601 4,07 245581 119 880 46,8 73,4 18,79 245581 119 1414 354 607 3,99 243982 118 920 46,8 73,9	1502 364 631 4,13 259231 123 924 48,5 75,9 19,06 259231 123 1493 368 636 4,06 257648 122 966 48,9 76,5		

⁽¹⁾ System side water heat exchanger 25°C/20°C, External air 35°C; 0% Free-cooling (2) System side water heat exchanger 25°C; External air 12°C

NSMW - BU - GU

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Free-cooling glycol free		1702	1002	1002	2002	2202	2332	2302	2032	2002	3002	3202	3702	3002
Cooling performance chiller operation (1)													-	
Cooling capacity	kW	328	381	435	482	506	550	580	627	657	674	703	772	814
Input power	kW	84	98	112	121	128	138	148	159	168	172	178	191	203
Cooling total input current	A	148	170	192	204	212	229	244	263	279	291	305	326	345
EER	W/W	3,93	3,90	3,89	3,99	3,97	3,99	3,92	3,94	3,91	3,91	3,95	4,05	4,02
Water flow rate system side	I/h	56622	65790	75056	83161	87363	94979	100110	108143	113452	116262		133207	140417
Pressure drop system side	kPa	88	112	111	106	117	115	128	139	127	134	130	106	117
Cooling performances with glycol-free (2)														
Cooling capacity	kW	319	287	345	367	369	433	436	488	506	507	538	595	597
Input power	kW	23,6	23,5	29,6	31,5	31,5	38,6	38,6	44,5	44,7	44,7	44,8	49,8	49,8
Free cooling total input current	A	37,3	37,3	46,8	50,1	50,1	61,5	61,5	70,6	71,0	71,0	71,2	78,9	78,9
EER	W/W	13,52	12,20	11,67	11,64	11,72	11,22	11,30	10,96	11,31	11,35	12,01	11,96	12,00
Water flow rate system side	l/h	56622	65790	75056	83161	87363	94979	100110	108143	113452	116262	121282	133207	140417
Pressure drop system side	kPa	88	112	111	106	117	115	128	139	127	134	130	106	117
Free-cooling glycol free Plus														
Cooling performance chiller operation (1)														
Cooling capacity	kW	327	380	433	480	504	548	578	624	655	671	700	769	810
Input power	kW	84	99	113	122	129	139	149	160	170	174	180	192	205
Cooling total input current	A	149	171	194	205	214	231	246	265	281	294	308	328	347
EER	W/W	3,88	3,84	3,84	3,93	3,91	3,94	3,87	3,89	3,86	3,86	3,89	4,00	3,96
Water flow rate system side	l/h	56434	65512	74759	82781	86955	94601	99699	107739	113006	115799		132683	139835
Pressure drop system side	kPa	87	111	110	105	116	115	127	138	126	132	129	105	116
Cooling performances with glycol-free (2)														
Cooling capacity	kW	331	300	360	385	388	455	458	510	531	533	567	624	626
Input power	kW	23,9	23,9	30	32	32	39,2	39,2	45,1	45,4	45,4	45,5	50,5	50,5
Free cooling total input current	A	37,9	37,8	47,5	50,8	50,8	62,3	62,3	71,6	72,0	72,0	72,1	80,0	80,0
EER	W/W	13,81	12,56	11,98	12,04	12,13	11,61	11,69	11,30	11,70	11,73	12,47	12,36	12,40
Water flow rate system side	l/h	56434	65512	74759	82781	86955	94601	99699	107739	113006	115799		132683	139835
							115		120	126	132	129	105	116
Pressure drop system side	kPa	87	111	110	105	116	110	127	138	120	132	127	103	110
Pressure drop system side	kPa	87	111	110	105	110	113	12/	130	120	132	127	103	110
Pressure drop system side Size	kPa	3902	4202	4502	4802	5202				5402	6903	7203	8403	9603
Size	kPa													
Size Free-cooling glycol free	kPa													
Size	kPa kW							2 60	002 (
Size Free-cooling glycol free Cooling performance chiller operation (1)		3902	4202	4502	4802	5202	560	3 12	289	5402	6903	7203	8403	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity	kW	3902	4202 909	4502 978	4802 1059	5202	560	3 12 3 3	289 17	5 402 1365	6903 1495	7203	8403	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power	kW kW	3902 864 216	4202 909 228	4502 978 243	4802 1059 260	5202 1127 276	560 121 293	3 12 3 3 3 5	289 17 29	1365 341	6903 1495 372	7203 1576 388	8403	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW kW	3902 864 216 363	909 228 378	978 243 414	1059 260 454	1127 276 472 4,09	121 29: 49: 4,1	3 12 3 3 3 3 5 4 4 4	289 17 29	1365 341 566 4,00	6903 1495 372 639	7203 1576 388 677	8403 - - -	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW kW A W/W	3902 864 216 363 3,99	909 228 378 3,99	978 243 414 4,02	1059 260 454 4,08	1127 276 472 4,09	121 29: 49: 4,1	3 12 3 3 3 3 3 5 4 4 4	289 17 29	1365 341 566 4,00	1495 372 639 4,02	7203 1576 388 677 4,06	- - - -	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW kW A W/W	864 216 363 3,99 149099	909 228 378 3,99 156852	978 243 414 4,02 168696	1059 260 454 4,08 182745	1127 276 472 4,09 19443	121 29: 49: 4,1 1 2092	3 12 3 3 3 3 3 5 4 4 4	289	1365 341 566 4,00	1495 372 639 4,02 257918	7203 1576 388 677 4,06 271953	- - - -	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW kW A W/W	864 216 363 3,99 149099	909 228 378 3,99 156852	978 243 414 4,02 168696	1059 260 454 4,08 182745	1127 276 472 4,09 19443	121 29: 49: 4,1 1 2092	3 12 3 3 3 3 3 5 4 4 4 998 222 2 1	289	1365 341 566 4,00	1495 372 639 4,02 257918	7203 1576 388 677 4,06 271953	- - - -	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power	kW kW A W/W I/h kPa	864 216 363 3,99 149099 134	909 228 378 3,99 156852 133	978 243 414 4,02 168696 156	1059 260 454 4,08 182745 166	5202 1127 276 472 4,09 19443 188	121 29: 49: 4,1 1 2092 11: 88: 79,	3 12 3 3 3 3 3 5 4 4 4 4 998 222 2 1	289 17 29 ,06 2401 2	5402 1365 341 566 4,00 35505 128	1495 372 639 4,02 257918	7203 1576 388 677 4,06 271953 135	- - - -	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW kW A W/W I/h kPa kW kW	864 216 363 3,99 149099 134 647 54,7 86,6	909 228 378 3,99 156852 133 743 63,8 100,7	978 243 414 4,02 168696 156 746 63,8 100,7	1059 260 454 4,08 182745 166 796 68,7 108,3	1127 276 472 4,09 19443 188 797 68,7	121 293 493 4,1 1 2092 111 888 79,	3 12 3 3 3 3 3 5 4 4 4 4 998 222 1 5 9 0 8 0 8 7,7 13	289 17 229 ,06 2401 2 42 38 4,0 33,4	1365 341 566 4,00 35505 128 990 89,0 141,2	6903 1495 372 639 4,02 257918 131 1126 98,2 155,6	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2	- - - -	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER	kW kW A W/W I/h kPa kW kW A	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83	909 228 378 3,99 156852 133 743 63,8 100,7 11,65	978 243 414 4,02 168696 156 746 63,8 100,7 11,69	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60	1127 276 472 4,09 19443 188 797 68,7 108,3	560 121 29: 49: 4,1 1 2092 11: 88: 79,	3 12 3 3 3 3 3 5 4 4 4 4 998 222 2 1 5 99 0 8 8 0 8 8 7,7 13	289 17 29 .06 2401 2 42 38 4,0 33,4 1,17	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41	- - - - - -	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side	kW kW A W/W I/h kPa kW kW A W/W I/h	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745	1127 276 472 4,09 19443 188 797 68,7 108,3 11,61	560 121 29: 49: 4,1 1 2092 11: 88: 79, 125 11,2 1 2092	3 12 3 3 3 3 3 5 4 4 4 998 222 1 1 5 9 0 8 0 8 7,7 12 1200 111	289 17 29 .06 2401 2 42 38 4,0 33,4 1,17 2401 2	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953	- - - - - -	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW kW A W/W I/h kPa kW kW A	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83	909 228 378 3,99 156852 133 743 63,8 100,7 11,65	978 243 414 4,02 168696 156 746 63,8 100,7 11,69	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60	1127 276 472 4,09 19443 188 797 68,7 108,3	560 121 29: 49: 4,1 1 2092 11: 88: 79,	3 12 3 3 3 3 3 5 4 4 4 998 222 1 1 5 9 0 8 0 8 7,7 12 1200 111	289 17 29 .06 2401 2 42 38 4,0 33,4 1,17 2401 2	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus	kW kW A W/W I/h kPa kW kW A W/W I/h	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745	1127 276 472 4,09 19443 188 797 68,7 108,3 11,61	560 121 29: 49: 4,1 1 2092 11: 88: 79, 125 11,2 1 2092	3 12 3 3 3 3 3 5 4 4 4 998 222 1 1 5 9 0 8 0 8 7,7 12 1200 111	289 17 29 .06 2401 2 42 38 4,0 33,4 1,17 2401 2	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling total input current EER Cooling capacity Free cooling total input current EER Cooling capacity Cooling performance chiller operation (1)	kW kW A W/W I/h kPa kW kW A W/W I/h kPa	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166	1127 276 472 4,09 19443 188 797 68,7 108,3 11,61 19443	560 121 29: 49: 4,1 1 2092 11: 88: 79, 125 11,2 1 2092 11:	2 60 3 12 3 3 3 3 3 5 4 4 4 998 22 2 1 5 9 0 8 0,7 12 20 11 1998 22 2 1	289 17 29 .06 2401 2 42 38 4,0 33,4 1,17 2401 2 42	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505 128	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescoling glycol free Plus Cooling performance chiller operation (1) Cooling capacity	kW kW A W/W I/h kPa kW kW A W/W I/h kPa	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166	5202 1127 276 472 4,09 19443 188 797 68,7 108,3 11,61 19443 188	560 121 29: 49: 4,1 1 2092 11: 88: 79, 125 11,2 1 2092 11:	2 60 3 12 3 3 3 3 3 5 4 4 4 998 22 2 1 5 9 0 8 0,7 13 20 11 1998 22 2 1	289 17 29 .06 2401 2 42 38 4,0 33,4 1,17 2401 2 42	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505 128	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescoling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power	kW kW A W/W I/h kPa kW A W/W I/h kPa	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166	5202 1127 276 472 4,09 19443 188 797 68,7 108,3 11,61 19443 188	560 121 293 493 4,1 1 20922 111 888 79, 125 11,2 1 2092 111 120 29	3 1: 3 1: 3 3: 3 3: 3 4: 4 4: 4 998 22: 2 1: 5 99 0 8: 7 13: 20 11: 20 12: 21 12: 22 12: 23 14: 24 24: 25 25: 26 26: 27 26: 28 26:	289 17 29 .06 2401 2 42 388 4,0 33,4 1,17 2401 2 42 284 220	1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505 128	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescoling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW kW A W/W I/h kPa kW A W/W I/h kPa	864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166	5202 1127 276 472 4,09 19443 188 797 68,7 108,3 11,61 19443 188 1122 278 475	560 121 29: 49: 4,1 1 20922 11: 88: 79, 125 11,, 1 2092 11: 120 29: 49	3 1: 3 1: 3 3: 3 3: 3 3: 4 4 4 4 9.98 22: 2 1: 5 99 0 8 8 7.7 13: 20 11: 298 22: 1 12: 298 22: 1 13: 20 11: 20 11: 20 11: 21: 22 11: 23: 24: 25: 26: 27: 28: 28: 28: 28: 28: 28: 28: 28	289 17 29 .06 2401 2 42 38 44,0 33,4 -1,17 2401 2 42 284 20 333	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505 128 1359 344 570	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling total input current EER Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW kW A W/W I/h kPa kW A W/W I/h kPa	864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218 366 3,94	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133 906 230 381 3,94	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166	5202 1127 276 472 4,09 19443 188 797 68,7 108,3 11,61 19443 188 1122 278 475 4,03	560 121 299 490 4,1 1 20922 111 888 79 125 11,2 1 2092 111 120 290 49	3 1: 3 3 3: 3 3 3 3 5 4 4 9.98 22: 2 1 1 5 99 0 8 8 7,7 13: 20 11: 20 12: 21 12: 22 1 1 13: 23 13: 24 14: 25 15: 26 16: 27 16: 28 17: 28 18: 28	289 17 29 .06 2401 2 42 38 4,0 33,4 -1,17 2401 2 42 284 20 333 .01	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505 128 1359 344 570 33,95	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644 3,97	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682 4,01	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling total input current EER Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW kW A W/W I/h kPa kW A W/W I/h kPa	864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218 366 3,94 148519	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133 906 230 381 3,94 156292	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156 974 245 418 3,97 168052	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166	5202 1127 276 472 4,09 19443 188 797 68,7 108,3 11,61 19443 188 1122 278 475 4,03 19364	560 121 299 499 4,1 1 20922 111 888 799, 1 125 11,2 1 2092 49 49 4,0 1 2084	3 1: 3 3: 3 3: 3 3: 3 3: 5 4: 4 4: 4 9:98 22: 2 1: 5 99 0 8: 6 0 8: 7 13: 20 11: 8 1: 6 3: 7 5: 8 4: 8 4: 8 4: 8 4: 8 4: 8 4: 8 5: 8 6: 8 7: 8 8: 8 8: 8 8: 8 8: 8 9: 8 9: 8 9: 8 20: 8 10: 8 10	289 17 29 06 2401 2 42 38 44,0 33,4 1,17 2401 2 42 284 20 33 01 1510 2	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505 128 1359 344 570 3,95 34585	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644 3,97 256917	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682 4,01 270905	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Free-cooling total input current EER Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side	kW kW A W/W I/h kPa kW A W/W I/h kPa	864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218 366 3,94	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166	5202 1127 276 472 4,09 19443 188 797 68,7 108,3 11,61 19443 188 1122 278 475 4,03	560 121 299 490 4,1 1 20922 111 888 79 125 11,2 1 2092 111 120 290 49	3 1: 3 3: 3 3: 3 3: 3 3: 5 4: 4 4: 4 9:98 22: 2 1: 5 99 0 8: 6 0 8: 7 13: 20 11: 8 1: 6 3: 7 5: 8 4: 8 4: 8 4: 8 4: 8 4: 8 4: 8 5: 8 6: 8 7: 8 8: 8 8: 8 8: 8 8: 8 9: 8 9: 8 9: 8 20: 8 10: 8 10	289 17 29 .06 2401 2 42 38 4,0 33,4 -1,17 2401 2 42 284 20 333 .01	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505 128 1359 344 570 33,95	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644 3,97	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682 4,01	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Free-tooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performances with glycol-free (2)	kW kW A W/W I/h kPa kW A W/W I/h kPa	864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218 366 3,94 148519	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133 906 230 381 3,94 156292	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156 974 245 418 3,97 168052	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166	5202 1127 276 472 4,09 19443 188 797 68,7 108,3 11,61 19443 188 1122 278 475 4,03 19364 187	560 121 299 499 4,1 1 2092 111 888 79, 1 125 11,2 1 2092 11 120 299 4,0 1 2084 11	3 1: 3 3: 3 3: 3 3: 3 4: 4 4: 4 9:98 22: 2 1: 5 9: 0 8: 0 8: 1: 0 9: 1: 0 1: 0 1: 0 3: 0 3: 0 3: 0 4: 0 4: 0 5: 0 6: 0 7: 0 7:	289 17 29 06 2401 2 42 38 44,0 33,4 1,17 2401 2 42 284 20 33 01 1510 2 41	5402 1365 341 566 4,00 85505 128 990 89,0 141,2 11,13 335505 128 1359 344 570 3,95 34585 127	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644 3,97 256917 130	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682 4,01 270905 134	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity	kW kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218 366 3,94 148519 133	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133 906 230 381 3,94 156292 132	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156 974 245 418 3,97 168052 155	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166 1055 262 457 4,03 182059 165	5202 1127 276 472 4,09 19443 188 797 108,3 11,61 19443 188 1122 278 475 4,03 19364 187	560 121 299 499 4,1 1 2092 111 888 79, 1 120 1 120 299 4,0 1 2084 11 93	3 12 3 3 3 3 3 3 5 4 4 4 998 222 2 1 5 99 0 8 0 8 7 13 20 11 18 1: 18 4: 18 4: 18 4: 18 4: 18 4: 19 5: 10	289 17 29 06 2401 2 42 38 4,0 33,4 1,17 2401 2 42 284 20 33 01 1510 2 41	5402 1365 341 566 4,00 85505 128 990 889,0 141,2 11,13 35505 128 1359 344 570 3,95 34585 127	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644 3,97 256917 130	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682 4,01 270905 134	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Cooling performances with glycol-free (2) Cooling performances with glycol-free (2) Cooling capacity Input power	kW kW A W/W I/h kPa kW A W/W I/h kPa kW A W/W I/h kPa	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218 366 3,94 148519 133	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133 906 230 381 3,94 156292 132	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156 974 245 418 3,97 168052 155	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166 1055 262 457 4,03 182059 165 834 69,7	5202 1127 276 472 4,09 19443 188 797 108,3 11,61 19443 188 1122 278 475 4,03 19364 187 835 69,7	121 299 491 4,1 1 2092 11: 888: 79, 125 11,2 1 2092 11: 120 299 4,0 1 2084 11 11	3 1: 3 3: 3 3: 3 3: 3 4 4 4: 998 22: 2 1: 5 99 0 8: 7 13: 998 22: 2 1: 8 1: 6 3: 7 5: 8 4 4: 8 1: 1 5: 9 9 8 22: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	289 17 29 ,06 2401 2 42 338 44,0 33,4 1,17 2401 2 42 284 20 33 ,01 1510 2 41	5402 1365 341 566 4,00 85505 128 990 889,0 141,2 11,13 35505 128 1359 344 570 3,95 34585 127 1036 990,3	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644 3,97 256917 130 1185 99,6	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682 4,01 270905 134 1236 104,6	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performances with glycol-free (2) Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A W/W I/h kPa	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218 366 3,94 148519 133 676 55,5 87,8	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133 906 230 381 3,94 156292 132 780 64,7 102	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156 974 245 418 3,97 168052 155 783 64,7	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166 1055 262 457 4,03 182059 165 834 69,7 109,8	5202 1127 276 472 4,09 19443 188 797 108,3 11,61 19443 188 1122 278 475 4,03 19364 187 835 69,7 109,8	121 299 491 112 888 79, 125 11, 1 2092 11 1 2092 11 1 2084 1 1 2084 1 1 2084 1 1 2084 1 1 2084 1 1 2084	3 1: 3 3: 3 3: 3 3: 3 4: 4 4: 4 998 22: 2 1: 5 99 0 8: 6 3: 7 12: 8 1: 8 4: 8 4: 8 4: 8 4: 8 4: 8 3: 8 4: 8 4: 8 4: 8 5: 8 5: 8 6: 8 7: 8 8: 8 7: 8 8: 8 7: 8 8: 8 9: 8 9: 8 1: 8	289 17 29 ,06 2401 2 42 38 4,0 33,4 1,17 2401 2 42 284 20 33 ,01 1510 2 41 84 55,2 35,2	5402 1365 341 566 4,00 85505 128 990 889,0 141,2 11,13 35505 128 1359 344 570 3,95 34585 127 1036 990,3 143,1	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644 3,97 256917 130 1185 99,6 157,6	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682 4,01 270905 134 1236 104,6 165,4	8403 	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure flow rate system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performances with glycol-free (2) Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER	kW kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A W/W I/h kPa	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218 366 3,94 148519 133 676 55,5 87,8 12,18	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133 906 230 381 3,94 156292 132 780 64,7 102 12,05	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156 974 245 418 3,97 168052 155 783 64,7 102 12,11	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166 1055 262 457 4,03 182059 165 834 69,7 109,8 11,97	5202 1127 276 472 4,09 19443 188 797 108,3 11,61 19443 188 1122 278 475 4,03 19364 187 835 69,7 109,8 11,98	560 121 29: 49: 4,1 1 2092 11: 888: 79, 125 11,2 1 2092 11: 1 2094 49 4,0 1 2084 11 93 80, 3 127 6 11,4	3 1: 3 3: 3 3: 3 3: 3 4 4 4: 998 22: 2 1: 5 99 0 8: 7 13: 7 12: 10 11: 10 9: 11 9: 11 9: 11 8: 13 3 3: 13 3 3 3 3: 14 4 4: 15 9: 17 11: 18 4: 18 4: 18 4: 18 5: 18 5:	289 17 29 ,06 2401 2 42 338 44,0 33,4 1,17 2401 2 42 284 20 33 ,01 1510 2 41 84 55,2 35,2 1,54	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505 128 1359 344 570 3,95 34585 127 1036 99,3 143,1 11,48	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644 3,97 256917 130 1185 99,6 157,6 11,90	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682 4,01 270905 134 1236 104,6 165,4 11,81	8403	9603
Size Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performances with glycol-free (2) Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A W/W I/h kPa	3902 864 216 363 3,99 149099 134 647 54,7 86,6 11,83 149099 134 861 218 366 3,94 148519 133 676 55,5 87,8	909 228 378 3,99 156852 133 743 63,8 100,7 11,65 156852 133 906 230 381 3,94 156292 132 780 64,7 102	978 243 414 4,02 168696 156 746 63,8 100,7 11,69 168696 156 974 245 418 3,97 168052 155 783 64,7	1059 260 454 4,08 182745 166 796 68,7 108,3 11,60 182745 166 1055 262 457 4,03 182059 165 834 69,7 109,8	5202 1127 276 472 4,09 19443 188 797 108,3 11,61 19443 188 1122 278 475 4,03 19364 187 835 69,7 109,8 11,98	121 299 49,1 11 2092 11: 888: 79, 125 11,2 1 2092 11: 1 2094 49 4,0 1 2084 11 11 93 80,8 11,4	3 1: 3 3: 3 3: 3 3: 3 4 4 4: 998 22: 2 1: 5 99 0 8: 7 1: 6 3: 7 5: 8 4: 8 3: 8 4: 998 22: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	289 17 29 ,06 2401 2 42 38 4,0 33,4 1,17 2401 2 42 284 20 33 ,01 1510 2 41 84 55,2 35,52 1,54	5402 1365 341 566 4,00 35505 128 990 89,0 141,2 11,13 35505 128 1359 344 570 3,95 34585 127 1036 99,3 143,1 11,48	1495 372 639 4,02 257918 131 1126 98,2 155,6 11,46 257918 131 1489 375 644 3,97 256917 130 1185 99,6 157,6	7203 1576 388 677 4,06 271953 135 1177 103,1 163,2 11,41 271953 135 1570 392 682 4,01 270905 134 1236 104,6 165,4	8403 	9603

⁽¹⁾ System side water heat exchanger 25°C/20°C, External air 35°C; 0% Free-cooling (2) System side water heat exchanger 25°C; External air 12°C

NSMW - BN - GN

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Free-cooling glycol free														
Cooling performance chiller operation (1)														
Cooling capacity	kW	324	376	428	473	497	538	567	614	643	659	687	751	803
Input power	kW	74	88	99	109	116	124	134	142	152	157	163	174	184
Cooling total input current	A	132	154	172	184	192	206	222	235	252	265	280	297	313
EER	W/W	4,41	4,27	4,31	4,35	4,29	4,33	4,21	4,32	4,24	4,21	4,22	4,32	4,38
Water flow rate system side	l/h	55983	64940	73810	81682	85818	92811	97769	105919	111036	113774	118607	129528	138643
Pressure drop system side	kPa	74	93	87	102	113	110	122	111	122	128	125	100	115
Cooling performances with glycol-free (2)														
Cooling capacity	kW	266	278	329	334	337	384	387	439	441	442	467	523	567
Input power	kW	12	14	19	19	20	22	22	24	24	24	24	29	31
Free cooling total input current	A	19,1	21,2	30,3	30,3	31,5	34,5	34,5	37,5	37,5	37,5	37,6	45,8	48,3
EER	W/W	21,73	20,57	17,29	17,53	16,94	17,58	17,68	18,41	18,50	18,55	19,52	17,83	18,28
Water flow rate system side	I/h	55983	64940	73810	81682	85818	92811	97769	105919	111036	113774	118607	129528	138643
Pressure drop system side	kPa	74	93	87	102	113	110	122	111	122	128	125	100	115
Free-cooling glycol free Plus													_	
Cooling performance chiller operation (1)														
Cooling capacity	kW	323	374	426	471	494	535	564	611	640	656	683	746	799
Input power	kW	74	89	100	110	117	125	136	143	153	158	164	175	185
Cooling total input current	A	132	155	173	185	194	207	224	237	254	267	282	300	316
EER	W/W	4,36	4,22	4,26	4,29	4,23	4,27	4,15	4,26	4,18	4,15	4,16	4,26	4,32
Water flow rate system side	l/h	55770	64623	73447	81232			97251	105389	110441	113149	117928	128821	137959
Pressure drop system side	kPa	74	92	86	101	112	109	121	110	121	127	123	99	113
Cooling performances with glycol-free (2)														
Cooling capacity	kW	279	292	346	351	354	404	407	461	463	464	491	549	595
Input power	kW	12,4	13,7	19,2	19,2	20	22,1	22,1	24,1	24,1	24,1	24,1	29,5	31,3
Free cooling total input current	A	19,2	21,4	30,5	30,5	31,7	34,8	34,8	37,8	37,8	37,8	37,9	46,1	48,6
EER	W/W	22,53	21,40	18,03	18,27	17,67	18,32	18,43	19,17	19,27	19,31	20,33	18,59	19,04
Water flow rate system side	l/h	55770	64623	73447	81232		92341	97251	105389	110441	113149	117928	128821	137959
Pressure drop system side	kPa	74	92	86	101	112	109	121	110	121	127	123	99	113
Size		3902	4202	4502	4802	5202	5602	2 60	02 (5402	6903	7203	8403	9603
Size Free-cooling alvcol free		3902	4202	4502	4802	5202	5602	2 60	02 (5402	6903	7203	8403	9603
Free-cooling glycol free		3902	4202	4502	4802	5202	5602	. 60	02 (5402	6903	7203	8403	9603
Free-cooling glycol free Cooling performance chiller operation (1)	kW										6903	7203	8403	9603
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity	kW	852	881	969	1033	1115	1198	12	63	1329				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power	kW kW							12	63		-	-	-	-
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity	kW	852 195 328	881 207 343	969 218 374	1033 232	1115 249 427	1198 265 447	12 28 48	63 88 81	1329 311 516	-	-	-	-
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A	852 195	881 207	969 218	1033 232 408	1115 249 427 4,49	1198 265 447 4,51	12 28 48 4,	63 88 81 38	1329 311		-		-
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W	852 195 328 4,37	881 207 343 4,26	969 218 374 4,44	1033 232 408 4,46	1115 249 427 4,49	1198 265 447 4,51	12 28 48 4, 85 217	63 88 81 38	1329 311 516 4,27	-			
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W I/h	852 195 328 4,37 147047	881 207 343 4,26 152087	969 218 374 4,44 167278	1033 232 408 4,46 178230	1115 249 427 4,49 192448	1198 265 447 4,51 3 20668	12 28 48 4, 85 217	63 88 81 38	1329 311 516 4,27 29339			- - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h	852 195 328 4,37 147047	881 207 343 4,26 152087	969 218 374 4,44 167278	1033 232 408 4,46 178230	1115 249 427 4,49 192448	1198 265 447 4,51 3 20668	12 28 44 4, 55 217	63 88 81 38	1329 311 516 4,27 29339			- - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2)	kW A W/W I/h kPa	852 195 328 4,37 147047 117	881 207 343 4,26 152087 125	969 218 374 4,44 167278 101	1033 232 408 4,46 178230 93	1115 249 427 4,49 192448 102	1198 265 447 4,51 3 20668 75	12 28 48 4, 4, 9	63 38 81 33 38 997 2	1329 311 516 4,27 29339 92			- - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity	kW A W/W I/h kPa	852 195 328 4,37 147047 117	881 207 343 4,26 152087 125	969 218 374 4,44 167278 101	1033 232 408 4,46 178230 93	1115 249 427 4,49 192448 102	1198 265 447 4,51 3 20668 75	12 28 48 4, 4, 55 217 9	63 88 81 38 997 2. 22	1329 311 516 4,27 29339 92			- - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power	kW A W/W I/h kPa kW	852 195 328 4,37 147047 117 617 32,8	881 207 343 4,26 152087 125 618 32,8	969 218 374 4,44 167278 101 727 41,1	1033 232 408 4,46 178230 93 770 43,7	1115 249 427 4,49 192448 102 828 45,7	1198 265 447 4,51 3 20668 75 880 47,7	12 28 48 4, 4, 55 217 9	63 88 81 338 9997 2.22 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2	1329 311 516 4,27 29339 92 889 47,7			- - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A	852 195 328 4,37 147047 117 617 32,8 51,0	881 207 343 4,26 152087 125 618 32,8 51,0	969 218 374 4,44 167278 101 727 41,1 65,0	1033 232 408 4,46 178230 93 770 43,7 69,0	1115 249 427 4,49 192448 102 828 45,7 72,0	1198 265 447 4,51 8 20668 75 880 47,7 75,0	8 122 28 48 4, 4, 155 2177 9 88 47 75 5 18	663 38 81 38 38 9997 2. 22 87 7,7 5,0 ,60	1329 311 516 4,27 29339 92 889 47,7			- - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW kW A W/W	852 195 328 4,37 147047 117 617 32,8 51,0	881 207 343 4,26 152087 125 618 32,8 51,0 18,85	969 218 374 4,44 167278 101 727 41,1 65,0 17,68	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59	1115 249 427 4,49 192448 102 828 45,7 72,0	1198 265 447 4,51 8 20668 75 880 47,7 75,0	122 28 48 4, 4, 15 217 9 88 47 75 5 18 5 217	663 38 81 38 38 9997 2. 22 87 7,7 5,0 ,60	1329 311 516 4,27 29339 92 889 47,7 75,0			- - -	
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668	122 28 48 4, 4, 15 217 9 88 47 75 5 18 5 217	63 38 31 38 3997 2 22 87 7,7 5,0 60 9997 2	1329 311 516 4,27 29339 92 889 47,7 75,0 8,64 29339				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668	122 28 48 4, 4, 15 217 9 88 47 75 5 18 5 217	63 38 31 38 3997 2 22 87 7,7 5,0 60 9997 2	1329 311 516 4,27 29339 92 889 47,7 75,0 8,64 29339				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus	kW A W/W I/h kPa kW kW A W/W I/h	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668	8 12 48 4, 4, 9 88 47 75 5 188 5 217	63	1329 311 516 4,27 29339 92 889 47,7 75,0 8,64 29339				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1)	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448	1198 265 447 4,51 8 20668 75 880 47,7 75,0 18,46 8 20668	8 12 28 44 4, 4, 55 217 9 88 47 75 6 18 85 217 9	63	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668 75	8 12 28 44 4, 4, 55 217 9 88 47 75 6 18 85 217 9	63	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102	1198 265 447 4,51 8 20668 75 880 47,7 75,0 18,46 8 20668 75	8 12 28 44 4, 4, 55 217 9 88 47 75 6 18 85 217 9	63	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102 1110 251 430 4,43	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668 75 1192 268 450 4,45	8 12 28 44 4, 4, 55 217 9 88 47 75 6 18 85 217 9	63	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92 1322 314 520				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117 848 197 330 4,31	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101 965 220 377 4,38	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102 1110 251 430 4,43	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668 75 1192 268 450 4,45	8 12 28 44 4, 4, 55 217 9 88 47 75 6 18 85 217 9 2 12 2 2 4 4 4 4 4, 9 0 216	63	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92 1322 314 520 4,21				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117 848 197 330 4,31	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125 877 209 346 4,20	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101 965 220 377 4,38 166517	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102 1110 251 430 4,43 191576	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668 75 1192 268 450 4,45 6 20570	8 12 28 44 4, 4, 55 217 9 88 47 75 6 18 85 217 9 2 12 2 2 4 4 4 4 4, 9 0 216	63	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92 1322 314 520 4,21 28136				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117 848 197 330 4,31	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125 877 209 346 4,20	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101 965 220 377 4,38 166517	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102 1110 251 430 4,43 191576	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668 75 1192 268 450 4,45 6 20570	8 12 28 44 4, 4, 55 217 9 88 47 75 6 18 85 217 9 2 12 2 29 44 4, 4, 9	63	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92 1322 314 520 4,21 28136				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2)	kW A W/W I/h kPa kW kW A W/W I/h kPa kW KPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117 848 197 330 4,31 146331	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125 877 209 346 4,20 151317 124	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101 965 220 377 4,38 166517	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93 1028 234 411 4,40 177452 92	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102 1110 251 430 4,43 191576 101	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668 75 1192 268 450 4,45 5 20570 74	8 12 28 44 4, 4, 4, 15 5 217 9 88 47 75 6 18 85 217 9 9 2 22 44 4, 4, 90 2166	63 63 68 88 81 38 997 2. 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92 1322 314 520 4,21 28136 91				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling total input current EER Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kW KPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117 848 197 330 4,31 146331 116	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125 877 209 346 4,20 151317 124	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101 965 220 377 4,38 166517 100	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93 1028 234 411 4,40 177452 92	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102 1110 251 430 4,43 191576 101	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668 75 1192 268 450 4,45 5 20570 74	8 12 28 44 4, 4, 15 217 9 88 47 75 6 18 85 217 9 9 2 122 44 4, 4, 90 2166 9 92 48	863 88 88 81 38 8997 2: 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92 1322 314 520 4,21 28136 91				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa kW KPa kW kPa kW kW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117 848 197 330 4,31 146331 116	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125 877 209 346 4,20 151317 124 649 33,1	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101 965 220 377 4,38 166517 100	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93 1028 234 411 4,40 177452 92	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102 1110 251 430 4,43 191576 101	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 3 20668 75 1192 268 450 4,45 5 20570 74	8 12 28 44 4, 4, 55 217 9 88 47 75 5 18 85 217 9 2 22 44 4, 4, 90 216 9	888 881 388 8997 2:22 887 7,7 5,0 60 60 60 60 60 60 60 60 60 60 60 60 60	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92 314 520 4,21 28136 91 934 48,1				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Prescooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kPa kW kW A kW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117 848 197 330 4,31 146331 116	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125 877 209 346 4,20 151317 124 649 33,1 51,4	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101 965 220 377 4,38 166517 100 764 41,4	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93 1028 234 411 4,40 177452 92	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102 1110 251 430 4,43 191576 101 870 46,1 72,5 18,87	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 8 20668 75 1192 268 450 4,45 5 20570 74 925 48,1 75,5 19,22	12 28 44 44, 45, 55 217 9 8 8 8 5 217 9 9 2 122 144 44, 47, 47, 47 14 14 14 14 14 14 14 14 14 14 14 14 14	63	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92 314 520 4,21 28136 91 934 48,1 75,5				
Free-cooling glycol free Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Free-cooling glycol free Plus Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Pressure drop system side Cooling performances with glycol-free (2) Cooling performances with glycol-free (2) Cooling capacity Input power Free cooling total input current EER	kW A W/W I/h kPa kW KW A W/W I/h kPa kW KW A W/W I/h kPa kW KW A W/W I/h kPa	852 195 328 4,37 147047 117 617 32,8 51,0 18,81 147047 117 848 197 330 4,31 146331 116 647 33,1 51,4 19,56	881 207 343 4,26 152087 125 618 32,8 51,0 18,85 152087 125 877 209 346 4,20 151317 124 649 33,1 51,4 19,61	969 218 374 4,44 167278 101 727 41,1 65,0 17,68 167278 101 965 220 377 4,38 166517 100 764 41,4 65,5 18,44	1033 232 408 4,46 178230 93 770 43,7 69,0 17,59 178230 93 1028 234 411 4,40 177452 92 809 44,1 69,5 18,34	1115 249 427 4,49 192448 102 828 45,7 72,0 18,12 192448 102 1110 251 430 4,43 191576 101 870 46,1 72,5 18,87	1198 265 447 4,51 3 20668 75 880 47,7 75,0 18,46 8 20668 75 1192 268 450 4,45 5 20570 74 925 48,1 75,5 19,22	12 28 44 44, 45, 55 217 9 88 85 217 9 9 2 122 44 400 216 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	63	1329 311 516 4,27 29339 92 889 47,7 75,0 18,64 29339 92 314 5520 4,21 28136 91 934 48,1 75,5 19,41				

⁽¹⁾ System side water heat exchanger 25°C/20°C, External air 35°C; 0% Free-cooling (2) System side water heat exchanger 25°C; External air 12°C

ELECTRIC DATA

Size				1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Electrical data																
	BA,GA	(1)	Α	206	228	253	265	289	306	324	362	384	400	415	449	472
Maximum current (FLA)	BE,GE	(1)	Α	207	229	265	277	289	322	339	372	394	410	426	457	480
Maximum current (FLA)	BU,GU	(1)	Α	207	229	265	280	292	322	339	372	395	410	426	457	480
	BN,GN	(1)	Α	215	240	280	292	305	332	349	381	404	419	434	472	503
	BA,GA	(1)	Α	279	269	308	346	362	395	406	457	472	490	500	536	551
Dook current (LDA)	BE,GE	(1)	Α	279	269	317	354	362	403	415	466	480	499	509	545	560
Peak current (LRA)	BU,GU	(1)	Α	279	269	317	357	365	403	415	466	481	499	509	545	560
	BN,GN	(1)	Α	288	280	332	369	378	414	425	475	490	508	518	559	583

Size				3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Electrical data															
	BA,GA	(1)	A	504	527	569	602	619	645	698	737	877	910	976	1111
Marrian compant (FLA)	BE,GE	(1)	A	512	550	583	631	648	681	730	779	894	936	-	-
Maximum current (FLA)	BU,GU	(1)	Α	512	550	583	631	648	683	731	779	899	941	-	-
	BN,GN	(1)	Α	541	564	624	667	693	719	758	797	-	-	-	-
	BA,GA	(1)	Α	590	611	643	665	857	883	963	990	866	888	1072	1204
Deals surrent (LDA)	BE,GE	(1)	Α	598	628	651	687	879	906	980	1016	875	905	-	-
Peak current (LRA)	BU,GU	(1)	Α	598	628	651	687	879	909	982	1016	880	910	-	-
	BN,GN	(1)	A	627	642	692	723	924	945	1009	1034	-	-	-	-

⁽¹⁾ Unit standar configuration without hydronic kit

GENERAL TECHNICAL DATA

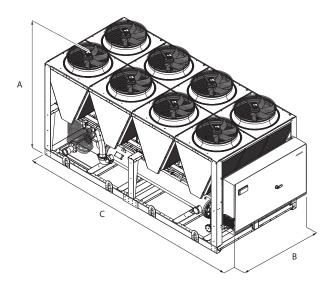
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Compressors															
Compressors	All	type							Screw						
Compressors / Circuit	All	n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2
Refrigerant	All	type							R134a						
System side heat exchanger															
Exchanger	All	type							Shell&tube						
Exchanger	All	n°	1	1	1	1	1	1	1	1	1	1	1	1	1
Fans															
Fans	All	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial						
	BA,GA	n°	8	8	8	8	10	10	10	12	12	12	12	14	14
Fans	BE,GE	n°	8	8	10	10	10	12	12	14	14	14	14	16	16
raiis	BU,GU	n°	8	8	10	10	10	12	12	14	14	14	14	16	16
	BN,GN	n°	10	10	12	12	12	14	14	16	16	16	16	18	20
Sound data calculated in cooling mo	de														
	BA,GA	dB(A)	97,1	97,1	97,4	97,3	98,1	98,0	97,8	98,4	98,4	98,7	99,3	100,4	100,8
Sound power level (1)	BE,GE	dB(A)	92,7	93,0	93,4	93,6	93,8	93,4	92,8	92,7	92,5	94,9	96,4	97,6	98,4
Journa power lever (1)	BU,GU	dB(A)	97,3	97,4	98,4	98,3	98,4	98,8	98,7	99,1	99,1	99,5	100,1	101,2	101,6
	BN,GN	dB(A)	92,8	93,1	93,9	93,8	93,9	93,7	93,2	93,0	92,8	94,3	96,0	97,9	98,7

	BN,GN	dB(A)	92,8	93,1	93,9	93,8	93,9	93,7 93	93,0	92,8	94,3	96,0	97,9	98,7
Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Compressors														
Compressors	All	Туре						Sci	rew					
	BA,GA	n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3	3/3	3/3
Community / Cinevit	BE,GE	n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3	-	-
Compressors / Circuit	BU,GU	n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	3/3	3/3	-	-
	BN,GN	n°	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	-	-	-	-
Refrigerant	All	Туре						R1	34a					
System side heat exchanger														
Exchanger	All	Туре						Shell	&tube					
	BA,GA	n°	1	1	1	1	1	1	1	1	1	1	1	1
Forder	BE,GE	n°	1	1	1	1	1	2	2	2	2	2	-	-
Exchanger	BU,GU	n°	1	1	1	1	1	2	2	2	2	2	-	-
	BN,GN	n°	1	1	2	2	2	2	2	2	-	-	-	-
Fans														
Fans	All	Туре	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
	BA,GA	n°	16	16	18	18	18	20	22	22	28	28	30	34
Г	BE,GE	n°	18	20	20	22	22	24	26	28	30	32	-	-
Fans	BU,GU	n°	18	20	20	22	22	24	26	28	30	32	-	-
	BN,GN	n°	22	22	26	28	30	32	32	32	-	-	-	-
Sound data calculated in cooli	ng mode													
	BA,GA	dB(A)	100,8	100,4	100,8	100,9	101,4	102,3	102,3	101,9	103,7	103,8	105,0	104,8
Cound normal (1)	BE,GE	dB(A)	97,6	96,4	96,7	97,0	98,9	100,3	99,5	98,7	98,7	98,9	-	-
Sound power level (1)	BU,GU	dB(A)	101,5	101,4	101,4	101,8	102,3	103,2	103,1	102,9	104,0	104,3	-	-
	BN,GN	dB(A)	97.9	96.8	97.0	97.3	98.7	100.1	99.5	98.7	-	-	-	-

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⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNIEN ISO 9614-2, as required for Eurovent certification

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions	and weights														
A	mm	Alls	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	mm	Alls	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
		A	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330
,		E	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520
C	mm	U	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520
		N	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Dimensions and	l weights													
A	mm	Alls	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	mm	Alls	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
		Α	9520	9520	10710	10710	10710	11900	13090	13090	16660	16660	17850	20230
c		E	10710	11900	11900	13090	13090	14280	15470	16660	17850	19040	-	-
C	mm	U	10710	11900	11900	13090	13090	14280	15470	16660	17850	19040	-	-
		N	13090	13090	15470	16660	17850	19040	19040	19040	-	-	-	-

For transport reasons, units with depth greater than 13090 mm are shipped separately. For further information, refer to the technical and/or installation manual.





















NSMI 1251-6102 F

Air-water chiller with free-cooling

Cooling capacity 286 ÷ 1280 kW



- · High efficiency also at partial loads
- Microchannel coil
- Low electrical consumption



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.

Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.

In the unit with desuperheater, it is also possible to produce free-hot water. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature. Unit can produce chilled water (up to -6 °C).

Units mono or dual-circuit

Unit with 1–2 refrigerant circuits.

The single circuit units have the inverter compressor, while the dual-circuit have an asynchronous compressor on/off switch and an inverter, the combination provides both high efficiency at part load and full load

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

 A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

Low noise version

Silenced versions feature a special compressor jacket which ensures a further noise reduction of approximately 4 dB.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

Further features:

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured

as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_: Anti-intrusion grid kit

KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ve	r	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
AER485P1	A,I	E	•	•	•												
AER485P1 x n° 2 (1)	A,I	E				•	•	•	•	•	•	•	•	•			
AERBACP	A,I	E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,l	E	•	•	•	•	•	•	•	•	•	•	•	•		•	•
FB1	A,I	E	•	•	•	•		•	•	•	•	•	•				•
MULTICHILLER_EVO	A,l	E	•	•	•	•	•	•	•	•	•		•	•	•	•	•
(1) x Indicates the quantity of accessories to	match.																
Ver	1251	1601	1801	2352	26	52	2802	3202	3402	3802	4102	4402	. 48	302	5202	5702	6102
A,E	GP4V	GP4V	GP5V	GP5\	/ GP	6V	GP7V	GP7V	GP7V	GP8V	GP9V	GP10	V GP	11V G	P11V	GP11V	GP11V

A grey background indicates the accessory must be assembled in the factory

Antivibration - NSMI free-cooling

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00															
A	AVX991	AVX992	AVX993	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990
E	AVX991	AVX992	AVX994	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990

Antivibration - NSMI free-cooling plus

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00															
A	AVX991	AVX992	AVX993	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990
E	AVX991	AVX992	AVX994	AVX966	AVX970	AVX995	AVX995	AVX999	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990
Heater exchangers															

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Heater exchangers															
Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	-	KRS24							
E	KRS23	KRS24													

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

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CONFIGURATOR

Field	Description
1,2,3,4	NSMI
5,6,7,8	Size 1251, 1601, 1801, 2352, 2652, 2802, 3202, 3402, 3802, 4102, 4402, 4802, 5202 5702, 6102
9	Operating field
10	Model
F	Free-cooling
Р	Free-cooling plus (1)
11	Heat recovery
0	Without heat recovery
D	With desuperheater (2)
12	Version
Α	High efficiency
E	Silenced high efficiency
13	Coils / free-cooling coils
0	Alluminium microchannel / Copper - aluminium
0	Painted alluminium microchannel / Copper painted aluminium
R	Copper-copper/Copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
14	Fans
0	Standard
J	Inverter
15	Power supply
0	400V ~ 3 50Hz with magnet circuit breakers
16,17	Integrated hydronic kit
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A

Field	Description
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (3)
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (3)
	Kit with 2 pumps
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J (3)

- (1) The Free-Cooling Plus "P" models are only compatible with"^{o"} ed "0"
 (2) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
 (3) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NSMI - free-cooling (FA/FE - PA/PE)

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: F			1271	1001	1001		2032	2002	3202	3102	3002	7102	7702	1002	<u> </u>	3702	0102
Cooling performance chiller operation (1)																	
Cooling capacity	A,E	kW	286.5	385.6	455.6	496,5	587.5	649.6	718.4	784,3	832.8	929.0	989.0	1096.3	1164.2	1208.4	1280.3
Input power	A,E	kW	96,6	126,7	157,5	177.7	206,3	221,2	244,7	272.7	280,5	324,3	343,8	368,4	417.3	436.6	477,9
Cooling total input current	A,E	A	166,0	212,0	261,0	309,0	356.0	381,0	417,0	456,0	470,0	547,0	580,0	644,0	692,0	728,0	761,0
EER	A,E	W/W	2.97	3.04	2,89	2.79	2.85	2.94	2,94	2.88	2.97	2,86	2,88	2,98	2.79	2.77	2,68
Water flow rate system side	A,E	I/h	49230	66245	78283	85309	100931	111607	123424	134748	143088	159614	169917	188349	200020	207622	219967
Pressure drop system side	A,E	kPa	52	78	75	48	67	68	76	46	54	68	79	80	90	94	107
Cooling performances with free-cooling (2)																	
Cooling capacity	A,E	kW	254,5	276,0	340,9	346,5	414,6	649,6	488,1	495,1	559,2	628,2	692,4	762,8	771,1	775,7	782,2
Input power	A,E	kW	15,0	15,0	18,7	18,7	22,5	26,2	26,2	26,2	30,0	33,7	37,5	41,2	41,2	41,2	41,2
Free cooling total input current	A,E	A	26,0	25,0	31,0	33,0	39,0	45,0	45,0	44,0	50,0	57,0	63,0	72,0	68,0	69,0	66,0
EER	A,E	W/W	19,97	18,41	18,19	18,49	18,43	18,22	18,60	18,87	18,65	18,62	18,47	18,50	18,70	18,81	18,97
Water flow rate system side	A,E	l/h	49230	66245	78283	85309	100931	111607	123424	134748	143088	159614	169917	188349	200020	207622	219967
Pressure drop system side	A,E	kPa	80	121	128	88	109	109	124	94	99	108	125	127	143	157	169
(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2°C																	
Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Size Model: P			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: P	A,E	kW	1251 285,5	1601 383,5	1801 453,4	2352 493,5	2652 584,0	2802 646,4	3202 714,7	3402 778,5	3802 827,8	4102 923,5	4402 983,6	4802 1090,1	5202 1156,6	5702 1200,5	6102 1270,3
Model: P Cooling performance chiller operation (1)	A,E A,E	kW kW															
Model: P Cooling performance chiller operation (1) Cooling capacity			285,5	383,5	453,4	493,5	584,0	646,4	714,7	778,5	827,8	923,5	983,6	1090,1	1156,6	1200,5	1270,3
Model: P Cooling performance chiller operation (1) Cooling capacity Input power	A,E	kW	285,5 97,4	383,5 127,8	453,4 158,9	493,5 179,7	584,0 208,6	646,4 223,4	714,7 247,5	778,5 275,8	827,8 283,4	923,5 327,8	983,6 347,4	1090,1 372,4	1156,6 421,9	1200,5 441,5	1270,3 483,8
Model: P Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current	A,E A,E	kW A	285,5 97,4 168,0	383,5 127,8 214,0	453,4 158,9 263,0	493,5 179,7 312,0	584,0 208,6 360,0	646,4 223,4 385,0	714,7 247,5 421,0	778,5 275,8 461,0	827,8 283,4 474,0	923,5 327,8 553,0	983,6 347,4 585,0	1090,1 372,4 644,0	1156,6 421,9 692,0	1200,5 441,5 728,0	1270,3 483,8 761,0
Model: P Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER	A,E A,E A,E	kW A W/W	285,5 97,4 168,0 2,93	383,5 127,8 214,0 3,00	453,4 158,9 263,0 2,85	493,5 179,7 312,0 2,75	584,0 208,6 360,0 2,80	646,4 223,4 385,0 2,89	714,7 247,5 421,0 2,89	778,5 275,8 461,0 2,82	827,8 283,4 474,0 2,92	923,5 327,8 553,0 2,82	983,6 347,4 585,0 2,83	1090,1 372,4 644,0 2,93	1156,6 421,9 692,0 2,74	1200,5 441,5 728,0 2,72	1270,3 483,8 761,0 2,63
Model: P Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	A,E A,E A,E A,E A,E	kW A W/W I/h	285,5 97,4 168,0 2,93 49048	383,5 127,8 214,0 3,00 65887	453,4 158,9 263,0 2,85 77903	493,5 179,7 312,0 2,75 84789	584,0 208,6 360,0 2,80 100332	646,4 223,4 385,0 2,89 111060	714,7 247,5 421,0 2,89 122801	778,5 275,8 461,0 2,82 133758	827,8 283,4 474,0 2,92 142233	923,5 327,8 553,0 2,82 158667	983,6 347,4 585,0 2,83 168998	1090,1 372,4 644,0 2,93 187289	1156,6 421,9 692,0 2,74 198712	1200,5 441,5 728,0 2,72 206254	1270,3 483,8 761,0 2,63 218254
Model: P Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	A,E A,E A,E A,E A,E	kW A W/W I/h	285,5 97,4 168,0 2,93 49048	383,5 127,8 214,0 3,00 65887	453,4 158,9 263,0 2,85 77903	493,5 179,7 312,0 2,75 84789	584,0 208,6 360,0 2,80 100332	646,4 223,4 385,0 2,89 111060	714,7 247,5 421,0 2,89 122801	778,5 275,8 461,0 2,82 133758	827,8 283,4 474,0 2,92 142233	923,5 327,8 553,0 2,82 158667	983,6 347,4 585,0 2,83 168998	1090,1 372,4 644,0 2,93 187289	1156,6 421,9 692,0 2,74 198712	1200,5 441,5 728,0 2,72 206254	1270,3 483,8 761,0 2,63 218254
Model: P Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2)	A,E A,E A,E A,E A,E	kW A W/W I/h kPa	285,5 97,4 168,0 2,93 49048 51	383,5 127,8 214,0 3,00 65887 78	453,4 158,9 263,0 2,85 77903 74	493,5 179,7 312,0 2,75 84789 47	584,0 208,6 360,0 2,80 100332 67	646,4 223,4 385,0 2,89 111060 67	714,7 247,5 421,0 2,89 122801	778,5 275,8 461,0 2,82 133758 45	827,8 283,4 474,0 2,92 142233 53	923,5 327,8 553,0 2,82 158667 67	983,6 347,4 585,0 2,83 168998 79	1090,1 372,4 644,0 2,93 187289 79	1156,6 421,9 692,0 2,74 198712 89	1200,5 441,5 728,0 2,72 206254 92	1270,3 483,8 761,0 2,63 218254 105
Model: P Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity	A,E A,E A,E A,E A,E A,E	kW A W/W I/h kPa	285,5 97,4 168,0 2,93 49048 51 271,8	383,5 127,8 214,0 3,00 65887 78	453,4 158,9 263,0 2,85 77903 74	493,5 179,7 312,0 2,75 84789 47	584,0 208,6 360,0 2,80 100332 67	646,4 223,4 385,0 2,89 111060 67	714,7 247,5 421,0 2,89 122801 75	778,5 275,8 461,0 2,82 133758 45	827,8 283,4 474,0 2,92 142233 53	923,5 327,8 553,0 2,82 158667 67	983,6 347,4 585,0 2,83 168998 79	1090,1 372,4 644,0 2,93 187289 79	1156,6 421,9 692,0 2,74 198712 89	1200,5 441,5 728,0 2,72 206254 92 830,9	1270,3 483,8 761,0 2,63 218254 105
Model: P Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2) Cooling capacity Input power	A,E A,E A,E A,E A,E A,E C)	kW A W/W I/h kPa kW kW	285,5 97,4 168,0 2,93 49048 51 271,8 15,2	383,5 127,8 214,0 3,00 65887 78 296,0 15,2	453,4 158,9 263,0 2,85 77903 74 365,5 19,0	493,5 179,7 312,0 2,75 84789 47 371,4 19,0	584,0 208,6 360,0 2,80 100332 67 444,5 22,8	646,4 223,4 385,0 2,89 111060 67 512,7 26,7	714,7 247,5 421,0 2,89 122801 75 523,2 26,7	778,5 275,8 461,0 2,82 133758 45 530,1 26,7	827,8 283,4 474,0 2,92 142233 53 599,3 30,5	923,5 327,8 553,0 2,82 158667 67 673,3 34,3	983,6 347,4 585,0 2,83 168998 79 742,3 38,1	1090,1 372,4 644,0 2,93 187289 79 817,7 41,9	1156,6 421,9 692,0 2,74 198712 89 826,2 41,9	1200,5 441,5 728,0 2,72 206254 92 830,9 41,9	1270,3 483,8 761,0 2,63 218254 105 837,1 41,9
Model: P Cooling performance chiller operation (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Cooling performances with free-cooling (2 Cooling capacity Input power Free cooling total input current	A,E A,E A,E A,E A,E C) A,E A,E A,E	kW A W/W I/h kPa kW kW A	285,5 97,4 168,0 2,93 49048 51 271,8 15,2 26,0	383,5 127,8 214,0 3,00 65887 78 296,0 15,2 25,0	453,4 158,9 263,0 2,85 77903 74 365,5 19,0 32,0	493,5 179,7 312,0 2,75 84789 47 371,4 19,0 33,0	584,0 208,6 360,0 2,80 100332 67 444,5 22,8 39,0	646,4 223,4 385,0 2,89 111060 67 512,7 26,7 46,0	714,7 247,5 421,0 2,89 122801 75 523,2 26,7 45,0	778,5 275,8 461,0 2,82 133758 45 530,1 26,7 45,0	827,8 283,4 474,0 2,92 142233 53 599,3 30,5 51,0	923,5 327,8 553,0 2,82 158667 67 673,3 34,3 58,0	983,6 347,4 585,0 2,83 168998 79 742,3 38,1 64,0	1090,1 372,4 644,0 2,93 187289 79 817,7 41,9 72,0	1156,6 421,9 692,0 2,74 198712 89 826,2 41,9 69,0	1200,5 441,5 728,0 2,72 206254 92 830,9 41,9 69,0	1270,3 483,8 761,0 2,63 218254 105 837,1 41,9 66,0

⁽¹⁾ System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: F																	
SEPR - (EN14825: 2018) High temperature with standard fans (1)																	
SEPR	A,E	W/W	6,95	6,32	6,23	6,60	6,73	7,06	6,85	6,65	6,98	6,74	6,83	7,24	7,11	7,28	7,05
SEPR - (EN14825: 2018) High temperature v	SEPR - (EN14825: 2018) High temperature with inverter fans (1)																
SEPR	A,E	W/W	6,95	6,32	6,23	6,60	6,73	7,06	6,85	6,65	6,98	6,74	6,83	7,24	7,11	7,28	7,05
(1) Calculation performed with FIXED water flo	w rate.																
Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: P																	
SEPR - (EN14825: 2018) High temperature v	vith stand	ard fans (1)															
SEPR	A,E	W/W	7,02	6,39	6,31	6,69	6,83	7,19	6,93	6,69	7,06	6,82	6,93	7,30	7,15	7,31	7,05
SEPR - (EN14825: 2018) High temperature v	vith invert	ter fans (1)															
SEPR	A,E	W/W	7,02	6,39	6,31	6,69	6,83	7,19	6,93	6,69	7,06	6,82	6,93	7,30	7,15	7,31	7,05

⁽¹⁾ Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Electric data																	
Maximum current (FLA)	A,E	Α	259,9	299,9	388,4	452,7	485,9	534,4	534,4	582,4	670,9	727,4	774,9	874,2	917,2	1002,2	1036,2
Peak current (LRA)	A,E	А	59,9	59,9	68,4	582,4	617,9	666,4	666,4	790,4	878,9	1008,4	1080,0	1180,2	1335,2	1420,2	1532,2

GENERAL TECHNICAL DATA

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Compressor																	
Туре	A,E	type								Screw							
Compressor regulation	A,E	Туре	T	-	- 1	I+0n/0ff	I+0n/0ff	I+0n/0ff	I+0n/0ff	I+0n/0ff	I+0n/0ff	I+0n/0ff	I+0n/0ff	I+0n/0ff	I+0n/0ff	1+0n/0ff	f I+0n/0ff
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type	R134a														
System side heat exchanger																	
Туре	A,E	type	Shell and tube														
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections																	
Connections (in/out)	A,E	Туре							G	rooved joir	nts						
Sizes (in/out)	A,E	Ø	5"	6"	6"	6"	6"	6"	6"	8"	8"	8"	8"	10"	10"	10"	10"
Fan																	
Туре	A,E	type								Axial							
Fan motor	A,E	type							Asynchro	nous with	phase cut						
Number	A,E	no.	8	8	10	10	12	14	14	14	16	18	20	22	22	22	22
Air flow rate	A,E	m³/h	109600	109600	137000	137000	164400	191800	191800	191800	219200	146600	274000	301400	301400	301400	301400

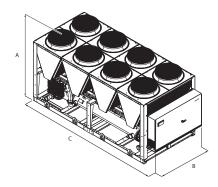
Sound data

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Sound data calculated in cooling mode (1)																	
Sound power level —	Α	dB(A)	98,1	99,2	99,4	99,4	99,7	100,7	100,7	101,1	101,2	101,3	101,9	103,6	103,8	103,8	103,9
	F	dB(A)	94.2	96.0	96.3	95.7	96.2	96.6	96.6	97.8	97.9	98.3	98.6	100.2	100.2	100.2	100.3

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

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DIMENSIONS



Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Dimensions and weights																	
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	4760	4760	5950	6400	7140	8330	8330	8330	9520	10710	11900	13090	13090	13090	13090

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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TBA 1300-3350 F

Air-water chiller with free-cooling

Cooling capacity 317,2 ÷ 1223,6 kW



- · High efficiency also at partial loads
- Microchannel coil
- Low peak current (only 6 Amps!)
- · Evaporator with low refrigerant charge
- Available also R513A (XP10) refrigerant gas



DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.

These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.

The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 43° C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter

Compressor features:

- Operates without oil as bearings are magnetic levitation type
- Continuous load modulation by varying rpm (from 30% to 100%)
- Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

Further features:

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

CONFIGURATOR

CO	NFI	GURATOR
Fiel	ld	Description
1,2,	,3	TBA
4,5,	,6,7	Size 1300, 1350, 2300, 2325, 2350, 3300, 3320, 3340, 3350
8		Model
	F	Free-cooling
	Р	Free-cooling plus (1)
9		Heat recovery
	0	Without heat recovery
10		Version
	Α	High efficiency
	Ε	Silenced high efficiency
11		Coils / free-cooling coils
	0	Alluminium microchannel / Copper - aluminium
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	٧	Copper-painted alumimium / Copper-painted alumimium
12		Fans
	J	Inverter
13		Power supply
	0	400V ~ 3 50Hz with magnet circuit breakers
14,	15	Integrated hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
_		- 1

Field	d	Description
Hei	DH	Pump H + stand-by pump
_	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (2)
_	נט	Kit with inverter pump to fixed speed
_	IA	Pump A equipped with inverter device to work at fixed speed
_	IB	Pump B equipped with inverter device to work at fixed speed
_	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
_	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	11	Pump I equipped with inverter device to work at fixed speed
	ii.	Pump J equipped with inverter device to work at fixed speed (2)
	.,	Kit with n°1 pump + stand-by pump both equipped wih inverter device to work at
		fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (2)
		Kit with double pump both equipped with inverter device to work at fixed speed
	KF	Doble pump F with inverter device to work at fixed speed
	KG	Doble pump G with inverter device to work at fixed speed
	KH	Doble pump H with inverter device to work at fixed speed
	KI	Doble pump I with inverter device to work at fixed speed
	KJ	Doble pump J with inverter device to work at fixed speed (2)
		Kit with double pumps
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (2)
16		Refrigerant gas
	0	R134a
	G	R513A (XP10)

 ⁽¹⁾ The Free-Cooling Plus "P" models are only compatible with" ed "O"
 (2) For all configurations including pump J please contact the factory.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured

as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **MULTICHILLER_EVO:** Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350
AER485P1	A,E	•	•	•		•	•		•	•
AER485P1 x n° 2 (1)	A,E				•			•		
AERBACP	A,E		•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	A,E	•	•	•	•	•	•	•	•	•

⁽¹⁾ x Indicates the quantity of accessories to match.

Antivibration

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350
A,E	AVX (1)								

⁽¹⁾ Contact us.

Anti-intrusion grid

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350
A,E	GP3T	GP4T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: F											
Cooling performance chiller operation (1)											
Cooling capacity	A,E	kW	317,2	419,2	634,5	736,4	838,4	934,7	1065,0	1149,0	1223,6
Input power	A,E	kW	91,6	121,8	182,8	214,3	244,4	267,3	311,2	337,8	365,9
Cooling total input current	A,E	A	147,5	198,3	295,0	345,8	396,7	427,5	498,3	559,2	604,2
EER	A,E	W/W	3,46	3,44	3,47	3,44	3,43	3,50	3,42	3,40	3,34
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	210235
Pressure drop system side	A,E	kPa	65	32	70	54	45	69	72	66	52
Cooling performances with free-cooling (2)											
Cooling capacity	A,E	kW	297,2	395,5	594,4	692,7	791,1	888,3	994,1	1085,0	1100,1
Input power	A,E	kW	11,3	15,0	22,5	26,3	30,0	33,8	37,5	41,3	41,3
Free cooling total input current	A,E	A	17,5	23,3	35,0	40,8	46,7	52,5	58,3	64,2	64,2
EER	A,E	W/W	26,41	26,36	26,41	26,38	26,36	26,31	26,50	26,30	26,66
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	210235
Pressure drop system side	A,E	kPa	118	78	130	103	99	127	138	117	109

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

(2) System side water heat exchanger 1	2°C / * °C; External a	air 2°C									
Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: P											
Cooling performance chiller operation	n (1)										
Cooling capacity	A,E	kW	317,2	419,2	634,5	736,4	838,4	934,7	1065,0	1149,0	1206,6
Input power	A,E	kW	93,1	123,9	185,8	217,9	248,6	271,6	316,4	343,6	366,0
Cooling total input current	A,E	A	147,9	198,8	295,7	346,7	397,6	428,6	499,6	560,5	605,5
EER	A,E	W/W	3,41	3,38	3,42	3,38	3,37	3,44	3,37	3,34	3,30
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	207315
Pressure drop system side	A,E	kPa	65	32	70	54	45	69	72	66	50
Cooling performances with free-cool	ing (2)										
Cooling capacity	A,E	kW	319,4	425,1	638,8	744,5	850,2	954,8	1068,2	1166,2	1181,8
Input power	A,E	kW	11,5	15,3	23,0	26,8	30,7	34,5	38,4	42,2	42,2
Free cooling total input current	A,E	А	17,9	18,8	35,7	36,7	37,6	53,6	44,6	65,5	80,5
EER	A,E	W/W	27,76	27,71	27,76	27,73	27,71	27,66	27,85	27,64	28,01
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	207315
Pressure drop system side	A,E	kPa	114	74	126	99	95	123	134	113	102

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C/* °C; External air 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: F											
SEER - (EN14825:2018) 12/7 wit	h inverter fans (1)										-
SEER	A,E	W/W	5,06	5,14	5,21	5,17	5,30	5,40	5,32	5,26	5,23
Seasonal efficiency	A,E	%	199,3%	202,7%	205,5%	203,6%	208,8%	212,8%	209,6%	207,2%	206,1%
SEPR - (EN14825: 2018) High ter	mperature with inverte	r fans (2)									-
SEPR	A,E	W/W	8,65	8,51	8,79	8,32	8,53	9,04	9,34	8,89	8,58
(1) Calculation performed with FI) (2) Calculation performed with FI) Size		THINDLE GUILLE I	1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: P											
SEER - (EN14825:2018) 12/7 wit	h inverter fans (1)										
SEER	A,E	W/W	4,98	5,06	5,14	5,09	5,21	5,32	5,11	5,18	5,17
Seasonal efficiency	A,E	%	196,3%	199,4%	202,5%	200,4%	205,5%	209,7%	201,2%	204,0%	203,7%
SEPR - (EN14825: 2018) High ter	mperature with inverte	r fans (2)									-
SEPR	A,E	W/W	8.91	8.45	8,88	8,53	8,65	9,18	8,99	9,06	8,81

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Electric data											
Maximum current (FLA)	A,E	А	165,0	249,0	329,0	413,0	498,0	493,0	577,0	737,0	737,0
Peak current (LRA)	A,E	А	36,0	45,0	210,0	305,0	315,0	384,0	479,0	575,0	575,0

GENERAL TECHNICAL DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Compressor											
Туре	A,E	type			,		Centrifugal				
Compressor regulation	A,E	Туре					Inverter				
Number	A,E	no.	1	1	2	2	2	3	3	3	3
Circuits	A,E	no.	1	1	1	2	1	1	2	1	1
Refrigerant	A,E	type					R134a				
Refrigerant charge (1)	A,E	kg	81,5	165,7	163,0	253,8	295,8	275,2	317,2	327,9	397,9
System side heat exchanger											
Туре	A,E	type					Shell and tube				
Number	A,E	no.	1	1	1	1	1	1	1	1	1
Hydraulic connections											
Connections (in/out)	A,E	Туре					Grooved joints				
Size (in)	A,E	Ø	3"	4"	4"	5″	5"	5"	5"	6"	6"
Size (out)	A,E	Ø	3"	4"	4"	5"	5"	5"	5"	6"	6"
Sound data calculated in cooling mo	ode (2)										
Carrad marriage	A	dB(A)	88,3	90,0	91,3	92,8	93,1	93,1	94,1	95,5	95,5
Sound power level	E	dB(A)	82,3	84,0	85,3	86,8	87,1	87,1	88,1	89,5	89,5
C	A	dB(A)	56,1	57,6	58,7	60,0	60,2	60,1	61,0	62,3	62,3
Sound pressure level (10 m)	E	dB(A)	50,1	51,6	52,7	54,0	54,2	54,1	55,0	56,3	56,3

General data - fans (F model)

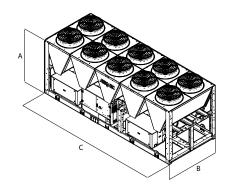
Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Fan											
Туре	A,E	type					Axial				
Fan motor	A,E	type					Inverter				
Number	A,E	no.	6	8	12	14	16	18	20	22	22
Air flow rate	A,E	m³/h	93180	124240	186360	217420	248480	279540	310600	341660	341660

General data - fans (P model)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Fan											
Туре	A,E	type					Axial				
Fan motor	A,E	type					Inverter				
Number	A,E	no.	6	8	12	14	16	18	20	22	22
Air flow rate	A,E	m³/h	88680	118240	177360	206920	236480	266040	295600	325160	325160

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Integrated hydronic ki	t: 00, DA, DB, D	C, DD, DE,	DF, DG, DH	, DI, DJ, IA,	IB, IC, ID,	E, IF, IG, II	I, II, IJ, JA, .	IB, JC, JD, .	E, JF, JG, J	IH, JI, JJ, KI	, KG, KH,
KI, KJ, PA, PB, PC, PD, P	PE, PF, PG, PH, P	I, PJ, TF, TO	G, TH, TI, TJ								
Dimensions and weights											
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200
(A,E	mm	3570	4760	7140	8330	9520	10710	11900	13090	13090
Model F											
Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Integrated hydronic ki	t: 00										
Weights											
Emptyweight	A	kg	3290	4330	5860	7050	8020	8490	9820	10310	10670
Empty weight	E	kg	3370	4440	6030	7250	8240	8740	10100	10610	10970
Weight functioning	A	kg	3570	4720	6380	7680	8790	9270	10720	11270	11710
Weight functioning	E	kg	3650	4830	6550	7880	9010	9520	11000	11570	12010
Model P											
Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Integrated hydronic ki	t: 00										
Weights											
Emptywaiaht	A	kg	3380	4460	6050	7270	8270	8780	10140	10650	11020
Empty weight	E	kg	3470	4570	6220	7470	8490	9020	10410	10960	11320
Waight functioning	A	kg	3700	4910	6650	8000	9150	9680	11180	11760	12220
Weight functioning	E	kg	3790	5020	6820	8200	9370	9920	11450	12070	12520





















TBG 1230-4310 F

Air-water chiller with free-cooling

Cooling capacity 238 ÷ 1110 kW



- HFO R1234ze refrigerant gas
- · High efficiency also at partial loads
- Microchannel coil
- Low peak current (only 6 Amps!)
- Evaporator with low refrigerant charge



DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.

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Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:

da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430; with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

Further features:

- Possibility to control two units in a Master-Slave configuration
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	J	Inverter
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	PF	Pump F
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	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump

<u>Field</u>	Description
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (2)
	Kit with inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed
IB	Pump B equipped with inverter device to work at fixed speed
IC	Pump C equipped with inverter device to work at fixed speedr
ID	Pump D equipped with inverter device to work at fixed speed
IE	Pump E equipped with inverter device to work at fixed speed
IF	Pump F equipped with inverter device to work at fixed speed
IG	Pump G equipped with inverter device to work at fixed speed
IH	Pump H equipped with inverter device to work at fixed speed
II	Pump I equipped with inverter device to work at fixed speed
IJ	Pump J equipped with inverter device to work at fixed speed (2)
	Kit with n°1 pump + stand-by pump both equipped wih inverter device to work at
	fixed speed
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
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KF	Doble pump F with inverter device to work at fixed speed
KG	Doble pump G with inverter device to work at fixed speed
KH	Doble pump H with inverter device to work at fixed speed
KI	Doble pump I with inverter device to work at fixed speed
KJ	Doble pump J with inverter device to work at fixed speed (2)
	Kit with double pumps
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J (2)

⁽¹⁾ The Free-Cooling Plus "P" models are only compatible with"°" ed "0" (2) For all configurations including pump J please contact the factory.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 4: RS-485 interface for supervision systems with MODBUS

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
AER485P1	A,E	•	•								
AER485P1 x n° 2 (1)	A,E			•	•	•					
AER485P1 x n° 3 (1)	A,E						•	•	•	•	
AER485P1 x n° 4 (1)	A,E										•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	
AERNET	A,E	•	•	•	•	•	•	•	•	•	•

(1) $\,x$ Indicates the quantity of accessories to match.

Antivibration

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00, DA, DB, DC	, DD, DE, DF, DG, DH,	DI, DJ, IA, IB, IC	, ID, IE, IF, IG, IH,	II, IJ, JA, JB, JC, JC), JE, JF, JG, JH, JI	, JJ, KF, KG, KH, KI	, KJ, PA, PB, PC,	PD, PE, PF, PG, PH	I, PI, PJ, TF, TG, TH	I, TI, TJ
A,E	AVX591	AVX (1)	AVX1187	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)	AVX (1)

(1) Contact us.

Anti-intrusion grid

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A,E	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A,E	kW	237,9	328,6	453,2	526,8	623,2	730,8	798,8	907,5	1019,7	1110,3
A,E	kW	68,6	95,3	130,6	153,1	181,1	211,4	231,7	260,0	294,0	328,1
A,E	A	112,5	158,3	214,2	255,0	300,8	346,7	387,5	433,3	489,2	549,2
A,E	W/W	3,47	3,45	3,47	3,44	3,44	3,46	3,45	3,49	3,47	3,38
A,E	l/h	40879	56452	77865	90518	107064	125557	137237	155924	175196	190769
A,E	kPa	48	51	45	54	50	55	54	63	46	56
A,E	kW	275,5	371,6	478,0	568,6	665,9	766,4	855,5	956,3	1057,8	1079,5
A,E	kW	11,3	15,0	18,8	22,5	26,3	30,0	33,8	37,5	41,3	41,3
A,E	A	17,5	23,3	29,2	35,0	40,8	46,7	52,5	58,3	64,2	64,2
A,E	W/W	24,49	24,77	25,49	25,27	25,36	25,54	25,34	25,50	25,64	26,16
A,E	l/h	40879	56452	77865	90518	107064	125557	137237	155924	175196	190769
A,E	kPa	81	93	86	97	87	97	98	113	88	105
	A,E	A,E kW A,E A A,E W/W A,E I/h A,E kPa) A,E kW A,E kW A,E kW A,E kW A,E kW A,E I/h A,E I/h	A,E kW 237,9 A,E kW 68,6 A,E A 112,5 A,E W/W 3,47 A,E U/h 40879 A,E kPa 48 A,E kW 275,5 A,E kW 11,3 A,E kW 11,3 A,E A 17,5 A,E W/W 24,49 A,E I/h 40879	A,E kW 237,9 328,6 A,E kW 68,6 95,3 A,E A 112,5 158,3 A,E W/W 3,47 3,45 A,E I/h 40879 56452 A,E kPa 48 51 A,E kW 275,5 371,6 A,E kW 11,3 15,0 A,E kW 11,3 15,0 A,E A 17,5 23,3 A,E W/W 24,49 24,77 A,E I/h 40879 56452	A,E kW 237,9 328,6 453,2 A,E kW 68,6 95,3 130,6 A,E A 112,5 158,3 214,2 A,E W/W 3,47 3,45 3,47 A,E I/h 40879 56452 77865 A,E kPa 48 51 45 A,E kW 275,5 371,6 478,0 A,E kW 11,3 15,0 18,8 A,E A 17,5 23,3 29,2 A,E W/W 24,49 24,77 25,49 A,E I/h 40879 56452 77865	A,E kW 237,9 328,6 453,2 526,8 A,E kW 68,6 95,3 130,6 153,1 A,E A 112,5 158,3 214,2 255,0 A,E W/W 3,47 3,45 3,47 3,44 A,E I/h 40879 56452 77865 90518 A,E kPa 48 51 45 54 A,E kW 275,5 371,6 478,0 568,6 A,E kW 11,3 15,0 18,8 22,5 A,E A 17,5 23,3 29,2 35,0 A,E W/W 24,49 24,77 25,49 25,27 A,E I/h 40879 56452 77865 90518	A,E kW 237,9 328,6 453,2 526,8 623,2 A,E kW 68,6 95,3 130,6 153,1 181,1 A,E A 112,5 158,3 214,2 255,0 300,8 A,E W/W 3,47 3,45 3,47 3,44 3,44 A,E I/h 40879 56452 77865 90518 107064 A,E kPa 48 51 45 54 50 A,E kW 275,5 371,6 478,0 568,6 665,9 A,E kW 11,3 15,0 18,8 22,5 26,3 A,E A 17,5 23,3 29,2 35,0 40,8 A,E W/W 24,49 24,77 25,49 25,27 25,36 A,E I/h 40879 56452 77865 90518 107064	A,E kW 237,9 328,6 453,2 526,8 623,2 730,8 A,E kW 68,6 95,3 130,6 153,1 181,1 211,4 A,E A 112,5 158,3 214,2 255,0 300,8 346,7 A,E W/W 3,47 3,45 3,47 3,44 3,44 3,46 A,E I/h 40879 56452 77865 90518 107064 125557 A,E kPa 48 51 45 54 50 55 A,E kW 275,5 371,6 478,0 568,6 665,9 766,4 A,E kW 11,3 15,0 18,8 22,5 26,3 30,0 A,E A 17,5 23,3 29,2 35,0 40,8 46,7 A,E W/W 24,49 24,77 25,49 25,27 25,36 25,54 A,E I/h 40879 56452	A,E kW 237,9 328,6 453,2 526,8 623,2 730,8 798,8 A,E kW 68,6 95,3 130,6 153,1 181,1 211,4 231,7 A,E A 112,5 158,3 214,2 255,0 300,8 346,7 387,5 A,E W/W 3,47 3,45 3,47 3,44 3,44 3,46 3,45 A,E I/h 40879 56452 77865 90518 107064 125557 137237 A,E kPa 48 51 45 54 50 55 54 A,E kW 275,5 371,6 478,0 568,6 665,9 766,4 855,5 A,E kW 11,3 15,0 18,8 22,5 26,3 30,0 33,8 A,E A 17,5 23,3 29,2 35,0 40,8 46,7 52,5 A,E W/W 24,49 24,77 <td>A,E kW 237,9 328,6 453,2 526,8 623,2 730,8 798,8 907,5 A,E kW 68,6 95,3 130,6 153,1 181,1 211,4 231,7 260,0 A,E A 112,5 158,3 214,2 255,0 300,8 346,7 387,5 433,3 A,E W/W 3,47 3,45 3,47 3,44 3,44 3,46 3,45 3,49 A,E I/h 40879 56452 77865 90518 107064 125557 137237 155924 A,E kPa 48 51 45 54 50 55 54 63 A,E kW 275,5 371,6 478,0 568,6 665,9 766,4 855,5 956,3 A,E kW 11,3 15,0 18,8 22,5 26,3 30,0 33,8 37,5 A,E A 17,5 23,3 29,2</td> <td>A,E kW 237,9 328,6 453,2 526,8 623,2 730,8 798,8 907,5 1019,7 A,E kW 68,6 95,3 130,6 153,1 181,1 211,4 231,7 260,0 294,0 A,E A 112,5 158,3 214,2 255,0 300,8 346,7 387,5 433,3 489,2 A,E W/W 3,47 3,45 3,47 3,44 3,46 3,45 3,49 3,47 A,E I/h 40879 56452 77865 90518 107064 125557 137237 155924 175196 A,E kPa 48 51 45 54 50 55 54 63 46 A,E kW 275,5 371,6 478,0 568,6 665,9 766,4 855,5 956,3 1057,8 A,E kW 11,3 15,0 18,8 22,5 26,3 30,0 33,8 37,5</td>	A,E kW 237,9 328,6 453,2 526,8 623,2 730,8 798,8 907,5 A,E kW 68,6 95,3 130,6 153,1 181,1 211,4 231,7 260,0 A,E A 112,5 158,3 214,2 255,0 300,8 346,7 387,5 433,3 A,E W/W 3,47 3,45 3,47 3,44 3,44 3,46 3,45 3,49 A,E I/h 40879 56452 77865 90518 107064 125557 137237 155924 A,E kPa 48 51 45 54 50 55 54 63 A,E kW 275,5 371,6 478,0 568,6 665,9 766,4 855,5 956,3 A,E kW 11,3 15,0 18,8 22,5 26,3 30,0 33,8 37,5 A,E A 17,5 23,3 29,2	A,E kW 237,9 328,6 453,2 526,8 623,2 730,8 798,8 907,5 1019,7 A,E kW 68,6 95,3 130,6 153,1 181,1 211,4 231,7 260,0 294,0 A,E A 112,5 158,3 214,2 255,0 300,8 346,7 387,5 433,3 489,2 A,E W/W 3,47 3,45 3,47 3,44 3,46 3,45 3,49 3,47 A,E I/h 40879 56452 77865 90518 107064 125557 137237 155924 175196 A,E kPa 48 51 45 54 50 55 54 63 46 A,E kW 275,5 371,6 478,0 568,6 665,9 766,4 855,5 956,3 1057,8 A,E kW 11,3 15,0 18,8 22,5 26,3 30,0 33,8 37,5

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	A,E	kW	237,9	328,6	453,2	526,8	623,1	730,8	798,8	907,5	1019,7	1110,3
Input power	A,E	kW	69,6	96,9	132,6	155,8	184,3	214,7	235,6	265,7	296,9	337,7
Cooling total input current	A,E	A	112,5	158,3	214,2	255,0	300,8	346,7	387,5	433,3	489,2	549,2
EER	A,E	W/W	3,42	3,39	3,42	3,38	3,38	3,40	3,39	3,42	3,43	3,29
Water flow rate system side	A,E	l/h	40879	56452	77865	90518	107064	125557	137237	155924	175196	190769
Pressure drop system side	A,E	kPa	48	51	45	54	50	55	54	63	46	56
Cooling performances with free-cooling (2))											
Cooling capacity	A,E	kW	295,4	398,2	514,2	610,9	714,2	823,8	919,0	1029,7	1136,1	1160,9
Input power	A,E	kW	11,5	15,4	19,2	23,0	26,9	30,7	34,5	38,3	42,2	42,2
Free cooling total input current	A,E	A	17,5	23,3	29,2	35,0	40,8	46,7	52,5	58,3	64,2	64,2
EER	A,E	W/W	25,70	25,90	26,80	26,50	26,60	26,90	26,60	26,90	26,90	27,50
Water flow rate system side	A,E	l/h	40879	56452	77864	90517	107064	125557	137236	155924	175196	190768
Pressure drop system side	A,E	kPa	78	91	83	94	84	94	95	110	84	101

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0% (2) System side water heat exchanger 12 °C / * °C; External air 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: F												
SEER - (EN14825:2018) 12/7 with	inverter fans (1)											
SEER	A,E	W/W	5,40	5,47	5,72	5,35	5,72	5,53	5,64	5,67	5,66	5,49
Seasonal efficiency	A,E	%	213,1%	215,7%	225,9%	210,9%	225,8%	218,0%	222,6%	223,7%	223,4%	216,4%
SEPR - (EN14825: 2018) High tem	perature with inverte	r fans (2)					-					
SEPR	A,E	W/W	9,45	9,36	9,37	8,49	9,15	9,31	9,45	9,50	9,47	9,13
(4) (1 1 (1 FIVE		ADIADIE .I.										

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: P												
SEER - (EN14825:2018) 12/7 with invert	er fans (1)											
SEER	A,E	W/W	5,33	5,58	5,65	5,27	5,63	5,45	5,56	5,56	5,63	5,34
Seasonal efficiency	A,E	%	210,3%	220,0%	222,8%	207,6%	222,2%	214,9%	219,2%	219,3%	222,3%	210,7%
SEPR - (EN14825: 2018) High temperate	ure with inverte	r fans (2)										
SEPR	A,E	W/W	9,36	9,24	9,27	8,55	9,21	9,34	9,35	9,35	9,43	8,93

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Electric data												
Maximum current (FLA)	A,E	А	125,0	189,0	239,0	304,0	368,0	418,0	538,0	547,0	597,0	707,0
Peak current (LRA)	A,E	A	36.0	45.0	161.0	230.0	239.0	355.0	424.0	433.0	549.0	608.0

GENERAL TECHNICAL DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Compressor												
Туре	A,E	type					Centi	ifugal				
Compressor regulation	A,E	Туре					Inv	erter				
Number	A,E	no.	1	1	2	2	2	3	3	3	4	4
Circuits	A,E	no.	1	1	1	2	1	2	1	1	2	2
Refrigerant	A,E	type					R12	34ze				
Refrigerant charge (1)	A,E	kg	81,5	120,1	152,3	187,1	197,8	264,5	275,2	285,9	327,9	327,9
System side heat exchanger												
Туре	A,E	type					Shell a	nd tube				
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E	Туре					Groove	d joints				
Size (in)	A,E	Ø	3"	3"	4"	4"	5"	5"	5"	5"	6"	6"
Size (out)	A,E	Ø	3"	3"	4"	4"	5"	5"	5"	5"	6"	6"
Sound data calculated in cooling mode (2	2)											
Cound names lavel	Α	dB(A)	86,3	88,9	88,8	90,5	91,7	91,6	93,1	93,3	93,3	94,2
Sound power level	E	dB(A)	83,3	85,9	85,8	87,5	88,7	88,6	90,1	90,3	90,3	91,2
Cound procesure level (10 m)	Α	dB(A)	54,1	56,5	56,3	57,9	58,9	58,7	60,1	60,2	60,1	61,0
Sound pressure level (10 m)	E	dB(A)	51,1	53,5	53,3	54,9	55,9	55,7	57,1	57,2	57,1	58,0

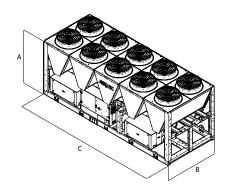
General data - fans

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: F												
Inverter fan							,					
Туре	A,E	type					A	xial				
Fan motor	A,E	type					Inv	erter				
Number	A,E	no.	6	8	10	12	14	16	18	20	22	22
Air flow rate	A,E	m³/h	93150	124200	155250	186300	217350	248400	279450	310500	341550	341550
Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: P												
Inverter fan												
Туре	A,E	type					A	xial		-		
Fan motor	A,E	type					Inv	erter				
Number	A,E	no.	6	8	10	12	14	16	18	20	22	22
Air flow rate	A.F	m³/h	88800	118400	148000	177600	207200	236800	266400	296000	325600	325600

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size	·		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic k	it: 00, DA, DB, D	C, DD, DE,	DF, DG, D	H, DI, DJ,	IA, IB, IC,	ID, IE, IF,	IG, IH, II, I	J, JA, JB, J	C, JD, JE,	JF, JG, JH,	JI, JJ, KF,	KG, KH,
KI, KJ, PA, PB, PC, PD,	PE, PF, PG, PH, P	I, PJ, TF, T	G, TH, TI, 1	נז								
Dimensions and weights												
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3570	4760	5950	7140	8330	9520	10710	11900	13090	13090
Model F												
Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic k	it: 00											
Weights												
Emptyweight	A	kg	3250	4110	5220	6180	6770	8130	8720	9400	10960	11220
Empty weight	E	kg	3330	4220	5360	6350	6960	8350	8960	9670	11270	11520
Weight functioning	A	kg	3510	4450	5630	6700	7360	8820	9500	10250	11920	12190
Weight functioning	E	kg	3590	4560	5770	6870	7550	9040	9740	10520	12230	12490
Model P												
Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic k	it: 00											
Weights												
Empty woight	A	kg	3340	4240	5380	6370	6990	8380	9000	9710	11310	11570
Empty weight	E	kg	3430	4350	5520	6540	7180	8600	9250	9990	11610	11870
Weight functioning	A	kg	3640	4640	5860	6970	7680	9180	9900	10700	12420	12690
weight fullcholling	E	kg	3730	4750	6000	7140	7870	9400	10150	10980	12720	12990

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WATER / WATER CHILLERS AND HEAT PUMPS

Aermec plant engineering really comes into its own in the field of machines and technology for centralised systems. Aermec offer a full range of chillers and heat pumps from the small domestic system up to that of the large size for the service industry.

The cooling capacity range is extremely wide, and the fittings solutions are equally diverse, for scroll, screw or centrifugal compressor applications.

The careful selection of materials and the close attention paid to every detail of assembly coupled with the huge selection of accessories complete the industry-leading products designed for use in this sector, making Aermec units a real "must" in the world of Italian and European climate control.

	WATER / WATE	R CHILLERS AND HEAT PUMPS	Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compr	ressors				
	WRL 026H-161H	Reversible water-cooled heat pump, gas side		6,0-40,0	8,0-48,0	696
	WRL 026-161	Water cooled heat pump reversible water side		6,6-44,2	7,5-48,0	703
	WRL 180H-650H	Reversible water-cooled heat pump, gas side		44,9-157,4	53,0-183,3	709
	WRL 180-650	Water cooled heat pump reversible water side		49,0-174,0	55,0-192,0	713
	WRK	Reversible water-cooled heat pump, gas side		38,9-165,9	48,5-207,7	718
	WWB 0300-0900	Water-water heat pumps only			56,7-265,9	726
	WWM	Water cooled heat pump reversible water side		96	110	731
	NXW 0503-1654	Water cooled heat pump reversible water side		111-511	127-582	737
	NXW 0503H - 1654H	Reversible water-cooled heat pump, gas side		106-477	125-565	742
new	NGW-0500-2600	Water cooled heat pump reversible water side		116,2-788,3		747
new	NGW-0350H-2600H	Reversible water-cooled heat pump, gas side		106,9-744,8		751
	Units with screw comp	ressors				
	WS 0601-2802	Water cooled heat pump reversible water side		147-700	164-778	755
	HWS 0601 - 2802	Water cooled heat pump reversible water side		147-369	165-778	759
	HWSG	Water cooled heat pump reversible water side		110-396	122-595	763
	WSH	Reversible water-cooled heat pump, gas side		165,8-269,7	183,3-300,3	767
	WFGI	Water cooled heat pump reversible water side		217-1765	243-1960	771
	WFGN	Water cooled heat pump reversible water side		136-1727	153-1921	781
	WFI	Water cooled heat pump reversible water side		291-2406	326-2664	788
	WFN	Water cooled heat pump reversible water side		182-2349	205-2610	797
	Units with centrifugal o	compressors				
	WMX	Water/water chiller (with R134a)		280,1-324,2		805
	WMG	Water/water chiller (with R1234ze)		282,3-312,4		808
	WTX	Water/water chiller		222,9-1958,4		811
	WTG	Water/water chiller (with R1234ze)		246,6-1959,4		816

















WRL 026H - 161H



- High efficiency
- Production of hot water up to 60 °C
- Production of domestic hot water
- Suitable for geothermal applications

Reversible water-cooled heat pump, gas side

Cooling capacity 6 ÷ 40 kW Heating capacity 8 ÷ 48 kW





DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications. Indoor units with hermetic scroll compressors and plate heat exchang-

In the configuration with desuperheater, it is also possible to produce

The technological choices made, always oriented to the highest quality, ensure very easy installation. In fact the electrical and hydraulic connections are all located in the upper part of the unit, facilitating the installation and maintenance operations and also reducing the technical gaps and their position in as little space as possible.

VERSIONS

° Without storage tank

A With storage tank

FEATURES

Operating field

Operation at full power with domestic hot water for the system up to 60°C.

(for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.

The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible. The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).

To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).

Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

CONTROL MPC

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

KSAE: External air sensor.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SSM: Probe to be used with the mixer valve in applications with radiant panels. The probe requires the VMF-CRP area accessory as well.

TAH: Ambient terminal with temperature and humidity probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump and dehumidifier consent.

TAT: Ambient terminal with temperature probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump. **VT:** Anti-vibration supports.

VPHL: Pressure switch valve with bypass solenoid valve, during cooling mode operation the bypass valve is closed so the water flows exclusively through the circuit with the pressure switch. During heating mode operation the water flows through both branches of the circuit.

ACCESSORIES COMPATIBILITY

Model	026	031	041	051	071	081	101	141	161
AER485P1	•	•	•	•	•	•	•	•	•
AERBACP	•	•	•	•	•	•	•	•	•
KSAE	•	•	•	•	•	•	•	•	•
PGD1	•	•	•	•	•		•	•	•
SGD	•	•	•	•	•	•	•	•	•
SSM	•	•	•	•	•	•	•	•	•
TAH	•	•	•	•	•	•	•	•	•
TAT	•		•		•		•	•	•

Antivibration

Version	Integrated hydronic kit, source side	System side - pumps	026	031	041	051	071
0	°,B,I,U,V	°,N,P	VT9	VT9	VT9	VT9	VT9
A	°,B,I,U,V	°,N,P	VT15	VT15	VT15	VT15	VT15
Version	Integrated hydronic source side	kit, System side - pumps	081		101	141	161
	30uice side						
0	°,B,I,U,V	°,N,P	VT9		VT15	VT15	VT15

Pressure switch valve

Ver	026	031	041	051	071	081	101	141	161
°.A	VPHI 1	VPHI 1	VPHI 2	VPHI 2	VPHI 3	VPHI 3	VPHI 4	VPHI 4	VPHI 4

CONFIGURATOR

Field	Description
1,2,3	WRL
4,5,6	Size 026, 031, 041, 051, 071, 081, 101, 141, 161
7	Operating field
Х	Electronic thermostatic expansion valve
8	Model
Н	Reversible heat pump, gas side
9	Version
0	Without storage tank
Α	With storage tank
10	Heat recovery
0	Without heat recovery
11	Integrated hydronic kit, source side
0	Without hydronic kit
В	On-off pump (1)
I	Inverter pump (2)
U	Pump high head (3)
V	Applications with bore hole water
12	System side - pumps
•	Without hydronic kit
N	Pump high head (3)
P	Pump (4)
13	Recovery side - pumps
•	Without hydronic kit
14	Soft-start
0	Without soft-start
S	With soft-start
15	Power supply
0	400V~3N 50Hz
4	230V~350Hz (5)
М	230V~ 50Hz (6)

⁽¹⁾ For size WRL 051 ÷ 081. The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.
(2) Only for WRL 026 ÷ 081
(3) Only for WRL 101 ÷ 161
(4) In sizes WRL 026 ÷ 081, it's an inverter circulator; for other sizes, it's an on-off pump.
(5) Only for WRL 051 ÷ 141
(6) Only for WRL 026 ÷ 041

PERFORMANCE SPECIFICATIONS 12 °C/7 °C - 40 °C/45 °C

WRL - (H°) - (400V 3N ~ 50Hz)

Size	,	026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 12 °C/7 °C(1)										
Cooling capacity	kW	6,3	8,1	10,4	13,7	17,8	20,3	27,6	35,4	40,4
Input power	kW	1,6	2,3	2,3	3,0	4,2	5,0	6,1	8,5	10,1
Cooling total input current	A	4,0	4,0	6,0	7,0	9,0	10,0	13,0	17,0	19,0
EER	W/W	3,98	3,47	4,52	4,51	4,18	4,08	4,49	4,15	4,01
Water flow rate source side	l/h	1346	1782	2178	2870	3759	4312	5763	7501	8611
Pressure drop source side	kPa	13	16	19	20	24	27	28	37	44
Water flow rate system side	l/h	1085	1396	1798	2367	3058	3492	4748	6098	6964
Pressure drop system side	kPa	9	11	13	14	16	18	20	24	29
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,9	9,5	12,4	16,4	20,9	24,0	32,7	41,7	47,6
Input power	kW	2,1	2,4	3,0	4,0	5,2	6,1	8,1	10,5	12,3
Heating total input current	A	4,8	4,8	6,6	8,3	10,0	12,0	16,0	20,0	23,0
COP	W/W	3,84	3,96	4,08	4,07	4,01	3,94	4,05	3,97	3,87
Water flow rate source side	l/h	1714	2086	2759	3635	4611	5291	7248	9196	10445
Pressure drop source side	kPa	34	34	46	43	50	59	52	62	73
Water flow rate system side	l/h	1364	1644	2151	2842	3616	4165	5669	7217	8246
Pressure drop system side	kPa	20	18	28	28	32	38	35	43	51

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Technical data WRL (H°) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M	1									
Cooling performance 12 °C/7 °C(1)										
Cooling capacity	kW	6,3	7,9	10,3	-	-	-	-	-	-
Input power	kW	1,7	1,9	2,4	-	-	-	-	-	-
Cooling total input current	А	9,0	11,0	14,0	-	-	-	-	-	-
EER	W/W	3,74	4,13	4,28	-	-	-	-	-	-
Water flow rate source side	l/h	1363	1678	2179	-	-	-	-	-	-
Pressure drop source side	kPa	14	16	19	-	-	-	-	-	-
Water flow rate system side	l/h	1085	1362	1781	-	-	-	-	-	-
Pressure drop system side	kPa	9	10	13	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,9	9,9	12,6	-	-	-	-	-	-
Input power	kW	2,1	2,6	3,3	-	-	-	-	-	-
Heating total input current	А	10,0	13,0	17,0	-	-	-	-	-	-
COP	W/W	3,85	3,89	3,82	-	-	-	-	-	-
Water flow rate source side	l/h	1717	2173	2745	-	-	-	-	-	-
Pressure drop source side	kPa	34	36	46	-	-	-	-	-	-
Water flow rate system side	l/h	1366	1723	2186	-	-	-	-	-	-
Pressure drop system side	kPa	20	22	29	-	-	-	-	-	-

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

WRL - (H°) - (400V 3N ~ 50Hz)

Size	1	026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 23 °C / 18 °C (1)										
Cooling capacity	kW	8,3	10,0	13,5	17,5	23,9	27,4	34,9	47,8	54,5
Input power	kW	1,6	1,9	2,4	3,3	4,4	5,2	6,6	9,0	10,7
Cooling total input current	A	4,1	3,0	6,0	7,6	9,2	10,0	14,0	17,0	19,0
EER	W/W	5,22	5,34	5,54	5,35	5,39	5,25	5,31	5,32	5,11
Water flow rate source side	I/h	1681	2039	2719	3547	4844	5557	7089	9679	11092
Pressure drop source side	kPa	20	21	30	31	40	45	42	62	73
Water flow rate system side	I/h	1428	1737	2330	3022	4136	4730	6040	8270	9438
Pressure drop system side	kPa	16	17	22	23	29	33	32	44	53
Heating performance 30 °C / 35 °C (2)										
Heating capacity	kW	8,1	10,1	13,0	17,0	22,6	25,8	34,1	45,0	50,8
Input power	kW	1,6	1,9	2,5	3,2	4,3	5,1	6,4	8,7	10,3
Heating total input current	А	3,7	3,7	5,2	6,4	8,4	9,7	12,0	16,0	19,0
COP	W/W	5,03	5,38	5,29	5,33	5,24	5,06	5,31	5,18	4,91
Water flow rate source side	I/h	1397	1751	2246	2934	3893	4456	5888	7770	8761
Pressure drop source side	kPa	21	20	30	30	37	43	38	50	58
Water flow rate system side	l/h	1901	2418	3098	4045	5363	6102	8125	10710	11951
Pressure drop system side	kPa	42	46	58	53	68	78	65	84	95

⁽¹⁾ Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

WRL (H°) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M	'									
Cooling performance 23 °C / 18 °C (1)										
Cooling capacity	kW	8,3	10,1	13,3	-	-	-	-	-	-
Input power	kW	1,6	2,0	2,5	-	-	-	-	-	-
Cooling total input current	A	8,1	11,0	14,0	-	-	-	-	-	-
EER	W/W	5,05	5,18	5,27	-	-	-	-	-	-
Water flow rate source side	l/h	1690	2070	2699	-	-	-	-	-	-
Pressure drop source side	kPa	22	24	29	-	-	-	-	-	-
Water flow rate system side	l/h	1428	1755	2295	-	-	-	-	-	-
Pressure drop system side	kPa	16	17	22	-	-	-	-	-	-
Heating performance 30 °C / 35 °C (2)										
Heating capacity	kW	8,2	10,2	13,1	-	-	-	-	-	-
Input power	kW	1,6	1,9	2,6	-	-	-	-	-	-
Heating total input current	A	8,1	9,7	13,0	-	-	-	-	-	-
COP	W/W	5,05	5,27	5,01	-	-	-	-	-	-
Water flow rate source side	l/h	1409	1767	2263	-	-	-	-	-	-
Pressure drop source side	kPa	21	23	31	-	-	-	-	-	-
Water flow rate system side	l/h	1919	2430	3082	-	-	-	-	-	-
Pressure drop system side	kPa	42	45	58	-	-	-	-	-	-

⁽¹⁾ Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL - (H°) - (400V 3N ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,64	3,39	4,31	4,53	4,20	4,13	4,81	4,49	4,36
Seasonal efficiency	%	142,7%	132,4%	169,4%	178,1%	165,1%	162,3%	189,4%	176,5%	171,4%
UE 811/2013 performance in average ambient conditio	ns (average) - 5	5 °C - Pdesignh	≤ 70 kW (2)							
Pdesignh	kW	10	12	16	21	26	31	42	53	61
ηsh	%	141.0%	145.0%	151.0%	152.0%	151.0%	150.0%	175.0%	173.0%	167.0%
SCOP	W/W	3,73	3,83	3,98	4,00	3,98	3,95	4,58	4,53	4,38
Efficiency energy class		A++	A++	A+++						
UE 811/2013 performance in average ambient conditio	ns (average) - 3	5 °C - Pdesignh	≤ 70 kW (3)							
Pdesignh	kW	11	14	17	23	30	35	45	60	68
ηsh	%	195.0%	210.0%	207.0%	212.0%	211.0%	205.0%	233.0%	226.0%	212.0%
SCOP	W/W	5,08	5,45	5,38	5,50	5,48	5,33	6,03	5,85	5,50
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL - (H°) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,48	3,80	4,15	-	-	-	-	-	-
Seasonal efficiency	%	136,2%	148,8%	163,1%	-	-	-	-	-	-
UE 811/2013 performance in average ambient co	onditions (average) - 5	5 °C - Pdesignh	≤ 70 kW (2)							
Pdesignh	kW	10	13	16	-	-	-	-	-	-
ηsh	%	142.0%	145.0%	142.0%	-	-	-	-	-	-
SCOP	W/W	3,75	3,83	3,75	-	-	-	-	-	-
Efficiency energy class		A++	A++	A++	-	-	-	-	-	-
UE 811/2013 performance in average ambient co	onditions (average) - 3	5 °C - Pdesignh	≤ 70 kW (3)							
Pdesignh	kW	11	14	17	-	-	-	-	-	-
ηsh	%	198.0%	212.0%	199.0%	-	-	-	-	-	-
SCOP	W/W	5,15	5,50	5,18	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL - (H ABP) - (400V 3N ~ 50Hz)

6:	-/									
Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	4,47	4,07	5,37	5,40	4,96	4,85	5,17	4,75	4,67
Seasonal efficiency	%	175,9%	159,7%	211,8%	213,1%	195,3%	190,9%	203,7%	186,8%	183,9%
UE 811/2013 performance in average ambient	conditions (average) - 5	5 °C - Pdesignh	≤ 70 kW (2)							
Pdesignh	kW	10	12	16	21	26	30	41	52	60
ηsh	%	151.0%	155.0%	161.0%	161.0%	157.0%	155.0%	173.0%	170.0%	166.0%
SCOP	W/W	3,98	4,08	4,23	4,23	4,13	4,08	4,53	4,45	4,35
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient	conditions (average) - 3	5 °C - Pdesignh	≤ 70 kW (3)							
Pdesignh	kW	10	13	17	22	30	34	44	59	66
ηsh	%	223.0%	238.0%	222.0%	237.0%	222.0%	210.0%	232.0%	230.0%	216.0%
SCOP	W/W	5,78	6,15	5,75	6,13	5,75	5,45	6,00	5,95	5,60
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL - (H ABP) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M	'									
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	4,21	4,63	5,14	-	-	-	-	-	-
Seasonal efficiency	%	165,5%	182,3%	202,7%	-	-	-	-	-	-
UE 811/2013 performance in average ambient cor	nditions (average) - 5	5 °C - Pdesignh	≤ 70 kW (2)							
Pdesignh	kW	10	13	16	-	-	-	-	-	-
ηsh	%	152.0%	156.0%	152.0%	-	-	-	-	-	-
SCOP	W/W	4,00	4,10	4,00	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-
UE 811/2013 performance in average ambient cor	nditions (average) - 3	5 °C - Pdesignh	≤ 70 kW (3)							
Pdesignh	kW	11	13	17	-	-	-	-	-	-
ηsh	%	228.0%	243.0%	214.0%	-	-	-	-	-	-
SCOP	W/W	5,90	6,28	5,55	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

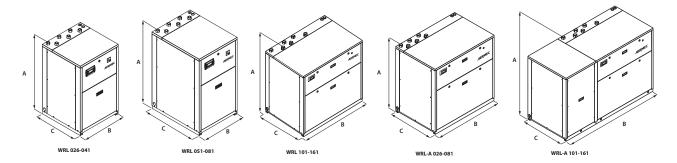
Size		026	031	041	051	071	081	101	141	161
Power supply: °	'									
Electric data										
Maximum current (FLA)	A	8,5	9,0	11,0	13,0	20,0	23,0	23,0	37,0	43,0
Peak current (LRA)	A	34,0	37,0	50,0	66,0	75,0	75,0	88,0	91,0	94,0
Size		026	031	041	051	071	081	101	141	161
Power supply: M	'									
Electric data										
Maximum current (FLA)	A	19,0	22,0	26,0	-	-	-	-	-	-
Peak current (LRA)	A	63.0	84.0	99.0	-	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			026	031	041	051	071	081	101	141	161
Compressor											
Туре	°,A	type					Scroll				
Number	°,A	no.	1	1	1	1	1	1	2	2	2
Circuits	°,A	no.	1	1	1	1	1	1	1	1	1
Refrigerant	°,A	type					R410A				
Source side heat exchanger											
Туре	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
System side heat exchanger											
Туре	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
Source side hydraulic connections											
Connections (in/out)	°,A	Туре					Gas - F				
Sizes (in/out)	°,A	Ø					1"1/4				
System side hydraulic connections											
Connections (in/out)	°,A	Туре					Gas - F				
Sizes (in/out)	°,A	Ø					1"1/4				
Sound data calculated in cooling mode (1)											
Sound power level	°,A	dB(A)	55,5	57,0	57,5	59,0	60,0	60,5	62,0	63,0	63,5
Cound procesure lovel (10 m)	0	dB(A)	24,3	25,8	26,3	27,7	28,7	29,2	30,6	31,6	32,1
Sound pressure level (10 m)	А	dB(A)	24,1	25,6	26,1	27,6	28,6	29,1	30,5	31,5	32,0

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			026	031	041	051	071	081	101	141	161
Dimensions and weights											
Λ.	0	mm	976	976	976	1126	1126	1126	1126	1126	1126
А	A	mm	1126	1126	1126	1126	1126	1126	1126	1126	1126
3	0	mm	605	605	605	605	605	605	1155	1155	1155
	A	mm	1155	1155	1155	1155	1155	1155	1755	1755	1755
·	0	mm	603	603	603	773	773	773	773	773	773
	A	mm	773	773	773	773	773	773	773	773	773
Emptyweight	0	kg	120	125	130	150	170	180	260	270	280
Empty weight	A	kg	190 (1)	200 (1)	210 (1)	230 (1)	250 (1)	260 (1)	340 (1)	350 (1)	360 (1)

⁽¹⁾ Units with two heat exchangers and storage tank, without pumps

















WRL 026 -161

Water cooled heat pump reversible water side

Cooling capacity 6,6 ÷ 44,2 kW Heating capacity 7,5 ÷ 48,0 kW



- High efficiency
- · Suitable for geothermal applications





DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications. Indoor units with hermetic scroll compressors and plate heat exchangers. In the configuration with desuperheater, it is also possible to produce free-hot water.

The technological choices made, always oriented to the highest quality, ensure very easy installation.

In fact, the electrical and hydraulic connections are all located at the top of the unit making it easy to install and maintain, also reducing the technical areas and their placement in the smallest space possible.

VERSIONS

° Without storage tank **A** With storage tank

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.

(for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.

The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.

The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).

To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).

Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

The regulation using an outside air temperature sensor (accessory) allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

KSAE: External air sensor.

MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

VT: Anti-vibration supports.

VPL: Pressure switch valve complete with connections, piloted directly in relation to condensation pressure; the valve modulates the volume of water needed to cool the condenser, thereby maintaining the condensation temperature unchanged.

ACCESSORIES COMPATIBILITY

Model	Ver	026	031	041	051	071	081	101	141	161
AERBAC-MODU	°,A	•	•	•	•	•	•	•	•	•
AERSET	°,A	•	•	•	•	•	•	•	•	•
KSAE	°,A	•	•	•	•	•	•	•	•	•
MODU-485BL	°,A	•	•	•	•	•	•	•	•	•
PR3	°,A	•	•	•	•	•	•	•	•	•
SGD	°,A	•								

Antivibration

Version	Integrated hydronic kit, source side	System side - pumps	026	031	041	051	071
0	0	0	VT9	VT9	VT9	VT9	VT9
0	B,I,U,V	N,P	VT9	VT9	VT9	VT9	VT9
A	°,B,I,U,V	°,N,P	VT15	VT15	VT15	VT15	VT15

Version	Integrated hydronic kit, source side	System side - pumps	081	101	141	161
0	0	0	VT9	VT15	VT15	VT15
٥	U	N,P	VT9	VT15	VT15	VT15
0	B,I,V	N,P	VT9	VT15	VT15	-
A	°,B,I,U,V	°,N,P	VT15	VT15A	VT15A	VT15A

not available

Pressure switch valve

Vor	037	031	041	0.51	071	001	101	141	1/1
 ver	020	U3 I	041	1001	071	081	101	141	101
°.A	VPL1	VPL1	VPL2	VPL2	VPL3	VPL3	VPL4	VPL4	VPL4

CONFIGURATOR

Configuration options

Field	Description
1,2,3	WRL
4,5,6	Size 026, 031, 041, 051, 071, 081, 101, 141, 161
7	Operating field
0	Standard mechanic thermostatic valve (1)
Υ	Low temperature mechanic thermostatic valve (2)
8	Model
0	Heat pump reversible on the water side
E	Evaporating unit (3)
9	Version
0	Without storage tank
Α	With storage tank
10	Heat recovery
0	Without heat recovery
D	With desuperheater
11	Integrated hydronic kit, source side
0	Without hydronic kit
В	On-off pump (4)
П	Inverter pump (5)

Field	l	Description
	U	Pump high head (6)
		Applications with bore hole water
	٧	2-way modulating valve
12		System side - pumps
	0	Without hydronic kit
	N	Pump high head (6)
	Р	On-off pump (4)
13		Field for future development
	0	Field not used
14		Soft-start
	0	Without soft-start
	S	With soft-start
15		Power supply
	0	400V~3N 50Hz
	М	230V~ 50Hz (7)

- (1) Water produced from $4^{\circ}\text{C} \div 18^{\circ}\text{C}$ (2) Water produced from $4^{\circ}\text{C} \div -8^{\circ}\text{C}$ (3) Shipped with holding charge only (4) For size WRL 051 \div 081. The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate. (5) Only for WRL 026 \div 081 (6) Only for WRL 101 \div 161 (7) Only for WRL 026 \div 041

PERFORMANCE SPECIFICATIONS

WRL-°

Size		026	031	041	051	071	081	101	141	161
Power supply: °	-	020	031	V41	031	V/ I	VOI	101	141	101
Cooling performance 12 °C/7 °C (1)										
	kW	67	0.4	11.2	14.7	10.2	21.9	29.5	20 €	43.9
Cooling capacity	kW	6,7	8,4	11,3	14,7	19,3			38,5	
Input power		1,5	1,8	2,6	3,1	4,0	4,7	6,2	8,1	9,5
Cooling total input current	A	3,1	2,6	4,9	6,4	7,4	9,1	13,0	15,0	18,0
EER	W/W	4,49	4,74	4,39	4,70	4,77	4,63	4,72	4,75	4,62
Water flow rate source side	I/h	1396	1735	2375	3054	3978	4538	6100	7947	9077
Pressure drop source side	kPa	28	30	35	32	40	46	42	57	66
Water flow rate system side		1154	1447	1955	2541	3320	3770	5078	6638	7555
Pressure drop system side	kPa	15	17	23	21	26	30	25	34	38
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,7	9,3	12,6	16,3	21,0	24,0	32,5	42,1	48,0
Input power	kW	1,9	2,3	3,2	4,0	5,1	5,9	8,0	10,2	12,0
Heating total input current	A	4,1	3,4	6,1	8,2	9,2	11,0	16,0	18,0	23,0
COP	W/W	3,93	4,04	3,94	4,05	4,17	4,04	4,06	4,14	4,02
Water flow rate source side	I/h	1680	2053	2767	3602	4708	5325	7200	9414	10671
Pressure drop source side	kPa	32	34	46	42	52	60	50	68	76
Water flow rate system side	l/h	1326	1607	2181	2819	3647	4159	5629	7284	8315
Pressure drop system side	kPa	25	26	30	27	34	39	36	48	55
(1) Date 14511:2022; Water user side 12 °C / 7 °C; W. (2) Date 14511:2022; Water user side 40 °C / 45 °C; V.	ater source side 30 °C / 35 Vater source side 10 °C / 7	5°C 7°C								
Size		026	031	041	051	071	081	101	141	161
Power supply: M	'									
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,6	8,3	11,3	-	-	-	-	-	-
Input power	kW	1,5	1,8	2,5	-	-	-	-	-	-
Cooling total input current	A	7,2	9,2	12,0	-	-	-	-	-	-
EER	W/W	4,30	4,50	4,56	-	-	-	-	-	-
Water flow rate source side	l/h	1386	1731	2359	-	-	-	-	-	-
Pressure drop source side	kPa	28	29	36	-	-	-	-	-	-
Water flow rate system side	l/h	1137	1430	1955	-	-	-	-	-	-
Pressure drop system side	kPa	15	17	23	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,6	9,4	12,5	-	-	-	-	-	-
Input power	kW	2,0	2,4	3.1	-	-	-	-	-	-
Heating total input current	Α	0.2	12.0	15.0						

ENERGY INDICES (REG. 2016/2281 EU)

WRL - °

COP

Heating total input current

Water flow rate source side

Water flow rate system side

Pressure drop system side

Pressure drop source side

WILL -										
Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,93	4,29	4,13	4,51	4,66	4,52	4,93	4,93	4,75
Seasonal efficiency	%	154,0%	168,5%	162,1%	177,3%	183,3%	177,8%	194,1%	194,0%	187,1%
UE 811/2013 performance in average ambien	t conditions (average) - 3	5 °C - Pdesignh	≤ 70 kW (2)							
Pdesignh	kW	11	14	17	23	30	35	45	60	68
SCOP	W/W	5,08	5,45	5,38	5,50	5,48	5,33	6,03	5,85	5,50
ηsh	%	195.0%	210.0%	207.0%	212.0%	211.0%	205.0%	233.0%	226.0%	212.0%
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

9,3

3,86

1662

32

1319

25

A

W/W

I/h

kPa

l/h

kPa

12,0

3,89

2053

35

1626

26

15,0

4,05

2778

46

2171

30

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,77	4,13	4,27	-	-	-	-	-	-
Seasonal efficiency	%	147,9%	162,0%	167,6%	-	-	-	-	-	-
UE 811/2013 performance in average ambient condition	s (average) - 3	5°C - Pdesignh	≤ 70 kW (2)							
Pdesignh	kW	11	14	17	-	-	-	-	-	-
SCOP	W/W	5,15	5,50	5,18	-	-	-	-	-	-
ηsh	%	198.0%	212.0%	199.0%	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

PERFORMANCE SPECIFICATIONS

WRL ABP

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 12 °C/7 °C (1)										
Cooling capacity	kW	6,8	8,5	11,4	14,9	19,4	22,0	29,8	38,9	44,2
Input power	kW	1,4	1,7	2,5	3,1	3,9	4,6	6,3	8,1	9,4
Cooling total input current	A	3,7	3,3	5,6	7,5	8,6	10,0	14,0	17,0	20,0
EER	W/W	4,75	5,02	4,62	4,84	4,93	4,78	4,75	4,79	4,69
Water flow rate source side	I/h	1396	1735	2375	3054	3978	4538	6100	7947	9077
Useful head source side	kPa	59	53	36	63	43	28	116	137	125
Water flow rate system side	I/h	1154	1447	1955	2541	3320	3770	5078	6638	7555
Useful head system side	kPa	74	70	56	79	66	56	148	164	157
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,6	9,2	12,5	16,1	20,9	23,8	32,2	41,6	47,6
Input power	kW	1,9	2,2	3,1	3,9	4,9	5,8	8,0	10,1	11,8
Heating total input current	A	4,7	4,0	6,7	9,3	10,0	13,0	18,0	20,0	25,0
COP	W/W	4,05	4,17	4,05	4,11	4,24	4,09	4,01	4,13	4,04
Water flow rate source side	I/h	1680	2053	2767	3602	4708	5325	7200	9414	10671
Useful head source side	kPa	52	43	16	46	20	4	90	121	109
Water flow rate system side	I/h	1326	1607	2181	2819	3647	4159	5629	7284	8315
Useful head system side	kPa	63	59	46	70	54	41	130	148	138

⁽¹⁾ Date 14511:2022, Water user side 12 $^{\circ}$ C/ C, Water source side 30 $^{\circ}$ C/ 35 $^{\circ}$ C (2) Date 14511:2022; Water user side 40 $^{\circ}$ C/ 45 $^{\circ}$ C; Water source side 10 $^{\circ}$ C/ 7 $^{\circ}$ C

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
Cooling performance 12 °C/7 °C(1)			,							
Cooling capacity	kW	6,7	8,4	11,4	-	-	-	-	-	-
Input power	kW	1,5	1,8	2,4	-	-	-	-	-	-
Cooling total input current	A	7,8	9,9	12,0	-	-	-	-	-	-
EER	W/W	4,54	4,75	4,80	-	-	-	-	-	-
Water flow rate source side	l/h	1386	1731	2359	-	-	-	-	-	-
Useful head source side	kPa	59	54	36	-	-	-	-	-	-
Water flow rate system side	I/h	1137	1430	1955	-	-	-	-	-	-
Useful head system side	kPa	74	70	56	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,5	9,3	12,4	-	-	-	-	-	-
Input power	kW	1,9	2,3	3,0	-	-	-	-	-	-
Heating total input current	A	9,9	13,0	15,0	-	-	-	-	-	-
COP	W/W	3,97	4,01	4,17	-	-	-	-	-	-
Water flow rate source side	I/h	1662	2053	2778	-	-	-	-	-	-
Jseful head source side	kPa	52	43	16	-	-	-	-	-	-
Nater flow rate system side	l/h	1319	1626	2171	-	-	-	-	-	-
Jseful head system side	kPa	63	59	45	-	-	-	-	-	-

⁽¹⁾ Date 14511:2022; Water user side 12 °C/7 °C; Water source side 30 °C/35 °C (2) Date 14511:2022; Water user side 40 °C/45 °C; Water source side 10 °C/7 °C

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Size			026	031	041	051	071	081	101	141	161
Cooling performance 12 °C/7 °C(1)											
Cooling capacity	E	kW	6,3	7,8	10,4	13,4	17,4	19,7	26,8	34,7	39,4
Input power	E	kW	1,7	2,0	2,8	3,6	4,5	5,3	7,2	9,1	10,6
Cooling total input current	E	A	3,0	3,0	5,0	7,0	8,0	10,0	14,0	17,0	21,0
EER	E	W/W	3,71	3,90	3,71	3,72	3,87	3,72	3,72	3,81	3,72
Water flow rate system side	E	l/h	1082	1340	1787	2302	2990	3385	4605	5962	6769
Pressure drop system side	E	kPa	13	15	20	17	21	25	21	28	31
Length of refrigerant lines from/to 0 - 10) m										
Gas line (C1)	E	Ø	9,5	9,5	9,5	12,7	12,7	15,9	15,9	18,0	18,0
Liquid line (C1)	E	Ø	9,5	9,5	9,5	12,7	12,7	12,7	15,9	18,0	18,0
Topping up the refrigerant gas (C1)	E	g/m	54	54	54	103	103	108	161	214	214

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL ABP

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	5,00	5,37	5,22	5,38	5,62	5,30	5,31	5,27	5,21
Seasonal efficiency	%	196,9%	211,7%	205,8%	212,0%	221,7%	208,8%	209,2%	207,7%	205,5%
UE 811/2013 performance in average ambient conditions	(average) - :	35 °C - Pdesignh :	≤ 70 kW (2)							
Pdesignh	kW	10	13	17	22	30	34	44	59	66
SCOP	W/W	5,78	6,15	5,75	6,13	5,75	5,45	6,00	5,95	5,60
ηsh	%	223.0%	238.0%	222.0%	237.0%	222.0%	210.0%	232.0%	230.0%	216.0%
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Efficiencies for low temperature applications (35 °C)

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	4,73	5,20	5,22	-	-	-	-	-	-
Seasonal efficiency	%	186,3%	205,1%	205,6%	-	-	-	-	-	-
UE 811/2013 performance in average ambient condi	tions (average) - 3	5 °C - Pdesignh	≤ 70 kW (2)							
Pdesignh	kW	11	13	17	-	-	-	-	-	-
SCOP	W/W	5,90	6,28	5,55	-	-	-	-	-	-
ηsh	%	228.0%	243.0%	214.0%	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Efficiencies for low temperature applications (35 °C)

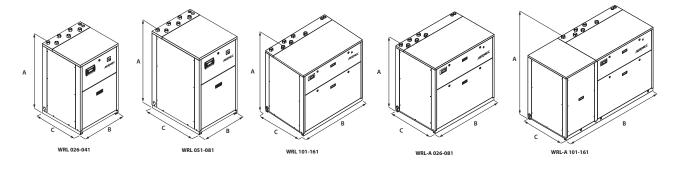
ELECTRIC DATA

Size			026	031	041	051	071	081	101	141	161
Electric data											
Manimum annual (FLA)	0	A	8,0	8,0	15,0	17,0	21,0	22,0	32,0	40,0	41,0
Maximum current (FLA)	M	A	18,0	21,0	34,0	-	-	-	-	-	-
D 1 ((DA)	0	A	34,0	37,0	65,0	75,0	75,0	75,0	90,0	94,0	95,0
Peak current (LRA)	M	A	63.0	84.0	119.0	-	-	-	-	-	_

GENERAL TECHNICAL DATA

Size			026	031	041	051	071	081	101	141	161
Compressor											
Туре	°,A	type					Scroll				
Number	°,A	no.	1	1	1	1	1	1	2	2	2
Circuits	°,A	no.	1	1	1	1	1	1	1	1	1
Refrigerant	°,A	type					R410A				
Refrigerant charge (1)	°,A	kg	0,8	0,9	1,2	1,6	1,9	2,0	3,6	4,4	4,7
Source side heat exchanger											
Туре	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
System side heat exchanger											
Туре	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
Source side hydraulic connections											
Connections (in/out)	°,A	Туре					Gas-F				
Sizes (in/out)	°,A	Ø					1" 1/4				
System side hydraulic connections											
Connections (in/out)	°,A	Туре					Gas-F				
Sizes (in/out)	°,A	Ø					1" 1/4				
Sound data calculated in cooling mo	ode (2)										
Sound power level	°,A	dB(A)	55,5	57,0	57,5	59,0	60,0	60,5	62,0	63,0	63,5
Cound procesure lovel (10 m)	0	dB(A)	24,3	25,8	26,3	27,7	28,7	29,2	30,6	31,6	32,1
Sound pressure level (10 m)	A	dB(A)	24,1	25,6	26,1	27,6	28,6	29,1	30,5	31,5	32,0

DIMENSIONS



Size			026	031	041	051	071	081	101	141	161
Dimensions and weights											
Α.	0	mm	976	976	976	1126	1126	1126	1126	1126	1126
A	A	mm	1126	1126	1126	1126	1126	1126	1126	1126	1126
D	0	mm	605	605	605	605	605	605	1155	1155	1155
В	A	mm	1155	1155	1155	1155	1155	1155	1755	1755	1755
(0	mm	603	603	603	773	773	773	773	773	773
C	A	mm	773	773	773	773	773	773	773	773	773
Emptyweight	0	kg	120	125	130	150	170	180	260	270	280
Empty weight	A	kg	190 (1)	200 (1)	210 (1)	230 (1)	250 (1)	260 (1)	340 (1)	350 (1)	360 (1)

⁽¹⁾ Units with two heat exchangers and storage tank, without pumps

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

















WRL 180H - 650H

Reversible water-cooled heat pump, gas side

Cooling capacity 44,9 ÷ 157,4 kW Heating capacity 53,0 ÷ 183,3 kW



- High efficiency
- Suitable for geothermal applications
- Production of hot water up to 55 °C







DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications. Indoor units with hermetic scroll compressors and plate heat exchangers.

In the configuration with desuperheater, it is also possible to produce free-hot water.

The technological choices made, always oriented to the highest quality, ensure very easy installation. In fact the electrical and hydraulic connections are all located in the upper part of the unit, facilitating the installation and maintenance operations and also reducing the technical gaps and their position in as little space as possible.

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55°C. (for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.

The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible. The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).

To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).

Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

CONTROL MPC

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

KSAE: External air sensor.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SSM: Probe to be used with the mixer valve in applications with radiant panels. The probe requires the VMF-CRP area accessory as well.

TAH: Ambient terminal with temperature and humidity probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump and dehumidifier consent.

TAT: Ambient terminal with temperature probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump.

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps. **VT:** Anti-vibration supports.

ACCESSORIES COMPATIBILITY

Model	Ver	180	200	300	400	500	550	600	650
AER485P1	0	•	•	•		•	•	•	•
AERNET	0	•	•	•	•	•	•	•	•
KSAE	0	•	•	•	•	•	•	•	•
PGD1	0	•	•	•	•	•	•	•	•
SGD	0	•	•	•	•	•			
SSM	0	•	•	•	•	•	•	•	•
TAH	0	•	•	•	•	•	•	•	•
TAT	0	•	•	•	•	•	•	•	•
VMF-CRP	0						•	•	

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	180	200	300	400	500	550	600	650
 0	°,N,P	°,B,F,I,U,V	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15

CONFIGURATOR

	••••									
Field		Description								
1,2,3		WRL								
4,5,6		Size 180, 200, 300, 400, 500, 550, 600, 650								
7		Operating field								
	0	Standard mechanic thermostatic valve (1)								
	Χ	Electronic thermostatic expansion valve								
	Υ	Low temperature mechanic thermostatic valve (2)								
8		Model								
	Н	Reversible heat pump, gas side								
9		Version								
	0	Standard								
10		Heat recovery								
	0	Without heat recovery								
	D	With desuperheater								
11		Integrated hydronic kit, source side								
	0	Without hydronic kit								
	В	On-off pump								

Field	Description
F	Single low-head inverter pump
I	High-head inverter pump
U	Pump high head
	Applications with bore hole water
٧	2-way modulating valve
12	System side - pumps
0	Without hydronic kit
١	Pump high head
Р	Pump low head
13	Field for future development
0	Field for future development
14	Soft-start
0	Without soft-start
S	With soft-start
15	Power supply
0	400V ~ 3N 50Hz

⁽¹⁾ Water produced from 4 °C \div 18 °C (2) Water produced from 4 °C \div - 8 °C

PERFORMANCE SPECIFICATIONS

WRL - °

Size			180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	0	kW	44,9	59,6	64,8	79,5	93,0	120,1	140,1	157,4
Input power	0	kW	10,8	14,7	16,3	18,6	20,1	27,6	31,4	35,8
Cooling total input current	0	A	20,0	25,0	28,0	32,0	36,0	52,0	60,0	69,0
EER	0	W/W	4,15	4,06	3,97	4,27	4,63	4,34	4,46	4,39
Water flow rate source side	0	l/h	9520	12659	13823	16682	19331	25177	29250	32920
Pressure drop source side	0	kPa	31	52	51	74	34	56	57	71
Water flow rate system side	0	l/h	7732	10274	11168	13711	16013	20686	24139	27112
Pressure drop system side	0	kPa	22	37	36	52	25	40	40	38
Heating performance 40 °C / 45 °C (2)										
Heating capacity	0	kW	53,0	70,9	76,6	92,6	106,4	143,7	164,2	183,3
Input power	0	kW	12,9	17,7	19,1	22,6	24,0	33,1	37,2	42,7
Heating total input current	0	A	23,0	29,0	31,0	37,0	41,0	56,0	64,0	74,0
COP	0	W/W	4,10	4,00	4,01	4,10	4,44	4,34	4,41	4,30
Water flow rate source side	0	l/h	11777	15734	17011	20840	24211	32704	37512	41689
Pressure drop source side	0	kPa	49	89	92	132	61	107	101	126
Water flow rate system side	0	l/h	9190	12277	13264	16046	18452	24913	28485	31788
Pressure drop system side	0	kPa	30	52	49	72	32	58	56	70

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ELECTRIC DATA

Size			180	200	300	400	500	550	600	650
Electric data										
Maximum current (FLA)	0	Α	32,6	41,8	45,2	52,1	59,0	99,0	112,0	125,0
Peak current (LRA)	0	Α	119,0	123,0	125,0	167,0	174,0	265,0	310,0	323,0

ENERGY INDICES (REG. 2016/2281 EU)

Size			180	200	300	400	500	550	600	650
SEER - 12/7 (EN14825: 2018) (1)										
SEER	0	W/W	4,25	4,04	4,15	4,38	5,04	4,62	4,80	4,69
Seasonal efficiency	0	%	166,9%	158,5%	162,8%	172,3%	198,4%	181,7%	188,9%	184,5%
UE 813/2013 performance in average	ambient conditio	ns (average) - 55	$^{\circ}$ C - Pdesignh \leq 4	00 kW (2)						
Pdesignh	0	kW	68	91	98	119	137	185	212	236
ηsh	0	%	173.0%	170.0%	170.0%	175.0%	189.0%	186.0%	189.0%	184.0%
SCOP	0	W/W	4,53	4,45	4,45	4,58	4,93	4,85	4,93	4,80
Efficiency energy class	0		A+++	-	-	-	-	-	-	-
UE 813/2013 performance in average	ambient conditio	ns (average) - 35	$^{\circ}$ C - Pdesignh \leq 4	00 kW (3)						
Pdesignh	0	kW	79	-	-	-	-	-	-	-
ηsh	0	%	222.0%	-	-	-	-	-	-	-
SCOP	0	W/W	5,75	-	-	-	-	-	-	-
Efficiency energy class	0		A+++	-	-	-	-	-	-	-

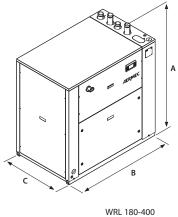
⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

GENERAL TECHNICAL DATA

Size			180	200	300	400	500	550	600	650
Compressor										
Туре	0	type				Sc	roll			
Compressor regulation	0	Туре				On	ı-Off			
Number	0	no.	2	2	2	2	2	2	2	2
Circuits	0	no.	1	1	1	1	1	1	1	1
Refrigerant	0	type				R4	10A			
Source side heat exchanger										
Туре	0	type				Braze	d plate			
Number	0	no.	1	1	1	1	1	1	1	1
System side heat exchanger										
Туре	0	type				Braze	d plate			
Number	0	no.	1	1	1	1	1	1	1	1
Source side hydraulic connections										
Connections (in/out)	0	Type				Groove	ed joints			
Sizes (in/out)	0	Ø	2"	2"	2"	2"	2"1/2	2"1/2	2" 1/2	2" 1/2
System side hydraulic connections										
Connections (in/out)	0	Туре				Groove	ed joints			
Sizes (in/out)	0	Ø	2"	2"	2"	2"	2"1/2	2"1/2	2" 1/2	2" 1/2
Sound data calculated in cooling mo	de (1)									
Sound power level	0	dB(A)	61,1	61,8	62,9	71,1	67,6	79,1	79,1	79,1
Sound pressure level (10 m)	0	dB(A)	29,6	30,3	31,4	39,6	36,0	47,5	47,5	47,5

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS





Size			180	200	300	400	500	550	600	650
Dimensions and weights										
A	0	mm	1380	1380	1380	1380	1380	1380	1380	1380
В	0	mm	1320	1320	1320	1320	2060	2060	2060	2060
C	0	mm	845	845	845	845	845	845	845	845
Empty weight	0	ka	370	370	381	388	522	598	708	753



















WRL 180 - 650

Water cooled heat pump reversible water side

Cooling capacity 49 ÷ 174 kW Heating capacity 55 ÷ 192 kW



- High efficiency
- Suitable for geothermal applications
- Production of hot water up to 55 °C







DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications. Indoor units with hermetic scroll compressors and plate heat exchangers.

In the configuration with desuperheater, it is also possible to produce free-hot water.

The technological choices made, always oriented to the highest quality, ensure very easy installation. In fact the electrical and hydraulic connections are all located in the upper part of the unit, facilitating the installation and maintenance operations and also reducing the technical gaps and their position in as little space as possible.

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C. (for more information, refer to the technical documentation).

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Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).

To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).

Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

CONTROL MPC

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
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ACCESSORIES

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AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

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ACCESSORIES COMPATIBILITY

	Ver	180	200	300	400	500	550	600	650
Model: °, E, K									
	0	AER48SP1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SSM, TAH, TAT, VMF-CRP				
Antivibratio	n								
Version	Integrated hydronic kit, source side	System side - pumps	180	200 3	00 400	500	550	600	650
0	°,B,F,I,U,V	°,N,P	VT9	VT9 V	T9 VT9	VT15	VT15	VT15	VT15

CONFIGURATOR

CO	INFI	GURATUR								
Field	d	Description								
1,2,3	3	WRL								
4,5,6	6	Size								
7,5,		180, 200, 300, 400, 500, 550, 600, 650								
7		Operating field								
	0	Standard mechanic thermostatic valve (1)								
	Χ	Electronic thermostatic expansion valve								
	Υ	Low temperature mechanic thermostatic valve (2)								
8		Model								
	0	Heat pump reversible on the water side								
	Ε	Evaporating unit (3)								
	K	Heat pump reversible on the water side with low pressure drops								
9		Version								
	0	Standard								
10		Heat recovery								
	0	Without heat recovery								
	D	With desuperheater								
11		Integrated hydronic kit, source side								
	0	Without hydronic kit								
	В	On-off pump								

Field	Description
F	Single low-head inverter pump
- 1	High-head inverter pump
U	Pump high head
	Applications with bore hole water
٧	2-way modulating valve
12	System side - pumps
0	Without hydronic kit
N	Pump high head
Р	Pump low head
13	Field for future development
0	Field for future development
14	Soft-start
0	Without soft-start
S	With soft-start
15	Power supply
0	400V~3N 50Hz

PERFORMANCE SPECIFICATIONS

WRL - E

Size		180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	46,0	60,1	69,6	80,1	90,6	121,3	140,2	158,7
Input power	kW	12,4	16,0	18,5	19,8	23,1	29,6	34,1	38,5
Cooling total input current	A	23,0	29,0	32,0	36,0	42,0	56,0	65,0	74,0
EER	W/W	3,71	3,76	3,76	4,05	3,92	4,10	4,11	4,12
Water flow rate system side	l/h	7903	10326	11958	13762	15566	20841	24088	27266
Pressure drop system side	kPa	23	39	39	56	25	42	47	57

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

WRL - °

Size		180	200	300	400	500	550	600	650
Cooling performance 12 °C/7 °C(1)	,								
Cooling capacity	kW	49,7	64,3	74,4	85,9	99,8	129,5	150,1	169,0
Input power	kW	10,8	14,4	16,8	18,3	20,4	27,0	31,0	35,7
Cooling total input current	A	20,0	25,0	29,0	62,0	36,0	51,0	59,0	68,0
EER	W/W	4,59	4,47	4,42	4,69	4,90	4,80	4,84	4,73
Water flow rate source side	l/h	10336	13418	15531	17725	20550	26664	30860	34836
Pressure drop source side	kPa	27	46	62	81	32	52	57	72
Water flow rate system side	l/h	8549	11082	12824	14822	17186	22296	25844	29025
Pressure drop system side	kPa	27	43	46	60	30	49	53	67
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	55,8	72,6	84,1	95,6	110,7	143,6	166,1	187,7
Input power	kW	13,2	17,6	20,5	22,4	24,8	32,9	37,9	43,9
Heating total input current	A	24,0	30,0	34,0	38,0	44,0	61,0	71,0	82,0
COP	W/W	4,24	4,13	4,10	4,27	4,46	4,36	4,38	4,27
Water flow rate source side	l/h	12542	16257	18813	21745	25213	32709	37914	42683
Pressure drop source side	kPa	58	93	99	129	65	105	114	144
Water flow rate system side	l/h	9685	12580	14561	16557	19196	24909	28816	32553
Pressure drop system side	kPa	24	40	55	71	28	45	50	63

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WRL - K

Size		180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	49,7	66,3	76,7	88,6	99,8	133,5	154,6	174,1
Input power	kW	10,8	14,4	16,9	18,3	20,4	26,7	30,8	35,6
Cooling total input current	A	20,0	25,0	29,0	32,0	36,0	51,0	59,0	68,0
EER	W/W	4,59	4,61	4,55	4,85	4,50	5,00	5,02	4,90
Water flow rate source side	l/h	10336	13753	15919	18173	20550	27338	31642	35716
Pressure drop source side	kPa	27	48	65	85	32	55	60	76
Water flow rate system side	l/h	8549	11414	13209	15267	17186	22965	26619	29967
Pressure drop system side	kPa	27	34	42	48	30	24	33	41
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	55,8	74,3	86,1	97,9	110,7	147,1	170,1	192,1
Input power	kW	13,2	17,5	20,5	22,2	24,8	32,3	37,3	43,1
Heating total input current	A	24,0	30,0	34,0	38,0	44,0	61,0	71,0	82,0
COP	W/W	4,24	4,24	4,20	4,40	4,46	4,56	4,56	4,46
Water flow rate source side	l/h	12542	16745	19337	22397	25213	33690	39052	43963
Pressure drop source side	kPa	58	73	90	103	65	52	71	88
Water flow rate system side	l/h	9685	12876	14904	16953	19196	25504	29507	33331
Pressure drop system side	kPa	24	42	57	74	28	48	52	66

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL °

Size		180	200	300	400	500	550	600	650
SEER - 12/7 (EN14825: 2018) (1)	,								
SEER	W/W	4,65	4,55	4,54	4,74	5,31	5,04	5,12	4,97
Seasonal efficiency	%	182,8%	178,9%	178,5%	186,4%	209,3%	198,7%	201,7%	195,8%
UE 813/2013 performance in average ambient co	nditions (average) - 55 °	C - Pdesignh ≤ 40	0 kW (2)						
Pdesignh	kW	68	91	98	119	137	185	212	236
ηsh	%	173.0%	170.0%	170.0%	175.0%	189.0%	186.0%	189.0%	184.0%
SCOP	W/W	4,53	4,45	4,45	4,58	4,93	4,85	4,93	4,80
Efficiency energy class		A+++	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient co	nditions (average) - 35 °	C - Pdesignh ≤ 40	0 kW (3)						
Pdesignh	kW	79	-	-	-	-	-	-	-
ηsh	%	222.0%	-	-	-	-	-	-	-
SCOP	W/W	5,75	-	-	-	-	-	-	-
Efficiency energy class		A+++	-	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL K

Size		180	200	300	400	500	550	600	650
SEER - 12/7 (EN14825: 2018) (1)								'	
SEER	W/W	4,65	4,71	4,67	4,90	5,31	5,31	5,35	5,19
Seasonal efficiency	%	182,8%	185,3%	183,6%	192,9%	209,3%	209,2%	210,9%	204,6%
UE 813/2013 performance in average ambient of	onditions (average) - 55 °C	C - Pdesignh ≤ 40	0 kW (2)						
Pdesignh	kW	68	91	98	119	137	185	212	236
ηsh	%	173.0%	170.0%	170.0%	175.0%	189.0%	186.0%	189.0%	184.0%
SCOP	W/W	4,53	4,45	4,45	4,58	4,93	4,85	4,93	4,80
Efficiency energy class		A+++	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient of	onditions (average) - 35 °C	C - Pdesignh ≤ 40	0 kW (3)						
Pdesignh	kW	79	-	-	-	-	-	-	-
ηsh	%	222.0%	-	-	-	-	-	-	-
SCOP	W/W	5,75	-	-	-	-	-	-	-
Efficiency energy class		A+++	-	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			180	200	300	400	500	550	600	650
Electric data										
Maximum current (FLA)	°,E,K	A	32,6	41,8	45,2	52,1	59,0	99,0	112,0	125,0
Peak current (LRA)	°,E,K	A	119,0	123,0	125,0	167,0	174,0	265,0	310,0	323,0

WRL-180-650-HP-W_Y_UN50_08 716 www.aermec.com

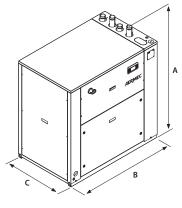
GENERAL TECHNICAL DATA

Size			180	200	300	400	500	550	600	650			
Compressor													
Туре	°,E,K	type				Sc	roll						
Compressor regulation	°,E,K	Туре				On-	-Off						
Number	°,E,K	no.	2	2	2	2	2	2	2	2			
Circuits	°,E,K	no.	1	1	1	1	1	1	1	1			
Refrigerant	°,E,K	type				R4	10A						
Refrigerant charge (1)	°,K	kg	6,0	7,0	6,8	7,2	9,0	14,5	16,8	16,5			
	E	kg	Holding charge										
Source side heat exchanger													
Tuno	°,K	type		Brazed plate									
Туре	E	type											
Number	°,K	no.	1	1	1	1	1	1	1	1			
	E	no.	-	-	-	-	-	-	-	-			
System side heat exchanger													
Туре	°,E,K	type				Braze	d plate						
Number	°,E,K	no.	1	1	1	1	1	1	1	1			
Source side hydraulic connections													
Compositions (in Joseph	°,K	Туре				Groove	d joints						
Connections (in/out)	E	Туре											
Simulia (ma)	°,K	Ø	2"	2"	2"	2"	2"1/2	2"1/2	2"1/2	2"1/2			
Sizes (in/out)	E	Ø											
System side hydraulic connections													
Connections (in/out)	°,E,K	Туре				Groove	d joints						
Sizes (in/out)	°,E,K	Ø	2"	2"	2"	2"	2"1/2	2"1/2	2"1/2	2"1/2			
Sound data calculated in cooling mode													
Sound power level	°,E,K	dB(A)	61,1	61,8	62,9	71,1	67,6	79,1	79,1	79,1			
Sound pressure level (10 m)	°,E,K	dB(A)	29,6	30,3	31,4	39,6	36,0	47,5	47,5	47,5			

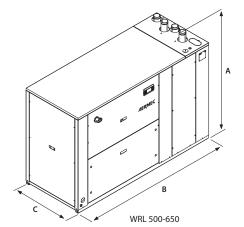
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS







Size			180	200	300	400	500	550	600	650
Dimensions and weights										
A	°,E,K	mm	1380	1380	1380	1380	1380	1380	1380	1380
В	°,E,K	mm	1320	1320	1320	1320	2060	2060	2060	2060
C	°,E,K	mm	845	845	845	845	845	845	845	845
Ftt-l-t	°,K	kg	375	375	381	388	518	594	670	715
Empty weight	E	ka	-	-	-	-	-	-	-	-

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WRK



Cooling capacity 38,9 ÷ 165,9 kW Heating capacity 48,5 ÷ 207,7 kW



- Optimised for heating in centralised systems.
- Production of hot water at high temperature up to 68°C.
- Independent from the gas network.
- DHW production.





DESCRIPTION

Water source heat pump with reverse cycle valve. The unit can produce chilled and hot water but it is optimized for high temperature hot water production, making it a perfect solution for DHW applications. It can also work with low source temperatures which make it possible to work with geothermal applications.

VERSIONS

° Standard

L Standard silenced

FEATURES

Extended operating range

Particular attention has been given to winter operation, ensuring the production of hot water up to 68°C.

Plug and play

All units are equipped with scroll compressors with steam injection and brazed plate heat exchangers. The base and panels are made of steel treated with polyester paints RAL 9003.

The heat pump can be supplied with all the components required for its installation in new systems and in retrofit applications. It can be combined with low temperature emission systems such as in floor radiant heating or fan coils, but also with conventional radiators.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO₅

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

 The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

AVX: Spring anti-vibration supports.

VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
AFD 40FD1	٥						•	•	•	•	•
AER485P1	L	•	•	•	•	•	•	•	•	•	•
AERBACP	٥						•	•	•	•	•
AEKBACP	L	•	•	•	•	•	•	•	•	•	•
AERNET	٥						•	•	•	•	•
AEKNEI	L		•	•	•	•		•	•	•	
PGD1	٥						•	•	•	•	•
PGD 1	L		•	•	•	•		•		•	
SGD -	٥						•	•			
	L	•	•	•	•	•		•			

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	0200	0280	0300	0330	0350
0	0	°,J,K,Q,R,U,V,W,Z	-	-	-	-	-
0	М	°,J,K,U,W	-	-	-	-	-
0	N	°,Q,R,V,Z	-	-	-	-	-
0	0	°,J,K,U,W	-	-	-	-	-
0	Р	°,Q,R,V,Z	-	-	-	-	-
L	0	°,J,K,Q,R,U,V,W,Z	-	-	-	-	-
L	М	°,J,K,U,W	-	-	-	-	-
L	N	°,Q,R,V,Z	-	-	-	-	-
L	0	°,J,K,U,W	-	-	-	-	-
L	P	°,Q,R,V,Z	-	-	-	-	-

Version	System side - pumps	Integrated hydronic kit, source side	0500	0550	0600	0650	0700
0	0	0	AVX345	AVX342	AVX342	AVX342	AVX342
٥	°,M	J,K,U,W	AVX343	AVX343	AVX343	AVX343	AVX343
0	N	0	AVX343	AVX343	AVX343	AVX343	AVX343
0	0	J,K,U,W	AVX343	AVX343	AVX343	AVX343	AVX343
0	P	0	AVX343	AVX343	AVX343	AVX343	AVX343
0	0	Q,R,V,Z	AVX313	AVX343	AVX343	AVX343	AVX343
0	M,0	0	AVX313	AVX343	AVX343	AVX343	AVX343
0	N,P	Q,R,V,Z	AVX343	AVX343	AVX343	AVX344	AVX344
L	٥	0	AVX345	AVX342	AVX342	AVX342	AVX342
L	°,M	J,K,U,W	AVX343	AVX343	AVX343	AVX343	AVX343
L	N	0	AVX343	AVX343	AVX343	AVX343	AVX343
L	0	J,K,U,W	AVX343	AVX343	AVX343	AVX343	AVX343
L	Р	0	AVX343	AVX343	AVX343	AVX343	AVX343
L	0	Q,R,V,Z	AVX313	AVX343	AVX343	AVX343	AVX343
L	M,0	0	AVX313	AVX343	AVX343	AVX343	AVX343
L	N,P	Q,R,V,Z	AVX343	AVX343	AVX343	AVX344	AVX344

- not available

Version	System side - pumps	Integrated hydronic kit, source side	0200	0280	0300	0330	0350
0	0	°,J,K,Q,R,U,V,W,Z	-	-	-	-	-
0	M	°,J,K,U,W	-	-	-	-	=
0	N	°,Q,R,V,Z	-	-	-	-	-
0	0	°,J,K,U,W	-	-	-	-	-
٥	Р	°,Q,R,V,Z	-	-	-	-	-
L	0	0	VT9	VT9	VT9	VT9	VT9
L	0	J,K,Q,R,U,V,W,Z	VT15	VT15	VT15	VT15	VT15
L	М	°,J,K,U,W	VT15	VT15	VT15	VT15	VT15
L	N	°,Q,R,V,Z	VT15	VT15	VT15	VT15	VT15
L	0	°,J,K,U,W	VT15	VT15	VT15	VT15	VT15
L	Р	°,Q,R,V,Z	VT15	VT15	VT15	VT15	VT15

Version	System side - pumps	Integrated hydronic kit, source side	0500	0550	0600	0650	0700
0	0	°,J,K,Q,R,U,V,W,Z	-	-	-	-	-
0	M	°,J,K,U,W	-	-	-	-	-
0	N	°,Q,R,V,Z	-	-	-	-	-
0	0	°,J,K,U,W	-	-	-	-	-
0	Р	°,Q,R,V,Z	-	-	-	-	-
L	0	°,J,K,Q,R,U,V,W,Z	-	-	-	-	-
L	M	°,J,K,U,W	-	-	-	-	-
L	N	°,Q,R,V,Z	-	-	-	-	-
L	0	°,J,K,U,W	-	-	-	-	-
L	Р	°,Q,R,V,Z	-	-	-	-	-

not available

Electronic device for peak current reduction.

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
0	-	-	-	-	-	DREWRK0500 (1)	DREWRK0550 (1)	DREWRK0600 (1)	DREWRK0650 (1)	DREWRK0700 (1)
L	DREWRK0200 (1)	DREWRK0280 (1)	DREWRK0300 (1)	DREWRK0330 (1)	DREWRK0350 (1)	DREWRK0500 (1)	DREWRK0550 (1)	DREWRK0600 (1)	DREWRK0650 (1)	DREWRK0700 (1)

(1) Only for supplies of $400V 3N \sim 50$ Hz and $400V 3 \sim 50$ Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.

A grey background indicates the accessory must be assembled in the factory

Power factor correction.

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
٥	-	-	-	-	-	RIFWRK0500	RIFWRK0550	RIFWRK0600	RIFWRK0650	RIFWRK0700
L	RIFWRK0200	RIFWRK0280	RIFWRK0300	RIFWRK0330	RIFWRK0350	RIFWRK0500	RIFWRK0550	RIFWRK0600	RIFWRK0650	RIFWRK0700

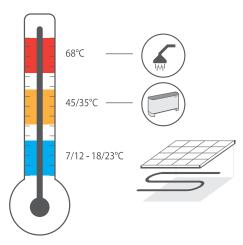
A grey background indicates the accessory must be assembled in the factory

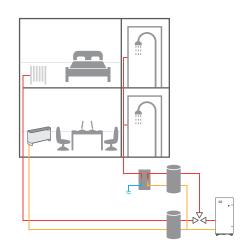
Double safety valve.

 Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
0	-	-	-	-	-	T6WRK2	T6WRK2	T6WRK2	T6WRK2	T6WRK2
L	T6WRK1	T6WRK1	T6WRK1	T6WRK1	T6WRK1	T6WRK2	T6WRK2	T6WRK2	T6WRK2	T6WRK2

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

APPLICATION EXAMPLES





WRK units are used in building renovations, where centralised boilers need replacing, while maintaining the existing distribution system and terminals (e.g. radiators) at the same time, to ensure the production of domestic hot water. This situation is typical when operating in contexts such as public buildings, but also in the case of centralised residential systems such as condominiums, where costs must be limited without changing the distribution system, while also offering a renewable energy source, represented precisely by heat pumps. Being able to upgrade a building without involving the distribution system also eliminates the inconveniences associated with the renovation of the premises, ensuring the continuity of the property's use, saving time and money.

CONFIGURATOR

Field	Description
1,2,3	WRK
4,5,6,7	Size 0200, 0280, 0300, 0330, 0350, 0500, 0550, 0600, 0650, 0700
8	Operating field
0	Standard mechanic thermostatic valve
9	Model
Н	Heat pump
10	Version
0	Standard
L	Standard silenced (1)
11	Evaporator
0	Standard
12	Heat recovery
0	Without heat recovery
D	With desuperheater
13	Power supply
0	400V ~ 3 50Hz with magnet circuit breakers
14	System side - pumps

Field	Description
0	Without hydronic kit
М	Single pump low head
N	Pump low head + stand-by pump
0	Single pump high head
P	Pump high head + stand-by pump
15	Integrated hydronic kit, source side (2)
0	Without hydronic kit
J	Single low-head inverter pump
K	Single high-head inverter pump
Q	Single high-head inverter pump + stand-by pump
R	Single low-head inverter pump + stand-by pump
U	Single pump low head
V	Pump low head + stand-by pump
W	Single pump high head
Z	Pump high head + stand-by pump
16	Field for future development
0	Field for future development

- (1) The size $\,$ 0200-0280-0300-0330-0350 only available in low noise version (L)
- (2) Heat pumps R and Q are availables only for sizes 0500÷0700

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PERFORMANCE SPECIFICATIONS 12 °C/7 °C - 40 °C/45 °C

WRK - H°

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C/7 °C (1)											
Cooling capacity	kW	-	-	-	-	-	96,2	110,9	130,0	145,8	166,1
Input power	kW	-	-	-	-	-	21,5	24,0	28,6	33,3	37,4
Cooling total input current	A	-	-	-	-	-	48,0	50,0	62,0	86,0	89,0
EER	W/W	-	-	-	-	-	4,47	4,63	4,55	4,38	4,44
Water flow rate source side	I/h	-	-	-	-	-	20140	23075	27128	30634	34797
Pressure drop source side	kPa	-	-	-	-	-	25	25	25	24	25
Water flow rate system side	l/h	-	-	-	-	-	16552	19082	22366	25077	28566
Pressure drop system side	kPa	-	-	-	-	-	17	17	17	16	17
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	-	-	-	-	-	120,8	137,7	163,1	187,1	207,9
Input power	kW	-	-	-	-	-	26,4	29,7	35,4	41,2	45,4
Heating total input current	А	-	-	-	-	-	52,0	56,0	69,0	92,0	95,0
COP	W/W	-	-	-	-	-	4,58	4,64	4,61	4,55	4,58
Water flow rate source side	l/h	-	-	-	-	-	27658	31618	37369	42704	47563
Pressure drop source side	kPa	-	-	-	-	-	49	49	50	47	50
Water flow rate system side	l/h	-	-	-	-	-	20958	23884	28290	32459	36068
Pressure drop system side	kPa	-	-	-	-	-	28	27	28	27	28

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WRK - HL

THE											
Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C/7 °C (1)											
Cooling capacity	kW	38,9	54,4	65,0	74,1	83,5	96,2	110,9	130,0	145,8	166,1
Input power	kW	8,6	12,0	14,3	16,8	18,8	21,5	24,0	28,6	33,3	37,4
Cooling total input current	А	20,0	25,0	31,0	43,0	45,0	48,0	50,0	62,0	86,0	89,0
EER	W/W	4,54	4,54	4,54	4,41	4,43	4,47	4,63	4,55	4,38	4,44
Water flow rate source side	l/h	8131	11358	13570	15551	17498	20140	23075	27128	30634	34797
Pressure drop source side	kPa	19	23	24	25	26	25	25	25	24	25
Water flow rate system side	l/h	6699	9362	11186	12754	14363	16552	19082	22366	25077	28566
Pressure drop system side	kPa	13	16	16	17	17	17	17	17	16	17
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	48,4	68,6	81,6	93,4	104,0	120,8	137,7	163,1	187,1	207,9
Input power	kW	10,6	14,8	17,8	20,8	22,9	26,4	29,7	35,4	41,2	45,4
Heating total input current	A	21,0	28,0	35,0	46,0	48,0	52,0	45,0	69,0	92,0	95,0
COP	W/W	4,57	4,62	4,58	4,48	4,54	4,58	4,64	4,61	4,55	4,58
Water flow rate source side	I/h	11062	15751	18684	21290	23771	27658	31618	37369	42704	47563
Pressure drop source side	kPa	37	45	47	49	50	49	49	50	47	50
Water flow rate system side	l/h	8397	11904	14149	16207	18041	20958	23884	28290	32459	36068
Pressure drop system side	kPa	21	26	27	28	29	28	27	28	27	28

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

WRK - H°

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	-	-	-	-	-	126,3	144,8	169,8	189,7	217,3
Input power	kW	-	-	-	-	-	21,7	23,3	29,3	33,4	39,0
Cooling total input current	A	-	-	-	-	-	47,0	47,0	62,0	84,0	91,0
EER	W/W	-	-	-	-	-	5,82	6,20	5,80	5,69	5,58
Water flow rate source side	l/h	-	-	-	-	-	25317	28767	34057	38166	43828
Pressure drop source side	kPa	-	-	-	-	-	39	39	40	37	40
Water flow rate system side	l/h	-	-	-	-	-	21826	25015	29337	32770	37528
Pressure drop system side	kPa	-	-	-	-	-	29	29	29	28	29
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	-	-	-	-	-	116,4	132,7	155,6	178,3	198,1
Input power	kW	-	-	-	-	-	20,7	23,0	27,5	32,1	35,4
Heating total input current	A	-	-	-	-	-	42,0	44,0	54,0	73,0	75,0
COP	W/W	-	-	-	-	-	5,62	5,77	5,66	5,56	5,60
Water flow rate source side	l/h	-	-	-	-	-	16656	19095	22309	25455	28334
Pressure drop source side	kPa	-	-	-	-	-	18	18	18	17	18
Water flow rate system side	l/h	-	-	-	-	-	20118	22943	26905	30825	34248
Pressure drop system side	kPa	-	-	-	-	-	25	25	25	24	25

⁽¹⁾ Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

WRK - HL

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	50,9	71,0	84,9	96,4	109,2	126,3	144,8	169,8	189,7	217,3
Input power	kW	8,8	11,7	14,7	16,9	19,8	21,7	23,3	29,3	33,4	39,0
Cooling total input current	A	20,0	24,0	31,0	42,0	46,0	47,0	47,0	62,0	84,0	91,0
EER	W/W	5,81	6,10	5,78	5,69	5,53	5,82	6,20	5,80	5,69	5,58
Water flow rate source side	l/h	10217	14150	17036	19386	22038	25317	28767	34057	38166	43828
Pressure drop source side	kPa	30	36	37	39	41	39	39	40	37	40
Water flow rate system side	l/h	8796	12274	14672	16662	18865	21826	25015	29337	32770	37528
Pressure drop system side	kPa	22	27	28	29	30	29	29	29	28	29
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	46,4	66,1	77,8	89,0	100,1	116,4	132,7	155,6	178,3	198,1
Input power	kW	8,3	11,5	13,8	16,2	18,2	20,7	23,0	27,5	32,1	35,4
Heating total input current	A	17,0	22,0	28,0	36,0	39,0	42,0	44,0	54,0	73,0	75,0
COP	W/W	5,60	5,76	5,66	5,51	5,49	5,62	5,77	5,66	5,56	5,60
Water flow rate source side	I/h	6629	9514	11157	12694	14269	16656	19095	22309	25455	28334
Pressure drop source side	kPa	13	17	17	17	18	18	18	18	17	18
Water flow rate system side	l/h	8016	11435	13458	15390	17310	20118	22943	26905	30825	34248
Pressure drop system side	kPa	19	24	24	25	26	25	25	25	24	25

⁽¹⁾ Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
SEER - 12/7 (EN14825: 2018) (1)												
CEED	0	W/W	-	-	-	-	-	5,33	5,46	5,28	5,38	5,28
SEER	L	W/W	4,75	5,14	5,04	5,04	4,97	5,33	5,46	5,28	5,38	5,28
C	0	%	-	-	-	-	-	210,2%	215,4%	208,2%	212,2%	208,2%
Seasonal efficiency	L	%	187,0%	202,6%	198,6%	198,6%	195,8%	210,2%	215,4%	208,2%	212,2%	208,2
UE 811/2013 performance in averag	je ambient conditio	ons (average)	- 55 °C - Pdesig	nh ≤ 70 kW (2)							
Feff singer an arrange along	0	_	-	-	-	-	-	-	-	-	-	-
Efficiency energy class	L		A+++	-	-	-	-	-	-	-	-	-
D.L. damek	0	kW	-	-	-	-	-	157	179	212	244	271
Pdesignh	L	kW	63	89	106	122	135	157	179	212	244	271
t	0	%	-	-	-	-	-	191.0%	195.0%	194.0%	193.0%	192.0%
ηsh	L	%	181.0%	187.0%	185.0%	181.0%	182.0%	191.0%	195.0%	194.0%	193.0%	192.0%
ccon	0	W/W	-	-	-	-	-	4,98	5,08	5,05	5,03	5,00
SCOP	L	W/W	4.73	4,88	4,83	4.73	4.75	4,98	5.08	5.05	5.03	5.00

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Efficiencies for average temperature applications (55 °C)

723

ELECTRIC DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Electric data												
Marrian and (FLA)	0	А	-	-	-	-	-	75,0	84,0	104,0	130,0	132,0
Maximum current (FLA)	L	А	32,0	42,0	52,0	65,0	66,0	75,0	84,0	104,0	130,0	132,0
Deale word (LDA)	0	А	-	-	-	-	-	216,0	181,0	218,0	271,5	273,0
Peak current (LRA)	L	A	144,0	139,0	166,0	206,5	207,0	216,0	181,0	218,0	271,5	273,0

GENERAL TECHNICAL DATA

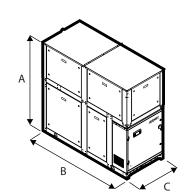
Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Compressor												
Tuno	0	type	-	-	-	-	-	Scroll	Scroll	Scroll	Scroll	Scroll
Туре	L	type					Sc	roll				
Number	0	no.	-	-	-	-	-	3	4	4	4	4
Nulliber	L	no.	2	2	2	2	2	3	4	4	4	4
Circuite	0	no.	-	-	-	-	-	2	2	2	2	2
Circuits	L	no.	2	2	2	2	2	2	2	2	2	2
Dofrigorant		type	-	-	-	-	-	R410A	R410A	R410A	R410A	R410A
Refrigerant	L	type					R4	10A				
Defrigerant charge (1)	0	kg	-	-	-	-	-	13,0	16,0	18,0	22,0	24,0
Refrigerant charge (1)	L	kg	6,0	8,0	9,0	10,0	11,0	13,0	16,0	18,0	22,0	24,0
Source side heat exchanger												
Туре	°,L	type					Braze	d plate				
Number	0	no.	-	-	-	-	-	1	1	1	1	1
Nulliber	L	no.	1	1	1	1	1	1	1	1	1	1
System side heat exchanger												
Туре	°,L	type					Braze	d plate				
Number		no.	-	-	-	-	-	1	1	1	1	1
Number	L	no.	1	1	1	1	1	1	1	1	1	1
Source side hydraulic connections												
Connections (in/out)	°,L	Туре					Groove	ed joints				
Sizes (in/out)	0	Ø	-	-	-	-	-	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
Sizes (III/Out)	L	Ø					2	1/2"				
System side hydraulic connections												
Connections (in/out)	°,L	Type					Groove	ed joints				
Cizac (in (aut)	0	Ø	-	-	-	-	-	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
Sizes (in/out)	L	Ø					2	1/2"				
Sound data calculated in cooling mod	e (2)											
Cound namer lavel	0	dB(A)	-	-	-	-	-	81,6	82,2	81,6	82,7	83,4
Sound power level	L	dB(A)	71,6	73,9	72,4	74,0	75,6	76,3	77,0	75,9	77,5	78,0
Sound pressure level (10 m)	0	dB(A)	-	-	-	-	-	49,9	50,5	49,9	51,0	51,7

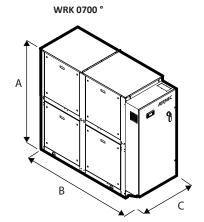
⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

WRK 0350 °







Size			0200	0280	0300	0330	0350
Dimensions and weights without hydr	onic kit						
Α.	0	mm	-	-	-	-	-
A	L	mm	1675	1675	1675	1675	1675
D	0	mm	-	-	-	-	-
В	L	mm	1265	1265	1265	1265	1265
	0	mm	-	-	-	-	-
C	L	mm	800	800	800	800	800
Dimensions and weights with pump/s							
Α.	0	mm	-	-	-	-	-
A	L	mm	1675	1675	1675	1675	1675
D	0	mm	-	-	-	-	-
В	L	mm	1890	1890	1890	1890	1890
	0	mm	-	-	-	-	-
	L	mm	800	800	800	800	800
Size			0500	0550	0600	0650	0700
Dimensions and weights without hydr	onic kit						
	0	mm	1840	1840	1840	1840	1840
A	L	mm	1885	1885	1885	1885	1885
В	°,L	mm	2155	2155	2155	2155	2155
С	°,L	mm	800	800	800	800	800
Dimensions and weights with pump/s							
	0	mm	1840	1840	1840	1840	1840
A	L	mm	1885	1885	1885	1885	1885
В	°,L	mm	3090	3090	3090	3090	3090
C	°,L	mm	800	800	800	800	800

	Version	System side - pumps	Integrated hydronic kit, source side		0200	0280	0300	0330	0350
	٥	°/M/N/0/P	°/J/K/Q/R/U/V/W/Z	kg	-	-	-	-	-
	L	٥	0	kg	495	550	565	570	580
	L	٥	J/K/U/W	kg	665	720	735	740	750
	L	٥	Q/R/V/Z	kg	690	745	760	765	775
	L	N/P	0	kg	690	745	760	765	775
Emnty waight	L	M/0	0	kg	665	720	730	740	750
Empty weight	L	M/0	J/K/U/W	kg	695	755	765	775	785
	L	М	Q/R/V/Z	kg	-	-	-	-	-
	L	N	J/K/U/W	kg	-	-	-	-	-
	L	0	Q/R/V/Z	kg	-	-	-	-	-
	L	Р	J/K/U/W	kg	-	-	-	-	-
	L	N/P	Q/R/V/Z	kg	750	805	820	825	835

⁻ not available

	Version	System side - pumps	Integrated hydronic kit, source side		0500	0550	0600	0650	0700
	0	0	0	kg	755	840	865	890	920
	0	٥	J/K/U/W	kg	935	1020	1045	1085	1115
	0	0	Q/R/V/Z	kg	1005	1090	1115	1170	1200
	0	M/0	0	kg	900	985	1010	1045	1075
	0	M/0	J/K/U/W	kg	990	1075	1100	1150	1180
	0	M	Q/R/V/Z	kg	-	-	-	-	-
	٥	N	J/K/U/W	kg	-	-	-	-	-
	0	0	Q/R/V/Z	kg	-	-	-	-	-
	0	Р	J/K/U/W	kg	-	-	-	-	-
	0	N/P	0	kg	970	1055	1080	1125	1155
	0	N/P	Q/R/V/Z	kg	1130	1215	1240	1315	1340
mpty weight	L	٥	0	kg	930	1015	1040	1065	1095
	L	٥	J/K/U/W	kg	1155	1240	1265	1305	1335
	L	0	Q/R/V/Z	kg	1225	1310	1335	1390	1420
	L	M/0	0	kg	1120	1205	1230	1265	1295
	L	M/0	J/K/U/W	kg	1210	1295	1320	1370	1400
	L	М	Q/R/V/Z	kg	-	-	-	-	-
	L	N	J/K/U/W	kg	-	-	-	-	-
	L	0	Q/R/V/Z	kg	-	-	-	-	-
	L	Р	J/K/U/W	kg	-	-	-	-	-
	L	N/P	0	kg	1190	1275	1300	1345	1375
	L	N/P	Q/R/V/Z	kg	1350	1435	1460	1535	1560

⁻ not available















WWB 0300-0900

Water-water heat pumps only

Heating capacity 56,7 ÷ 265,9 kW



- Optimised to produce high temperature hot water
- Can be used with any air or water cooled heat pump
- Max. processed water temperature: 80 °C
- Max inlet temperature on source side: 45 °C





DESCRIPTION

WWB is a range of irreversible water-water heat pumps that produce high temperature water with a low or medium temperature source. Internal unit suitable for use in centralised residential systems, in systems that serve hotels and other forms of accommodation, and for applications in the tertiary and industrial sectors.

FEATURES

Maximum energy efficiency

Aermec, which has focused for years on energy efficiency, designed the WWB units with the aim of guaranteeing high efficiency both with full and partial loads.

Operating field

With its wide operating range, it can be integrated with numerous applications and is a valid alternative to boilers and all conventional systems used to produce high temperature hot water since it also uses existing systems.

Production of hot water up to 80 °C (Max inlet temperature on source side 45 °C).

Constructional characteristics of unit

- Optimised plate heat exchangers with low pressure drops.
- 2 cooling circuits, 1 compressor per circuit.
- Scroll compressors for high condensing temperatures.
- Compact size for easier installation.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

CONTROL

Control unit accessible externally with touch-screen user interface, multilingual display of all operating parameters.

Optimised control logic for use with low and medium temperature heat pumps.

Complies with safety (EC) and electromagnetic compatibility directives. Removable slide-out electrical panel with opening side (LH/RH side) configurator option

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0300	0330	0350	0550	0600	0700	0800	0900
AER485P1	L	•	•	•	•	•	•	•	•
AERBACP	L	•	•	•	•	•	•	•	•
AERNET	L		•	•	•	•	•	•	
MULTICHILLER_EVO	L	•	•	•	•	•	•	•	•
PGD1	L	•						•	•

MULTICHILLER_EVO: Contact the factory for compatibility of the accessory with the type of implant envisaged.

Antivibration

Ver	0300	0330	0350	0550	0600	0700	0800	0900
L	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15

Power factor correction

									_
Ver	0300	0330	0350	0550	0600	0700	0800	0900	
L	RIFWWB0300	RIFWWB0330	RIFWWB0350	RIFWWB0550	RIFWWB0600	RIFWWB0700	RIFWWB0800	RIFWWB0900	Ī

A grey background indicates the accessory must be assembled in the factory

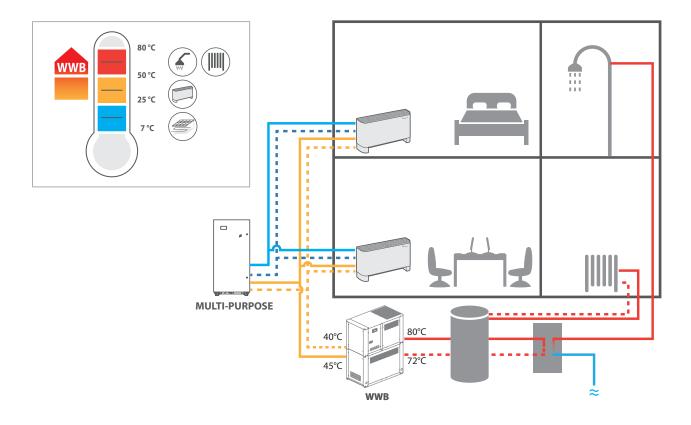
CONFIGURATOR

Field	Description
1,2,3	WWB
4,5,6,7	Size 0300, 0330, 0350, 0550, 0600, 0700, 0800, 0900
8	Operating field (1)
Х	Standard
9	Model
Н	Heat pump
10	Version

Field	Description
L	Silenced
11	Power supply
0	400V ~ 3 50Hz
S	400V ~ 3 50Hz with Soft-Start
12	Electrical panel version
0	Standard opening (LH)
R	Reverse opening (RH)

⁽¹⁾ Evaporator water up to $+5^{\circ}$ C. Electronic thermostatic valve as standard.

Example of four-pipe system



PERFORMANCE SPECIFICATIONS

Size			0300	0330	0350	0550	0600	0700	0800	0900
Heating performances (Water user	side 70 °C / 78 °C; Wa	iter source side 4	5 °C / 40 °C) (1)							
Heating capacity	L	kW	70,3	77,7	93,2	114,6	143,7	181,7	220,5	265,9
Input power	L	kW	16,7	18,0	21,6	27,7	34,7	44,3	55,4	66,4
Heating total input current	L	A	29,0	30,0	36,0	46,0	61,0	71,0	89,0	104,0
COP	L	W/W	4,22	4,31	4,33	4,14	4,14	4,11	3,98	4,00
Water flow rate system side	L	l/h	7721	8537	10243	12592	15787	19973	24229	29221
Pressure drop system side	L	kPa	18	22	31	21	33	24	35	24
Water flow rate source side	L	l/h	9339	10400	12491	15141	18986	23950	28791	34785
Pressure drop source side	L	kPa	12	15	10	15	8	12	16	23
Heating performances (Water user	side 70 °C / 78 °C; Wa	iter source side 3	5 °C / 30 °C) (2)							
Heating capacity	L	kW	56,7	62,7	75,2	92,4	115,9	146,5	177,8	214,4
Input power	L	kW	16,3	17,6	21,0	27,0	33,9	43,2	54,0	64,7
Heating total input current	L	A	28,0	29,0	35,0	45,0	59,0	70,0	87,0	102,0
COP	L	W/W	3,48	3,56	3,58	3,42	3,42	3,39	3,29	3,31
Water flow rate system side	L	l/h	6228	6886	8262	10157	12734	16110	19543	23570
Pressure drop system side	L	kPa	12	14	20	14	22	15	23	16
Water flow rate source side	L	l/h	7008	7820	9396	11340	14221	17924	21486	25974
Pressure drop source side	L	kPa	7	9	6	8	4	7	9	13
Heating performances (Water user	side 47 °C / 55 °C; Wa	iter source side 1	0°C/7°C)(3)							
Heating capacity	L	kW	35,6	39,4	47,3	58,1	72,9	92,2	111,8	134,8
Input power	L	kW	9,8	10,6	12,7	16,3	20,4	26,1	32,6	39,1
Input current	L	A	16,9	17,8	21,4	27,4	35,9	42,1	52,7	61,8
COP	L	W/W	3,62	3,71	3,73	3,56	3,57	3,53	3,43	3,45
Water flow rate system side	L	I/h	3881	4291	5148	6329	7935	10039	12178	14688
Pressure drop system side	L	kPa	5	6	8	8	8	6	9	6
Water flow rate source side	L	I/h	7405	8259	9923	11988	15034	18952	22733	27478
Pressure drop source side	L	kPa	8	10	6	9	5	7	10	15

ENERGY DATA

Size			0300	0330	0350	0550	0600	0700	0800	0900
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)										
Pdesignh	L	kW	46	51	61	76	95	120	145	175
ηsh	L	%	176,00	180,00	180,00	175,00	174,00	174,00	169,00	175,00
SCOP	L	W/W	4,60	4,70	4,70	4,58	4,55	4,55	4,43	4,48
Efficiency energy class	L		A++	A++	A++	-	-	-	-	-

⁽¹⁾ Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

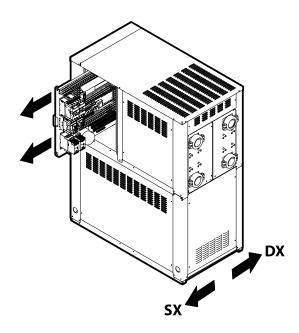
Size			0300	0330	0350	0550	0600	0700	0800	0900
Power supply: °										
Electric data										
Maximum current (FLA)	L	A	30,9	32,2	38,2	50,2	64,6	79,8	94,6	113,7
Peak current (LRA)	L	A	110,4	127,1	137,1	165,1	206,3	264,9	319,3	366,9
Size			0300	0330	0350	0550	0600	0700	0800	0900
Power supply: S										
Electric data										
Maximum current (FLA)	L	A	30,9	32,2	38,2	50,2	64,6	79,8	94,6	113,7
Peak current (LRA)	L	A	53,4	60,5	66,3	81,1	101,9	129,9	156,1	180,9

⁽¹⁾ Date 14511:2022; Water user side 70 °C/78 °C; Water source side 45 °C/40 °C (2) Date 14511:2022; Water user side 70 °C/78 °C; Water source side 35 °C/30 °C (3) Date 14511:2022; Water user side 47 °C/55 °C; Water source side 10 °C/7 °C

GENERAL TECHNICAL DATA

Size			0300	0330	0350	0550	0600	0700	0800	0900
Compressor										
Туре	L	type				Sc	roll			
Compressor regulation	L	Туре				On-	-Off			
Number	L	no.	2	2	2	2	2	2	2	2
Circuits	L	no.	2	2	2	2	2	2	2	2
Refrigerant	L	type				R1.	34a			
Refrigerant load circuit 1 (1)	L	kg	2,8	2,8	3,6	4,4	6,5	7,7	8,0	9,9
Refrigerant load circuit 2 (1)	L	kg	2,8	2,8	3,5	4,3	6,3	7,5	7,8	9,7
Source side heat exchanger										
Туре	L	type				Braze	d plate			
Number	L	no.	1	1	1	1	1	1	1	1
Connections (in/out)	L	Туре				Groove	d joints			
Sizes (in/out)	L	Ø	2"	2"	2"	2"	2"	2"1/2	2" 1/2	2"1/2
System side heat exchanger										
Туре	L	type				Braze	d plate			
Number	L	no.	1	1	1	1	1	1	1	1
Connections (in/out)	L	Туре				Groove	d joints			
Sizes (in/out)	L	Ø	2"	2"	2"	2"	2"	2"1/2	2" 1/2	2"1/2
Sound data calculated in cooling mo	de (2)									
Sound power level	L	dB(A)	71,8	71,8	71,8	75,1	78,3	79,3	80,4	82,4
Sound pressure level (10 m)	L	dB(A)	40,2	40,2	40,2	43,5	46,7	47,7	48,9	50,9

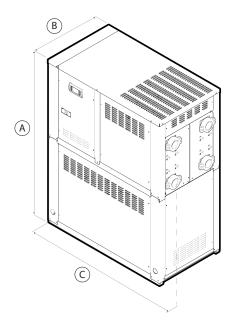
Removal of electrical panel



Electrical panel version	Configurator option
Sx - LH side	° (Standard)
Dx - RH side	R

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).



Size			0300	0330	0350	0550	0600	0700	0800	0900
Dimensions and weights										
A	L	mm	1650	1650	1650	1650	1650	1650	1650	1650
В	L	mm	710	710	710	710	710	710	710	710
(L	mm	1300	1300	1300	1300	1300	1300	1300	1300
Weights										
Weight empty + packaging	L	kg	420	425	440	455	500	715	760	820
Weight functioning	L	kg	415	420	440	460	510	730	775	840



















WWM

Water cooled heat pump reversible water side

Cooling capacity 96 kW Heating capacity 110 kW



- Compact module
- · Single or dual refrigerant circuit
- · Reliable and modular
- Max 2 levels of stackable units
- Up to 36 connectable units (see the modularity options)
- Easy installation and maintenance



DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.

These are indoor units with hermetic scroll compressors, system side heat exchanger and plate source.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FFATURES

The precise choice of components, the special configuration, and the possibility to connect several independent modules and manage them as if they were a single unit are all aspects that guarantee maximum output at full load, whilst ensuring continuous adaptation to the real service needs.

Bus Bar, to facilitate the electrical connections.

Modularity

Thanks to its modular construction, the installation can be adapted to suit specific system development needs whilst guaranteeing improved safety and reliability.

As a result, the cooling capacity can be easily increased over time, at a limited cost.

WWM consists of independent 96 kW modules that can be linked together to reach a capacity of 3456 kW.

With WWM, you can combine up to 36 units designed to minimise the overall dimensions.

The modules are easy to install and link together from the hydronic point of view, thanks to the connections with grooved joints.

Refrigerant circuit

The refrigerant circuit can easily be disconnected from the unit, maintaining all the functions of the hydronic circuit to ensure correct system operation.

Hydraulic components

WWM version PN10 has the **switch**; WWM version PN21 mounts the **transmitter**.

Fitted as standard, with **butterfly shut-off valves** on both hydronic lines for disconnecting the circuit when maintenance needs to be carried out.

In the event of a variable flow rate, the **motorised hydronic valves** can intercept one module or more in order to reduce the flow rate when there is a low thermal load level.

Very quiet

The WWM units stand out for their quiet operation.

Accurate unit sound-proofing, using good-quality sound absorbent material, means all the units work at low noise levels.

Units in parallel

The MULTICHILLER_EVO (accessory) allows up to 9 units to be managed in parallel mode.

This accessory allow to maximise the total efficency to the system under to work load, external air temperature conditions and water produced. Each unit has its own electrical panel, guaranteeing continuity even if one module malfunctions or goes into lockout.

CONTRO

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The adjustment system includes the complete management of alarms and the alarm log.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible

to save a log file with all the connected unit datas in the personal terminal for post analysis.

KWWM: Kit containing 4 caps with a diameter of 6" for the water man-

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

FACTORY FITTED ACCESSORIES

CRATE_WWM°: Special crate for transport **CRATE_WWMH-A:** Special crate for transport

KITIDRO_WWM: Water filter with connection pipe (diameter 6") with drain tap and additional bulb well (diameter 1/2") available to the install-

KREC_WWM: Cable entries box in order to facilitate the electrical installation.

ACCESSORIES COMPATIBILITY

Accessory	WWM05001°	WWM05001H	WWM05002°	WWM05002H
AER485P1	•	•	•	•
AERBACP	•	•	•	•
AERNET	•	•	•	•
KWWM	•	•	•	•
MULTICHILLER_EVO	•	•		•

For the control with MULTICHILLER EVO, nr.1 accessory AER485P1 is mandatory for every WWM of the system.

Special crate for transport

Accessory	WWM05001°	WWM05001H	WWM05002°	WWM05002H
CRATE_WWM°	•		•	
CRATE_WWMH-A		•		

■ CRATE_WWM°: 100 kg, CRATE_WWMH-A: 130 kg

Cable entries box

Accessory	WWM05001°	WWM05001H	WWM05002°	WWM05002H
KREC_WWM	•	•	•	

Water filter

Accessory	WWM05001°	WWM05001H	WWM05002°	WWM05002H
KITIDRO WWM		•	•	•

CONFIGURATOR

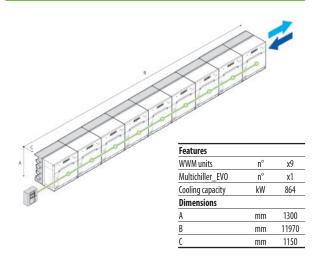
CONT	GORATOR
Field	Description
1,2,3	WWM
4,5,6,7	Size 0500
8	Operating field (1)
0	Standard mechanic thermostatic valve
9	Model
1	Single refrigerant circuit
2	Double refrigerant circuit
10	Hydraulic pressure rating
1	145 psi (PN10)
3	300 psi (PN21)
11	Hydraulic headers kit
0	No headers provided
Н	6" Headers kit - PN21 standard carbon steel pipes declared in accordance with EN 10255

Field	Description
12	Power connection
0	Without bus bars
В	With bus bars
13	Power supply
0	400V ~ 3 50Hz with magnet circuit breakers
14	Electrical panel SCCR
0	10 kA control panel
15	Peak current reduction
0	Without power factor device
R	With power factor device (2)
16	Field for future development
0	-

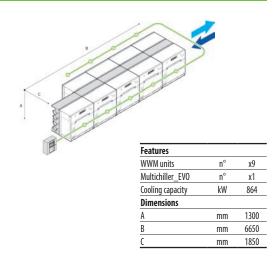
⁽¹⁾ Water produced up to +4 °C (2) Factory installed

MODULARITY OPTIONS

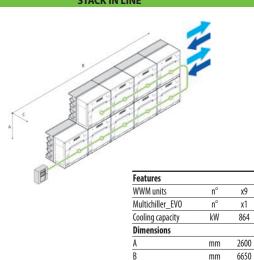
CONFIGURATION 1: IN LINE



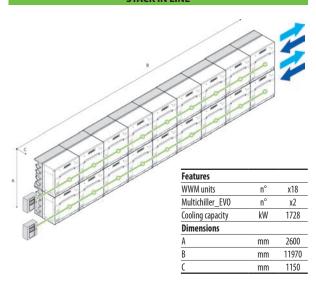
CONFIGURATION 2: BACK TO BACK



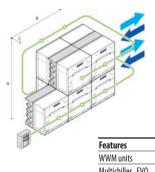
CONFIGURATION 3.1: STACK IN LINE



CONFIGURATION 3.2: STACK IN LINE



CONFIGURATION4.1: STACK IN LINE BACK TO BACK



 Features

 WWM units
 n°
 x9

 Multichiller_EV0
 n°
 x1

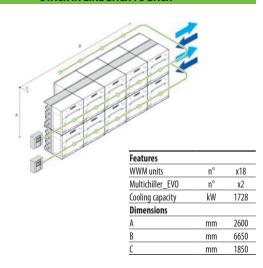
 Cooling capacity
 kW
 864

 Dimensions
 mm
 2600

 B
 mm
 3990

 C
 mm
 1850

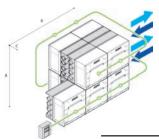
CONFIGURATION 4.2: STACK IN LINE BACK TO BACK



1150

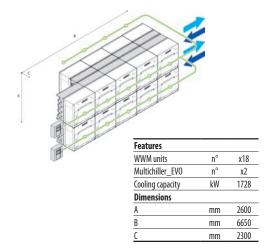
mm

CONFIGURATION 5.1: STACK IN LINE BACK TO BACK DOUBLE

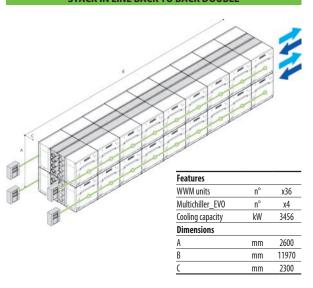


Features		
WWM units	n°	х9
Multichiller_EV0	n°	х1
Cooling capacity	kW	864
Dimensions		
A	mm	2600
В	mm	3990
C	mm	2300

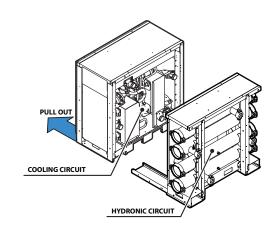
CONFIGURATION 5.2: STACK IN LINE BACK TO BACK DOUBLE



CONFIGURATION 5.3: STACK IN LINE BACK TO BACK DOUBLE



EASY MAINTENANCE



PERFORMANCE SPECIFICATIONS

WWM - Single refrigerant circuit "1" - Double refrigerant circuit "2"

		WWM05001°	WWM05002°
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	96,0	95,2
Input power	kW	20,3	20,0
Cooling total input current	A	40,0	40,0
EER	W/W	4,74	4,76
Water flow rate source side	l/h	20046	19895
Pressure drop source side	kPa	34	23
Water flow rate system side	l/h	16528	16384
Pressure drop system side	kPa	24	17
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	109,2	110,0
Input power	kW	24,8	24,1
Heating total input current	A	48,0	48,0
COP	W/W	4,41	4,57
Water flow rate system side	l/h	18943	19092
Pressure drop system side	kPa	30	21
Water flow rate source side	l/h	24430	24809
Pressure drop source side	kPa	52	39

⁽¹⁾ Date 14511:2022; Water user side 12 °C /7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C /7 °C

ENERGY DATA

		WWM05001°	WWM05002°								
SEER - 12/7 (EN14825:2018) with standard fans (1)											
SEER	W/W	6,12	5,37								
Seasonal efficiency	%	241,8%	211,8%								
UE 813/2013 performance in average a	ambient conditions (average) - 55 °C - Pd	esignh ≤ 400 kW (2)									
Pdesignh	kW	138	140								
SCOP	W/W	4,83	4,68								
ηsh	%	185.0%	179.0%								

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Efficiencies for average temperature applications (55 °C)

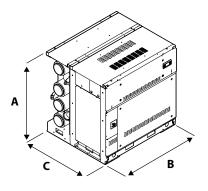
ELECTRIC DATA

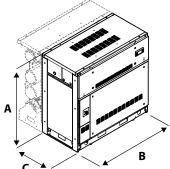
		WWM05001°	WWM05002°
Electric data			
Maximum current (FLA)	A	62,0	62,0
Peak current (LRA)	A	148,9	148,9

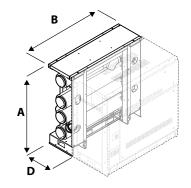
GENERAL TECHNICAL DATA

		WWM05001°	WWM05002°
Compressor			
Туре	type	Scroll	Scroll
Number	no.	2	2
Circuits	no.	1	2
Refrigerant	type	R410A	R410A
Source side heat exchanger			
Туре	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Туре	Grooved joints	Grooved joints
Sizes (in/out)	Ø	6"	6"
System side heat exchanger			
Туре	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Туре	Grooved joints	Grooved joints
Sizes (in/out)	Ø	6"	6"
Sound data calculated in cooling mode (1)			
Sound power level	dB(A)	81,0	81,0
Sound pressure level (10 m)	dB(A)	49,5	49,5

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).







		WWM05001°	WWM05001H	WWM05002°	WWM05002H
Dimensions and weights					
A	mm	1300	1300	1300	1300
В	mm	1330	1330	1330	1330
C	mm	775	1150	775	1150
D	mm	-	452	-	452
Weights					
Weight empty + packaging	kg	700	930	700	930
Weight functioning	kg	711	1042	711	1042
Empty weight + packaging (with bus bars)	kg	736	966	736	966
Weight functioning (with bus bars)	kg	747	1078	747	1078
Hydraulic headers kit					
Weight empty + packaging	kg	-	230	-	230
Weight functioning	kg	-	330	-	330

Aermec S.p.A. Via Roma, 996 - 37040 Bevilacqua (VR) - Italia Tel. 0442633111 - Telefax 044293577 www.aermec.com















NXW 0503 - 1654

Water cooled heat pump reversible water side

Cooling capacity 111 ÷ 511 kW Heating capacity 127 ÷ 582 kW



- Options of 1 or 2 pumps on both source and user side.
- Reversible on hydraulic side in heat pump





DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications. Indoor units with hermetic scroll compressors and plate heat exchangers. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18 °C, and the possibility to produce also negative temperature water down to -10°C for the evaporator and hot water for the condenser up to 55 °C. (for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Option integrated hydronic kit, source and user side

The built-in hydronic module includes the main water circuit components; it is available in varius configurations with one or two pumps with high or low head both on the system side and the source side, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO

Microprocessor adjustment, with display LCD which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and the ad adjustment includes complete management of the alarms and their log.

You also have the possibility to:

- Check two units in parallel Master-Slave
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **MULTICHILLER_EVO:** Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring

constant flow rate to the evaporators. **PGD1:** Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
AER485P1	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L			•	•		•		•			•		•
MULTICHILLER_EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,L		•	•	•	•	•	•	•		•	•	•	•

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	0503	0553	0604	0654	0704	0754	0804
0	0	0	AVX319	AVX319	AVX301	AVX301	AVX301	AVX303	AVX310
0	٥	J,K,U,W	AVX320	AVX320	AVX320	AVX320	AVX320	AVX312	AVX651
0	M,0	0	AVX320	AVX320	AVX320	AVX320	AVX320	AVX312	AVX651
0	0	V,Z	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
0	М	J,K,U,V,W,Z	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
0	N	°,J,K,U,W	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
0	0	J,K,U,V,W,Z	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
0	Р	°,J,K,U,W	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
0	N,P	V,Z	AVX309	AVX309	AVX310	AVX310	AVX310	AVX312	AVX651
L	0	0	AVX309	AVX309	AVX310	AVX303	AVX303	AVX310	AVX314
L	0	J,K,U,W	AVX321	AVX321	AVX311	AVX311	AVX651	AVX651	AVX652
L	M,0	o o	AVX321	AVX321	AVX311	AVX311	AVX651	AVX651	AVX652
L	0	V,Z	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	М	J,K,U,W	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	N	Ó	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	0	J,K,U,W	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	Р	o o	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	М	V,Z	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	N	J,K,U,W	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	0	V,Z	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	Р	J,K,U,W	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	N,P	V,Z	AVX312	AVX312	AVX312	AVX310	AVX651	AVX651	AVX652

Version	System side - pumps	Integrated hydronic kit, source side	0904	1004	1254	1404	1504	1654
0	0	0	AVX314	AVX316	AVX316	AVX315	AVX330	AVX330
0	0	J,K,U,W	AVX655	AVX653	AVX654	AVX654	AVX334	AVX337
0	M,N,O	0	AVX655	AVX653	AVX654	AVX654	AVX334	AVX337
0	0	V,Z	AVX655	AVX653	AVX654	AVX654	AVX337	-
0	M,0	J,K,U,W	AVX665	AVX653	AVX654	AVX654	AVX337	AVX335
0	M,0	V,Z	AVX655	AVX653	AVX654	AVX654	AVX340	-
0	N	J,K,U,W	AVX665	AVX653	AVX654	AVX654	AVX340	AVX335
0	N	V,Z	AVX665	AVX653	AVX654	AVX654	AVX335	-
0	Р	0	AVX655	AVX653	AVX654	AVX654	-	-
0	Р	J,K,U,V,W,Z	AVX665	AVX653	AVX654	AVX654	-	-
L	0	0	AVX314	AVX315	AVX315	AVX317	AVX331	AVX331
L	0	J,K,U,W	AVX653	AVX654	AVX659	AVX659	AVX335	AVX338
L	M,0	0	AVX653	AVX654	AVX659	AVX659	AVX335	AVX338
L	0	V,Z	AVX653	AVX654	AVX659	AVX659	AVX338	-
L	M	J,K,U,W	AVX653	AVX654	AVX659	AVX659	AVX338	AVX339
L	N	0	AVX653	AVX654	AVX659	AVX659	AVX338	AVX339
L	0	J,K,U,W	AVX653	AVX654	AVX659	AVX659	AVX338	AVX339
L	M,N,O	V,Z	AVX653	AVX654	AVX659	AVX659	AVX339	-
L	N	J,K,U,W	AVX653	AVX654	AVX659	AVX659	AVX339	AVX341
L	Р	°,J,K,U,V,W,Z	AVX653	AVX654	AVX659	AVX659	-	-

not available

Power factor correction

Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
°,L	RIF98	RIF98	RIF95	RIF95	RIF95	RIF95	RIF95	RIF96	RIF97	RIF97	RIF97	RIF97	RIF97

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Device for peak current reduction

•													
Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
°,L	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)	DRE801 (1)	DRE901 (1)	DRE1001 (1)	DRE1251 (1)	DRE1401 (1)	DRE1500 (1)	DRE1650 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

ATOR
Description
NXW
Size 0503, 0553, 0604, 0654, 0704, 0754, 0804, 0904, 1004, 1254, 1404, 1504, 1654
Operating field
Standard mechanic thermostatic valve (1)
Electronic thermostatic expansion valve
Low temperature mechanic thermostatic valve (2)
Model
Heat pump reversible on the water side
Heat pump reversible on the water side with low pressure drops (3)
Version
Standard
Standard silenced
Evaporator
Standard
Evaporating unit (4)
Heat recovery
Without heat recovery
With desuperheater (5)
With total recovery (6)
Power supply
400V ~ 3 50Hz with magnet circuit breakers
500V ~ 3 50Hz with magnet circuit breakers (7)
System side - pumps
Without hydronic kit
Single pump low head
Pump low head + stand-by pump
Single pump high head
Pump high head + stand-by pump (8)
Integrated hydronic kit, source side
Without hydronic kit
Single low-head inverter pump (8)
Single high-head inverter pump (8)
Single pump low head
Pump low head + stand-by pump (9)
Pump high head
Pump high head + stand-by pump (9)

- (1) Water produced from 4 °C ÷ 18 °C
 (2) Water produced from 4 °C ÷ -10 °C; for the avalability with the heat recovery we advise you to contact us
 (3) Only for sizes from 0704 ÷ 0904
 (4) Shipped with holding charge only.
 (5) The desuperheater must be isolated in heating mode. In cooling mode, a water temperature no lower
- than 35°C must always be guaranteed on the heat exchanger inlet.
 (6) Options not available for condensing unit, and for models with pump/s
 (7) Only for 0804 ÷ 1004 sizes
 (8) Not available for size 1504 ÷ 1654
 (9) Not available for size 1654

PERFORMANCE SPECIFICATIONS

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Cooling performance 12 °C/7 °C(1)															
Cooling capacity	°,L	kW	111,8	120,7	148,7	166,7	188,7	222,7	257,6	291,6	325,7	354,6	384,6	453,9	511,4
Input power	°,L	kW	23,0	24,8	30,6	34,4	38,9	45,6	53,0	60,3	66,5	72,6	78,7	92,3	104,0
Cooling total input current	°,L	A	48,0	51,0	58,0	63,0	86,0	94,0	102,0	120,0	138,0	140,0	143,0	160,0	178,0
EER	°,L	W/W	4,87	4,86	4,86	4,85	4,85	4,88	4,86	4,84	4,90	4,88	4,89	4,92	4,92
Water flow rate source side	°,L	I/h	23047	24886	30656	34332	38866	45790	52970	60075	67065	73041	79190	93374	105103
Pressure drop source side	°,L	kPa	25	29	29	37	37	45	60	38	29	34	36	36	47
Water flow rate system side	°,L	l/h	19243	20789	25600	28692	32472	38314	44327	50169	56011	60993	66147	78063	87938
Pressure drop system side	°,L	kPa	30	35	32	40	43	47	49	55	35	36	36	36	40
Heating performance 40 °C / 45 °C (2)															
Heating capacity	°,L	kW	127,6	137,8	170,0	190,3	215,4	253,7	293,5	332,9	371,5	404,7	438,7	517,1	582,0
Input power	°,L	kW	27,6	29,9	36,3	40,9	46,4	54,5	63,3	72,3	79,0	86,2	93,3	109,5	123,4
Heating total input current	°,L	A	57,0	60,0	68,0	73,0	100,0	109,0	119,0	140,0	161,0	163,0	166,0	186,0	207,0
COP	°,L	W/W	4,62	4,61	4,69	4,66	4,64	4,66	4,64	4,60	4,70	4,69	4,70	4,72	4,71
Water flow rate source side	°,L	l/h	29340	31697	39235	43975	49768	58721	67938	76891	85844	93480	101380	119642	134776
Pressure drop source side	°,L	kPa	70	81	75	94	101	110	115	129	82	85	85	85	94
Water flow rate system side	°,L	I/h	22142	23905	29490	33021	37384	44030	50933	57790	64513	70265	76175	89802	101065
Pressure drop system side	°,L	kPa	23	27	27	34	34	42	55	35	27	31	33	33	43

⁽¹⁾ Date 14511:2022; Water user side 12 °C/7 °C; Water source side 30 °C/35 °C (2) Date 14511:2022; Water user side 40 °C/45 °C; Water source side 10 °C/7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,L	W/W	5,50	5,85	5,79	5,77	5,84	5,81	5,52	6,30	6,42	6,37	6,38	6,49	6,48
Seasonal efficiency	°,L	%	217,0%	231,0%	228,6%	227,8%	230,6%	229,4%	217.8%	248,8%	253,8%	251,6%	252,0%	256,4%	256,2%
SEPR - (EN 14825: 2018) High temperatu	re (2)														
SEPR	0	W/W	-	-	-	-	-	-	-	7,90	7,90	7,80	7,80	8,00	8,00
SEPK	L	W/W	-	-	-	-	-	-	-	7,93	7,90	7,78	7,80	8,00	8,02
UE 813/2013 performance in average an	nbient conditi	ons (averag	e) - 55 °C - F	designh ≤	400 kW (3)										
Pdesignh	°,L	kW	164	177	218	244	277	326	377	-	-	-	-	-	-
SCOP	°,L	W/W	5,10	5,05	5,18	5,10	5,10	5,10	5,08	-	-	-	-	-	-
ηsh	°,L	%	196.0%	194.0%	199.0%	196.0%	196.0%	196.0%	195.0%	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

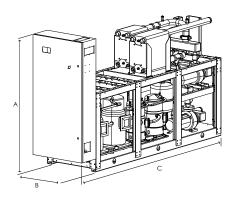
Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Electric data															
Maximum current (FLA)	°,L	Α	75,0	80,0	96,0	107,0	122,0	146,0	169,0	193,0	217,0	231,0	248,0	267,0	296,0
Peak current (LRA)	°,L	Α	240,0	245,0	227,0	238,0	289,0	319,0	341,0	398,0	422,0	490,0	504,0	601,0	630,0

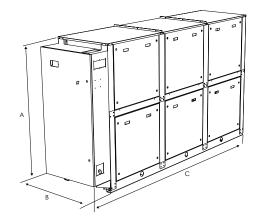
GENERAL TECHNICAL DATA

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Compressor															
Туре	°,L	type							Scroll						
Compressor regulation	°,L	Туре							0n-0ff						
Number	°,L	no.	3	3	4	4	4	4	4	4	4	4	4	4	4
Circuits	°,L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R410A						
Refrigerant charge (1)	°,L	kg	13,2	12,5	15,6	15,6	18,0	22,0	26,0	33,0	38,0	44,0	44,0	46,0	53,0
Source side heat exchanger															
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Туре						(rooved join	ts					
Size (in)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3″
Size (out)	°,L	Ø	2" 1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3″
System side heat exchanger															
Туре	°,L	type							Brazed plate	1					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Туре						(rooved join	ts					
Size (in)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3″
Size (out)	°,L	Ø	2"1/2	2"1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2"1/2	3"	3"	3"	3"	3″
Sound data calculated in cooling mode	e (2)														
Canadanament	0	dB(A)	78,0	79,0	79,0	80,0	82,0	86,0	88,0	88,0	88,0	90,0	90,0	93,0	95,0
Sound power level	L	dB(A)	72,0	73,0	73,0	74,0	76,0	80,0	82,0	82,0	82,0	84,0	84,0	86,0	87,0
C	0	dB(A)	46,4	47,4	47,4	48,4	50,4	54,3	56,3	56,3	56,3	58,3	58,3	61,3	63,3
Sound pressure level (10 m)		dB(A)	40,3	41.3	41.3	42.3	44,3	48.3	50.3	50.3	50,3	52.3	52.3	54,3	55,3

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).





Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Dimensions and weights															
Α.	0	mm	1835	1835	1835	1835	1835	1775	1775	1820	1820	1820	1820	1820	1820
A	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
В	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
	0	mm	1795	1795	1795	1795	1795	2420	2420	2420	2420	2420	2420	2420	2420
	L	mm	2090	2090	2090	2090	2090	2420	2420	2420	2420	2420	2420	2420	2420
Frankriishk	0	kg	578	582	682	690	727	882	989	1180	1417	1461	1539	1613	1721
Empty weight	L	kg	750	755	854	863	900	1054	1187	1378	1615	1659	1737	1811	1919

The weight of the unit does not include the hydronic kit and accessories.

















NXW 0503H - 1654H

Reversible water-cooled heat pump, gas side

Cooling capacity 106 ÷ 477 kW Heating capacity 125 ÷ 565 kW



- Installation versatility also for geothermal applications.
- Options of 1 or 2 pumps on both source and user side.
- Production of hot water up to 55 °C





DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications. These are indoor units with hermetic scroll compressors, system side heat exchanger and plate source.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C. (for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Option integrated hydronic kit, source and user side

Possibility of integrated hydronic kit containing the main hydraulic components and available with various configurations.

CONTROL PCO

Microprocessor adjustment, with display LCD which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and the ad adjustment includes complete management of the alarms and their log.

You also have the possibility to:

- Check two units in parallel Master-Slave
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0503	0553	0604	0654	0704	0754	0804
AER485P1	°,L	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	
AERNET	°,L	•	•	•	•	•	•	
MULTICHILLER_EVO	°,L	•	•	•	•	•	•	
PGD1	°,L	•	•	•	•	•	•	•
Model	Ver	0904	1004	1254	1	1404	1504	1654
AER485P1	°,L	•	•	•		•	•	•
AERBACP	°,L	•	•	•		•	•	•
AERNET	٥١		•	•		•	•	
TENITE								
MULTICHILLER_EVO	°,L	•	•	•		•		

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	0503	0553	0604	0654	0704	0754	0804
٥	0	0	AVX319	AVX319	AVX301	AVX301	AVX302	AVX310	AVX310
0	0	J,K,U,W	AVX320	AVX320	AVX320	AVX309	AVX309	AVX651	AVX651
0	M,0	0	AVX320	AVX320	AVX320	AVX309	AVX309	AVX651	AVX651
0	0	V,Z	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
0	М	J,K,U,W	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
0	N	0	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
0	0	J,K,U,W	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
0	Р	0	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
0	М	V,Z	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
0	N	J,K,U,W	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
0	0	V,Z	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
0	Р	J,K,U,W	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
0	N,P	V,Z	AVX309	AVX309	AVX312	AVX312	AVX312	AVX651	AVX651
L	0	0	AVX309	AVX309	AVX310	AVX303	AVX304	AVX314	AVX314
L	0	J,K,U,W	AVX311	AVX311	AVX311	AVX311	AVX651	AVX652	AVX665
L	M,0	0	AVX311	AVX311	AVX311	AVX311	AVX651	AVX652	AVX665
L	0	V,Z	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	М	J,K,U,W	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	N	0	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	0	J,K,U,W	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	Р	0	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	М	V,Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665
L	N	J,K,U,V,W,Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665
L	0	V,Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665
L	Р	J,K,U,V,W,Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665

Version	System side - pumps	Integrated hydronic kit, source side	0904	1004	1254	1404	1504	1654
٥	0	0	AVX314	AVX316	AVX315	AVX317	AVX330	AVX331
٥	0	J,K,U,W	AVX665	AVX654	AVX654	AVX654	AVX337	AVX336
٥	M,0	0	AVX665	AVX654	AVX654	AVX654	AVX337	AVX336
0	0	V,Z	AVX665	AVX654	AVX654	AVX654	AVX336	-
٥	М	J,K,U,W	AVX665	AVX654	AVX654	AVX654	AVX336	AVX335
0	N	0	AVX665	AVX654	AVX654	AVX654	AVX336	AVX335
٥	0	J,K,U,W	AVX665	AVX654	AVX654	AVX654	AVX336	AVX335
0	M,0	V,Z	AVX665	AVX654	AVX654	AVX654	AVX335	-
0	N	J,K,U,W	AVX665	AVX654	AVX654	AVX654	AVX335	AVX339
0	N	V,Z	AVX665	AVX654	AVX654	AVX654	-	-
0	Р	°,J,K,U,V,W,Z	AVX665	AVX654	AVX654	AVX654	-	-
L	0	0	AVX315	AVX317	AVX317	AVX318	AVX331	AVX333
L	0	J,K,U,W	AVX653	AVX659	AVX659	AVX659	AVX338	AVX338
L	0	V,Z	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	М	°,J,K,U,W	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	N	0	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	0	°,J,K,U,W	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	M,0	V,Z	AVX653	AVX659	AVX659	AVX659	AVX339	-
L	N	J,K,U,W	AVX653	AVX659	AVX659	AVX659	AVX339	AVX341
L	N	V,Z	AVX653	AVX659	AVX659	AVX659	AVX341	-
L	Р	°,J,K,U,V,W,Z	AVX653	AVX659	AVX659	AVX659		

⁻ not available

Power factor correction

Ver	0503	0553	0604	0654	0704	0754	0804
°,L	RIF98	RIF98	RIF95	RIF95	RIF95	RIF95	RIF95

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Ver	0904	1004	1254	1404	1504	1654
°,L	RIF96	RIF97	RIF97	RIF97	RIF97	RIF97

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0503	0553	0604	0654	0704	0754	0804
°,L	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)	DRE801 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Ver	0904	1004	1254	1404	1504	1654
°,L	DRE901 (1)	DRE1001 (1)	DRE1251 (1)	DRE1401 (1)	DRE1500 (1)	DRE1650 (1)

(1) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz, x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	NXW
4,5,6,7	Size 0503, 0553, 0604, 0654, 0704, 0754, 0804, 0904, 1004, 1254, 1404, 1504, 1654
8	Operating field (1)
۰	Standard mechanic thermostatic valve
Χ	Electronic thermostatic expansion valve
9	Model
Н	Heat pump
10	Version
•	Standard
L	Standard silenced
11	Evaporator
•	Standard
12	Heat recovery
•	Without heat recovery
D	With desuperheater (2)
13	Power supply
•	$400V\sim3$ 50Hz with magnet circuit breakers
5	$500V \sim 3$ 50Hz with magnet circuit breakers (3)
14	System side - pumps
•	Without hydronic kit
M	Single pump low head
N	Pump low head + stand-by pump
0	Single pump high head
P	Pump high head + stand-by pump (4)
15	Integrated hydronic kit, source side
	Without hydronic kit
J	Single low-head inverter pump
K	Single high-head inverter pump
U	Single pump low head
V	Pump low head + stand-by pump (5)
W	Pump high head
Z	Pump high head + stand-by pump (5)

⁽¹⁾ Water produced from 4 °C ÷ 18 °C
(2) The desuperheater must be isolated in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) Only for 8084 ÷ 1004 sizes
(4) The hydronic kit P is not available for sizes 1504 and 1654
(5) The hydronic kits V and Z are not available for size 1654

PERFORMANCE SPECIFICATIONS

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°,L	kW	105,9	113,8	140,8	159,8	180,7	211,6	242,7	277,7	313,6	341,7	369,7	423,6	477,0
Input power	°,L	kW	23,8	25,7	31,1	35,3	40,2	47,1	54,2	62,2	70,4	76,6	82,7	94,8	106,7
Cooling total input current	°,L	A	49,0	52,0	60,0	65,0	87,0	95,0	104,0	122,0	140,0	144,0	147,0	164,0	183,0
EER	°,L	W/W	4,45	4,43	4,52	4,52	4,50	4,49	4,47	4,47	4,45	4,46	4,47	4,47	4,47
Water flow rate source side	°,L	l/h	22173	23854	29402	33334	37744	44198	50635	58078	65694	71514	77333	88547	99702
Pressure drop source side	°,L	kPa	25	29	28	35	35	42	55	36	28	32	34	41	44
Water flow rate system side	°,L	I/h	18212	19586	24225	27490	31098	36424	41750	47764	53949	58759	63570	72837	82027
Pressure drop system side	°,L	kPa	17	20	19	24	24	29	38	24	19	22	24	29	30
Heating performance 40 °C / 45 °C (2)															
Heating capacity	°,L	kW	125,4	135,8	165,8	187,6	210,4	269,6	310,2	325,2	365,6	399,8	434,0	500,6	565,2
Input power	°,L	kW	27,9	30,2	36,8	41,8	46,9	55,6	64,6	72,6	80,8	88,6	96,4	111,2	124,9
Heating total input current	°,L	A	54,0	57,0	66,0	72,0	94,0	105,0	115,0	135,0	154,0	160,0	165,0	181,0	202,0
COP	°,L	W/W	4,49	4,49	4,51	4,49	4,48	4,85	4,80	4,48	4,52	4,51	4,50	4,50	4,52
Water flow rate source side	°,L	l/h	28545	30928	37776	42774	47928	62567	71944	74067	83306	91109	98905	114256	129207
Pressure drop source side	°,L	kPa	43	49	46	58	58	46	61	58	46	52	58	66	71
Water flow rate system side	°,L	I/h	21762	23561	28776	32552	36508	46797	53844	56470	63485	69420	75355	86926	98135
Pressure drop system side	°,L	kPa	24	28	26	33	32	31	40	33	26	30	32	41	43

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

		,													
Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,L	W/W	5,39	5,38	5,53	5,60	5,38	5,60	5,27	5,77	5,88	5,94	5,97	6,43	6,44
Seasonal efficiency	°,L	%	212,6%	212,2%	218,2%	221,0%	212,2%	221,0%	207.8%	227,8%	232,2%	234,5%	235,6%	254,2%	254,7%
SEPR - (EN 14825: 2018) High temperat	ture (2)														
SEPR	°,L	W/W	-	-	-	-	-	-	-	7,03	7,06	7,06	7,03	-	-
UE 813/2013 performance in average a	mbient condition	ons (averag	e) - 55 °C - P	designh ≤	400 kW (3)										
Pdesignh	°,L	kW	161	175	213	241	271	320	368	-	-	-	-	-	-
SCOP	°,L	W/W	4,95	4,93	4,95	4,93	4,93	4,90	4,80	-	-	-	-	-	-
ηsh	°,L	%	190.0%	189.0%	190.0%	189.0%	189.0%	188.0%	184.0%	-	-	-	-	-	-

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for average temperature applications (55 °C)

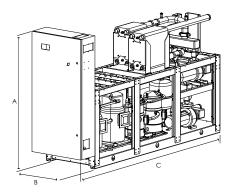
ELECTRIC DATA

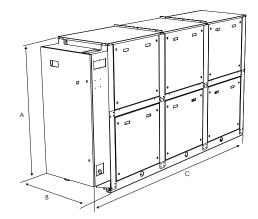
Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Electric data															
Maximum current (FLA)	°,L	Α	75,0	80,0	96,0	107,0	122,0	146,0	169,0	193,0	217,0	231,0	248,0	267,0	296,0
Peak current (LRA)	°,L	Α	240,0	245,0	227,0	238,0	289,0	319,0	341,0	398,0	422,0	490,0	504,0	601,0	630,0

GENERAL TECHNICAL DATA

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Compressor															
Туре	°,L	type							Scroll						
Compressor regulation	°,L	Туре							On-Off						
Number	°,L	no.	3	3	4	4	4	4	4	4	4	4	4	4	4
Circuits	°,L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R410A						
Refrigerant charge (1)	°,L	kg	13,0	13,0	17,0	17,0	20,0	22,0	26,0	36,0	54,0	54,0	58,0	60,0	62,0
Source side heat exchanger															
Туре	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Туре						(Grooved join	S					
Size (in)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3″	3"
Size (out)	°,L	Ø	2" 1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
System side heat exchanger															
Туре	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Туре						(Grooved joint	S					
Size (in)	°,L	Ø	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
Size (out)	°,L	Ø	2"1/2	2"1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3″	3"	3"	3"	3"	3"
Sound data calculated in cooling mode (2)															
Country and a second	0	dB(A)	78,0	79,0	79,0	80,0	82,0	86,0	88,0	88,0	88,0	90,0	90,0	93,0	95,0
Sound power level —	L	dB(A)	72,0	73,0	73,0	74,0	76,0	80,0	82,0	82,0	82,0	84,0	84,0	86,0	87,0
County management (10 mm)	0	dB(A)	46,4	47,4	47,4	48,4	50,4	54,3	56,3	56,3	56,3	58,3	58,3	61,3	63,3
Sound pressure level (10 m)	L	dB(A)	40,3	41,3	41,3	42,3	44,3	48,3	50,3	50,3	50,3	52,3	52,3	54,3	55,3

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).





Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Dimensions and weights															
A.	0	mm	1835	1835	1835	1835	1835	1775	1775	1820	1820	1820	1820	1820	1820
A	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
В	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
	0	mm	1795	1795	1795	1795	1795	2420	2420	2420	2420	2420	2420	2420	2420
C	L	mm	2090	2090	2090	2090	2090	2420	2420	2420	2420	2420	2420	2420	2420
Frankrissiahk	0	kg	628	633	734	743	791	948	1042	1275	1545	1577	1657	1687	1825
Empty weight	L	kg	801	805	907	915	963	1121	1240	1473	1743	1774	1855	1885	2023

The weight of the unit does not include the hydronic kit and accessories.



















NGW 0500-2600

Water cooled heat pump reversible water side

Cooling capacity 116,2 ÷ 788,3 kW



- Production of hot water up to 60 °C
- Options of 1 or 2 pumps on both source and user side.
- Reversible on hydraulic side in heat pump





DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications. Indoor units with hermetic scroll compressors and plate heat exchangers. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

L Standard silenced

FEATURES

Operating field

Full load functioning with production of chilled water from -2 to 20 °C, with the possibility of also producing water at negative temperatures down to -10 °C at the evaporator and hot water at the condenser up to 60 °C. (for more information, refer to the technical documentation).

Compressors

The compressors, optimised for low compression ratios in tandem and trio two-circuit configuration, ensure high efficiency especially at part loads, enabling them to exceed the minimum seasonal energy efficiency requirements for the design of low energy systems in both winter and summer.

Dual-circuit unit

The units are two-circuit to ensure continuity of operation in case one of the circuits fails.

Option integrated hydronic kit, source and user side

The hydronic kit includes the main hydraulic components and is available in different configurations with one or two pumps, both on the evaporator and condenser side, in order to have a cost-saving solution that also facilitates final installation.

Refrigerant HFC R32

Thanks to the R32 refrigerant (A2L slightly flammable), the environmental impact of the units is significantly reduced.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO₂ values.

The range NGW 0500-2600 is designed to be installed indoors.

The unit is fitted with:

- Leak detector and safety valves with exchange isolation valve as standard
- Electrical control board completely separate from compressor compartment
- Only the version with hood and improved ventilation is available The machine is suitable for indoor installation in the machinery room and complies with the requirements of EN 378-3.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

CONTROL

www.aermec.com

Microprocessor control, complete with a 6-button multifunction keypad for simple and intuitive navigation between the various screens, making it possible to edit the operating parameters and fully manage alarms and their history.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

CONFIGURATOR

CONFIGUR	ATOR
Field	Description
1,2,3	NGW
4,5,6,7	Size
	0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1200, 1400, 1500, 1600, 1800, 2000, 2200, 2450, 2600
8	Operating field
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	Model
0	Heat pump reversible on the water side
10	Evaporator
0	Standard
E	Evaporating unit
11	Heat recovery
0	Without heat recovery
D	With desuperheater
12	Power supply
0	400V ~ 3 50Hz with magnet circuit breakers
13,14	Hydronic kit integrated on chilled water utility side
00	Without hydronic kit
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump (3)
DB	Pump B + stand-by pump (3)
DC	Pump C + stand-by pump (3)
DD	Pump D + stand-by pump (4)
DE	Pump E + stand-by pump (4)
DF	Pump F + stand-by pump (4)
DG	Pump G + stand-by pump (4)
D/d	Kit with n° 1 pump
PA	Pump A (3)
PB	Pump B (3)
PC	Pump C (3)
PD PD	Pump D (4)
PE	Pump E (4)
PF	Pump F (4)
PG	Pump G (4)
15,16	Integrated hydronic kit, source side
00	Without hydronic kit
	Kit with n° 1 inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed (3)
IB	Pump B equipped with inverter device to work at fixed speed (3)
IC	Pump C equipped with inverter device to work at fixed speedr (3)
ID	Pump D equipped with inverter device to work at fixed speed (4)
IE	Pump E equipped with inverter device to work at fixed speed (4)
IF	Pump F equipped with inverter device to work at fixed speed (4)
IG	Pump G equipped with inverter device to work at fixed speed (4)
	Kit with n° 1 inverter pump $+$ stand-by pump to fixed speed
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (3)
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed (3)
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed (3)
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed (4)
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed (4)
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (4)
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (4)
	Kit with n° 1 pump
UA	Pump A (3)
UB	Pump B (3)
UC	Pump C (3)
UD	Pump D (4)
UE	Pump E (4)
UF	Pump F (4)
UG	Pump G (4)
1/4	Pump n° 1 pump + stand-by pump
VA	Pump A + stand-by pump (3)
VB	Pump B + stand-by pump (3)
VC	Pump C + stand-by pump (3)
VD	Pump D + stand-by pump (4)
VE	Pump E + stand-by pump (4)
VF	Pump F + stand-by pump (4)
VG	Pump G + stand-by pump (4)

(4) Only for 0800 - 2600 sizes

⁽¹⁾ Water produced from -2 °C \div 20 °C (2) Water produced from -10 °C \div 10 °C (3) Only for 0500 - 0750 sizes

PERFORMANCE SPECIFICATIONS

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Cooling performance 12 °C / 7 °C (1)																				
Cooling capacity	L	kW	116,2	126,2	141,9	157,6	174,2	208,1	242,2	272,5	310,0	333,2	384,9	429,3	487,3	531,0	613,7	702,5	745,5	788,3
Input power	L	kW	23,1	25,8	28,6	32,0	35,4	41,8	48,3	55,2	61,0	68,2	78,4	89,9	99,1	110,7	128,0	144,9	156,9	169,0
Cooling total input current	L	A	46,0	50,0	56,0	63,0	69,0	82,0	92,0	102,0	112,0	122,0	139,0	158,0	174,0	193,0	223,0	252,0	271,0	290,0
EER	L	W/W	5,02	4,90	4,97	4,93	4,92	4,98	5,01	4,94	5,08	4,89	4,91	4,78	4,91	4,79	4,80	4,85	4,75	4,66
Water flow rate source side	L	l/h	23697	25835	28975	32227	35626	42485	49434	55761	63163	68288	78835	88290	99749	109106	126085	144036	153303	162554
Pressure drop source side	L	kPa	26	30	33	33	35	35	23	27	23	28	30	38	36	42	45	49	56	63
Water flow rate system side	L	I/h	20022	21761	24467	27179	30042	35886	41724	46970	53417	57424	66349	74022	83995	91568	105834	121162	128604	136024
Pressure drop system side	L	kPa	18	21	23	23	25	25	15	19	16	20	21	27	25	30	32	35	39	43
(1) Date 14511:2022; Water user side 12 °C /	7°C; Water so	urce side 3	0 °C / 35	°C																
Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Heating performance 40 °C / 45 °C (1)																				
Heating capacity	L	kW	131,9	143,7	160,1	178,5	197,8	236,5	274,2	308,7	349,0	383,1	443,0	497,0	561,7	615,5	710,3	810,8	863,4	916,1
Input power	L	kW	29,9	33,2	36,8	41,2	45,6	53,8	61,6	70,1	77,3	86,1	99,0	113,5	125,4	140,0	161,9	183,6	198,6	213,7
COP	L	W/W	4,42	4,32	4,35	4,33	4,34	4,40	4,45	4,41	4,51	4,45	4,47	4,38	4,48	4,40	4,39	4,42	4,35	4,29
Water flow rate system side	L	l/h	22628	24662	27481	30644	33965	40622	47094	53044	59967	65843	76143	85445	96573	105824	122139	139439	148499	157564
Pressure drop system side	L	kPa	23	27	30	31	32	32	21	24	21	25	27	35	33	39	41	45	51	57
Water flow rate source side	L	I/h	29874	32405	36178	40310	44708	53647	62171	69911	79474	87019	100804	112663	128027	139798	161323	184619	196027	207433
Pressure drop source side	L	kPa	41	49	50	52	54	55	33	41	36	44	47	59	56	67	71	77	87	97

⁽¹⁾ Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Energy index

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	L	W/W	6,82	6,76	6,81	6,81	6,90	6,70	7,06	6,91	7,22	7,05	7,23	7,21	7,22	7,13	7,05	7,11	7,13	6,96
Seasonal efficiency	L	%	269,85	267,49	269,27	269,33	272,86	264,81	279,40	273,27	285,71	278,89	286,25	285,22	285,69	282,11	279,12	281,53	282,11	275,37
UE 813/2013 performance in average ambi	ent conditi	ons (aver	age) - 35	°C - Pde	esignh ≤	400 kW	(2)													
SCOP	L	W/W	6,33	6,40	6,45	6,43	6,25	6,25	6,63	6,46	6,34	6,58	6,42	6,22	6,44	6,38	6,23	6,23	6,38	6,01
ηsh	L	%	245	248	250	249	242	242	257	251	246	255	249	241	249	247	241	241	247	232

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Electric data

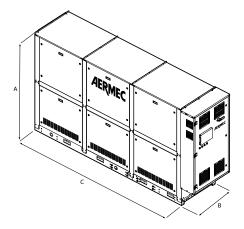
Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Electric data																				
Maximum current (FLA)	L	Α	73,0	81,0	89,0	99,0	108,0	127,0	145,0	163,0	181,0	198,0	228,0	258,0	288,0	318,0	367,0	416,0	446,0	476,0
Peak current (LRA)	L	А	239,0	204,0	210,0	265,0	274,0	293,0	359,0	377,0	395,0	412,0	538,0	568,0	598,0	628,0	677,0	726,0	756,0	786,0

GENERAL TECHNICAL DATA

General data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Compressor																				
Туре	L	type									Sci	roll								
Compressor regulation	L	Туре									On-	-Off								
Number	L	no.	3	4	4	4	4	4	4	4	4	4	4	4	4	4	5	6	6	6
Circuits	L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	L	type									R:	32								
Refrigerant load circuit 1 (1)	L	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Refrigerant load circuit 2 (1)	L	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Source side heat exchanger																				
Туре	L	type									Brazeo	d plate								
Number	L	no.	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3
Connections (in/out)	L	Туре									Groove	d joints								
Size (in)	L	Ø	2"1/2	2"1/2	2" 1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Size (out)	L	Ø	2" 1/2	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
System side heat exchanger																				
Туре	L	type									Brazeo	d plate								
Number	L	no.	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3
Connections (in/out)	L	Туре									Groove	d joints								
Size (in)	L	Ø	2"1/2	2"1/2	2" 1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Size (out)	L	Ø	2"1/2	2"1/2	2" 1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.



Dimensions and weights

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Dimensions and weights																				
A	L	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
В	L	mm	800	800	800	800	800	850	850	850	850	850	850	850	850	850	900	900	900	900
C	L	mm	2090	2090	2090	2090	2090	2500	2500	2500	2500	2500	2500	2500	2500	2500	3600	3600	3600	3600
Empty weight	L	kg	1020	1080	1095	1115	1140	1195	1320	1375	1475	1520	1615	1675	1810	1875	2275	2490	2550	2605

The weight of the unit does not include the hydronic kit and accessories.

For the version with hydronic kit please contact headquarters.

















NGW 0500H-2600H

Reversible water-cooled heat pump, gas side

Cooling capacity 106,9 ÷ 744,8 kW



- Production of hot water up to 60 °C
- Installation versatility also for geothermal applications.
- Options of 1 or 2 pumps on both source and user side.
- Reversible in heat pump on refrigerant circuit.





DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications. Indoor units with hermetic scroll compressors and plate heat exchangers. The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

L Standard silenced

FEATURES

Operating field

Full load functioning with production of chilled water from -2 to 20 °C, with the possibility of also producing water at negative temperatures down to -10 °C at the evaporator and hot water at the condenser up to 60 °C. (for more information, refer to the technical documentation).

Compressors

The compressors, optimised for low compression ratios in tandem and trio two-circuit configuration, ensure high efficiency especially at part loads, enabling them to exceed the minimum seasonal energy efficiency requirements for the design of low energy systems in both winter and summer.

Dual-circuit unit

The units are two-circuit to ensure continuity of operation in case one of the circuits fails.

Option integrated hydronic kit, source and user side

The hydronic kit includes the main hydraulic components and is available in different configurations with one or two pumps, both on the evaporator and condenser side, in order to have a cost-saving solution that also facilitates final installation.

Refrigerant HFC R32

Thanks to the R32 refrigerant (A2L slightly flammable), the environmental impact of the units is significantly reduced.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO₂ values.

The range NGW 0500H-2600H is designed to be installed indoors.

The unit is fitted with:

- Leak detector and safety valves with exchange isolation valve as standard
- Electrical control board completely separate from compressor compartment
- Only the version with hood and improved ventilation is available The machine is suitable for indoor installation in the machinery room and complies with the requirements of EN 378-3.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

CONTROL

Microprocessor control, complete with a 6-button multifunction keypad for simple and intuitive navigation between the various screens, making it possible to edit the operating parameters and fully manage alarms and their history.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

751

CONFIGURATOR

Field	Description
1,2,3	NGW
	Size
4,5,6,7	0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1200, 1400, 1500, 1600, 1800, 2000, 2200, 2450, 2600
8	Operating field
Х	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	Model (3)
<u>-</u>	Reversible heat pump, gas side
10	Evaporator
0	Standard
11	Heat recovery
•	Without heat recovery
D	With desuperheater
12	Power supply
	400V ~ 3 50Hz with magnet circuit breakers
13,14	Hydronic kit integrated on chilled water utility side
00	Without hydronic kit
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump (4)
DB	Pump B + stand-by pump (4)
DC	Pump C + stand-by pump (4)
DD	Pump D + stand-by pump (5)
DE	Pump E + stand-by pump (5)
DF	Pump F + stand-by pump (5)
DG	Pump G + stand-by pump (5)
	Kit with n°1 pump
PA	Pump A (4)
PB	Pump B (4)
PC	Pump C (4)
PD	Pump D (5)
PE	Pump E (5)
PF	Pump F (5)
PG	Pump G (5)
15,16	Integrated hydronic kit, source side
00	Without hydronic kit
	Kit with n° 1 inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed (4)
IB	Pump B equipped with inverter device to work at fixed speed (4)
IC IC	Pump C equipped with inverter device to work at fixed speedr (4)
ID ID	Pump D equipped with inverter device to work at fixed speed (5)
IE	
	Pump E equipped with inverter device to work at fixed speed (5)
IF	Pump F equipped with inverter device to work at fixed speed (5)
IG	Pump G equipped with inverter device to work at fixed speed (5)
	Kit with n° 1 inverter pump + stand-by pump to fixed speed
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4)
JB	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4)
JB JC	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4)
JB JC JD	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5)
JB JC JD JE	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5)
JB JC JD JE JF	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5)
JB JC JD JE	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5)
JB JC JD JE JF	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5)
JB JC JD JE JF	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5)
JB JC JD JE JF JG	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n°1 pump
JB JC JD JE JF JG	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4)
JB JC JD JE JF JG UA UB	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4)
JB JC JD JE JF JG UA UB UC UD	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n°1 pump Pump A (4) Pump B (4) Pump C (4) Pump D (5)
JB JC JD JE JF JG UA UB UC	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4) Pump C (4) Pump D (5) Pump E (5)
JB JC JD JE JF JG UA UB UC UD UE	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n°1 pump Pump A (4) Pump B (4) Pump C (4) Pump D (5) Pump E (5)
JB JC JD JE JF JG UA UB UC UD UE	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4) Pump C (4) Pump D (5) Pump E (5) Pump F (5) Pump F (5)
JB JC JD JE JF JG UA UB UC UD UE UF	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4) Pump B (4) Pump C (4) Pump D (5) Pump F (5) Pump F (5) Pump F (5) Pump G (5) Pump G (5) Pump M (5)
JB JC JD JE JF JG UA UB UC UD UE UF UG	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4) Pump B (4) Pump C (4) Pump D (5) Pump E (5) Pump F (5) Pump F (5) Pump G (5) Pump G (5) Pump A + stand-by pump (4)
JB JC JD JE JF JG UA UB UC UD UE UF UG VA VB	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4) Pump C (4) Pump D (5) Pump E (5) Pump F (5) Pump F (5) Pump F (5) Pump F (5) Pump A + stand-by pump Pump A + stand-by pump (4) Pump B + stand-by pump (4)
JB JC JD JE JF JG UA UB UC UD UE UF UG VA VB VC	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4) Pump C (4) Pump D (5) Pump E (5) Pump F (5) Pump G (5) Pump A + stand-by pump Pump A + stand-by pump (4) Pump B + stand-by pump (4) Pump C + stand-by pump (4)
JB JC JD JE JF JG UA UB UC UD UE UF UG VA VB VC VD	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4) Pump C (4) Pump D (5) Pump E (5) Pump F (5) Pump F (5) Pump A + stand-by pump Pump A + stand-by pump Pump A + stand-by pump (4) Pump B + stand-by pump (4) Pump B - stand-by pump (4) Pump C + stand-by pump (5)
JB JC JD JE JF JG UA UB UC UD UE UF UG VA VB VC VD VE	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4) Pump D (5) Pump E (5) Pump E (5) Pump F (5) Pump G (5) Pump M + stand-by pump (4) Pump A + stand-by pump (4) Pump D + stand-by pump (4) Pump D + stand-by pump (5) Pump C + stand-by pump (5) Pump D + stand-by pump (5)
JB JC JD JE JF JG UA UB UC UD UE UF UG VA VB VC VD VE VF	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump C+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n° 1 pump Pump A (4) Pump B (4) Pump B (4) Pump D (5) Pump F (5) Pump F (5) Pump F (5) Pump F (5) Pump B + stand-by pump (4) Pump B + stand-by pump (4) Pump C + stand-by pump (4) Pump C + stand-by pump (5) Pump E + stand-by pump (5) Pump E + stand-by pump (5) Pump F + stand-by pump (5)
JB JC JD JE JF JG UA UB UC UD UE UF UG VA VB VC VD VE	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4) Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5) Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5) Kit with n°1 pump Pump A (4) Pump B (4) Pump B (4) Pump C (4) Pump C (5) Pump F (5) Pump F (5) Pump A + stand-by pump Pump A + stand-by pump (4) Pump B + stand-by pump (4) Pump D + stand-by pump (5) Pump C + stand-by pump (5) Pump C + stand-by pump (5)

(5) Only for 0800 - 2600 sizes

⁽¹⁾ Water produced from -2 °C ÷ 20 °C (2) Water produced from -10 °C ÷ 10 °C (3) Not available for the condenserless "E" (4) Only for 0500 - 0750 sizes

PERFORMANCE SPECIFICATIONS

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Cooling performance 12 °C / 7 °C (1)																				
Cooling capacity	L	kW	106,9	116,4	130,9	145,4	160,8	191,8	223,9	252,6	285,1	312,3	361,0	404,6	457,5	500,8	577,9	660,3	702,6	744,8
Input power	L	kW	24,4	27,0	29,9	33,5	37,1	44,1	50,3	57,2	63,8	70,9	81,5	92,5	103,0	114,0	131,9	149,9	161,2	172,5
Cooling total input current	L	А	46,0	50,0	56,0	63,0	69,0	82,0	92,0	102,0	112,0	122,0	139,0	158,0	174,0	193,0	223,0	252,0	271,0	290,0
EER	L	W/W	4,38	4,31	4,38	4,35	4,34	4,35	4,45	4,42	4,47	4,41	4,43	4,37	4,44	4,39	4,38	4,40	4,36	4,32
Water flow rate source side	L	l/h	18426	20063	22562	25076	27732	33067	38572	43524	49125	53826	62214	69745	78844	86337	99627	113849	121168	128487
Pressure drop source side	L	kPa	16	19	20	21	22	22	13	17	14	17	19	23	22	26	28	30	34	39
Water flow rate system side	L	l/h	22326	24364	27308	30389	33611	40075	46643	52670	59358	65159	75247	84484	95277	104479	120601	137650	146680	155709
Pressure drop system side	L	kPa	24	28	30	31	32	32	19	24	21	26	27	35	32	39	41	45	51	57
(1) Date 14511:2022; Water user side 12 °C	/ 7 °C; Water so	urce side 3	0 °C / 35	°C																
Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Heating performance 40 °C / 45 °C (1)																				
Heating capacity	L	kW	126,4	138,0	153,7	171,5	190,0	227,1	263,3	297,0	333,9	366,3	423,7	476,8	537,8	590,7	681,5	777,2	829,2	881,3
Input power	L	kW	30,7	34,0	37,6	42,0	46,5	55,3	62,6	70,9	78,9	87,3	100,4	114,0	126,9	140,5	162,6	185,1	199,0	212,9
COP	L	W/W	4,12	4,06	4,09	4,08	4,09	4,11	4,21	4,19	4,23	4,19	4,22	4,18	4,24	4,20	4,19	4,20	4,17	4,14
Water flow rate source side	L	l/h	28052	30528	34060	37975	42099	50383	58691	66163	74575	81647	94630	106330	120340	131981	152159	173698	185081	196474
Pressure drop source side	L	kPa	35	42	43	45	47	48	28	36	31	38	40	51	48	58	61	66	75	85
Water flow rate system side	L	l/h	21693	23680	26365	29413	32585	38951	45214	50979	57336	62886	72744	81824	92305	101349	116928	133335	142221	151113
Pressure drop system side	L	kPa	22	26	27	28	29	29	17	22	19	23	25	31	29	35	37	40	46	52

⁽¹⁾ Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Energy index

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	L	W/W	6,17	6,05	6,08	6,10	6,15	6,01	6,51	6,32	6,52	6,25	6,55	6,56	6,54	6,51	6,59	6,56	6,59	6,51
Seasonal efficiency	L	%	243,85	239,18	240,28	240,81	243,00	237,28	257,48	249,97	257,83	247,07	258,84	259,44	258,75	257,48	260,65	259,58	260,66	257,48
UE 813/2013 performance in average ambier	nt condit	ions (avera	age) - 35	°C - Pde	esignh ≤	400 kW	(2)													
SCOP	L	W/W	5,72	5,85	5,95	5,85	5,78	5,75	6,13	5,99	6,18	6,08	5,97	5,76	5,97	6,02	5,89	6,05	5,87	5,75
ηsh	L	%	221	226	230	226	223	222	237	232	239	235	231	222	231	233	228	234	227	222

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Electric data

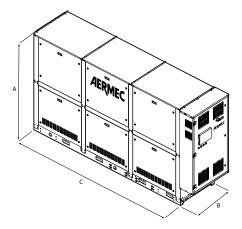
Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Electric data																				
Maximum current (FLA)	L	Α	73,0	81,0	89,0	99,0	108,0	127,0	145,0	163,0	181,0	198,0	228,0	258,0	288,0	318,0	367,0	416,0	446,0	476,0
Peak current (LRA)	L	А	239,0	204,0	210,0	265,0	274,0	293,0	359,0	377,0	395,0	412,0	538,0	568,0	598,0	628,0	677,0	726,0	756,0	786,0

GENERAL TECHNICAL DATA

General data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Compressor																				
Туре	L	type									Sci	oll								
Compressor regulation	L	Туре									On-	-Off								
Number	L	no.	3	4	4	4	4	4	4	4	4	4	4	4	4	4	5	6	6	6
Circuits	L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	22
Refrigerant	L	type									R:	32								
Refrigerant load circuit 1 (1)	L	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Refrigerant load circuit 2 (1)	L	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Source side heat exchanger																				
Туре	L	type									Brazeo	l plate								
Number	L	no.	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3
Connections (in/out)	L	Туре									Groove	d joints								
Size (in)	L	Ø	2"1/2	2" 1/2	2" 1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Size (out)	L	Ø	2" 1/2	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
System side heat exchanger																				
Туре	L	type									Brazeo	l plate								
Number	L	no.	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3
Connections (in/out)	L	Туре									Groove	d joints								
Size (in)	L	Ø	2"1/2	2"1/2	2" 1/2	2" 1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Size (out)	L	Ø	2"1/2	2"1/2	2" 1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.



Dimensions and weights

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Dimensions and weights																				
A	L	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
В	L	mm	800	800	800	800	800	850	850	850	850	850	850	850	850	850	900	900	900	900
C	L	mm	2090	2090	2090	2090	2090	2500	2500	2500	2500	2500	2500	2500	2500	2500	3600	3600	3600	3600
Empty weight	L	kg	1025	1085	1100	1120	1145	1205	1335	1395	1495	1540	1635	1700	1835	1900	2305	2525	2585	2645

The weight of the unit does not include the hydronic kit and accessories.

For the version with hydronic kit please contact headquarters.



















WS 0601 - 2802

Water cooled heat pump reversible water side

Cooling capacity 147 ÷ 700 kW Heating capacity 164 ÷ 778 kW



- · High efficiency all in Class A Eurovent
- Optimised for low condenser temperatures
- · Optimised for geothermal applications
- Available also R513A (XP10) refrigerant gas





DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water from 4 to 16° C, and the possibility to produce negative temperature water (down to -6° C) on the evaporator and hot water (up to 50° C) on the condenser. (for more information, refer to the technical documentation).

Units mono or dual-circuit

Depending on the size, the units are one-circuit or two-circuit models to ensure maximum efficiency with full loads as well as partial loads and guarantee operation continuity if one of the circuits stop.

They are equipped with screw compressors and system and source side plate heat exchangers.

CONTROL PCO₅

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log.

Possibility to control two units in a Master-Slave configuration

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modhus TCP/IP SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
AER485P1	°,L	•	•	•	•	•								
AER485P1 x n° 2 (1)	°,L						•	•	•	•	•	•	•	•
AERBACP	°,L							•	•					
AERNET	°,L	•	•	•	•		•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,L	•		•	•		•	•	•	•	•	•		•
PRV3	°,L					•		•	•					

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Evaporator: °													
°,L	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661
Evaporator: E													
°,L	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661

Power factor correction

Ver	0601	0701	0801	0901	1101	1202	1402
°,L	-	RIF161	RIF161	RIF201	RIF241	RIF161 x2	RIF161 x2

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	1602	1802	2002	2202	2502	2802
°,L	RIF161 x2	RIF201 x 2	RIF201+RIF241	RIF241 x2	RIF301 x2	RIF301 x2

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	0601	0701	0801	0901	1101	1202	1402
L	AKW (1)						

(1) Available only in low noise version A grey background indicates the accessory must be assembled in the factory

Ver	1602	1802	2002	2202	2502	2802
L	AKW (1)					

(1) Available only in low noise version A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

ł	Description
	WS
5,6	Size 0601, 0701, 0801, 0901, 1101, 1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
	Operating field
0	Standard mechanic thermostatic valve (1)
χ	Electronic thermostatic expansion valve (1)
Υ	Low temperature mechanic thermostatic valve (2)
Z	Low temperature electronic thermostatic valve (2)
	Model
0	Heat pump reversible on the water side
	Heat recovery
0	Without heat recovery
D	With desuperheater (3)
T	With total recovery (4)
	Version
0	Standard
	° X Y Z ° D T

Field		Description
L	L	Standard silenced
11		Evaporator
C	0	Standard
Е	E	Evaporating unit (5)
12		Power supply
c	0	400V ~ 3 50Hz with fuses
2	2	230V ~ 3 50Hz with fuses
	4	230V ~ 3 50Hz with magnet circuit breakers
5	5	500V ~ 3 50Hz with fuses
3	8	400V ~ 3 50Hz with magnet circuit breakers
	9	500V ~ 3 50Hz with magnet circuit breakers

(1) Water produced from $4^{\circ}\text{C} \div 16^{\circ}\text{C}$ (2) Water produced from $4^{\circ}\text{C} \div -6^{\circ}\text{C}$; for the avalability with the heat recovery we advise you to contact us (3) In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet. (4) Option not available for condenserless unit. (5) Shipped with holding charge only.

PERFORMANCE SPECIFICATIONS

WS - °/L

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Cooling performance 12 °C/7 °C(1)															
Cooling capacity	°,L	kW	147,7	186,9	212,2	233,8	299,0	308,6	369,1	421,6	469,8	545,6	599,8	654,3	700,4
Input power	°,L	kW	29,1	36,6	81,8	46,0	58,7	605,6	72,8	83,2	92,7	106,7	117,2	128,1	136,8
Cooling total input current	°,L	Α	56,0	67,0	74,0	83,0	95,0	110,0	133,0	149,0	167,0	179,0	190,0	219,0	235,0
EER	°,L	W/W	5,08	5,11	5,07	5,08	5,09	5,10	5,07	5,06	5,07	5,11	5,12	5,11	5,12
Water flow rate source side	°,L	l/h	30238	38269	43508	47922	61258	63078	75593	86332	96177	111478	122506	133608	142894
Pressure drop source side	°,L	kPa	33	23	22	22	25	47	36	39	43	48	52	58	65
Water flow rate system side	°,L	l/h	25421	32148	36495	40212	51431	53088	63476	72492	80788	93813	103143	112508	120438
Pressure drop system side	°,L	kPa	23	17	15	16	18	33	25	27	30	33	35	39	44
Heating performance 40 °C / 45 °C (2)															
Heating capacity	°,L	kW	164,9	208,7	237,3	261,4	334,0	343,7	412,1	470,6	524,2	607,2	667,2	727,6	778,0
Input power	°,L	kW	36,8	46,3	52,9	58,1	74,2	76,9	92,2	105,5	117,7	135,5	148,8	162,8	174,1
Heating total input current	°,L	Α	70,0	84,0	94,0	105,0	120,0	138,0	168,0	188,0	210,0	225,0	240,0	275,0	296,0
COP	°,L	W/W	4,48	4,51	4,49	4,50	4,50	4,47	4,47	4,46	4,46	4,48	4,48	4,47	4,47
Water flow rate system side	°,L	l/h	28611	36218	41197	45370	57987	59660	71552	81718	91025	105442	115854	126347	135087
Pressure drop system side	°,L	kPa	29	21	19	20	23	42	32	35	38	43	46	52	58
Water flow rate source side	°,L	l/h	37525	47456	53873	59360	75920	78366	93702	107011	119257	138485	152256	166081	177787
Pressure drop source side	°,L	kPa	49	37	33	34	39	73	54	59	65	72	77	85	96

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Performance specifications Evaporating units

WS - E

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Evaporator: E															
Cooling performance 12 °C/7 °C(1)															
Cooling capacity	°,L	kW	134,5	167,9	189,2	216,7	264,4	276,7	333,2	381,0	431,7	489,8	542,5	591,7	629,6
Input power	°,L	kW	34,7	42,2	48,2	55,0	67,0	69,3	84,4	96,5	109,9	122,0	134,1	146,8	157,0
Cooling total input current	°,L	Α	63,0	75,0	85,0	96,0	111,0	127,0	151,0	170,0	192,0	207,0	222,0	252,0	270,0
EER	°,L	W/W	3,88	3,98	3,92	3,94	3,94	3,99	3,95	3,95	3,93	4,01	4,05	4,03	4,01
Water flow rate system side	°,L	l/h	23108	28849	32512	37238	45248	47546	57251	65458	74169	84147	93212	101661	108175
Pressure drop system side	°,L	kPa	18	13	12	12	14	25	19	20	23	25	27	30	34

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,L	W/W	5,58	5,80	6,09	6,04	5,96	6,22	6,24	6,39	6,39	6,38	6,38	6,42	6,39
Seasonal efficiency	°,L	%	220,2%	229,0%	240,6%	238.6%	235,2%	245,7%	246,6%	252,5%	252,6%	252,1%	252,2%	253,9%	252,7%
SEPR - (EN 14825: 2018) High temperatu	ıre (2)														
SEPR	°,L	W/W	-	-	-	-	7,77	7,97	7,99	8,11	8,01	8,04	8,01	8,05	8,01
UE 813/2013 performance in average ar	nbient conditio	ons (averag	e) - 35 °C - P	designh ≤	400 kW (3)										
Pdesignh	°,L	kW	229	290	330	363	-	-	-	-	-	-	-	-	-
SCOP	°,L	W/W	5,98	6,10	6,30	6,25	-	-	-	-	-	-	-	-	-
ηsh	°,L	%	231.0%	236.0%	244.0%	242.0%	-	-	-	-	-	-	-	-	-

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.
(3) Efficiencies for low temperature applications (35 °C)

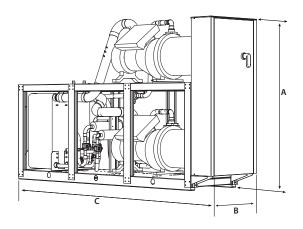
ELECTRIC DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Electric data															
Maximum current (FLA)	°,L	Α	90,7	98,0	112,0	128,0	156,0	168,0	196,0	224,0	256,0	284,0	312,0	354,0	380,0
Peak current (LRA)	°,L	А	147,0	140,0	163,0	192,0	246,0	194,1	198,5	228,0	262,6	316,6	324,7	388,1	448,1

GENERAL TECHNICAL DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Compressor															
Туре	°,L	type							Screw						
Compressor regulation	°,L	Туре							On-Off						
Number	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R134a						
Refrigerant charge (1)	°,L	kg	18,0	22,0	22,0	25,0	38,0	36,0	42,0	44,0	50,0	59,0	68,0	70,0	80,0
System side heat exchanger															
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Source side heat exchanger															
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections															
Connections (in/out)	°,L	Туре						(Grooved join	ts					
Sizes (in/out)	°,L	Ø							3"						
Source side hydraulic connections															
Connections (in/out)	°,L	Туре						(Grooved join	ts					-
Sizes (in/out)	°,L	Ø							3″						
Sound data calculated in cooling mode (2)															
County a surroulous	0	dB(A)	86,1	86,8	87,1	87,8	87,1	89,1	89,8	90,1	90,8	90,5	90,1	91,3	91,8
Sound power level —	L	dB(A)	78,1	78,8	79,1	79,9	78,1	81,1	81,8	82,1	82,9	82,1	81,1	83,4	84,1
Cound (20)	0	dB(A)	54,3	55,0	55,3	56,0	55,3	57,2	57,9	58,3	59,0	58,6	58,2	59,3	59,9
Sound pressure level (10 m) —	L	dB(A)	46,3	47,0	47,3	48,1	46,3	49,2	50.0	50,2	51,0	50,2	49,2	51,5	52,2

DIMENSIONS



Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Dimensions and weights															
1	0	mm	1775	1775	1775	1775	1775	1975	1975	1975	2005	1985	2065	2065	2065
A	L	mm	1775	1775	1775	1775	1775	2120	2120	2120	2120	2120	2120	2120	2120
В	°,L	mm	810	810	810	810	810	810	810	810	810	810	810	810	810
C	°,L	mm	2960	2960	2960	2960	3360	2960	2960	2960	2960	3360	3360	3360	3360
Empty weight	0	kg	1101	1251	1301	1357	1788	1738	2071	2140	2212	2648	3050	3131	3131
Empty weight	L	kg	1229	1379	1429	1485	1934	1966	2299	2368	2440	2905	3307	3388	3388

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).



















HWS 0601 - 2802

Water cooled heat pump reversible water side

Cooling capacity 147 ÷ 369 kW Heating capacity 165 ÷ 778 kW



- High efficiency all in Class A Eurovent
- Unit optimised for high condenser temperatures.
- · Optimised for geothermal applications
- Available also R513A (XP10) refrigerant gas





DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-16 $^{\circ}$ C, and the possibility to produce also hot water for the condenser up to 60 $^{\circ}$ C. (for more information, refer to the technical documentation).

Units mono or dual-circuit

Depending on the size, the units are one-circuit or two-circuit models to ensure maximum efficiency with full loads as well as partial loads and guarantee operation continuity if one of the circuits stop.

They are equipped with screw compressors and system and source side plate heat exchangers.

Integral acoustic enclosure

For all versions, if required, it is available the integral acoustic enclosure, which can further reduce the sound level.

CONTROL PCO₅

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log.

Possibility to control two units in a Master-Slave configuration The presence of a programmable timer allows functioning time periods and a possible second set-point to be set. The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
AER485P1	°,L	•	•	•	•	•								
AER485P1 x n° 2 (1)	°,L						•	•	•	•	•	•	•	•
AERBACP	°,L		•	•					•					•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,L	•	•	•			•	•	•		•	•		•
PRV3	°,L	•		•			•	•	•		•			•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Heat recovery	Evaporator	0601	0701	0801	0901	1101	1202	1402
0	0	0	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658
0	°,D	E	-	AVX668	AVX668	AVX668	AVX669	-	AVX670
0	D	0	-	AVX651	AVX652	AVX652	AVX654	AVX658	AVX658
0	Ţ	٥	-	AVX652	AVX655	AVX655	AVX657	-	AVX662
L	0	0	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658
L	°,D	E	-	AVX668	AVX668	AVX668	AVX669	-	AVX670
L	D	0	-	AVX651	AVX652	AVX652	AVX654	AVX658	AVX658
L	Ţ	0	-	AVX652	AVX655	AVX655	AVX657	-	AVX662

Version	Heat recovery	Evaporator	1602	1802	2002	2202	2502	2802
0	0	0	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661
0	0	E	AVX670	AVX670	AVX671	AVX672	AVX672	AVX672
0	D	°,E	-	-	-	-	-	-
0	Ţ	0	-	-	-	-	-	-
L	0	0	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661
L	0	E	AVX670	AVX670	AVX671	AVX672	AVX672	AVX672
L	D	°,E	-	-	-	-	-	-
L	Ţ	0	-	-	-	-	-	-

- not available

Power factor correction

Ver	0601	0701	0801	0901	1101	1202	1402
°,L	-	RIF161	RIF161	RIF201	RIF241	-	RIF161 x2

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver	1602	1802	2002	2202	2502	2802
°,L	RIF161 x2	RIF201 x 2	RIF201+RIF241	RIF241 x2	RIF301 x2	RIF301 x2

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
L	AKW (1)												

(1) Available only in low noise version A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

HWS
Size 0601, 0701, 0801, 0901, 1101, 1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
Operating field
Standard mechanic thermostatic valve
Electronic thermostatic expansion valve
Model
Heat pump reversible on the water side
Heat recovery
Without heat recovery
With desuperheater (1)
With total recovery (2)
Version
Standard
Standard silenced

Field	Description
12	Evaporator
0	Standard
E	Evaporating unit (3)
13	Power supply
0	400V ~ 3 50Hz with fuses
2	230V ~ 3 50Hz with fuses
4	230V ~ 3 50Hz with magnet circuit breakers
5	500V ~ 3 50Hz with fuses
8	400V ~ 3 50Hz with magnet circuit breakers
9	500V ~ 3 50Hz with magnet circuit breakers

- The temperature of the water in the heat exchanger inlet must never drop below 35°C. The desuperheater is not available for sizes 0601 and 1202.
 The desuperheater and total recovery are not available for sizes 0601 and 1202; T are not compatible
- with E.

 (3) Shipped with holding charge only. Option not available for size 0601 and 1202.

PERFORMANCE SPECIFICATIONS

HWS - °/L

Size			0601	0701	0801	0901	1101	1202	1402
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	°,L	kW	146,7	178,8	212,7	233,7	293,7	293,7	356,6
Input power	°,L	kW	31,7	38,0	43,2	49,2	59,7	63,5	76,8
Cooling total input current	°,L	Α	56,0	66,0	74,0	82,0	101,0	112,0	132,0
EER	°,L	W/W	4,63	4,70	4,92	4,75	4,92	4,62	4,64
Water flow rate source side	°,L	l/h	30474	37085	43795	48419	60454	60948	73996
Pressure drop source side	°,L	kPa	40	27	27	26	31	53	50
Water flow rate system side	°,L	l/h	25256	30754	36596	40204	50513	50513	61337
Pressure drop system side	°,L	kPa	29	20	20	19	23	38	36
Heating performance 40 °C / 45 °C (2)									
Heating capacity	°,L	kW	163,9	199,3	234,8	260,1	324,0	327,5	397,5
Input power	°,L	kW	38,0	45,4	51,6	58,8	71,4	76,3	92,2
Heating total input current	°,L	A	66,0	78,0	88,0	97,0	120,0	133,0	157,0
COP	°,L	W/W	4,31	4,39	4,55	4,42	4,54	4,29	4,31
Water flow rate source side	°,L	I/h	36968	45016	53566	58847	73936	73936	89780
Pressure drop source side	°,L	kPa	62	43	43	41	49	81	77
Water flow rate system side	°,L	l/h	28421	34581	40752	45134	56255	56843	69010
Pressure drop system side	°,L	kPa	35	23	23	23	27	46	43

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size			1602	1802	2002	2202	2502	2802
Heating performance 40 °C / 45 °C (1)								
Heating capacity	°,L	kW	465,7	522,8	584,8	646,9	730,9	799,6
Input power	°,L	kW	104,0	121,3	133,2	145,1	165,9	181,5
Heating total input current	°,L	A	176,0	195,0	218,0	241,0	277,0	280,0
COP	°,L	W/W	4,48	4,31	4,39	4,46	4,41	4,40
Water flow rate source side	°,L	l/h	106378	118198	133036	147873	166735	182932
Pressure drop source side	°,L	kPa	86	88	96	103	114	137
Water flow rate system side	°,L	l/h	80851	90770	101543	112315	126902	138328
Pressure drop system side	°,L	kPa	48	50	54	58	65	79

⁽¹⁾ Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Performance specifications Evaporating units

HWS - E

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Evaporator: E															
Cooling performance 12 °C/7 °C(1)															
Cooling capacity	°,L	kW	-	163,0	192,0	212,0	263,0	-	326,0	385,0	428,0	481,0	539,0	601,0	676,0
Input power	°,L	kW	-	41,0	47,0	54,0	66,0	-	82,0	93,0	108,0	120,0	132,0	146,0	159,0
Cooling total input current	°,L	Α	-	72,0	81,0	90,0	113,0	-	144,0	162,0	180,0	204,0	226,0	254,0	272,0
EER	°,L	W/W	-	3,98	4,09	3,93	3,98	-	3,98	4,14	3,96	4,01	4,08	4,12	4,25
Water flow rate system side	°,L	l/h	-	28005	32988	36424	45186	-	56011	66147	73535	82641	92606	103259	116144
Pressure drop system side	°,L	kPa	-	20	20	19	23	-	36	40	41	45	48	53	62

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0601	0701	0801	0901	1101	1202	1402
SEER - 12/7 (EN14825: 2018) (1)									
SEER	°,L	W/W	5,01	5,28	5,57	5,43	5,59	5,36	5,42
Seasonal efficiency	°,L	%	197,4%	208,2%	219.8%	214.2%	220,6%	211,4%	213,6%
UE 813/2013 performance in average a	mbient conditior	ns (average) - 55 °	C - Pdesignh ≤ 400 k	(W (2)					
Pdesignh	°,L	kW	215	257	293	330	-	-	-
SCOP	°,L	W/W	4,55	4,60	4,73	4,58	-	-	-
ηsh	°,L	%	174.0%	176.0%	181.0%	175.0%	-	-	-

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

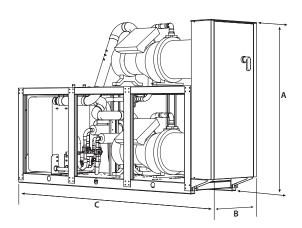
Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Electric data															
Maximum current (FLA)	°,L	Α	105,0	124,0	144,0	162,0	182,0	210,0	248,0	288,0	324,0	344,0	364,0	430,0	430,0
Peak current (LRA)	°,L	A	180,0	163,0	192,0	229,0	300,0	285,0	287,0	336,0	391,0	462,0	482,0	575,0	575,0

GENERAL TECHNICAL DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Compressor															
Туре	°,L	type							Screw						
Compressor regulation	°,L	Туре							On-Off						
Number	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R134a						
System side heat exchanger															
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Source side heat exchanger															
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections															
Connections (in/out)	°,L	Туре						(Grooved join	ts					
Sizes (in/out)	°,L	Ø							3″						
Source side hydraulic connections															
Connections (in/out)	°,L	Туре						(Grooved join	ts					
Sizes (in/out)	°,L	Ø							3″						
Sound data calculated in cooling mode (1)															
	0	dB(A)	85,0	86,0	86,0	86,0	92,0	88,0	89,0	89,0	89,0	93,0	95,0	95,0	95,0
Sound power level —	L	dB(A)	77,0	78,0	78,0	78,0	84,0	80,0	81,0	81,0	81,0	85,0	87,0	87,0	87,0
	0	dB(A)	53,2	54,2	54,2	54,2	60,2	56,2	57,2	57,2	57,2	61,1	63,1	63,1	63,1
Sound pressure level (10 m)	L	dB(A)	45,2	46,2	46,2	46,2	52,2	48,1	49,1	49,1	49,1	53,1	55,1	55,1	55,1

L UULN 4-3,2 4-0,2

DIMENSIONS



Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Dimensions and weights															
A	0	mm	1775	1775	1775	1775	1775	1975	1975	1975	2005	1985	2065	2065	2065
A	L	mm	1775	1775	1775	1775	1775	2120	2120	2120	2120	2120	2120	2120	2120
В	°,L	mm	810	810	810	810	810	810	810	810	810	810	810	810	810
С	°,L	mm	2960	2960	2960	2960	3360	2960	2960	2960	2960	3360	3360	3360	3360
Empty weight	°,L	kg	1101	1251	1301	1357	1788	1738	2028	2097	2169	2598	3000	3095	3095

















HWSG

Water cooled heat pump reversible water side

Cooling capacity 110 ÷ 396 kW Heating capacity 122 ÷ 595 kW



- Use of the new ecological gas R1234ze
- Unit optimised for high condenser temperatures.
- Production of hot water from condenser up to 65° C.





DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

L Standard silenced

FEATURES

Operating field

Production of chilled water up to 4°C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 65°C .

Units mono or dual-circuit

Depending on the size, the units are one-circuit or two-circuit models to ensure maximum efficiency with full loads as well as partial loads and quarantee operation continuity if one of the circuits stop.

They are equipped with screw compressors and system and source side plate heat exchangers dedicated to use of the new HFO R1234ze gas.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:

ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430, with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL

pCO⁵ control type

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log.

Possibility to control two units in a Master-Slave configuration

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

AVX: Spring anti-vibration supports.

ACCESSORIES COMPATIBILITY

Model	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
AER485P1	°,L	•	•	•	•	•								
AER485P1 x n° 2 (1)	°,L						•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,L	•			•	•	•	•	•			•		•

(1) $\,$ x Indicates the quantity of accessories to match.

Antivibration

Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
°,L	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661

CONFIGURATOR

MIOR
Description
HWSG
Size 0601, 0701, 0801, 0901, 1101, 1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
Operating field
Electronic thermostatic expansion valve (1)
Low temperature electronic thermostatic valve (2)
Model
Optimised for high condenser temperatures
Heat recovery
Without heat recovery
With desuperheater (3)
With total recovery (3)
Version
Standard
Standard silenced
Evaporator
Standard
Power supply
400V ~ 3 50Hz with fuses

⁽¹⁾ Water produced from 4 °C ÷ 16 °C (2) Water produced from −5 °C ÷ 4 °C (3) Order management

PERFORMANCE SPECIFICATIONS

HWSG - °/L

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002
Cooling performance 12 °C/7 °C(1)												
Cooling capacity	°,L	kW	110,5	135,1	156,5	176,0	215,8	221,7	271,4	315,9	354,9	396,8
Input power	°,L	kW	23,2	27,7	31,3	35,6	43,2	46,2	57,0	63,9	73,6	80,7
Cooling total input current	°,L	A	48,0	55,0	61,0	66,0	82,0	96,0	111,0	122,0	132,0	149,0
EER	°,L	W/W	4,77	4,87	5,00	4,94	4,99	4,80	4,76	4,94	4,82	4,92
Water flow rate system side	°,L	l/h	19007	23236	26907	30255	37102	38143	46690	54329	61030	68240
Pressure drop system side	°,L	kPa	16	11	10	11	12	24	32	21	23	25
Water flow rate source side	°,L	l/h	22875	27903	32183	36261	44378	45808	56089	64986	73289	81668
Pressure drop source side	°,L	kPa	23	16	15	15	17	34	47	31	34	36
Heating performance 40 °C / 45 °C (2)												-
Heating capacity	°,L	kW	122,8	149,7	172,4	194,4	237,8	245,8	301,0	348,2	393,1	437,6
Input power	°,L	kW	27,7	33,1	37,3	42,5	51,6	55,2	68,3	76,4	88,0	96,5
Heating total input current	°,L	A	58,0	65,0	72,0	78,0	97,0	114,0	131,0	145,0	157,0	176,0
СОР	°,L	W/W	4,43	4,52	4,62	4,57	4,61	4,45	4,41	4,56	4,47	4,53
Water flow rate system side	°,L	l/h	21319	25989	29942	33756	41288	42668	52248	60463	68263	75995
Pressure drop system side	°,L	kPa	20	14	13	13	15	29	41	27	30	31
Water flow rate source side	°,L	l/h	27820	34012	39384	44285	54307	55832	68342	79522	89331	99885
Pressure drop source side	°,L	kPa	35	24	22	23	26	50	69	46	50	54

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size			2202	2502	2802
Heating performance 40 °C / 45 °C ((1)		,		
Heating capacity	°,L	kW	488,6	540,8	595,5
Input power	°,L	kW	106,1	119,3	131,9
Heating total input current	°,L	A	196,0	225,0	240,0
COP	°,L	W/W	4,60	4,53	4,52
Water flow rate system side	°,L	I/h	84852	93902	103410
Pressure drop system side	°,L	kPa	34	37	45
Water flow rate source side	°,L	I/h	112042	123541	136133

Pressure drop source side °,L kf
(1) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002
SEER - 12/7 (EN14825: 2018) (1)												
Seasonal efficiency	°,L	%	205,9%	214,4%	222,6%	221,7%	221,9%	210,8%	211,5%	228,3%	223,0%	226,4%
SEER	°,L	W/W	5,22	5,44	5,64	5,62	5,62	5,35	5,36	5,78	5,65	5,74
UE 813/2013 performance in average an	nbient conditio	ns (average) -	55 °C - Pdesigi	nh ≤ 400 kW (2)							
Pdesignh	°,L	kW	155	188	217	245	299	309	379	-	-	-
SCOP	°,L	W/W	4,52	4,62	4,72	4,69	4,69	4,63	4,60	-	-	-
ηsh	°,L	%	173.0%	177.0%	181.0%	179.0%	181.0%	177.0%	176.0%	-	-	-

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

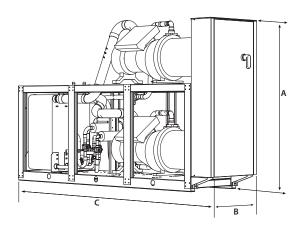
ELECTRIC DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Electric data															
Maximum current (FLA)	°,L	Α	75,6	95,6	104,4	115,9	143,2	151,2	191,2	208,8	231,8	259,1	286,4	323,8	352,0
Peak current (LRA)	٠,١	Α	180.0	163.0	192.0	229.0	267.0	255.6	258.6	296.4	344.9	372.2	410.2	475.9	490.0

GENERAL TECHNICAL DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Compressor															
Туре	°,L	type							Screw						
Compressor regulation	°,L	Туре							On/Off						
Number	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R1234ze						
Refrigerant load circuit 1 (1)	°,L	kg	18,0	20,0	22,0	25,0	38,0	18,0	20,5	21,5	25,0	25,0	33,0	35,0	39,0
Refrigerant load circuit 2 (1)	°,L	kg	-	-	-	-	-	18,0	20,0	22,0	25,0	30,0	18,0	20,5	21,5
System side heat exchanger															
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Source side heat exchanger															
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections															
Connections (in/out)	°,L	Туре						(Grooved join	ts					
Size (in) (2)	°,L	Ø							3″						
Size (out) (2)	°,L	Ø							3″						
Source side hydraulic connections															
Connections (in/out)	°,L	Туре						(Grooved join	ts					
Size (in)	°,L	Ø							3″						
Size (out)	°,L	Ø							3″						
Sound data calculated in cooling mode (3	3)														
Sound power level	0	dB(A)	87,0	86,0	86,0	86,0	92,0	89,0	90,0	89,0	89,0	93,0	95,0	95,0	95,0
Journa power lever	L	dB(A)	78,9	78,0	78,0	78,0	84,0	81,0	81,9	81,0	81,0	85,0	87,0	87,0	87,0
Cound proceure level (10 m)	0	dB(A)	55,2	54,2	54,2	54,2	60,2	57,2	58,1	57,2	57,2	61,1	63,1	63,1	63,1
Sound pressure level (10 m)	L	dB(A)	47,1	46,2	46,2	46,2	52,2	49,1	50,0	49,1	49,1	53,1	55,1	55,1	55,1

DIMENSIONS



Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Dimensions and weights															
1	0	mm	1775	1775	1775	1775	1775	1975	1975	1975	2005	1985	2065	2065	2065
A	L	mm	1775	1775	1775	1775	1775	2120	2120	2120	2120	2120	2120	2120	2120
В	°,L	mm	810	810	810	810	810	810	810	810	810	810	810	810	810
C	°,L	mm	2960	2960	2960	2960	3360	2960	2960	2960	2960	3360	3360	3360	3360
Empty weight	0	kg	1101	1251	1301	1357	1788	1738	2028	2097	2169	2598	3000	3095	3095
Empty weight	L	kg	1229	1379	1429	1485	1934	1966	2256	2325	2397	2855	3257	3352	3352

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

(2) Size
(3) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

















WSH

Reversible water-cooled heat pump, gas side

Cooling capacity 165,8 ÷ 269,7 kW Heating capacity 183,3 ÷ 300,3 kW



- Reversing valve
- Optional electronic expansion valve which allows: cooling down to -6 °C
- Modulating capacity control 25-100%





DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.

High-efficiency screw compressors, with silent functioning and with cooling capacity adjustment via continuous modulation from 40 to 100%. (25-100% with electronic valve OPTION which is to be requested when placing the order)

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-16 $^{\circ}$ C, and the possibility to produce also negative temperature water down to -6 $^{\circ}$ C for the evaporator and hot water for the condenser up to 55 $^{\circ}$ C. (for more information, refer to the technical documentation).

CONTROL PCO₅

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Adjustment includes complete management of the alarms and their log.

Possibility to control two units in a Master-Slave configuration

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 2: RS-485 interface for supervision systems with MOD-BUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP. SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	0701	0801	0901	1101	1402	1602	1802	2002	2202	2502
AER485P1	°,L	•	•	•	•						
AER485P1 x n° 2 (1)	°,L					•	•	•	•	•	•
AERBACP	°,L		•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,L	•	•	•	•	•	•	•	•	•	•
PRV3	°,L	•					•				

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	0701	0801	0901	1101	1402	1602	1802	2002	2202	2502
-L	AVX665	AVX665	AVX665	AVX666	AVX662	AVX662	AVX662	AVX663	AVX664	AVX664

Power factor correction

Ver	0701	0801	0901	1101	1402
°,L	RIF161	RIF161	RIF201	RIF241	RIF161 x2
A grey background indicates the accessor	y must be assembled in the factory				
Ver	1602	1802	2002	2202	2502
°,L	RIF161 x2	RIF201 x 2	RIF201+RIF241	RIF241 x2	RIF301 x2

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	0701	0801	0901	1101	1402	1602	1802	2002	2202	2502
L	AKW (1)									

CONFIGURATOR

Field	Description
1,2,3	WSH
4,5,6,7	Size 0701, 0801, 0901, 1101
8	Operating field
٥	Standard mechanic thermostatic valve (1)
Χ	Low temperature electronic thermostatic valve (2)
9	Model
٥	Reversible heat pump, gas side
10	Heat recovery
0	Without heat recovery
D	With desuperheater (3)
11	Version
٥	Standard
L	Standard silenced
12	Condenser
٥	PED regulation
13	Power supply
0	400V ∼ 3 50Hz
2	230V ~ 3 50Hz with fuses
4	230V ~ 3 50Hz with magnet circuit breakers
5	500V ~ 3 50Hz with fuses
8	400V ~ 3 50Hz with magnet circuit breakers
9	500V ~ 3 50Hz with magnet circuit breakers

⁽¹⁾ Available only in low noise version A grey background indicates the accessory must be assembled in the factory

Water produced up to +4 °C
 Water produced up to +4 °C. For different temperature please contact the factory.
 In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.

PERFORMANCE SPECIFICATIONS

WSH - °/L

Size			0701	0801	0901	1101	1402	1602	1802	2002	2202	2502
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	°,L	kW	165,8	195,7	216,7	269,7	359,6	427,5	465,5	525,4	593,4	671,3
Input power	°,L	kW	37,1	42,3	48,3	58,8	79,2	92,0	103,5	114,9	127,1	146,9
Cooling total input current	°,L	A	65,0	73,0	81,0	100,0	135,0	147,0	162,0	188,0	210,0	242,0
EER	°,L	W/W	4,47	4,63	4,48	4,59	4,54	4,65	4,50	4,57	4,67	4,57
Water flow rate source side	°,L	l/h	34669	40687	45310	56133	74845	88595	96985	109020	122605	139074
Pressure drop source side	°,L	kPa	30	31	30	36	57	62	65	79	88	101
Water flow rate system side	°,L	l/h	28521	33675	37283	46389	61852	73535	80064	90373	102056	115457
Pressure drop system side	°,L	kPa	23	24	22	27	43	47	48	59	65	74
Heating performance 40 °C / 45 °C (2)												
Heating capacity	°,L	kW	183,3	210,3	237,3	300,3	420,5	490,6	540,6	620,7	700,8	784,8
Input power	°,L	kW	45,4	51,6	58,7	74,4	102,9	122,0	131,6	152,1	171,9	188,2
Heating total input current	°,L	Α	81,0	91,0	101,0	131,0	179,0	210,0	221,0	257,0	291,0	320,0
COP	°,L	W/W	4,04	4,08	4,05	4,03	4,09	4,02	4,11	4,08	4,08	4,17
Water flow rate source side	°,L	l/h	40419	46517	52342	66297	93577	108720	120586	138319	156325	176563
Pressure drop source side	°,L	kPa	42	42	39	51	76	81	82	90	101	112
Water flow rate system side	°,L	l/h	31805	36498	41190	52140	72996	85162	93852	107756	121659	136259
Pressure drop system side	°,L	kPa	24	23	23	29	57	62	63	72	79	91

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0701	0801	0901	1101	1402	1602	1802	2002	2202	2502
SEER - 12/7 (EN14825: 2018) (1)												
SEER	°,L	W/W	5,04	5,47	5,29	5,11	4,82	4,90	4,77	4,70	4,70	4,53
Seasonal efficiency	°,L	%	198,6%	215,8%	208.6%	201,3%	189,8%	193,0%	187,8%	185,0%	185,0%	178,2%
UE 813/2013 performance in average an	nbient conditio	ns (average) -	55 °C - Pdesig	nh ≤ 400 kW (2)							
Pdesignh	°,L	kW	249	285	322	-	-	-	-	-	-	-
SCOP	°,L	W/W	4,20	4,25	4,23	-	-	-	-	-	-	-
ηsh	°,L	%	160.0%	162.0%	161.0%	-	-	-	-	-	-	-

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

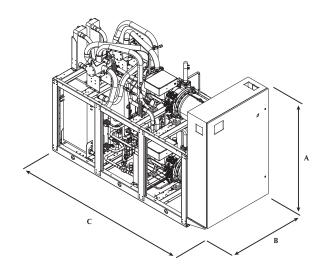
Size			0701	0801	0901	1101	1402	1602	1802	2002	2202	2502
Electric data												
Maximum current (FLA)	°,L	А	124,0	144,0	162,0	182,0	248,0	288,0	324,0	344,0	364,0	430,0
Peak current (LRA)	°,L	А	163,0	192,0	229,0	300,0	287,0	336,0	391,0	462,0	482,0	575,0

GENERAL TECHNICAL DATA

Size			0701	0801	0901	1101	1402	1602	1802	2002	2202	2502
Compressor												
Туре	°,L	type					Bi-	vite				
Compressor regulation	°,L	Туре					On-	-Off				
Number	°,L	no.	1	1	1	1	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	2	2	2	2	2	2
Refrigerant	°,L	type					R1.	34a				
System side heat exchanger												
Туре	°,L	type					Braze	d plate				
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Туре					Groove	d joints				
Sizes (in/out)	°,L	Ø					3	"				
Source side heat exchanger												
Туре	°,L	type					Braze	d plate				
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Туре					Groove	d joints				
Sizes (in/out)	°,L	Ø					3	"				
Sound data calculated in cooling mode	(1)											
County and an accordance leaves	0	dB(A)	86,0	86,0	86,0	92,0	89,0	89,0	89,0	93,0	95,0	95,0
Sound power level	L	dB(A)	78,0	78,0	78,0	84,0	81,0	81,0	81,0	85,0	87,0	87,0
C	0	dB(A)	54,1	54,1	54,1	60,1	57,1	57,1	57,1	61,0	63,0	63,0
Sound pressure level (10 m)	L	dB(A)	46,1	46,1	46,1	52,1	49,1	49,1	49,1	53,0	55,0	55,0

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0701	0801	0901	1101	1402	1602	1802	2002	2202	2502
Dimensions and weights												
A	0	mm	2050	2050	2050	2050	2050	2050	2050	2050	2050	2050
A	L	mm	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120
В	°,L	mm	809	809	809	809	1249	1249	1249	1249	1249	1249
C	°,L	mm	2960	2960	2960	3360	3060	3060	3060	3460	3460	3460
Frankriishk	0	kg	1391	1443	1506	1946	2276	2350	2423	2872	3309	3407
Empty weight	L	kg	1622	1674	1737	2206	2542	2616	2689	3168	3605	3703

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WFGI

Water cooled heat pump reversible water side

Cooling capacity 217 ÷ 1765 kW Heating capacity 243 ÷ 1960 kW



- Production of hot water from condenser up to 65° C.
- Production of chilled water down to -8°C.





DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

FEATURES

Operating field

Production of chilled water up to 20 °C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 65 °C depending on the model.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10° C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

All units are equipped with an inverter compressor combined with an onoff compressor (two-circuit sizes) or two on/off compressors (three-circuit sizes), with R1234ze (A2L) refrigerant.

The R515B refrigerant with this type of gas is also available on the configurator. Performances do not vary when the refrigerant gas available on the configurator varies.

For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO₅

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

Adjustment includes complete management of the alarms and their log. Possibility to control two units in a Master-Slave configuration

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•		•	•		•														
AER485P1 x n° 2 (1)	А																					
AER485P1 x n° 3 (1)	°,A																					•
AFDRACE	0																				•	•
AERBACP	А	•	•	•	•		•	•	•	•	•	•		•	•	•	•		•	•	•	•
AERNET -	0																			•		•
AEKINEI	А	•		•			•	•				•										
AERSET	Α	•					•	•	•	•			•						•	•		•
MULTICULUED EVO	0																		•	•	•	•
MULTICHILLER_EVO -	Α	•				•	•		•			•	•	•	•				•	•	•	•
DCD1	0																		•	•		•
PGD1	A	•			•	•	•	•	•		•	•	•	•	•			•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

vibiation					
Version	Set-up	Heat recovery	1101	1251	1401
0	°,L	°,D,T	-	-	-
A	0	0	AVX680	AVX680	AVX681
A	L	0	AVX681	AVX681	AVX681
А	°,L	D,T	-	-	-
Version	Set-up	Heat recovery	1601	1801	2101
0	°,L	°,D,T	-	-	-
A	0	0	AVX687	AVX687	AVX682
A	L	0	AVX682	AVX682	AVX682
A	°,L	D,T	-	-	-
Version	Set-up	Heat recovery	2401	2502	2801
0	°,L	°,D,T	-	-	-
A	0	0	AVX685	AVX673	AVX683
A	L	0	AVX683	AVX674	AVX683
A	°,L	D,T	-	AVX674	-
Version	Set-up	Heat recovery	2802	3201	3202
0	°,L	°,D,T	-	-	-
A	°,L	0	AVX674	AVX683	AVX679
A	°,L	D,T	AVX674	-	AVX679
Version	Set-up	Heat recovery	3602	4202	4802
0	°,L	°,D,T	-	-	-
A	0	°,D	AVX679	AVX679	AVX678
A	L	0	AVX679	AVX679	AVX678
A	0	Ţ	AVX679	AVX678	AVX678
A	L	D,T	AVX679	AVX678	AVX678
Version	Set-up	Heat recovery	5602	6402	6703
0	°,L	°,D,T	-	-	Contact us.
A	°,L	°,D,T	AVX678	AVX678	Contact us.
Version	Set-up	Heat recovery	7203	8403	9603
0	°,L	°,D,T	Contact us.	Contact us.	Contact us.
A	°,L	°,D,T	Contact us.	Contact us.	Contact us.

not available

Power factor correction

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	-	-	-	-	-	-	-	RIFWFI2502	-	RIFWFI2802	-

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

Ver 3202 3602 4202 4802 5602 6402 6703 7203 8403 9603 RIFWFI6703 RIFWFI7203 RIFWFI8403 RIFWFI9603 RIFWFI3202 RIFWFI3602 RIFWFI4202 RIFWFI4802 RIFWFI5602 RIFWFI6402 RIFWFI6703 RIFWFI7203 RIFWFI8403 RIFWFI9603

A grey background indicates the accessory must be assembled in the factory

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

V	1101	1251	1401	1/01	1001	2101	2401	3503	2001	2002	2201
Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15

A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
0	-	-	-	-	-	-	ISG7	ISG8	ISG8	ISG8
A	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	WFGI
	Size
5,6,7,8	1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
9	Model
0	Standard condensation
Н	Optimised for high condensation
10	Version
0	Standard (1)
Α	High efficiency
11	Operating field
Х	Electronic thermostatic expansion valve
Z	Double electronic thermostatic for low temperature
12	Set-up
0	Standard without hood
K	Super low noise with hood (2)
L	Silenced with hood

Field	Description
13	Heat recovery
0	Without heat recovery
D	With desuperheater (3)
T	With total recovery (3)
14	Evaporator
0	Standard
Е	Evaporating unit
15	Power supply
0	400V ~ 3 50Hz with fuses
8	400V ~ 3 50Hz with magnet circuit breakers (4)
16	Refrigerant gas (5)
0	R1234ze
G	R515B

- (1) Only for sizes from 6703 to 9603
 (2) Only for units with R515B
 (3) Not available for the condenserless "E"
 (4) Not available for 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2801, 3201 size
 (5) Performances do not vary when the refrigerant gas available on the configurator varies.

MODEL PERFORMANCE DATA (°) - FOR TEMPERATURES WATER PRODUCED UP TO +55°C

WFGI 1101 - 3201 - model (°) version A - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	216,8	255,6	285,6	324,6	366,2	407,0	484,9	545,9	586,5
Input power	kW	41,8	50,3	55,3	62,1	73,8	83,3	92,6	102,6	112,2
Cooling total input current	A	74,0	87,0	95,0	106,0	125,0	140,0	152,0	170,0	187,0
EER	W/W	5,19	5,08	5,17	5,23	4,96	4,89	5,24	5,32	5,23
Water flow rate source side	I/h	44248	52351	58332	66233	75332	83987	98906	111058	119737
Pressure drop source side	kPa	30	33	29	26	22	21	24	24	21
Water flow rate system side	I/h	37296	43987	49124	55816	62963	69984	83363	93854	100830
Pressure drop system side	kPa	22	24	24	15	18	13	20	26	14
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	243,2	292,8	321,7	365,6	419,7	467,2	540,0	606,5	655,5
Input power	kW	55,2	66,1	70,6	77,1	94,3	106,3	118,0	131,1	142,3
Heating total input current	A	97,0	114,0	120,0	131,0	159,0	178,0	193,0	215,0	236,0
COP	W/W	4,41	4,43	4,56	4,74	4,45	4,40	4,58	4,63	4,61
Water flow rate system side	I/h	42220	50823	55848	63486	72879	81140	93796	105337	113866
Pressure drop system side	kPa	27	31	27	23	20	20	22	22	19
Water flow rate source side	I/h	55079	66427	73525	84200	95108	105386	123347	139074	149713
Pressure drop source side	kPa	48	56	54	34	41	29	45	58	32

- (1) Date 14511:2022; Water user side 12 °C/7 °C; Water source side 30 °C/35 °C (2) Date 14511:2022; Water user side 40 °C/45 °C; Water source side 10 °C/7 °C

WFGI 2502 - 9603 - model (°) version A - gas R1234ze

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C/7 °C (1)													
Cooling capacity	kW	506,3	571,0	664,9	737,9	869,3	989,2	1096,6	1223,1	1323,2	1463,2	1605,2	1765,9
Input power	kW	96,8	107,6	125,2	143,4	166,7	185,8	206,7	234,8	238,3	265,7	299,4	337,5
Cooling total input current	Α	171,0	192,0	215,0	245,0	273,0	311,0	346,0	396,0	407,0	468,0	519,0	591,0
EER	W/W	5,23	5,31	5,31	5,15	5,22	5,32	5,30	5,21	5,55	5,51	5,36	5,23
Water flow rate source side	l/h	102932	115945	135099	150773	177155	200809	223021	249142	267794	296179	326287	360505
Pressure drop source side	kPa	61	55	46	30	45	50	36	51	11	24	23	22
Water flow rate system side	l/h	87066	98181	114326	126885	149451	170077	188509	210265	227441	251516	275910	303500
Pressure drop system side	kPa	45	35	33	41	32	44	34	43	26	31	29	17
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	564,4	631,4	731,6	821,0	966,2	1093,4	1212,3	1370,1	1454,7	1611,8	1770,0	1960,8
Input power	kW	124,9	136,1	155,8	181,8	211,1	235,7	260,5	299,0	300,1	334,7	374,9	420,6
Heating total input current	A	218,0	241,0	264,0	306,0	343,0	390,0	431,0	498,0	507,0	582,0	643,0	732,0
COP	W/W	4,52	4,64	4,70	4,52	4,58	4,64	4,65	4,58	4,85	4,82	4,72	4,66
Water flow rate system side	l/h	97998	109633	127054	142602	167814	189909	210585	237978	252762	280014	307509	340678
Pressure drop system side	kPa	56	50	41	27	41	45	32	46	10	22	20	20
Water flow rate source side	I/h	129450	145407	168838	187634	221376	252011	278815	314719	336930	373381	407768	449226
Pressure drop source side	kPa	99	76	73	89	70	96	73	96	56	69	63	37

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 6703 - 9603 - model (°) version ° - gas R1234ze

Size		6703	7203	8403	9603
Model: °	'				
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1309,2	1445,9	1559,4	1729,0
Input power	kW	242,2	267,6	299,6	340,9
Cooling total input current	A	396,0	475,0	525,0	588,0
EER	W/W	5,40	5,40	5,20	5,07
Water flow rate source side	l/h	265488	293277	318297	354161
Pressure drop source side	kPa	44	39	34	41
Water flow rate system side	l/h	225045	248539	268020	297184
Pressure drop system side	kPa	27	29	22	26
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1443,5	1597,2	1729,1	1928,5
Input power	kW	304,0	336,2	373,6	425,5
Heating total input current	A	493,0	592,0	650,0	729,0
COP	W/W	4,75	4,75	4,63	4,53
Water flow rate system side	l/h	250744	277455	300382	335030
Pressure drop system side	kPa	39	35	30	37
Water flow rate source side	l/h	333379	368962	396107	439877
Pressure drop source side	kPa	59	64	49	58

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Energy marces (neg. 2010/2201 E	7)									
Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
SEER - 12/7 (EN14825: 2018) (1)										
Seasonal efficiency	%	343,60	349,90	351,60	353,90	361,00	361,00	360,80	362,20	361,40
SEER	W/W	8,67	8,82	8,87	8,92	9,10	9,10	9,10	9,13	9,11
SEPR - (EN 14825: 2018) High temperature (2)										
SEPR	W/W	9,70	9,80	9,60	9,30	9,80	9,40	9,50	9,20	9,10
(1) Calculation performed with VARIABLE water flow rate a	and VARIABLE outl	et temperature.								

⁽²⁾ Calculation performed with VARIABLE water flow rate.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °														
SEER - 12/7 (EN14825: 2018) (1)														
Consequence officiana.	0	%	-	-	-	-	-	-	-	-	335.7%	337.9%	329.7%	326.0%
Seasonal efficiency	A	%	340.8%	345.4%	342.7%	347.3%	346.2%	347.8%	355.7%	349.1%	355.8%	353.7%	354.5%	349.3%
CLLD	0	W/W	-	-	-	-	-	-	-	-	8,47	8,52	8,32	8,23
SEER	A	W/W	8,60	8,71	8,64	8,76	8,73	8,77	8,97	8,80	8,97	8,92	8,94	8,81
SEPR - (EN 14825: 2018) High temperatu	ure (2)													
CEDD	0	W/W	-	-	-	-	-	-	-	-	8,80	8,70	8,60	8,70
SEPR	Λ.	\M/\M	0.30	0.40	8 00	0.00	0.10	0.10	0.20	0.20	8 00	8 00	0.00	0.00

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			1101	1251	1401
Model: °			,		
UE 813/2013 performance in average am	bient conditions (a	average) - 55 °C - Pdesignh ≤ 400	0 kW (1)		
Pdesignh	0	kW	-	-	-
ruesigiiii	A	kW	300,00	368,00	399,00
CCOD	0	W/W	-	-	-
SCOP	A	W/W	5,25	5,25	5,33
nch	٥	%	-	-	-
ısh –	A	%	202	202	205

⁽¹⁾ Efficiencies for average temperature applications (55 °C)

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
Electric data																							
Maximum summer (FLA)	0	А	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	682,4	765,6	849,2	957,6
Maximum current (FLA)	Α	Α	158,9	180,6	184,4	201,3	220,8	247,5	280,9	309,0	315,2	331,4	342,7	368,6	408,3	456,2	523,3	582,2	663,0	682,4	765,4	849,2	957,6
Deals surrent (LDA)	0	Α	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1063,0	1177,0	1391,0	1583,0
Peak current (LRA)	A	А	23,0	23,0	23,0	23,0	23,0	23,0	23,0	498,0	23,0	592,0	23,0	641,0	689,0	837,0	934,0	1124,0	1287,0	1063,0	1177,0	1391,0	1583,0

MODEL PERFORMANCE DATA (H) - FOR TEMPERATURES WATER PRODUCED UP TO +65°C

WFGI 1101 - 3201 - model (H) version A - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H	'									
Cooling performance 12 °C/7 °C(1)										
Cooling capacity	kW	220,0	254,8	289,6	327,4	357,5	399,0	482,6	542,2	593,6
Input power	kW	41,7	49,5	57,4	64,3	73,6	83,0	96,5	109,7	118,6
Cooling total input current	A	76,0	87,0	99,0	109,0	123,0	138,0	158,0	181,0	197,0
EER	W/W	5,28	5,14	5,04	5,09	4,85	4,81	5,00	4,94	5,00
Water flow rate source side	I/h	44780	52069	59378	67087	73813	82562	99166	111592	122023
Pressure drop source side	kPa	30	33	29	26	22	21	24	24	21
Water flow rate system side	l/h	37844	43840	49813	56306	61471	68609	82982	93228	102044
Pressure drop system side	kPa	22	24	24	15	18	13	20	26	14
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	242,3	283,1	322,4	364,4	402,1	448,3	537,9	604,7	657,2
Input power	kW	50,8	60,1	69,5	77,0	88,8	100,0	114,2	129,4	134,3
Heating total input current	A	91,0	105,0	118,0	130,0	148,0	165,0	186,0	211,0	222,0
COP	W/W	4,77	4,71	4,64	4,73	4,53	4,48	4,71	4,67	4,89
Water flow rate system side	l/h	42056	49149	55968	63270	69832	77853	93424	105035	114165
Pressure drop system side	kPa	27	29	26	23	19	19	22	22	19
Water flow rate source side	I/h	55990	65269	74006	83856	91549	101626	123761	139042	152399
Pressure drop source side	kPa	48	54	54	33	40	28	45	59	32

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 2502 - 9603 - model (H) version A - gas R1234ze

	2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
kW	511,3	581,3	664,4	741,3	869,2	988,5	1083,6	1218,4	1312,3	1450,5	1588,3	1759,4
kW	100,0	114,5	129,9	146,9	170,3	191,3	214,6	243,5	249,2	279,2	314,2	360,4
A	182,0	205,0	225,0	248,0	291,0	326,0	370,0	411,0	449,0	491,0	556,0	651,0
W/W	5,11	5,08	5,11	5,04	5,10	5,17	5,05	5,00	5,27	5,20	5,06	4,88
l/h	104337	118851	135775	151933	177734	201586	222077	249762	267707	296196	325814	363151
kPa	61	55	46	30	45	50	36	51	11	24	23	22
I/h	87940	99961	114232	127463	149434	169953	186288	209453	225564	249326	273015	302384
kPa	45	35	33	41	32	44	34	43	26	31	29	17
kW	563,1	641,8	731,2	822,8	961,9	1089,6	1200,8	1381,7	1445,1	1599,5	1759,3	1964,0
kW	120,6	137,4	154,1	177,9	203,8	229,4	255,3	289,7	297,6	333,6	372,8	425,2
A	216,0	243,0	263,0	295,0	344,0	385,0	434,0	479,0	530,0	579,0	651,0	763,0
W/W	4,67	4,67	4,75	4,63	4,72	4,75	4,70	4,77	4,86	4,79	4,72	4,62
l/h	97770	111434	126975	142910	167067	189246	208586	239997	251090	277882	305657	341230
kPa	54	49	41	26	40	44	31	47	10	22	20	20
l/h	130239	148043	169179	189222	222144	252647	276929	320765	334856	370130	405298	448896
kPa	99	76	73	90	70	96	74	100	56	69	64	37
	kW A W/W I/h kPa I/h kPa KW kW A W/W I/h kPa I/h	kW 511,3 kW 100,0 A 182,0 W/W 5,11 I/h 104337 kPa 61 I/h 87940 kPa 45 kW 563,1 kW 120,6 A 216,0 W/W 4,67 I/h 97770 kPa 54 I/h 130239	kW 511,3 581,3 kW 100,0 114,5 A 182,0 205,0 W/W 5,11 5,08 I/h 104337 118851 kPa 61 55 I/h 87940 99961 kPa 45 35 kW 563,1 641,8 kW 120,6 137,4 A 216,0 243,0 W/W 4,67 4,67 I/h 97770 111434 kPa 54 49 I/h 130239 148043	kW 511,3 581,3 664,4 kW 100,0 114,5 129,9 A 182,0 205,0 225,0 W/W 5,11 5,08 5,11 I/h 104337 118851 135775 kPa 61 55 46 I/h 87940 99961 114232 kPa 45 35 33 kW 563,1 641,8 731,2 kW 120,6 137,4 154,1 A 216,0 243,0 263,0 W/W 4,67 4,67 4,75 I/h 97770 111434 126975 kPa 54 49 41 I/h 130239 148043 169179	kW 511,3 581,3 664,4 741,3 kW 100,0 114,5 129,9 146,9 A 182,0 205,0 225,0 248,0 W/W 5,11 5,08 5,11 5,04 I/h 104337 118851 135775 151933 kPa 61 55 46 30 I/h 87940 99961 114232 127463 kPa 45 35 33 41 kW 563,1 641,8 731,2 822,8 kW 120,6 137,4 154,1 177,9 A 216,0 243,0 263,0 295,0 W/W 4,67 4,67 4,75 4,63 I/h 97770 111434 126975 142910 kPa 54 49 41 26 I/h 130239 148043 169179 189222	kW 511,3 581,3 664,4 741,3 869,2 kW 100,0 114,5 129,9 146,9 170,3 A 182,0 205,0 225,0 248,0 291,0 W/W 5,11 5,08 5,11 5,04 5,10 I/h 104337 118851 135775 151933 177734 kPa 61 55 46 30 45 I/h 87940 99961 114232 127463 149434 kPa 45 35 33 41 32 kW 563,1 641,8 731,2 822,8 961,9 kW 120,6 137,4 154,1 177,9 203,8 A 216,0 243,0 263,0 295,0 344,0 W/W 4,67 4,67 4,75 4,63 4,72 I/h 97770 111434 126975 142910 167067 kPa 54 49<	kW 511,3 581,3 664,4 741,3 869,2 988,5 kW 100,0 114,5 129,9 146,9 170,3 191,3 A 182,0 205,0 225,0 248,0 291,0 326,0 W/W 5,11 5,08 5,11 5,04 5,10 5,17 I/h 104337 118851 135775 151933 177734 201586 kPa 61 55 46 30 45 50 I/h 87940 99961 114232 127463 149434 169953 kPa 45 35 33 41 32 44 kW 563,1 641,8 731,2 822,8 961,9 1089,6 kW 120,6 137,4 154,1 177,9 203,8 229,4 A 216,0 243,0 263,0 295,0 344,0 385,0 W/W 4,67 4,67 4,75 4,63	kW 511,3 581,3 664,4 741,3 869,2 988,5 1083,6 kW 100,0 114,5 129,9 146,9 170,3 191,3 214,6 A 182,0 205,0 225,0 248,0 291,0 326,0 370,0 W/W 5,11 5,08 5,11 5,04 5,10 5,17 5,05 I/h 104337 118851 135775 151933 177734 201586 222077 kPa 61 55 46 30 45 50 36 I/h 87940 99961 114232 127463 149434 169953 186288 kPa 45 35 33 41 32 44 34 kW 563,1 641,8 731,2 822,8 961,9 1089,6 1200,8 kW 120,6 137,4 154,1 177,9 203,8 229,4 255,3 A 216,0 243,0	kW 511,3 581,3 664,4 741,3 869,2 988,5 1083,6 1218,4 kW 100,0 114,5 129,9 146,9 170,3 191,3 214,6 243,5 A 182,0 205,0 225,0 248,0 291,0 326,0 370,0 411,0 W/W 5,11 5,08 5,11 5,04 5,10 5,17 5,05 5,00 I/h 104337 118851 135775 151933 177734 201586 222077 249762 kPa 61 55 46 30 45 50 36 51 I/h 87940 99961 114232 127463 149434 169953 186288 209453 kPa 45 35 33 41 32 44 34 43 kW 563,1 641,8 731,2 822,8 961,9 1089,6 1200,8 1381,7 kW 120,6 137,4<	kW 511,3 581,3 664,4 741,3 869,2 988,5 1083,6 1218,4 1312,3 kW 100,0 114,5 129,9 146,9 170,3 191,3 214,6 243,5 249,2 A 182,0 205,0 225,0 248,0 291,0 326,0 370,0 411,0 449,0 W/W 5,11 5,08 5,11 5,04 5,10 5,17 5,05 5,00 5,27 I/h 104337 118851 135775 151933 177734 201586 222077 249762 267707 kPa 61 55 46 30 45 50 36 51 11 I/h 87940 99961 114232 127463 149434 169953 186288 209453 225564 kPa 45 35 33 41 32 44 34 43 26 kW 563,1 641,8 731,2 822,8<	kW 511,3 581,3 664,4 741,3 869,2 988,5 1083,6 1218,4 1312,3 1450,5 kW 100,0 114,5 129,9 146,9 170,3 191,3 214,6 243,5 249,2 279,2 A 182,0 205,0 225,0 248,0 291,0 326,0 370,0 411,0 449,0 491,0 W/W 5,11 5,08 5,11 5,04 5,10 5,17 5,05 5,00 5,27 5,20 I/h 104337 118851 135775 151933 177734 201586 222077 249762 267707 296196 kPa 61 55 46 30 45 50 36 51 11 24 I/h 87940 99961 114232 127463 149434 169953 186288 209453 22564 249326 kPa 45 35 33 41 32 44 34	kW 511,3 581,3 664,4 741,3 869,2 988,5 1083,6 1218,4 1312,3 1450,5 1588,3 kW 100,0 114,5 129,9 146,9 170,3 191,3 214,6 243,5 249,2 279,2 314,2 A 182,0 205,0 225,0 248,0 291,0 326,0 370,0 411,0 449,0 491,0 556,0 W/W 5,11 5,08 5,11 5,04 5,10 5,17 5,05 5,00 5,27 5,20 5,06 I/h 104337 118851 135775 151933 177734 201586 222077 249762 267707 296196 325814 kPa 61 55 46 30 45 50 36 51 11 24 23 I/h 87940 99961 114232 127463 149434 169953 186288 209453 225564 249326 273015

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI-HP-W_Y_UN50_08

WFGI 6703 - 9603 - model (H) version ° - gas R1234ze

Size		6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1298,6	1433,8	1544,1	1739,6
Input power	kW	252,7	280,5	312,9	362,4
Cooling total input current	A	449,0	491,0	553,0	649,0
EER	W/W	5,14	5,11	4,93	4,80
Nater flow rate source side	I/h	265376	293300	317856	359510
Pressure drop source side	kPa	44	39	34	41
Nater flow rate system side	I/h	223228	246460	265406	299001
Pressure drop system side	kPa	27	29	22	26
leating performance 40 °C / 45 °C (2)					
leating capacity	kW	1433,5	1584,7	1718,0	1945,1
nput power	kW	300,7	334,3	369,6	428,4
leating total input current	A	530,0	579,0	649,0	761,0
TOP	W/W	4,77	4,74	4,65	4,54
Nater flow rate system side	I/h	249013	275290	298460	337909
Pressure drop system side	kPa	39	35	30	36
Vater flow rate source side	I/h	331388	365876	394002	443875
Pressure drop source side	kPa	59	64	49	58

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
SEER - 12/7 (EN14825: 2018) (1)										
Seasonal efficiency	%	314,30	316,20	304,40	314,40	296,40	301,70	310,30	314,20	317,80
SEER	W/W	7,93	7,98	7,69	7,94	7,49	7,62	7,83	7,93	8,02
SEPR - (EN 14825: 2018) High temperature (2)										
SEPR	W/W	9,10	9,00	8,70	8,90	8,40	8,40	8,80	8,60	8,90

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H														
SEER - 12/7 (EN14825: 2018) (1)														
Consequel officients	0	%	-	-	-	-	-	-	-	-	287.7%	286.9%	287.6%	281.6%
Seasonal efficiency	A	%	294.9%	295.7%	300.5%	291.4%	301.0%	304.5%	309.3%	298.9%	302.4%	297.7%	302.9%	295.0%
SEER	0	W/W	-	-	-	-	-	-	-	-	7,27	7,25	7,27	7,12
SEER	A	W/W	7,45	7,47	7,59	7,36	7,60	7,69	7,81	7,55	7,64	7,52	7,65	7,45
SEPR - (EN 14825: 2018) High temperatu	re (2)													
CEDD	0	W/W	-	-	-	-	-	-	-	-	8,20	8,20	8,30	8,30
SEPR	A	W/W	8,60	8,60	8,50	8,60	8,50	8,60	8,50	8,60	8,60	8,50	8,70	8,70

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			1101	1251	1401
Model: H					
UE 813/2013 performance in average a	mbient conditions (a	verage) - 55 °C - Pdesignh ≤ 400	kW (1)		
Ddacianh	۰	kW	-	-	-
designh	A	kW	296,00	348,00	395,00
SCOP	٥	W/W	-	-	-
SCOP	A	W/W	5,45	5,43	5,23
L	٥	%	-	-	-
sh –	A	%	210	209	201

⁽¹⁾ Efficiencies for average temperature applications (55 °C)

Electric data

necessis data																							
Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
Electric data																							
Marinerum arresent (FLA)	0	Α	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	853,0	939,0	1047,0	1178,0
Maximum current (FLA)	Α	Α	155,0	177,0	201,0	222,0	262,0	296,0	349,0	343,0	390,0	389,0	415,0	422,0	488,0	559,0	644,0	719,0	797,0	853,0	939,0	1047,0	1178,0
Dools surrount (LDA)	0	Α	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1179,0	1297,0	1527,0	1737,0
Peak current (LRA)	A	Α	23,0	23,0	23,0	23,0	23,0	23,0	23,0	494,0	23,0	545,0	23,0	661,0	730,0	885,0	1002,0	1198,0	1357,0	1179,0	1297,0	1527,0	1737,0

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Model performance data (°) - for condensing temperatures up to 55°C

Model output data WFGI° - AE - gas R1234ze

Model: *	Model output data WFGI* - AE - gas K1	234ZE												
Cooling performance 12 °C / 7 °C - gas R1234ze (1) NW 198,0 231,1 256,8 292,1 326,6 363,6 437,8 493,2 519,	Size			1101	1251	1401	16	01	1801	2101	2401	2	801	3201
Cooling capacity	Model: °													
Input power RW 51,6 61,8 66,8 75,1 88,4 100,0 109,4 123,5 136, Cooling total input current A 92,0 108,0 115,0 128,0 151,0 168,9 184,0 206,0 227, EER W/W 3,83 3,74 3,85 3,89 3,69 3,64 4,00 3,99 3,82 EVaporator water flow rate I/h 34021 39713 44127 50189 56115 62473 75211 84731 8927 8	Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling total linput current	Cooling capacity	kW		198,0	231,1	256,8	29	2,1	326,6	363,6	437,8	4	93,2	519,6
Fig. W/W 3,83 3,74 3,85 3,89 3,69 3,64 4,00 3,99 3,82 3,99 3,94 3,99 3,94 3	Input power	kW		51,6	61,8	66,8	75	5,1	88,4	100,0	109,4	1	23,5	136,2
Pressure drop evaporator side I/h 34021 39713 44127 50189 56115 62473 75211 84731 8927 Pressure drop evaporator side RPa 17 20 19 12 15 11 17 21 12 Length of refrigerant lines from/to 0 - 10 m Gas line (C1)	Cooling total input current	A		92,0	108,0	115,0	12	8,0	151,0	168,9	184,0	2	06,0	227,0
Pressure drop evaporator side RPa 17 20 19 12 15 11 17 21 12	EER	W/W	1	3,83	3,74	3,85	3,	89	3,69	3,64	4,00	:	3,99	3,82
Cast line (C1)	Evaporator water flow rate	I/h		34021	39713	44127	50	189	56115	62473	75211	8	4731	89274
Gas line (C1)	Pressure drop evaporator side	kPa		17	20	19	1	2	15	11	17		21	12
Gas line (C2)	Length of refrigerant lines from/to 0 - 10 m													
Gas line (C3)	Gas line (C1)	Ø		54,0	67,0	67,0	67	7,0	76,0	76,0	89,0		39,0	89,0
Liquid line (C1)	Gas line (C2)			-	-	-		-	-	-	-		-	-
Liquid line (C2)	Gas line (C3)	Ø		-	-	-		-	-	-	-		-	-
Liquid line (C3)	Liquid line (C1)			35,0	42,0	42,0	42	2,0	42,0	54,0	54,0		54,0	54,0
(1) Service side water 12 °C/7 °C; Condensing temperature 45 °C Size 2502 2802 3202 3602 4202 4802 5602 6402 6703 7203 8403 96 Model: ° Cooling performance 12 °C/7 °C - gas R1234ze (1) Cooling capacity kW 453,9 510,4 593,1 659,9 765,6 890,9 975,6 1082,9 1179,9 1316,9 1449,4 157 Input power kW 116,3 128,9 149,1 172,3 195,5 215,5 242,5 277,6 290,6 321,6 361,5 40 Cooling total input current A 207,0 229,0 256,0 293,0 327,0 370,0 411,0 471,0 488,0 555,0 616,0 70 EER W/W 3,90 3,96 3,98 3,83 3,92 4,13 4,02 3,90 4,06 4,09 4,01 3, Evaporator water flow rate W/h 77982 87695 101893 113381 131535 153062 167617 186047 202720 226251 249032 270 Pressure drop evaporator side kPa 36 28 26 33 27 35 26 33 20 26 25 1 Length of refrigerant lines from/to 0 - 10 m	Liquid line (C2)	Ø		-	-	-		-	-	-	-		-	-
Size 2502 2802 3202 3602 4202 4802 5602 6402 6703 7203 8403 96 Model: ° Cooling performance 12 °C/7 °C - gas R1234ze (1) Cooling capacity kW 453,9 510,4 593,1 659,9 765,6 890,9 975,6 1082,9 1179,9 1316,9 1449,4 157 Input power kW 116,3 128,9 149,1 172,3 195,5 215,5 242,5 277,6 290,6 321,6 361,5 40 Cooling total input current A 207,0 229,0 256,0 293,0 327,0 370,0 411,0 471,0 488,0 555,0 616,0 70 EER W/W 3,90 3,96 3,98 3,83 3,92 4,13 4,02 3,90 4,06 4,09 4,01 3,6 Evaporator water flow rate I/h 77982 87695 101893 113381 131535 153062 <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>-</td>				-	-	-			-	-	-		-	-
Model: ° Cooling performance 12 °C/7 °C- gas R1234ze (1) Cooling capacity kW 453,9 510,4 593,1 659,9 765,6 890,9 975,6 1082,9 1179,9 1316,9 1449,4 157 Input power kW 116,3 128,9 149,1 172,3 195,5 215,5 242,5 277,6 290,6 321,6 361,5 40 Cooling total input current A 207,0 229,0 256,0 293,0 327,0 370,0 411,0 471,0 488,0 555,0 616,0 70 EER W/W 3,90 3,96 3,98 3,83 3,92 4,13 4,02 3,90 4,06 4,09 4,01 3,6 Evaporator water flow rate I/h 77982 87695 101893 113381 131535 153062 167617 186047 202720 226251 249032 270 Pressure drop evaporator side kPa 36 28 26 33	(1) Service side water 12 °C / 7 °C; Condensing temperature	e 45 °C												
Cooling performance 12 °C/7 °C- gas R1234ze (1) Cooling capacity kW 453,9 510,4 593,1 659,9 765,6 890,9 975,6 1082,9 1179,9 1316,9 1449,4 157 Input power kW 116,3 128,9 149,1 172,3 195,5 215,5 242,5 277,6 290,6 321,6 361,5 40 Cooling total input current A 207,0 229,0 256,0 293,0 327,0 370,0 411,0 471,0 488,0 555,0 616,0 70 EER W/W 3,90 3,96 3,98 3,83 3,92 4,13 4,02 3,90 4,06 4,09 4,01 3,6 Evaporator water flow rate I/h 77982 87695 101893 113381 131535 153062 167617 186047 202720 226251 249032 270 Pressure drop evaporator side kPa 36 28 26 33 27 35	Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Cooling capacity kW 453,9 510,4 593,1 659,9 765,6 890,9 975,6 1082,9 1179,9 1316,9 1449,4 157 Input power kW 116,3 128,9 149,1 172,3 195,5 215,5 242,5 277,6 290,6 321,6 361,5 40 Cooling total input current A 207,0 229,0 256,0 293,0 327,0 370,0 411,0 471,0 488,0 555,0 616,0 70 EER W/W 3,90 3,96 3,98 3,83 3,92 4,13 4,02 3,90 4,06 4,09 4,01 3,6 Exaporator water flow rate I/h 77982 87695 101893 113381 131535 153062 167617 186047 202720 226251 249032 270 Pressure drop evaporator side kPa 36 28 26 33 27 35 26 33 20 26 25 1 Length of refrigerant lines from/to 0 - 10 m	Model: °													
Input power kW 116,3 128,9 149,1 172,3 195,5 215,5 242,5 277,6 290,6 321,6 361,5 40 Cooling total input current A 207,0 229,0 256,0 293,0 327,0 370,0 411,0 471,0 488,0 555,0 616,0 70 EER W/W 3,90 3,96 3,98 3,83 3,92 4,13 4,02 3,90 4,06 4,09 4,01 3,6 Evaporator water flow rate I/h 77982 87695 101893 113381 131535 153062 167617 186047 202720 22651 249032 270 Pressure drop evaporator side kPa 36 28 26 33 27 35 26 33 20 26 25 1 Length of refrigerant lines from/to 0 - 10 m	Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling total input current A 207,0 229,0 256,0 293,0 327,0 370,0 411,0 471,0 488,0 555,0 616,0 70 EER W/W 3,90 3,96 3,98 3,83 3,92 4,13 4,02 3,90 4,06 4,09 4,01 3,6 Evaporator water flow rate I/h 77982 87695 101893 113381 131535 153062 167617 186047 202720 226251 249032 270 Pressure drop evaporator side kPa 36 28 26 33 27 35 26 33 20 26 25 1 Length of refrigerant lines from/to 0 - 10 m	Cooling capacity	kW	453,9	510,4	593,1	659,9	765,6	890,9	975,6	1082,9	1179,9	1316,9	1449,4	1574,0
EER W/W 3,90 3,96 3,98 3,83 3,92 4,13 4,02 3,90 4,06 4,09 4,01 3,6 Evaporator water flow rate I/h 77982 87695 101893 113381 131535 153062 167617 186047 202720 226251 249032 270 Pressure drop evaporator side kPa 36 28 26 33 27 35 26 33 20 26 25 1 Length of refrigerant lines from/to 0 - 10 m	Input power	kW	116,3	128,9	149,1	172,3	195,5	215,5	242,5	277,6	290,6	321,6	361,5	409,6
Evaporator water flow rate	Cooling total input current	Α	207,0	229,0	256,0	293,0	327,0	370,0	411,0	471,0	488,0	555,0	616,0	700,0
Pressure drop evaporator side kPa 36 28 26 33 27 35 26 33 20 26 25 1 Length of refrigerant lines from/to 0 - 10 m	==	W/W	3,90	3,96	3,98	3,83	3,92	4,13	4,02	3,90	4,06	4,09	4,01	3,84
Length of refrigerant lines from/to 0 - 10 m	Evaporator water flow rate	l/h	77982	87695	101893	113381	131535	153062	167617	186047	202720	226251	249032	270431
	Pressure drop evaporator side	kPa	36	28	26	33	27	35	26	33	20	26	25	14
C (C)	Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1) Ø 67,0 67,0 67,0 76,0 88,9 88,9 88,9 76,0 88,9 88,9 88,9 88,9 88,9 88,9 88,9 88	Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2) Ø 67,0 67,0 67,0 76,0 76,0 88,9 88,9 76,0 88,9 88,9 88,9 88,9 88,9 88,9 88,9 88	Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
	Gas line (C3)		-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1) Ø 42,0 42,0 42,0 42,0 54,0 54,0 54,0 54,0 54,0 54,0 54,0 54		-	42.0	42.0	42 N	42.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54,0
Liquid line (C2) Ø 42,0 42,0 42,0 54,0 54,0 54,0 54,0 54,0 54,0 54,0 54	Liquid line (C1)	Ø	42,0	42,0	42,0	72,0	31,0	3 .//	3 1,0	3 1/0	3 1/0	3 1/0	3 1,0	3 .10
Liquid line (C3) Ø 54,0 54,0 54,0 54														54,0

Liquid line (C3) Ø
(1) Service side water 12 °C/7 °C; Condensing temperature 45 °C

Model output data WFGI° - °E - gas R1234ze

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C/7 °C - gas R1234ze (1)					
Cooling capacity	kW	1146,9	1278,8	1388,3	1517,0
Input power	kW	291,2	322,2	361,3	409,8
Cooling total input current	A	489,0	556,0	615,0	700,0
EER	W/W	3,94	3,97	3,84	3,70
Evaporator water flow rate	I/h	197057	219704	238518	260630
Pressure drop evaporator side	kPa	20	23	17	21
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model performance data (H) - for condensing temperatures up to 60°C

Model output data - model WFGIH - AE - gas R1234ze

Size			1101	1251	1401	16	501	1801	2101	2401		2801	3201
Model: H	'												
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW		198,0	231,1	256,8	29	2,1	326,6	363,6	437,8	} 4	193,2	519,6
Input power	kW		51,6	61,8	66,8	75	5,1	88,4	100,0	109,4	1 1	123,5	136,2
Cooling total input current	A		92,0	108,0	115,0	12	8,0	151,0	168,9	184,0) 2	206,0	227,0
EER	W/W	1	3,83	3,74	3,85	3,	89	3,69	3,64	4,00		3,99	3,82
Evaporator water flow rate	I/h		34021	39713	44127	50	189	56115	62473	7521	1 8	4731	89274
Pressure drop evaporator side	kPa		17	20	19	1	12	15	11	17		21	12
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø		54,0	67,0	67,0	67	7,0	76,0	76,0	89,0		89,0	89,0
Gas line (C2)	Ø		-	-	-		-	-	-	-		-	-
Gas line (C3)	Ø		-	-	-		-	-	-	-		-	-
Liquid line (C1)	Ø		35,0	42,0	42,0	42	2,0	42,0	54,0	54,0		54,0	54,0
Liquid line (C2)	Ø		-	-	-		-	-	-	-		-	-
Liquid line (C3)	Ø		-	-	-		-	-	-	-		-	-
(1) Service side water 12 °C / 7 °C; Condensing temperature	re 45 °C												
Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	453,9	510,4	593,1	659,9	765,6	890,9	975,6	1082,9	1179,9	1316,9	1449,4	1574,0
Input power	kW	116,3	128,9	149,1	172,3	195,5	215,5	242,5	277,6	290,6	321,6	361,5	409,6
Cooling total input current	A	207,0	229,0	256,0	293,0	327,0	370,0	411,0	471,0	488,0	555,0	616,0	700,0
EER	W/W	3,90	3,96	3,98	3,83	3,92	4,13	4,02	3,90	4,06	4,09	4,01	3,84
Evaporator water flow rate	l/h	77982	87695	101893	113381	131535	153062	167617	186047	202720	226251	249032	270431
Pressure drop evaporator side	kPa	36	28	26	33	27	35	26	33	20	26	25	14
Length of refrigerant lines from/to 0 - 10 m													
					74.0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	70,0	00/2	00/2		/ -		00,7	/-
Gas line (C1) Gas line (C2)	Ø Ø	67,0 67,0	67,0 67,0	67,0 67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2) Gas line (C3)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9 42,0	76,0 76,0	88,9 88,9	88,9 88,9	88,9 88,9

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model output data - model WFGIH - °E - gas R1234ze

Size		6703	7203	8403	9603
Model: H	'				
Cooling performance 12 °C / 7 °C - gas R1234ze (1)					
Cooling capacity	kW	1146,9	1278,8	1388,3	1517,0
Input power	kW	291,2	322,2	361,3	409,8
Cooling total input current	A	489,0	556,0	615,0	700,0
EER	W/W	3,94	3,97	3,84	3,70
Evaporator water flow rate	l/h	197057	219704	238518	260630
Pressure drop evaporator side	kPa	20	23	17	21
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
iquid line (C1)	Ø	54,0	54,0	54,0	54,0
iquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

GENERAL TECHNICAL DATA

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor																							
Туре	°,A	type											Screw										
Compressor regulation	°,A	Туре	1	- 1	- 1	1	1	1	1	1/1	- 1	1/1	1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type											R1234ze	2									
Defrigerant lead circuit 1 (1)	٥	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
Refrigerant load circuit 1 (1)	A	kg	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Definement lead singuit 2 (1)	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
Refrigerant load circuit 2 (1)	Α	kg	-	-	-	-	-	-	-	50,0	-	53,0	-	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Definement load singuit 2 (1)	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
Refrigerant load circuit 3 (1)	A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger																							
Туре	°,A	type										She	ell and t	ube									
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Туре										Gro	oved jo	ints									
Source side heat exchanger																							
Туре	°,A	type										She	ell and t	ube									
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Туре										Gro	oved jo	ints									

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

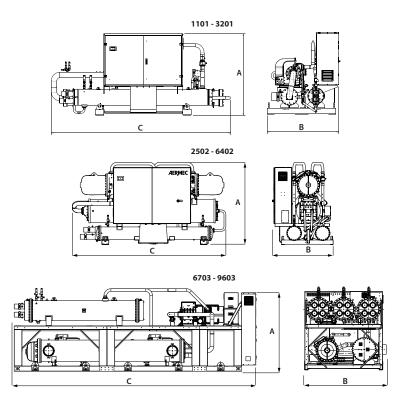
SOUND DATA

Sound data calculated with functioning in cooling mode - R1234ze gas

Size		1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Refrigerant gas: °																						
Standard equipment																						
Sound power level (1)	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	97,3	97,3	97,7	98,0	98,8	98,8	98,9	98,9	99,3	100,0	99,5	100,6	101,0	102,0
Silenced equipment																						
Sound power level (1)	dB(A)	90,0	91,8	92,1	93,0	93,1	93,2	93,3	93,3	93,3	93,7	94,0	94,8	94,8	94,9	94,9	95,3	96,0	95,5	96,6	97,0	98,0

⁽¹⁾ Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS



Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °, H																							
Dimensions and weights - standard config	uration																						
	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
Α -	Α	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
D	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
В -	Α	mm	1510	1560	1610	1610	1610	1610	1610	1645	1630	1645	1630	1675	1675	1685	1875	1875	2000	2200	2200	2200	2200
	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
-	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4380	4380	4395	4500	4580	4580	5650	5650	5650	5650
Fti-la	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8740	9680	9900	10000
Empty weight -	Α	kg	2020	2030	2230	2410	2450	2670	3090	3710	3530	3980	3570	5160	5220	5710	6440	6680	6770	9730	11440	11980	12060
Dimensions and weights - quiet configura	tion																						
	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
Α -	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
2	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
В -	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1645	1630	1675	1675	1685	1875	1875	2000	2200	2200	2200	2200
	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
-	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	6840	6840	6840
	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9270	10240	10510	10610
Empty weight -	Α	kg	2180	2190	2390	2570	2610	2830	3280	4020	3720	4290	3760	5500	5560	6050	6810	7080	7170	10260	12000	12590	12670

[■] For the sizes of D-T-E versions please contact the factory.





















WFGN

Water cooled heat pump reversible water side

Cooling capacity 136 ÷ 1727 kW Heating capacity 153 ÷ 1921 kW



- Production of hot water up to 55°C.
- Production of chilled water down to -8°C.





DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

FEATURES

Operating field

Production of chilled water up to 16 °C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 55 °C.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10° C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

They are equipped with screw compressors and system and source side shell and tube heat exchangers dedicated to use of the new HFO R1234ze gas (A2L).

The R515B refrigerant with this type of gas is also available on the configurator. Performances do not vary when the refrigerant gas available on the configurator varies.

For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO₅

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

Adjustment includes complete management of the alarms and their log. Possibility to control two units in a Master-Slave configuration

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Mod-bus TCP/IP. SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A											•		•		•	•	•	•	•					
AER485P1 x n° 3 (1)	°,A																					•	•		•
AFDDACD	٥																					•	•		•
AERBACP	A	•		•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•		•
AFDNIFT	0																						•		•
AERNET	A			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•		•
AERSET	A	•	•	•	•	•	•	•	•	•	•		•		•										
MUUTICUULED EVO	٥																					•			•
MULTICHILLER_EVO	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DCD1	0																						•		•
PGD1	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•		•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	0701	0801	0901	1101	1251
0	°,L	°,D,T	-	-	-	-	-
A	°,L	0	AVX680	AVX680	AVX680	AVX681	AVX681
A	°,L	D,T	-	-	-	-	-
Version	Set-up	Heat recovery	1401	1601	1801	2101	2401
٥	°,L	°,D,T	-	-	-	-	-
A	0	0	AVX681	AVX682	AVX682	AVX683	AVX683
A	L	0	AVX681	AVX682	AVX685	AVX683	AVX683
A	°,L	D,T	-	-	-	-	-
Version	Set-up	Heat recovery	2502	2801	2802	3201	3202
٥	°,L	°,D,T	-	-	-	-	-
A	0	0	AVX673	AVX683	AVX674	AVX683	AVX679
A	L	0	AVX674	AVX683	AVX674	AVX683	AVX678
A	0	D	AVX674	-	AVX674	-	AVX679
A	0	Ţ	AVX674	-	AVX674	-	AVX678
A	L	D,T	AVX674	-	AVX674	-	AVX678
Version	Set-up	Heat recovery	3602	4202	4802	5602	6402
٥	°,L	°,D,T	-	-	-	-	-
A	0	°,D	AVX679	AVX678	AVX678	AVX678	AVX678
A	0	Ţ	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	°,D	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	T	AVX678	AVX678	AVX676	AVX676	AVX676
Version	Set-up	Heat recovery		6703	7203	8403	9603
0	°,L	°,D,T	Co	ntact us.	Contact us.	Contact us.	Contact us.
A	°,L	°,D,T	Co	ntact us.	Contact us.	Contact us.	Contact us.

Power factor correction

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801
A	RIFWFN0701	RIFWFN0801	RIFWFN0901	RIFWFN1101	RIFWFN1251	RIFWFN1401	RIFWFN1601	RIFWFN1801	RIFWFN2101	RIFWFN2401	RIFWFN2502	RIFWFN2801
Vor	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Ver	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Ver °	2802	3201	3202	3602	4202	4802	5602	6402	6703 RIFWFN6703	7203 RIFWFN7203	8403 RIFWFN8403	9603 RIFWFN9603

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801
A	ISG10	ISG10	ISG10	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15
Ver	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
0	-	-	-	-	-	-	-	-	ISG5	ISG5	ISG6	ISG6
A	ISG1	ISG15	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

CONFIGURATOR

Field	Description
1,2,3,4	WFGN
5,6,7,8	Size 0701, 0801, 0901, 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
9	Model
0	Heat pump reversible on the water side
10	Version
0	Standard (1)
Α	High efficiency
11	Operating field
Χ	Electronic thermostatic expansion valve
Z	Double electronic thermostatic for low temperature
12	Set-up
۰	Standard
K	Super low noise with hood (2)
L	Silenced with hood
13	Heat recovery
0	Without heat recovery
D	With desuperheater (3)
T	With total recovery (3)
14	Evaporator
۰	Standard
E	Evaporating unit
15	Power supply
۰	400V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit
2	230V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (4)
4	230V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (4)
5	500V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (4)
8	400V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit
9	500V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (4)
16	Refrigerant gas (5)
٥	R1234ze
G	R515B

PERFORMANCE SPECIFICATIONS

WFGN 0701-3201 - version A - gas R1234ze

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Cooling performance 12 °C/7 °C (1)													
Cooling capacity	kW	136,1	154,8	173,8	221,3	239,8	272,3	335,7	370,1	434,3	490,7	545,3	596,9
Input power	kW	26,0	29,7	33,8	41,4	45,0	51,2	61,5	69,0	78,1	88,5	100,0	109,9
Cooling total input current	Α	52,0	57,0	63,0	70,0	83,0	96,0	107,0	119,0	130,0	156,0	173,0	193,0
EER	W/W	5,24	5,21	5,15	5,35	5,33	5,32	5,46	5,37	5,56	5,55	5,45	5,43
Water flow rate system side	l/h	23410	26632	29906	38077	41247	46844	57740	63636	74675	84359	93748	102619
Pressure drop system side	kPa	22	25	24	22	21	22	16	20	15	21	25	15
Water flow rate source side	I/h	27751	31586	35551	44983	48779	55416	68103	75234	87855	99259	110576	121174
Pressure drop source side	kPa	21	20	19	24	21	18	18	18	19	19	19	18
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	153,1	172,4	196,2	245,2	267,2	303,2	369,1	408,3	478,4	547,5	601,0	663,0
Input power	kW	32,6	37,2	42,4	51,8	56,4	64,2	76,0	85,4	96,3	109,6	123,2	137,5
Heating total input current	Α	64,0	71,0	79,0	87,0	103,0	119,0	131,0	146,0	160,0	191,0	210,0	240,0
COP	W/W	4,69	4,63	4,63	4,74	4,73	4,73	4,86	4,78	4,97	4,99	4,88	4,82
Water flow rate system side	l/h	26569	29919	34065	42555	46384	52636	64078	70908	83096	95098	104400	115170
Pressure drop system side	kPa	20	18	17	22	19	16	16	16	17	18	17	17
Water flow rate source side	l/h	35233	39544	45008	56537	61580	69831	85443	94274	111358	127787	139586	153205
Pressure drop source side	kPa	49	55	55	48	47	48	34	44	34	48	57	34

⁽¹⁾ Only for sizes from 6703 to 9603(2) Only for units with R515B(3) Not available for the condenserless "E"

 ⁽⁴⁾ The 230V and 500V power supplies are only available for sizes 0701 - 0801 - 0901 - 1101 - 1251 - 1401 - 2502 - 2802
 (5) Performances do not vary when the refrigerant gas available on the configurator varies.

WFGN 2502-9603 - version A - gas R1234ze

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	489,1	556,6	675,8	750,2	879,3	995,4	1100,3	1217,3	1315,3	1454,9	1594,7	1727,0
Input power	kW	91,4	103,5	125,1	138,3	159,8	180,3	202,1	225,0	236,7	262,9	296,7	326,6
Cooling total input current	Α	166,0	192,0	214,0	237,0	261,0	312,0	346,0	388,0	386,0	466,0	515,0	577,0
EER	W/W	5,35	5,38	5,40	5,42	5,50	5,52	5,45	5,41	5,56	5,53	5,38	5,29
Water flow rate system side	l/h	84115	95704	116204	128995	151168	171142	189154	209277	226089	250084	274117	296820
Pressure drop system side	kPa	42	33	34	42	35	44	33	41	25	31	30	17
Water flow rate source side	l/h	99161	112842	136932	152026	177654	200961	222817	246414	266044	294386	324122	352026
Pressure drop source side	kPa	53	50	49	31	51	51	42	62	19	18	18	21
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	545,1	618,4	747,2	833,5	967,0	1093,6	1204,7	1333,7	1457,0	1601,3	1761,4	1921,0
Input power	kW	116,1	130,9	155,9	173,0	198,3	224,8	248,9	277,7	293,3	326,6	365,9	400,0
Heating total input current	Α	208,0	240,0	264,0	291,0	320,0	383,0	421,0	473,0	473,0	571,0	627,0	702,0
COP	W/W	4,70	4,73	4,79	4,82	4,88	4,87	4,84	4,80	4,97	4,90	4,81	4,80
Water flow rate system side	l/h	94650	107376	129767	144768	167936	189943	209256	231650	253135	278220	306025	333765
Pressure drop system side	kPa	49	45	44	28	45	46	37	55	17	16	16	19
Water flow rate source side	l/h	126174	143007	173413	193793	225352	255129	279883	310087	339613	372508	407744	443369
Pressure drop source side	kPa	95	74	77	96	79	98	73	91	56	70	66	37

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGN 6703-9603 - version ° - gas R1234ze

Size		6703	7203	8403	9603
Cooling performance 12 °C/7 °C(1)					
Cooling capacity	kW	1300,7	1439,0	1554,8	1692,4
Input power	kW	239,3	265,4	297,1	329,6
Cooling total input current	A	396,0	475,0	525,0	588,0
EER	W/W	5,44	5,42	5,23	5,13
Water flow rate system side	I/h	223578	247357	267235	290895
Pressure drop system side	kPa	26	29	22	26
Water flow rate source side	I/h	263609	291721	317119	346049
Pressure drop source side	kPa	39	39	33	39
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1444,7	1588,0	1725,3	1890,3
Input power	kW	296,0	328,4	364,3	404,7
Heating total input current	A	485,0	583,0	639,0	716,0
COP	W/W	4,88	4,83	4,74	4,67
Water flow rate system side	l/h	250963	275857	299728	328385
Pressure drop system side	kPa	36	35	29	35
Water flow rate source side	l/h	335840	368447	397507	434518
Pressure drop source side	kPa	59	65	48	58

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801
SEER - 12/7 (EN14825: 2018) (1)												
SEER	W/W	6,71	6,96	6,87	6,43	6,80	6,79	6,69	6,69	7,01	6,99	6,58
Seasonal efficiency	%	265,30	275,30	271,70	254,00	269,00	268,40	264,60	264,70	277,20	276,70	260,30
SEPR - (EN 14825: 2018) High temperature (2)												
SEPR	W/W	8,20	8,00	8,20	8,00	8,00	8,00	8,00	7,90	8,10	8,10	8,10

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			6703	7203	8403	9603
SEER - 12/7 (EN14825: 2018) (1)						
SEER	°,A	W/W	7,11	7,14	7,03	6,94
Seasonal efficiency	°,A	%	281,30	282,50	278,30	274,40
SEPR - (EN 14825: 2018) High te	mperature (2)					
SEPR	°.A	W/W	8.10	8.20	8.20	8.30

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature. (2) Calculation performed with VARIABLE water flow rate.

Size 0701 0801 0901 1101 1251 1401 UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh \leq 400 kW (1) kW Pdesignh kW 197,00 219,00 253,00 312,00 339,00 384,00 Α W/W SCOP 4,65 4,70 A W/W4,65 4,75 5,00 4,98 % ηsh 180 192 178 178 182 191 Α %

 $[\]overline{\rm (1)}\,$ Efficiencies for average temperature applications (55 °C)

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

WFGN - version AE - gas R1234ze

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Evaporator: E													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	121,0	137,5	154,5	196,6	214,1	243,2	297,4	329,0	390,9	442,4	480,9	529,0
Input power	kW	31,4	35,9	40,9	50,0	54,7	62,2	74,1	83,1	93,9	106,2	119,1	131,5
Cooling total input current	A	58,0	65,0	73,0	83,0	97,0	111,0	125,0	140,0	154,0	183,0	203,0	226,0
EER	W/W	3,85	3,83	3,77	3,93	3,92	3,91	4,02	3,96	4,16	4,17	4,04	4,02
Evaporator water flow rate	l/h	20792	23621	26548	33776	36780	41778	51103	56534	67168	76005	110092	90893
Pressure drop evaporator side	kPa	31	35	35	31	31	32	22	29	22	30	35	21
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	42,0	54,0	54,0	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	28,0	35,0	35,0	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
(1) Service side water 12 °C / 7 °C; Condensing temperate	ture 45 °C												
Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Evaporator: E								'					
Cooling performance 12 °C/7 °C - gas R1234ze (1)													
Cooling capacity	kW	435,2	495,4	598,4	665,6	796,3	895,9	964,3	1068,0	1165,6	1325,4	1443,9	1565,4
Input power	kW	109,2	124,2	148,1	164,9	188,7	212,3	238,2	262,9	279,7	316,3	354,8	392,2
Cooling total input current	A	193,0	222,0	250,0	279,0	310,0	365,0	405,0	451,0	459,0	545,0	603,0	673,0
EER	W/W	3,99	3,99	4,04	4,04	4,22	4,22	4,05	4,06	4,17	4,19	4,07	3,99
Evaporator water flow rate	l/h	74770	85110	102813	114362	136819	153933	165685	183500	200259	227721	248077	268953
Pressure drop evaporator side	kPa	60	48	49	63	50	63	45	56	34	46	43	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0
(1) Service side water 12 °C / 7 °C: Condensing temperat											. , .		

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

WFGN - version °E - gas R1234ze

Size		6703	7203	8403	9603
Evaporator: E					
Cooling performance 12 °C / 7 °C - gas R1234ze (1)					
Cooling capacity	kW	1129,2	1283,0	1378,4	1504,1
Input power	kW	282,3	319,1	356,8	394,8
Cooling total input current	A	463,0	549,0	606,0	676,0
EER	W/W	4,00	4,02	3,86	3,81
Evaporator water flow rate	l/h	194017	220439	236821	258428
Pressure drop evaporator side	kPa	35	41	30	36
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ELECTRIC DATA

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402
Electric data																					
Maximum current (FLA)	A	106,0	119,0	136,0	162,0	183,0	208,0	243,0	275,0	305,0	350,0	365,0	389,0	416,0	427,0	486,0	549,0	609,0	700,0	777,0	854,0
Peak current (LRA)	A	163	192	229	300	314	341	436	465	586	650	440	805	486	917	601	650	792	890	1070	1210
Size							67	03			72	03			84	03			96	603	
Electric data																					
Maximum current (FLA)	°,A		ŀ	Ą			91.	3,0			105	50,0			116	6,0			128	31,0	
Peak current (LRA)	°.A			4			90	98			11	29			13	34			15	i02	

GENERAL TECHNICAL DATA

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
Compressor																
Туре	°,A	type							Scr	ew						
Compressor regulation	°,A	Type							On-	-Off						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	2	1	2	1
Circuits	°,A	no.	1	1	1	1	1	1	1	1	1	1	2	1	2	1
Refrigerant	°,A	type							R12	34ze						
Refrigerant load circuit 1 (1)	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
menigerani ioau ciicuit i (1)	A	kg	41,0	41,0	38,0	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0
Pofrigorant load circuit 2 (1)	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigerant load circuit 2 (1)	A	kg	-	-	-	-	-	-	-	-	-	-	50,0	-	53,0	-
Refrigerant load circuit 3 (1)	°,A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
System side heat exchanger																
Туре	°,A	type							Shell ar	nd tube						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Туре							Groove	d joints						
Source side heat exchanger																
Туре	°,A	type							Shell a	nd tube						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	2	1	2	1
Connections (in/out)	°,A	Туре							Groove	d joints						
(1) The load indicated in the table is an e	stimated and prel	iminary value	e. The final	value of th	e refrigerar	nt load is ind	icated on	the unit's to	echnical lab	el. For furth	er inform	ation conta	ct the office	2.		
Size			32	202	3602	4202		4802	5602	6402	2	6703	7203	84	03	9603
Compressor																
Туре	°,A	type							S	crew						
Compressor regulation	°,A	Туре							0	n-Off						
Number	°,A	no.		2	2	2		2	2	2		3	3	3	}	3
Circuits	°,A	no.		2	2	2		2	2	2		3	3		3	3
Refrigerant	°,A	type							R1	234ze						
Definement lead singuist 1 (1)	0	kg		-	-	-		-	-	-		107,0	115,0	13	6,0	157,0
Refrigerant load circuit 1 (1)	A	kg	8	1,0	71,0	70,0	•	123,0	124,0	121,)	106,0	104,0	11	0,0	120,0
Definement lead sinsuit 2 (1)	0	kg		-	-	-		-	-	-		107,0	115,0	13	6,0	157,0
Refrigerant load circuit 2 (1)	A	kg	8	1,0	71,0	70,0	•	123,0	124,0	121,0)	106,0	104,0	110	0,0	120,0
D.f.:	0	kg		-	-	-		-	-	-		107,0	115,0	13	6,0	157,0
Refrigerant load circuit 3 (1)	A	kg		-	-	-		-	-	-		106,0	104,0	110	0,0	120,0
System side heat exchanger																
Туре	°,A	type							Shell	and tube						
Number	°,A	no.		1	1	1		1	1	1		1	1	1	l	1
Connections (in/out)	°,A	Туре							Groo	ved joints		-				
Source side heat exchanger																
Туре	°,A	type							Shell	and tube						
Number	°,A	no.		2	2	2		2	2	2		3	3		2	3
Nulliber	,Α	110.														

Connections (in/out) °,A Type Grooved joints

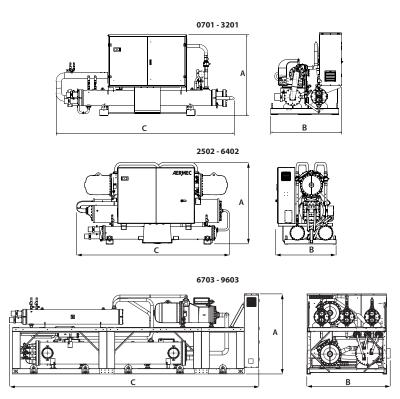
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Refrigerant gas: °																										
Standard equipment																										
Cound november (1)	0	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97,0	97,2	99,5	100,0
Sound power level (1)	A	dB(A)	87,7	88,0	87,7	89,1	90,3	91,3	90,5	90,7	93,2	92,5	93,5	94,8	94,0	94,2	94,0	94,5	95,0	95,5	97,5	98,0	97,0	97,2	99,5	100,0
Silenced equipment																										
Cound normal (1)	0	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93,0	93,2	95,5	96,0
Sound power level (1)	A	dB(A)	83,7	84,0	83,7	85,1	86,3	87,3	86,5	86,7	89,2	88,5	89,5	90,8	90,0	90,2	90,0	90,5	91,0	91,5	93,5	94,0	93,0	93,2	95,5	96,0

⁽¹⁾ Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS



<u></u>						40.00		4440	4446								2405				
Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402
Set-up: °																				-	
Dimensions and weights		4700	4700	4700	4700	4700	4045	4015	4045	4007	4007		4000		4000	2405	2405	22.12	2122	2112	
A						1790	1865	1865	1865	1887	1887	2000	1920	2075	1920	2195	2195	2340	2432	2440	2432
<u>B</u>						1550	1610	1610	1610	1610	1610	1500	1630	1500	1630	1575	1575	1585	1775	1775	1820
[3445	3560	4100	4100	4140	4252	4320	4290	4345	4290	4380	4380	4395	4535	4605	4605
Empty weight	kg	1610	1630	1630	2120	2130	2350	2940	2980	3260	3320	3810	3820	4100	3870	5690	5750	6300	6670	6970	7070
Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402
Set-up: L																					
Dimensions and weights																					
<u>A</u>	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	2000	1920	2075	1920	2195	2195	2340	2432	2440	2432
В	mm	1450	1450	1450	1540	1600	1610	1610	1610	1630	1630	1500	1645	1500	1645	1575	1575	1585	1775	1775	1820
(mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4320	4290	4345	4290	4650	4650	4600	5015	5150	5150
Empty weight	kg	1770	1790	1790	2280	2290	2510	3120	3170	3450	3510	4120	4030	4410	4080	6050	6120	6670	7040	7420	7490
Size							67	03			72	03			84	03			96	03	
Set-up: °																					
Dimensions and weights																					
A			m	m			22	50			22	50			22	50			22	50	
<u>B</u>			m	m			22				22				22				22		
ſ			m	m			56	50			56	50			56	50			56	50	
	A		m	m			68				68				68				68		
Empty weight			k	g			93	30			99	10			101	130			102	200	
	A		k	g			103	320			116	570			122	270			12:	360	
Size							67	03			72	03			84	03			96	03	
Set-up: L																					
Dimensions and weights																					
A	°,A		m	m			22	50			22	50			22	50			22	50	
В	°,A		m	m			22	.00			22	00			22	.00			22	.00	
(m	m			56	50			56	50			56	50			56	50	
	A		m	m			68	40			68	40			68	40			68	40	
Empty weight		mm 1720 1720 1720 1720 mm 1450 1450 1450 1540 mm 3480 3480 3480 3470 kg 1770 1790 1790 2280 **Open color of the color of					98	90			104	170			107	760			108	330	
Empty weight	A	°,A mm ° mm A mm ° kg A kg A mm °,A mm °,A mm ° a mm ° mm A mm ° kg					108	380			122	230			129	950			129	990	

■ For the sizes of D-T-E versions please contact the factory.

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WFI

- Condenser side hot water production up to 60°C.
- Production of chilled water down to -8°C.
- Available also R513A refrigerant gas

Water cooled heat pump reversible water side

Cooling capacity 291 ÷ 2406 kW Heating capacity 326 ÷ 2664 kW





DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

FEATURES

Operating field

Production of chilled water up to 16° C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 60° C depending on the model.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10° C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

All units are equipped with an inverter compressor combined with an onoff compressor (two-circuit sizes) or two on/off compressors (three-circuit sizes) with R134a refrigerant.

The R513A (XP10) refrigerant with this type of gas is also available on the configurator. On average, the units have a yield > 2% and an EER < 3% compared to the same size with R134a.

For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO₅

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

Adjustment includes complete management of the alarms and their log. Possibility to control two units in a Master-Slave configuration

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP. SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	А	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A								•						•	•						
AER485P1 x n° 3 (1)	°,A																		•			•
AFDDACD	0																			•	•	•
AERBACP —	А	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AFDNIFT	0																		•	•		•
AERNET —	А	•	•	•	•	•		•	•	•	•	•		•	•	•	•	•	•	•	•	•
MULTICULUED EVO	0																		•	•	•	•
MULTICHILLER_EVO —	A	•		•	•	•		•	•	•		•		•	•	•			•	•	•	•
DCD1	0																		•	•	•	•
PGD1 —	А			•	•			•				•	•	•		•	•	•	•		•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

ibration					
Version	Set-up	Heat recovery	1101	1251	1401
0	°,K,L	°,D,T	-	-	-
A	0	0	AVX680	AVX680	AVX681
A	K	0	AVX681	AVX681	AVX688
A	L	0	AVX681	AVX681	AVX681
A	°,K,L	D,T	-	-	-
Version	Set-up	Heat recovery	1601	1801	2101
0	°,K,L	°,D,T	-	-	-
A	0	0	AVX687	AVX687	AVX682
A	K	0	AVX682	AVX682	AVX685
A	L	0	AVX682	AVX682	AVX682
A	°,K,L	D,T	-	-	-
Version	Set-up	Heat recovery	2401	2502	2801
0	°,K,L	°,D,T	-	-	-
A	0	0	AVX685	AVX673	AVX683
A	K	0	AVX683	Contact us.	AVX683
A	L	0	AVX683	AVX674	AVX683
A	°,L	D,T	-	AVX674	-
А	K	D,T	-	Contact us.	-
Version	Set-up	Heat recovery	2802	3201	3202
0	°,K,L	°,D,T	-	-	-
A	°,L	0	AVX674	AVX683	AVX679
A	K	0	Contact us.	AVX683	Contact us.
A	°,L	D,T	AVX674	-	AVX679
A	K	D,T	Contact us.	-	Contact us.
Version	Set-up	Heat recovery	3602	4202	4802
0	°,K,L	°,D,T	-	-	-
A	0	°,D	AVX679	AVX679	AVX678
A	L	0	AVX679	AVX679	AVX678
A	K	°,D,T	Contact us.	Contact us.	Contact us.
A	0	Ţ	AVX679	AVX678	AVX678
A	L	D,T	AVX679	AVX678	AVX678
Version	Set-up	Heat recovery	5602	6402	6703
0	°,K,L	°,D,T	-	-	Contact us.
A	°,L	°,D,T	AVX678	AVX678	Contact us.
A	K	°,D,T	Contact us.	Contact us.	Contact us.
Version	Set-up	Heat recovery	7203	8403	9603
0	°,K,L	°,D,T	Contact us.	Contact us.	Contact us.
A	°,K,L	°,D,T	Contact us.	Contact us.	Contact us.

not available

Power factor correction

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	-	-	-	-	-	-	-	RIFWFI2502	-	RIFWFI2802	-

The accessory cannot be fitted on the configurations indicated with - A grey background indicates the accessory must be assembled in the factory

 Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
0	-	-	-	-	-	-	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603
A	RIFWFI3202	RIFWFI3602	RIFWFI4202	RIFWFI4802	RIFWFI5602	RIFWFI6402	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15
A grey background indicates the accessory must be assembled in the factory											
Ver	3202	3602	4202	4802	5602		6402	6703	7203	8403	9603
0	-	-	-	-	-		-	ISG5	ISG5	ISG6	ISG6
A	ISG2	ISG2	ISG2	ISG3	ISG3		ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	WFI
4,5,6,7	Size 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
8	Model
۰	Standard condensation
Н	Optimised for high condensation
9	Version
•	Standard (1)
Α	High efficiency
10	Operating field
X	Electronic thermostatic expansion valve (2)
Z	Double electronic thermostatic for low temperature (3)
11	Set-up
•	Standard without hood
K	Super silenced
L	Silenced with hood
12	Heat recovery
•	Without heat recovery
D	With desuperheater (4)
T	With total recovery (4)
13	Evaporator
•	Standard
E	Evaporating unit
14	Power supply
0	400V ~ 3 50Hz with fuses
8	$400V \sim 3$ 50Hz with magnet circuit breakers (5)
15	Refrigerant gas
0	R134a
G	R513A (XP10) (6)

MODEL PERFORMANCE DATA (°) - FOR TEMPERATURES WATER PRODUCED UP TO +55°C

WFI 1101 - 3201 - model (°) version A - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	291,4	339,7	388,2	433,5	496,2	552,0	635,3	714,7	783,3
Input power	kW	55,9	66,5	75,6	85,1	98,6	111,6	122,5	138,9	148,8
Cooling total input current	Α	95,0	111,0	125,0	140,0	161,0	181,0	199,0	223,0	241,0
EER	W/W	5,21	5,11	5,13	5,09	5,03	4,95	5,19	5,15	5,26
Water flow rate source side	l/h	59350	69394	79271	88730	101760	113566	129637	145972	159590
Pressure drop source side	kPa	42	41	36	32	30	30	33	33	31
Water flow rate system side	l/h	50123	58428	66772	74535	85331	94907	109229	122894	134668
Pressure drop system side	kPa	38	43	45	27	32	24	35	45	26
Heating performances 40 °C / 45 °C - gas R134a (2)										
Heating capacity	kW	326,0	387,7	437,0	490,2	566,3	631,1	707,9	798,2	873,1
Input power	kW	74,3	88,1	97,5	106,3	126,9	143,0	156,9	178,5	189,7
Heating total input current	A	125,0	144,0	158,0	173,0	204,0	230,0	251,0	281,0	305,0
COP	W/W	4,39	4,40	4,48	4,61	4,46	4,41	4,51	4,47	4,60
Water flow rate system side	l/h	56587	67319	75890	85131	98344	109614	122953	138630	151661
Pressure drop system side	kPa	39	39	33	29	28	28	30	29	28
Water flow rate source side	l/h	74024	88235	99938	112439	128897	142918	161620	182106	199956
Pressure drop source side	kPa	83	98	101	61	74	54	76	98	57
(1) Date 14511:2022: Water user side 12 °C / 7 °C: Water sour	rca cida 30°C / 3	5 °C								

⁽¹⁾ Date 14511:2022; Water user side 12 °C/7 °C; Water source side 30 °C/35 °C (2) Date 14511:2022; Water user side 40 °C/45 °C; Water source side 10 °C/7 °C

⁽¹⁾ Only for sizes from 6703 to 9603 (2) Water produced from 0 °C \div 16 °C (3) Water produced from -8 °C up to 10 °C

⁽⁴⁾ Not available for the condenserless "E"
(5) Not available for 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2801, 3201 size
(6) For further details refer to the technical documentation or to the Magellano selection program.

WFI 2502 - 9603 - model (°) version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	670,0	757,4	889,1	1002,3	1143,6	1304,6	1441,8	1621,2	1771,2	1940,6	2167,0	2406,5
Input power	kW	127,4	144,9	168,9	192,8	218,4	244,5	275,3	309,9	327,6	362,0	410,0	458,2
Cooling total input current	Α	214,0	244,0	277,0	315,0	351,0	399,0	446,0	497,0	527,0	597,0	667,0	751,0
EER	W/W	5,26	5,23	5,26	5,20	5,24	5,34	5,24	5,23	5,41	5,36	5,29	5,25
Water flow rate source side	l/h	136129	154084	180866	204404	232973	264813	293658	330152	359034	393872	440716	490182
Pressure drop source side	kPa	55	58	48	46	44	47	48	48	38	31	32	40
Water flow rate system side	l/h	115215	130225	152866	172295	196591	224275	247834	278670	304461	333577	372486	413608
Pressure drop system side	kPa	53	43	38	27	31	44	31	39	45	54	57	33
Heating performances 40 °C / 45 °C - gas R134a (2)													
Heating capacity	kW	746,2	839,5	979,7	1112,5	1270,4	1441,8	1597,0	1815,3	1951,6	2145,2	2391,0	2664,3
Input power	kW	165,1	183,8	210,4	242,5	276,5	310,2	346,1	394,1	414,4	459,6	518,3	573,6
Heating total input current	Α	273,0	305,0	341,0	394,0	441,0	499,0	556,0	624,0	656,0	743,0	826,0	931,0
COP	W/W	4,52	4,57	4,66	4,59	4,59	4,65	4,61	4,61	4,71	4,67	4,61	4,64
Water flow rate system side	l/h	129578	145788	170162	193225	220670	250442	277422	315345	339051	372698	415418	462891
Pressure drop system side	kPa	50	51	42	41	40	42	43	44	34	28	28	36
Water flow rate source side	I/h	171302	192864	225753	254786	291203	332319	366559	417106	451025	495203	550498	612203
Pressure drop source side	kPa	118	95	82	60	67	97	69	88	98	118	125	73

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 6703 - 9603 - model (°) version ° - gas R134a

Size		6703	7203	8403	9603
Model: °	"				
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1723,4	1905,7	2114,5	2327,9
Input power	kW	331,7	366,9	409,8	463,6
Cooling total input current	A	522,0	592,0	659,0	744,0
EER	W/W	5,20	5,19	5,16	5,02
Water flow rate source side	l/h	350768	387913	431371	476493
Pressure drop source side	kPa	73	69	58	71
Water flow rate system side	l/h	296246	327572	363441	400118
Pressure drop system side	kPa	47	51	39	46
Heating performances 40 °C / 45 °C - gas R134a (2)					
Heating capacity	kW	1909,4	2114,9	2342,8	2593,9
Input power	kW	418,2	463,2	513,0	581,3
Heating total input current	A	651,0	737,0	817,0	922,0
COP	W/W	4,57	4,57	4,57	4,46
Water flow rate system side	I/h	331680	367403	407019	450652
Pressure drop system side	kPa	65	62	52	63
Water flow rate source side	l/h	438855	486287	537130	592236
Pressure drop source side	kPa	103	112	85	102

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
SEER - 12/7 (EN14825: 2018) . refrigeran	t gas R134a (1)																					
Cassanal officiana.	0	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	319,80	319,20	318,20	313,6
Seasonal efficiency	A	%	337,10	343,20	342,80	348,90	348,20	350,10	347,00	339,20	351,20	340,00	355,00	341,70	340,20	337,90	340,30	343,50	344,30	343,10	341,00	340,50	342,50
CLLD	0	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,07	8,06	8,03	7,92
SEER	А	W/W	8,50	8,66	8,65	8,80	8,78	8,83	8,75	8,56	8,86	8,58	8,95	8,62	8,58	8,52	8,58	8,66	8,68	8,65	8,60	8,59	8,64
SEPR - (EN 14825: 2018) High temperatu	re - refrigera	nt gas R1	134a (2)																			
CEDD	0	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,60	8,60	8,40	8,40
SEPR	A	W/W	9,40	9,40	9,30	8,70	9,30	8,90	9,10	9,10	9,00	9,00	8,90	8,90	8,80	8,90	8,80	8,90	8,90	9,00	8,80	8,60	8,80

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
Gas R134a																							
Maximum surrent (FLA)	0	Α	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	862,9	965,5	1077,5	1211,4
Maximum current (FLA)	A	Α	163,0	189,0	206,0	226,0	262,0	300,0	329,0	354,5	371,0	395,1	405,0	447,5	511,1	576,7	647,2	724,3	824,0	862,9	965,5	1077,5	1211,4
Dook current (LDA)	۰	Α	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1176,0	1301,0	1533,0	1744,0
Peak current (LRA)	A	Α	23,0	23,0	23,0	23,0	23,0	23,0	23,0	506,0	23,0	550,0	23,0	666,0	730,0	889,0	982,0	1179,0	1355,0	1176,0	1301,0	1533,0	1744,0

[•]

MODEL PERFORMANCE DATA (H) - FOR TEMPERATURES WATER PRODUCED UP TO +60°C

WFI 1101 - 3201 - model (H) version A - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	294,7	338,4	389,7	436,1	479,8	540,5	637,9	703,6	781,8
Input power	kW	57,3	67,1	79,0	87,4	98,3	110,3	127,2	142,1	162,7
Cooling total input current	A	98,0	112,0	129,0	143,0	159,0	177,0	206,0	228,0	262,0
EER	W/W	5,15	5,05	4,94	4,99	4,88	4,90	5,02	4,95	4,80
Water flow rate source side	l/h	60130	69281	80074	89564	98879	111372	130851	144597	161585
Pressure drop source side	kPa	44	41	37	32	30	30	33	32	33
Water flow rate system side	l/h	50692	58217	67029	74994	82505	92934	109677	120988	134409
Pressure drop system side	kPa	39	44	46	26	32	24	35	43	27
Heating performances 40 °C / 45 °C - gas R134a (2)										
Heating capacity	kW	325,5	376,9	434,9	486,7	538,4	604,0	709,5	783,3	871,3
Input power	kW	70,4	82,2	96,5	105,2	119,3	133,5	151,5	168,8	185,2
Heating total input current	A	118,0	135,0	155,0	170,0	190,0	212,0	241,0	265,0	295,0
COP	W/W	4,63	4,58	4,51	4,63	4,51	4,52	4,68	4,64	4,71
Water flow rate system side	l/h	56513	65431	75521	84523	93497	104898	123224	136049	151346
Pressure drop system side	kPa	39	37	33	29	27	27	29	29	29
Water flow rate source side	l/h	74998	86674	99584	111688	122874	137657	163575	180444	200734
Pressure drop source side	kPa	86	97	100	58	71	52	78	97	59

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 2502 - 9603 - model (H) version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	672,4	770,8	886,7	999,1	1145,7	1305,1	1454,0	1620,1	1770,6	1939,2	2161,5	2375,7
Input power	kW	132,4	153,1	173,5	195,9	224,6	254,6	288,9	327,3	340,1	376,7	435,1	482,5
Cooling total input current	Α	226,0	257,0	285,0	316,0	364,0	415,0	475,0	543,0	567,0	621,0	715,0	806,0
EER	W/W	5,08	5,04	5,11	5,10	5,10	5,13	5,03	4,95	5,21	5,15	4,97	4,92
Water flow rate source side	l/h	137384	157768	181226	204349	234273	266548	297970	332858	360998	396033	443977	488997
Pressure drop source side	kPa	53	55	48	48	49	48	50	46	36	32	32	38
Water flow rate system side	l/h	115641	132532	152452	171756	196959	224366	249941	278496	304349	333335	371531	408313
Pressure drop system side	kPa	54	44	36	27	32	44	32	40	46	54	51	30
Heating performances 40 °C / 45 °C - gas R134a (2)													
Heating capacity	kW	741,6	852,1	975,8	1106,1	1267,8	1441,2	1611,1	1842,1	1948,7	2138,6	2398,1	2642,8
Input power	kW	160,3	184,4	206,0	235,2	268,6	305,3	343,0	388,6	408,5	453,9	520,2	571,4
Heating total input current	A	268,0	305,0	334,0	376,0	431,0	490,0	558,0	633,0	669,0	732,0	838,0	945,0
COP	W/W	4,63	4,62	4,74	4,70	4,72	4,72	4,70	4,74	4,77	4,71	4,61	4,62
Water flow rate system side	l/h	128783	147970	169486	192116	220216	250335	279872	320004	338539	371554	416652	459154
Pressure drop system side	kPa	47	48	42	42	44	43	44	42	32	28	29	33
Water flow rate source side	I/h	171266	196282	225782	254976	292792	333536	371554	426498	451814	494844	551546	606152
Pressure drop source side	kPa	118	96	80	60	71	97	71	93	101	118	113	66

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 6703 - 9603 - model (H) version $^{\circ}$ - gas R134a

Size		6703	7203	8403	9603
Model: H	'				
Cooling performance 12 °C/7 °C - gas R134a (1)					
Cooling capacity	kW	1706,6	1904,2	2109,2	2298,6
Input power	kW	343,5	381,7	434,3	486,5
Cooling total input current	A	561,0	616,0	705,0	796,0
EER	W/W	4,97	4,99	4,86	4,72
Water flow rate source side	l/h	349811	390073	434460	475234
Pressure drop source side	kPa	73	70	59	70
Water flow rate system side	I/h	293360	327313	362530	395080
Pressure drop system side	kPa	47	51	38	46
Heating performances 40 °C / 45 °C - gas R134a (2)					
Heating capacity	kW	1891,1	2108,3	2348,6	2571,3
Input power	kW	411,1	457,6	515,2	578,0
Heating total input current	A	662,0	727,0	826,0	933,0
COP	W/W	4,60	4,61	4,56	4,45
Water flow rate system side	I/h	328503	366257	408016	446727
Pressure drop system side	kPa	64	62	52	62
Water flow rate source side	l/h	435501	485905	538185	586506
Pressure drop source side	kPa	104	112	85	101

⁽¹⁾ Date 14511:2022; Water user side 12 °C/7 °C; Water source side 30 °C/35 °C (2) Date 14511:2022; Water user side 40 °C/45 °C; Water source side 10 °C/7 °C

Energy indices (Reg. 2016/2281 EU)

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
SEER - 12/7 (EN14825: 2018) . refrigerant (gas R134a (1)																					
Concernal officiency	0	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	279,70	281,00	284,80	278,60
Seasonal efficiency -	Α	%	306,80	310,90	296,50	309,10	297,30	306,60	308,50	298,00	314,60	297,10	315,60	301,30	295,40	301,80	303,60	307,30	298,00	297,80	295,60	296,90	297,50
SEER -	0	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,07	7,10	7,20	7,04
JEEN -	Α	W/W	7,75	7,85	7,49	7,80	7,51	7,74	7,79	7,53	7,94	7,50	7,97	7,61	7,46	7,62	7,67	7,76	7,53	7,52	7,47	7,50	7,51
SEPR - (EN 14825: 2018) High temperature	e - refrigerar	nt gas R	134a (2)																			
SEPR -	0	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,40	8,30	8,20	8,10
JEFN -	A	W/W	9,20	9,10	9,10	8,50	9,00	8,60	8,80	8,80	8,80	8,80	8,70	8,60	8,40	8,60	8,50	8,60	8,60	8,70	8,60	8,40	8,50

⁽¹⁾ Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
Gas R134a																							
Maximum aureant /FLA)	0	А	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	954,0	1052,0	1180,0	1290,0
Maximum current (FLA)	A	А	165,0	190,0	216,0	237,0	274,0	308,0	356,0	378,0	387,0	428,0	418,0	473,0	535,0	616,0	704,0	787,0	864,0	954,0	1357,0	1180,0	1290,0
Deals surrent (LDA)	0	А	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1234,0	1357,0	1595,0	1784,0
Peak current (LRA)	A	Α	23,0	23,0	23,0	23,0	23,0	23,0	23,0	507,0	23,0	560,0	23,0	676,0	742,0	897,0	1009,0	1203,0	1359,0	1234,0	1052,0	1595,0	1784,0

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Model performance data (°) - for condensing temperatures up to 55°C

Model output data - model WFI° - AE - gas R134a

Size			1101	1251	1401	16	501	1801	2101	2401	2	801	3201
Model: °													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW		261,4	307,5	351,6	39	93,3	441,4	493,3	571,6	5 6	642,9	693,1
Input power	kW		68,4	80,8	90,0	10	0,3	117,7	133,8	145,8	3 1	64,9	178,0
Cooling total input current	А		119,0	139,0	152,0	16	58,0	197,0	222,0	240,0) 2	169,0	292,0
EER	W/V	V	3,82	3,81	3,91	3,	,92	3,75	3,69	3,92		3,90	3,89
Evaporator water flow rate	I/h		44906	52830	60402	67	574	75833	84756	98206	5 11	10455	119091
Pressure drop evaporator side	kPa		31	36	37	7	21	27	20	28		36	21
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø		54,0	67,0	67,0	6	7,0	76,0	76,0	89,0		89,0	89,0
Gas line (C2)	Ø		-	-	-		-	-	-	-		-	-
Gas line (C3)	Ø		-	-	-		-	-	-	-		-	-
Liquid line (C1)	Ø		35,0	42,0	42,0	4.	2,0	42,0	54,0	54,0		54,0	54,0
Liquid line (C2)	Ø		-	-	-		-	-	-	-		-	-
Liquid line (C3)	Ø		-	-	-		-	-	-	-		-	-
(1) Service side water 12 °C / 7 °C; Condensing temperatu	ire 45 °C												
Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	603,1	688,5	797,4	899,3	1008,4	1169,8	1287,8	1439,2	1558,1	1742,4	1896,4	2110,0
Input power	kW	152,9	171,4	198,1	229,9	259,8	287,4	323,9	364,6	386,3	431,2	481,0	540,3
Cooling total input current	A	261,4	292,5	330,2	380,6	424,7	476,4	532,4	600,3	631,3	709,7	792,6	891,2
EER	W/W	3,94	4,02	4,03	3,91	3,88	4,07	3,98	3,95	4,03	4,04	3,94	3,91
Evaporator water flow rate	l/h	103615	118287	137003	154508	173247	200980	221262	247268	267705	299365	325826	362526
Pressure drop evaporator side	kPa	43	35	29	22	25	35	25	31	35	43	39	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Ø

42,0

42,0

42,0

42,0

54,0

54,0

54,0

54,0

54,0

54,0

54,0

54,0

54,0

54,0

54,0

54,0

Liquid line (C2)

Liquid line (C3)

Model output data - model WFI° - °E - gas R134a

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1515,4	1689,7	1833,1	2021,9
Input power	kW	387,7	429,0	481,0	541,3
Cooling total input current	A	633,0	713,0	793,0	893,0
EER	W/W	3,91	3,94	3,81	3,74
Evaporator water flow rate	I/h	260358	290307	314947	347392
Pressure drop evaporator side	kPa	37	40	29	35
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
iquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model performance data (H) - for condensing temperatures up to 60°C

Model output data - model WFIH - AE - gas R134a

Size			1101	1251	1401	1	501	1801	2101	2401	2	801	3201
Model: H													
Cooling performance 12 °C/7 °C - gas R134a (1)													
Cooling capacity	kW		260,1	304,6	351,5	39	93,7	432,7	485,1	579,1	6	38,3	697,1
Input power	kW		65,4	76,0	88,4	9	7,7	111,1	123,1	143,8	3 1	58,6	176,5
Cooling total input current	A		113,0	129,0	148,0	16	52,0	180,0	200,0	235,0) 2	57,0	290,0
EER	W/W	l	3,98	4,01	3,98	4	,03	3,89	3,94	4,03	A	1,02	3,95
Evaporator water flow rate	I/h		44694	52328	60399	67	637	74335	83339	99495	5 10	19670	119762
Pressure drop evaporator side	kPa		31	35	37		21	26	19	29		36	21
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø		54,0	67,0	67,0	6	7,0	76,0	76,0	88,9		38,9	88,9
Gas line (C2)	Ø		-	-	-		-	-	-	-		-	-
Gas line (C3)	Ø		-	-	-		-	-	-	-		-	-
Liquid line (C1)	Ø		35,0	42,0	42,0	4	2,0	42,0	54,0	54,0		54,0	54,0
Liquid line (C2)	Ø		-	-	-		-	-	-	-		-	-
Liquid line (C3)	Ø		-	-	-		-	-	-	-		-	-
(1) Service side water 12 °C / 7 °C; Condensing temperate	ıre 45 °C												
Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C/7 °C - gas R134a (1)													
Cooling capacity	kW	602,3	690,5	794,5	897,8	1009,4	1177,8	1297,5	1436,1	1566,5	1750,8	1908,3	2101,3
Input power	kW	147,9	170,4	193,3	218,4	248,4	284,6	324,0	361,7	383,8	424,1	485,5	536,4
Cooling total input current	A	256,5	291,2	322,9	358,5	412,8	473,1	536,1	602,7	646,0	707,3	806,6	899,1
EER	W/W	4,07	4,05	4,11	4,11	4,06	4,14	4,01	3,97	4,08	4,13	3,93	3,92
Evaporator water flow rate	l/h	103477	118635	136501	154254	173418	202354	222930	246737	269151	300804	327864	361031
Pressure drop evaporator side	kPa	43	35	29	22	25	36	26	31	36	44	40	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54.0	54,0	54,0	54,0	54,0	54,0	54,0
Liquia lille (CZ)	V	12,0	12,0	12,0	12,0	3 1,0	3 1/0	31,0	3 1,0	3 1,0	3 170	3 1,0	31,0

Liquid line (C3) Ø
(1) Service side water 12 °C/7 °C; Condensing temperature 45 °C

54,0

54,0

54,0

54,0

Model output data - model WFIH - °E - gas R134a

Size	'	6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1524,4	1698,4	1844,7	2016,4
Input power	kW	383,7	425,2	483,3	533,7
Cooling total input current	A	645,8	709,0	803,3	895,1
EER	W/W	3,97	3,99	3,82	3,78
Evaporator water flow rate	l/h	261912	291802	316947	346444
Pressure drop evaporator side	kPa	38	40	29	35
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

GENERAL TECHNICAL DATA

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor																							
Туре	°,A	type											Screw										
Compressor regulation	°,A	Туре	I	1	I	ı	-	- 1	Π	I+1	ı	I+1	П	1+I	1+1	1+1	1+I	1+1	1+1	2+1	2+1	2+1	2+1
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type											R134a										
	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
Refrigerant load circuit 1 (1)	A	kg	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
D.C: (1.1: ::2/0)	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
Refrigerant load circuit 2 (1)	A	kg	-	-	-	-	-	-	-	50,0	-	53,0	-	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 3 (1)	°,A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger																							
Туре	°,A	type										Sh	ell and to	ıbe									
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Туре										Gro	oved joi	nts									
Source side heat exchanger																							
Туре	°,A	type										She	ell and to	ıbe									
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Туре										Gro	oved joi	nts									

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

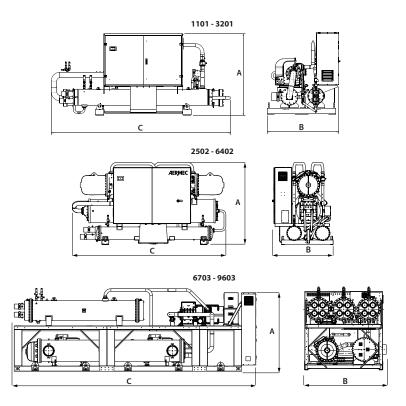
SOUND DATA

Sound data calculated with functioning in cooling mode - R134a gas

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
Standard equipment																							
Cound nowar lavel (1)	0	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99,2	98,9	100,0	100,5
Sound power level (1)	Α	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	96,9	97,3	97,4	98,0	97,9	98,0	98,8	98,8	98,6	98,9	99,2	98,9	100,0	100,5
Silenced equipment																							
Cound notice (1)	0	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92,3	91,3	92,8	93,0
Sound power level (1)	Α	dB(A)	86,1	88,0	88,2	89,1	89,2	89,3	89,3	89,3	89,3	89,6	89,8	90,3	90,5	91,5	91,1	91,2	91,3	92,3	91,3	92,8	93,0
Super silenced equipment																							
County and a supply (1)	0	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89,4	88,4	89,8	90,0
Sound power level (1)	Α	dB(A)	83,1	85,0	85,3	86,2	86,3	86,4	86,3	86,3	86,4	86,7	86,8	87,4	87,5	88,5	88,1	88,2	88,8	89,4	88,4	89,8	90,0
(1) Sound power: calculated in agreement wi	th the Stand	ard UNI EN	I ISO 96	14-2, ir	compl	iance w	ith that	request	ed by E	urovent	certific	ation.											
Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Size Model: H			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H Standard equipment	0	dB(A)	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	99,5	7203	101,0	
Model: H	° A	dB(A)	- 94,0	1251 - 95,8	- 96,1	1601 - 97,0	- 97,1	2101 - 97,2	2401 - 97,3	2502 - 97,3	2801 - 97,3	2802 - 97,7	3201 - 98,0	3202 - 98,8	3602 - 98,8	4202 - 98,9	4802 - 98,9	5602 99,3	- 100,0			101,0	
Model: H Standard equipment	-	. ,		-	-	-	-			-		-	-	-	-	_	-	-	-	99,5	100,6	101,0	102,0
Model: H Standard equipment Sound power level (1) Silenced equipment	-	. ,		-	-	-	-			-		-	-	-	-	_	-	-	-	99,5	100,6	101,0	102,0
Model: H Standard equipment Sound power level (1)	A	dB(A)		-	-	-	-			-		-	-	-	-	_	-	-	-	99,5 99,5	100,6 100,6	101,0 101,0	102,0 102,0
Model: H Standard equipment Sound power level (1) Silenced equipment	A	dB(A)	94,0	95,8	96,1	97,0	97,1	- 97,2	97,3	97,3	97,3	97,7	98,0	98,8	98,8	98,9	98,9	99,3	- 100,0	99,5 99,5 94,4	100,6 100,6 94,6	101,0 101,0 94,6	102,0 102,0 94,9
Model: H Standard equipment Sound power level (1) Silenced equipment Sound power level (1)	A	dB(A)	94,0	95,8	96,1	97,0	97,1	- 97,2	97,3	97,3	97,3	97,7	98,0	98,8	98,8	98,9	98,9	99,3	- 100,0	99,5 99,5 94,4	100,6 100,6 94,6	101,0 101,0 94,6	102,0 102,0 94,9

⁽¹⁾ Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS



Unit dimensions and weights °/H in standard configuration

Size			1101	1251	1//01	1601	1901	2101	2//01	2502	2011	2802	2201	3202	3603	4202	1802	5602	6402	6702	7202	8/103	0603
			1101	1231	1401	1001	1001	2101	2401	2302	2001	2002	3201	3202	3002	4202	4002	3002	0402	0/03	7203	0403	7003
Model: °, H																							
Dimensions and weights - standard confi	guration																						
<u> </u>	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
A	Α	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
В	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
D	А	mm	1510	1560	1610	1610	1610	1610	1610	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
(0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	А	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4380	4380	4395	4500	4580	4580	5650	5650	5650	5650
Emptywoight	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8740	9680	9900	10000
Empty weight	A	kg	2020	2030	2230	2410	2450	2670	3090	3710	3530	3980	3570	5160	5220	5710	6440	6680	6770	9730	11440	11980	12060

Unit dimensions and weights °/H in silenced configuration

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °, H																							
Dimensions and weights - quiet configuration	n																						
A	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
Α —	Α	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
D	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
В —	Α	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
_	Α	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	6840	6840	6840
Fundanciale	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9270	10240	10510	10610
Empty weight —	Α	kg	2180	2190	2390	2570	2610	2830	3280	4020	3720	4290	3760	5500	5560	6050	6810	7080	7170	10260	12000	12590	12670
Super silenced equipment dimensions and w	veights																						
Α.	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
Α	Α	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
D	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
В —	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
	0	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
_	Α	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	5650	5650	5650
Frankriishk	0	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9890	10890	11230	11330
Empty weight —	A	kg	2370	2380	2580	2760	2800	3020	3500	4400	3940	4670	3980	5910	5970	6460	7240	7550	7640	10880	12650	13310	13390

[■] For the sizes of D-T-E versions please contact the factory.

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WFN

Water cooled heat pump reversible water side

Cooling capacity 182 ÷ 2349 kW Heating capacity 205 ÷ 2610 kW



- Production of hot water up to 55°C.
- Production of chilled water down to -8°C.





DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

A High efficiency

FEATURES

Operating field

Production of chilled water up to $16\,^{\circ}\text{C}$ of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to $55\,^{\circ}\text{C}$.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10° C.

Mono, bi-tri circuit unit

Unit with 2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

They are equipped with screw compressors and system and source side shell and tube heat exchangers with R134a refrigerant.

The R513A (XP10) refrigerant with this type of gas is also available on the configurator. On average, the units have a yield > 2% and an EER < 3% compared to the same size with R134a.

For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO₅

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

Adjustment includes complete management of the alarms and their log. Possibility to control two units in a Master-Slave configuration

The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AER485P1 x n° 2: RS-485 interface for supervision systems with MODBUS protocol.

AER485P1 x n° 3: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Mod-bus TCP/IP. SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A															•	•	•	•	•	•				
AER485P1 x n° 3 (1)	°,A	•																				•			•
AFDDACD	0																						•	•	•
AERBACP	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AFDNIFT	0																								•
AERNET	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•
MULTICULUED EVO	0																					•	•		•
MULTICHILLER_EVO	A	•		•	•	•	•		•		•				•	•	•	•	•	•	•		•	•	•
PGD1	0	,																				•	•	•	•
PUVI	A	•		•	•		•	•	•		•		•		•	•				•			•		•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	0701	0801	0901	1101	1251
0	°,K,L	°,D,T	-	-	-	-	-
A	°,K,L	0	AVX680	AVX680	AVX680	AVX681	AVX681
A	°,K,L	D,T	-	-	-	-	-
Version	Set-up	Heat recovery	1401	1601	1801	2101	2401
0	°,K,L	°,D,T	-	-	-	-	-
A	0	0	AVX681	AVX682	AVX682	AVX683	AVX683
A	K	0	AVX688	AVX683	AVX683	AVX683	AVX683
A	L	0	AVX681	AVX682	AVX685	AVX683	AVX683
A	°,K,L	D,T	-	-	-	-	-
Version	Set-up	Heat recovery	2502	2801	2802	3201	3202
0	°,K,L	°,D,T	-	-	-	-	-
A	0	0	AVX673	AVX683	AVX674	AVX683	AVX679
A	K	0	Contact us.	AVX686	Contact us.	AVX686	Contact us
A	L	0	AVX674	AVX683	AVX674	AVX683	AVX678
A	0	D	AVX674	-	AVX674	-	AVX679
A	0	T	AVX674	-	AVX674	-	AVX678
A	L	D,T	AVX674	-	AVX674	-	AVX678
A	K	D,T	Contact us.	-	Contact us.	-	Contact us.
Version	Set-up	Heat recovery	3602	4202	4802	5602	6402
0	°,K,L	°,D,T	-	-	-	-	-
A	0	°,D	AVX679	AVX678	AVX678	AVX678	AVX678
A	K	°,D,T	Contact us.	Contact us.	Contact us.	Contact us.	Contact us
A	0	Ţ	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	°,D	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	Ī	AVX678	AVX678	AVX676	AVX676	AVX676
Version	Set-up	Heat recovery		6703	7203	8403	9603
0	°,K,L	°,D,T		Contact us.	Contact us.	Contact us.	Contact us.
A	°,K,L	°,D,T		Contact us.	Contact us.	Contact us.	Contact us.

not available

Power factor correction

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801
A	RIFWFN0701	RIFWFN0801	RIFWFN0901	RIFWFN1101	RIFWFN1251	RIFWFN1401	RIFWFN1601	RIFWFN1801	RIFWFN2101	RIFWFN2401	RIFWFN2502	RIFWFN2801
A grey background indicates the accessory m	ust be assemble	ed in the factory	у									
Ver	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
0	-	-	-	-	-	-	-	-	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603
Δ	RIFWFN2802	RIFWFN3201	RIFWFN3202	RIFWFN3602	RIFWFN4202	RIFWFN4802	RIFWFN5602	RIFWFN6402	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603

A grey background indicates the accessory must be assembled in the factory

Isolating kit

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
٥	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ISG5	ISG5	ISG6	ISG6
A	ISG10	ISG10	ISG10	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

799

CONFIGURATOR

Field	Description
1,2,3	WFN
4,5,6,7	Size 0701, 0801, 0901, 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
8	Model
0	Heat pump reversible on the water side
9	Version
0	Standard (1)
A	High efficiency
10	Operating field
Х	Electronic thermostatic expansion valve (2)
Z	Double electronic thermostatic for low temperature (3)
11	Set-up
0	Standard
K	Super silenced
L	Silenced with hood
12	Heat recovery
0	Without heat recovery
D	With desuperheater (4)
T	With total recovery (4)

Field	Description
13	Evaporator
0	Standard
E	Evaporating unit
14	Power supply
0	400V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (5)
2	230V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (5)
4	230V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (5)
5	500V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit
8	400V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit
9	500V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (5)
15	Refrigerant gas
0	R134a
G	R513A (XP10)

- (1) Only for sizes from 6703 to 9603
 (2) Water produced from 0 °C ÷ 16 °C
 (3) Water produced from -8 °C up to 10 °C
 (4) Not available for the condenserless "E"
 (5) The 230V and 500V power supplies are only available for sizes 0701 0801 0901 1101 1251 1401 2502 2802

PERFORMANCE SPECIFICATIONS

WFN 0701 - 3201 - version A - gas R134a

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Cooling performance 12 °C/7 °C (1)	'												
Cooling capacity	kW	182,1	207,2	232,9	295,9	322,1	370,3	448,8	504,1	579,3	655,9	719,6	788,4
Input power	kW	35,2	40,2	45,6	55,9	60,5	68,8	83,9	95,0	106,4	120,6	136,6	149,7
Cooling total input current	A	63,0	71,0	79,0	91,0	104,0	120,0	138,0	156,0	170,0	200,0	223,0	248,0
EER	W/W	5,18	5,16	5,11	5,30	5,32	5,38	5,35	5,31	5,45	5,44	5,27	5,27
Water flow rate system side	l/h	31347	35658	40063	50900	55401	63688	77171	86683	99596	112777	123733	135542
Pressure drop system side	kPa	40	46	46	40	40	41	28	35	27	37	45	27
Water flow rate source side	l/h	37125	42261	47577	60109	65418	75101	91161	102491	117368	132862	146434	160587
Pressure drop source side	kPa	37	37	34	44	37	33	33	33	33	34	33	32
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	204,8	230,6	262,5	327,5	358,1	410,4	494,2	556,2	639,5	733,2	796,8	879,7
Input power	kW	44,4	50,8	57,8	70,4	76,6	87,1	104,0	118,2	131,8	150,4	169,5	188,1
Heating total input current	A	78,0	88,0	98,0	113,0	130,0	149,0	170,0	191,0	209,0	246,0	272,0	308,0
COP	W/W	4,61	4,54	4,54	4,65	4,68	4,71	4,75	4,70	4,85	4,87	4,70	4,68
Water flow rate system side	l/h	35533	40021	45575	56858	62177	71260	85815	96600	111065	127339	138391	152791
Pressure drop system side	kPa	34	33	31	40	33	29	30	29	30	31	29	29
Water flow rate source side	l/h	47178	52944	60295	75577	82711	94940	114197	128417	148521	170834	184231	202358
Pressure drop source side	kPa	90	101	103	88	89	91	61	78	61	85	101	60

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFN 2502 - 9603 - version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Cooling performance 12 °C/7 °C (1)													
Cooling capacity	kW	652,3	746,8	905,7	1024,5	1164,3	1325,5	1446,9	1589,7	1721,1	1960,7	2149,5	2349,3
Input power	kW	121,4	137,8	167,7	189,5	213,7	242,9	270,4	296,6	317,6	359,9	406,3	445,4
Cooling total input current	Α	208,0	239,0	275,0	310,0	341,0	401,0	447,0	493,0	509,0	598,0	667,0	739,0
EER	W/W	5,37	5,42	5,40	5,41	5,45	5,46	5,35	5,36	5,42	5,45	5,29	5,28
Water flow rate system side	l/h	112179	128411	155723	176117	200144	227870	248717	273259	295856	337027	369472	403784
Pressure drop system side	kPa	51	41	38	29	33	45	32	38	43	55	51	30
Water flow rate source side	l/h	132175	151199	183520	207646	235653	268115	293728	322600	348857	396964	437212	478412
Pressure drop source side	kPa	49	50	49	49	50	49	48	46	34	32	32	36
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	726,4	828,1	1001,4	1138,6	1283,2	1459,8	1589,2	1809,3	1911,8	2159,8	2376,5	2610,0
Input power	kW	154,8	174,8	209,3	234,9	264,8	302,9	332,5	371,1	396,0	450,7	504,3	547,7
Heating total input current	Α	260,0	298,0	339,0	381,0	418,0	492,0	545,0	606,0	624,0	733,0	812,0	900,0
COP	W/W	4,69	4,74	4,78	4,85	4,85	4,82	4,78	4,88	4,83	4,79	4,71	4,77
Water flow rate system side	l/h	126142	143812	173923	197757	222889	253571	276062	314312	332129	375231	412895	453465
Pressure drop system side	kPa	45	45	44	45	45	44	43	44	31	28	28	32
Water flow rate source side	l/h	168271	191878	232387	264585	298364	339696	368017	421779	444410	502013	549582	603144
Pressure drop source side	kPa	114	92	85	65	73	101	70	91	97	122	112	66

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFN 6703 - 9603 - version ° - gas R134a

Size		6703	7203	8403	9603
Cooling performance 12 °C/7 °C (1)	'			1	
Cooling capacity	kW	1691,1	1925,6	2120,1	2310,0
Input power	kW	322,4	364,9	407,2	452,6
Cooling total input current	A	505,0	594,0	660,0	733,0
EER	W/W	5,00	5,00	5,00	5,00
Water flow rate system side	I/h	290696	330989	364406	397041
Pressure drop system side	kPa	46	52	39	46
Water flow rate source side	I/h	343740	390980	431894	471655
Pressure drop source side	kPa	70	70	58	69
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1885,5	2129,2	2348,8	2575,2
Input power	kW	401,0	454,4	501,6	558,6
Heating total input current	A	619,0	728,0	803,0	893,0
COP	W/W	5,00	5,00	5,00	5,00
Water flow rate system side	I/h	327527	369895	408061	447398
Pressure drop system side	kPa	64	63	52	62
Water flow rate source side	I/h	436659	493020	542047	593071
Pressure drop source side	kPa	105	115	86	103

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Refrigerant gas: °														
SEER - 12/7 (EN14825: 2018) . re	frigerant gas R134a (1)												
CLLD	0	W/W	-	-	-	-	-	-	-	-	-	-	-	-
SEER	A	W/W	6,64	6,87	6,80	6,55	6,76	6,83	6,79	6,85	6,94	6,94	6,62	6,75
Concornal officioness	•	%	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	A	%	262,60	271,70	269,00	259,00	267,50	270,00	268,40	270,90	274,50	274,50	261,70	267,10
(1) Calculation performed with VA	RIABLE water flow rate a	nd VARIABLE	outlet tempe	rature.										
Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Refrigerant gas: °														
SEER - 12/7 (EN14825: 2018) . re	frigerant gas R134a (1)												
SEER Seasonal efficiency	0	W/W	-	-	-	-	-	-	-	-	6,85	7,02	6,98	6,88
	A	W/W	7,06	7,19	7,07	7,23	7,24	7,18	7,01	7,14	7,37	7,44	7,31	7,34
Casanal afficiency	0	%	-	-	-	-	-	-	-	-	270.8%	277.7%	276.2%	272.3%
Seasonal eniciency	A	%	279.5%	284.6%	279.8%	296.3%	286.5%	284.3%	277.3%	282.4%	291.9%	294.5%	289.5%	290.4%
(1) Calculation performed with VA	RIABLE water flow rate a	nd VARIABLE	outlet tempe	rature.										
Size					070)1		0801		0	901		1101	
Refrigerant gas: °														
UE 813/2013 performance in ave	erage ambient conditi	ons (average	e) - 55 °C - Pd	esignh ≤ 40	00 kW (1)									
Ddarianh	0		kW		-			-			-		-	
Pdesignh	A		kW		264,	00		294,00		33	39,00		417,00	
SCOP			W/W		-			-			-		-	
otur	A		W/W		4,5	8		4,63			4,55		4,73	
nch	0		%		-			-			-		-	
ηsh	A		%		175,	00		177,00		17	74,00		181,00	

⁽¹⁾ Efficiencies for average temperature applications (55 °C)

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

WFN - AE- gas R134a

WIN-AL- gas KIS-a													
Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Evaporator: E													
Cooling performance 12 °C/7 °C - gas R134a (1)													
Cooling capacity	kW	162,7	185,3	208,6	264,5	289,4	331,9	398,9	449,2	519,2	588,2	640,8	701,8
Input power	kW	41,4	47,2	53,8	65,8	71,8	81,7	98,8	111,7	125,2	141,5	158,8	175,4
Cooling total input current	Α	74,0	83,0	94,0	109,0	124,0	141,0	164,0	185,0	203,0	236,0	263,0	290,0
EER	W/W	3,93	3,92	3,88	4,02	4,03	4,06	4,04	4,02	4,15	4,16	4,03	4,00
Evaporator water flow rate	l/h	27948	31843	35845	45444	49721	57032	68528	77175	89209	101057	110092	120581
Pressure drop evaporator side	kPa	32	36	37	32	32	33	22	28	22	30	36	21
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	42,0	54,0	54,0	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	28,0	35,0	35,0	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Evaporator: E													
Cooling performance 12 °C/7 °C - gas R134a (1)													
Cooling capacity	kW	584,6	668,6	803,3	911,8	1043,5	1186,8	1284,6	1414,9	1544,3	1758,8	1912,5	2076,9
Input power	kW	143,3	163,2	196,5	222,8	249,8	283,2	317,9	349,1	373,7	422,6	474,7	523,3
Cooling total input current	A	246,7	282,2	326,3	368,7	405,5	472,6	525,9	578,3	606,7	705,8	785,6	867,1
EER	W/W	4,08	4,10	4,09	4,09	4,18	4,19	4,04	4,05	4,13	4,16	4,03	3,97
Evaporator water flow rate	l/h	100443	114870	138020	156649	179280	203906	220716	243093	265322	302189	328596	356829
Pressure drop evaporator side	kPa	41	33	30	23	27	36	25	30	35	44	40	23
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

WFN - °E - gas R134a

Size		6703	7203	8403	9603
Evaporator: E					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1500,1	1704,7	1830,1	1998,5
Input power	kW	375,4	424,4	474,7	524,9
Cooling total input current	A	609,0	708,0	786,0	869,0
EER	W/W	4,00	4,02	3,86	3,81
Evaporator water flow rate	I/h	257735	292888	314432	343357
Pressure drop evaporator side	kPa	36	41	29	35
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

⁽¹⁾ Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ELECTRIC DATA

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Electric data														
Maximum current (FLA)		Α	106,0	119,0	136,0	162,0	183,0	208,0	243,0	275,0	305,0	350,0	389,0	427,0
Peak current (LRA)		A	166,0	195,0	232,0	303,0	317,0	344,0	439,0	468,0	589,0	653,0	808,0	920,0
Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Electric data														
Maximovina surrent (FLA)	0	А	-	-	-	-	-	-	-	-	913,0	1050,0	1166,0	1281,0
Maximum current (FLA)	A	А	365,0	416,0	486,0	549,0	609,0	700,0	777,0	854,0	913,0	1050,0	1166,0	1281,0
Dook current (LDA)	0	А	-	-	-	-	-	-	-	-	1198,0	1353,0	1585,0	1774,0
Peak current (LRA)	A	Α	500.0	552,0	682.0	743.0	894.0	1003.0	1197.0	1347.0	1198.0	1353.0	1585,0	1774,0

GENERAL TECHNICAL DATA

WFN - A

Size	'	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Compressor													
Туре	type				-		Scr	ew					
Compressor regulation	Туре						On-	-Off					
Number	no.	1	1	1	1	1	1	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type						R13	34a					
Refrigerant load circuit 1 (1)	kg	41,0	41,0	38,0	59,0	57,0	72,0	66,0	61,0	85,0	81,0	110,0	104,0
System side heat exchanger													
Туре	type						Shell ar	nd tube					
Number	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	Туре						Groove	d joints					
Sizes (in/out)	Ø	4"	4"	4"	4"	5"	6"	6"	6"	6"	6"	8"	8"
Source side heat exchanger													
Туре	type						Shell ar	nd tube					
Number	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	Туре						Groove	d joints					
Sizes (in/out)	Ø	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"	6"	6"

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor														
Туре	°,A	type						Scr	rew					
Compressor regulation	°,A	Туре						On-	-Off					
Number	°,A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type						R1:	34a					
Definement lead singuit 1 (1)	0	kg	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
Refrigerant load circuit 1 (1)	A	kg	50,0	53,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Defining want load singuit 2 (1)	0	kg	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
Refrigerant load circuit 2 (1)	A	kg	50,0	53,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Definement lead singuit 2 (1)	0	kg	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
Refrigerant load circuit 3 (1)	A	kg	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger														
Туре	°,A	type						Shell ar	nd tube					
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Туре						Groove	d joints					
Sizes (in/out)	°,A	Ø	8"	8"	8"	8"	10"	10"	10"	10"	10"	10"	10"	10"
Source side heat exchanger														
Туре	°,A	type						Shell ar	nd tube					
Number	°,A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Туре						Groove	d joints					
C: /:- /	0	Ø	-	-	-	-	-	-	-	-	5″	5″	6"	6"
Sizes (in/out)	A	Ø	4"	4"	4"	4"	5"	6"	6"	6"	-	-	-	-

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Set-up: °														
Sound data calculated in cooling mode (1)													
Cound nouver level	0	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
Sound power level –	А	dB(A)	87,7	88,0	87,7	89,1	90,3	91,3	90,5	90,7	93,2	92,5	87,4	84,9

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Set-up: K														
Sound data calculated in cooling mode (1)														
County account and	0	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
Sound power level —	Α	dB(A)	78.0	78.2	77.9	79.8	80.4	80.9	81.1	81.5	84.3	82.6	85.1	84.5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Set-up: L														
Sound data calculated in cooling mode (1)											-			
Constanting	0	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
Sound power level —	А	dB(A)	81.0	81.2	80.9	82.8	83.4	83.9	84.1	84.5	87.3	85.5	88.1	87.5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Set-up: °														
Sound data calculated in cooling mode (1))				-	-								
Country of the countr	0	dB(A)	-	-	-	-	-	-	-	-	97,0	97,2	99,5	100,0
Sound power level —	A	dB(A)	93,5	94,0	94,0	94,5	95,0	95,5	97,5	98,0	97,0	97,2	99,5	100,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

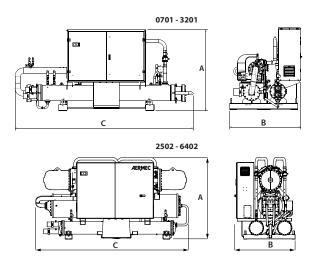
Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Set-up: K														
Sound data calculated in cooling mode (1))					-								
Count manual land	0	dB(A)	-	-	-	-	-	-	-	-	88,1	87,3	89,8	90,3
Sound power level —	A	dB(A)	83.6	83.6	84.5	85.2	86.1	85.6	87.8	88.3	88.1	87.3	89.8	90.3

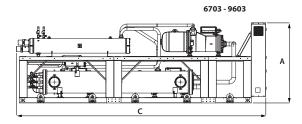
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

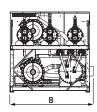
Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Set-up: L														
Sound data calculated in cooling mode (1)														
Count manual lavel	0	dB(A)	-	-	-	-	-	-	-	-	91,1	90,2	92,8	93,3
Sound power level —	A	dB(A)	86.6	86.6	87.5	88.2	89.1	88.5	90.8	91.3	91.1	90.2	92.8	93.3

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS







WFN 0701-9603 ver. A

WFN 0701-9005 Vel. A													
Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Dimensions and weights - standard configuration													
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	1920	1920
В	mm	1450	1450	1450	1510	1550	1610	1610	1610	1610	1610	1630	1630
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4290	4290
Empty weight	kg	1610	1630	1630	2120	2130	2350	2940	2980	3260	3320	3820	3870
Dimensions and weights - quiet configuration													
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	1920	1920
В	mm	1450	1450	1450	1540	1600	1610	1610	1610	1630	1630	1645	1645
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4290	4290
Empty weight	kg	1770	1790	1790	2280	2290	2510	3120	3170	3450	3510	4030	4080
Super silenced equipment dimensions and weights													
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	1920	1920
В	mm	1450	1450	1450	1540	1600	1610	1610	1610	1630	1630	1645	1645
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4290	4290
Empty weight	kg	1960	1980	1980	2470	2480	2700	3340	3390	3670	3730	4280	4330
Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
JIZE		2302	2002	3202	3002	1202					, 200	0103	7003
Dimensions and weights - standard configuration		2302	2002	3202		1202					7203	0103	7003
	mm	2000	2075	2195	2195	2340	2432	2440	2432	2250	2250	2250	2250
	mm mm							2440 1800					
		2000	2075	2195	2195	2340	2432		2432	2250	2250	2250	2250
	mm	2000 1500	2075 1500	2195 1575	2195 1575	2340 1585	2432 1845	1800	2432 1800	2250 2200	2250 2200	2250 2200	2250 2200
Dimensions and weights - standard configuration A B C	mm mm	2000 1500 4320	2075 1500 4345	2195 1575 4380	2195 1575 4380	2340 1585 4395	2432 1845 4535	1800 4605	2432 1800 4605	2250 2200 6840	2250 2200 6840	2250 2200 6840	2250 2200 6840
Dimensions and weights - standard configuration A B C Empty weight	mm mm	2000 1500 4320	2075 1500 4345	2195 1575 4380	2195 1575 4380	2340 1585 4395	2432 1845 4535	1800 4605	2432 1800 4605	2250 2200 6840	2250 2200 6840	2250 2200 6840	2250 2200 6840
Dimensions and weights - standard configuration A B C Empty weight	mm mm kg	2000 1500 4320 3810	2075 1500 4345 4100	2195 1575 4380 5690	2195 1575 4380 5750	2340 1585 4395 6300	2432 1845 4535 6670	1800 4605 6970	2432 1800 4605 7070	2250 2200 6840 10320	2250 2200 6840 11670	2250 2200 6840 12270	2250 2200 6840 12360
Dimensions and weights - standard configuration A B C Empty weight	mm mm kg mm	2000 1500 4320 3810	2075 1500 4345 4100	2195 1575 4380 5690	2195 1575 4380 5750	2340 1585 4395 6300	2432 1845 4535 6670	1800 4605 6970 2440	2432 1800 4605 7070	2250 2200 6840 10320 2250	2250 2200 6840 11670	2250 2200 6840 12270	2250 2200 6840 12360
Dimensions and weights - standard configuration A B C Empty weight	mm mm kg mm mm	2000 1500 4320 3810 2000 1500	2075 1500 4345 4100 2075 1500	2195 1575 4380 5690 2195 1575	2195 1575 4380 5750 2195 1575	2340 1585 4395 6300 2340 1585	2432 1845 4535 6670 2432 1845	1800 4605 6970 2440 1800	2432 1800 4605 7070 2432 1800	2250 2200 6840 10320 2250 2200	2250 2200 6840 11670 2250 2200	2250 2200 6840 12270 2250 2200	2250 2200 6840 12360 2250 2200
Dimensions and weights - standard configuration A B C Empty weight Dimensions and weights - quiet configuration A B C	mm mm kg mm mm	2000 1500 4320 3810 2000 1500 4320	2075 1500 4345 4100 2075 1500 4345	2195 1575 4380 5690 2195 1575 4650	2195 1575 4380 5750 2195 1575 4650	2340 1585 4395 6300 2340 1585 4600	2432 1845 4535 6670 2432 1845 5015	1800 4605 6970 2440 1800 5150	2432 1800 4605 7070 2432 1800 5150	2250 2200 6840 10320 2250 2200 6840	2250 2200 6840 11670 2250 2200 6840	2250 2200 6840 12270 2250 2200 6840	2250 2200 6840 12360 2250 2200 6840
Dimensions and weights - standard configuration A B C Empty weight Dimensions and weights - quiet configuration A B C Empty weight	mm mm kg mm mm	2000 1500 4320 3810 2000 1500 4320	2075 1500 4345 4100 2075 1500 4345	2195 1575 4380 5690 2195 1575 4650	2195 1575 4380 5750 2195 1575 4650	2340 1585 4395 6300 2340 1585 4600	2432 1845 4535 6670 2432 1845 5015	1800 4605 6970 2440 1800 5150	2432 1800 4605 7070 2432 1800 5150	2250 2200 6840 10320 2250 2200 6840	2250 2200 6840 11670 2250 2200 6840	2250 2200 6840 12270 2250 2200 6840	2250 2200 6840 12360 2250 2200 6840
Dimensions and weights - standard configuration A B C Empty weight Dimensions and weights - quiet configuration A B C Empty weight	mm kg mm mm mm kg	2000 1500 4320 3810 2000 1500 4320 4120	2075 1500 4345 4100 2075 1500 4345 4410	2195 1575 4380 5690 2195 1575 4650 6050	2195 1575 4380 5750 2195 1575 4650 6120	2340 1585 4395 6300 2340 1585 4600 6670	2432 1845 4535 6670 2432 1845 5015 7040	1800 4605 6970 2440 1800 5150 7420	2432 1800 4605 7070 2432 1800 5150 7490	2250 2200 6840 10320 2250 2200 6840 10880	2250 2200 6840 11670 2250 2200 6840 12230	2250 2200 6840 12270 2250 2200 6840 12950	2250 2200 6840 12360 2250 2200 6840 12990
Dimensions and weights - standard configuration A B C Empty weight Dimensions and weights - quiet configuration A B C Empty weight	mm kg mm mm kg mm mm kg mm	2000 1500 4320 3810 2000 1500 4320 4120	2075 1500 4345 4100 2075 1500 4345 4410	2195 1575 4380 5690 2195 1575 4650 6050	2195 1575 4380 5750 2195 1575 4650 6120	2340 1585 4395 6300 2340 1585 4600 6670	2432 1845 4535 6670 2432 1845 5015 7040	1800 4605 6970 2440 1800 5150 7420	2432 1800 4605 7070 2432 1800 5150 7490	2250 2200 6840 10320 2250 2200 6840 10880	2250 2200 6840 11670 2250 2200 6840 12230	2250 2200 6840 12270 2250 2200 6840 12950	2250 2200 6840 12360 2250 2200 6840 12990
Dimensions and weights - standard configuration A B C Empty weight Dimensions and weights - quiet configuration A B C Empty weight C Empty weight	mm kg mm mm kg mm mm kg	2000 1500 4320 3810 2000 1500 4320 4120 2000 1500	2075 1500 4345 4100 2075 1500 4345 4410 2075 1500	2195 1575 4380 5690 2195 1575 4650 6050 2195 1575	2195 1575 4380 5750 2195 1575 4650 6120 2195 1575	2340 1585 4395 6300 2340 1585 4600 6670 2340 1585	2432 1845 4535 6670 2432 1845 5015 7040 2432 1845	1800 4605 6970 2440 1800 5150 7420 2440 1800	2432 1800 4605 7070 2432 1800 5150 7490 2432 1800	2250 2200 6840 10320 2250 2200 6840 10880 2250 2200	2250 2200 6840 11670 2250 2200 6840 12230 2250 2200	2250 2200 6840 12270 2250 2200 6840 12950 2250 2200	2250 2200 6840 12360 2250 2200 6840 12990 2250 2200

WFN 6703-9603 ver. °

					,
Size		6703	7203	8403	9603
Dimensions and weights - standard configuration					
A	mm	2250	2250	2250	2250
В	mm	2200	2200	2200	2200
(mm	5650	5650	5650	5650
Empty weight	kg	9330	9910	10130	10200
Dimensions and weights - quiet configuration					
A	mm	2250	2250	2250	2250
В	mm	2200	2200	2200	2200
C	mm	5650	5650	5650	5650
Empty weight	kg	9890	10470	10760	10830
Super silenced equipment dimensions and weights					
A	mm	2250	2250	2250	2250
В	mm	2200	2200	2200	2200
	mm	5650	5650	5650	5650
Empty weight	kg	10540	11120	11510	11580

[■] For the sizes of D-T-E versions please contact the factory.

For the size of the units with the RIF accessory we ask you to contact the headquarters.

















WMX

Water-water chiller

Cooling capacity 280,1 ÷ 324,2 kW



- High efficiency also at partial loads ESEER 8.4
- Compact design
- · Extremely flexible and reliable





DESCRIPTION

Indoor unit for the production of chilled water, equipped with magnetic levitation centrifugal compressors and system side, flooded source heat exchangers that guarantee a 50% reduction of the refrigerant load in comparison to conventional flooded heat exchangers.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

The technological choices made, always oriented to the highest quality and efficiency can reach 5.71 EER values (class A for the working conditions Eurovent).

EFFICIENCY

A High efficiency

U Very high efficiency

Both units can be silenced.

FEATURES

- 5 times lighter than an equivalent screw compressor.
- Extremely compact wide to allow access through a standard doorway.
- High efficiency with generously sizes heat exchanger.

Two-stage, oil-free centrifugal compressor with latestgeneration magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.

Provided with inverter technology that permits capacity modulation down to 30% A version.

Built-in device to reduce starting current (only 6 Amps!)

Operating field

Water produced from 20 °C up to 45 °C on Condenser side and from 5 °C up to 20 °C on Evaporator side.

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

CONFIGURATOR

Field	Description
1,2,3	WMX
4,5,6	Size
4,5,0	300
7	Efficiency
Α	High efficiency

Description
Very high efficiency
Version
Standard
Silenced

30

PERFORMANCE SPECIFICATIONS

Size			300
Efficiency: A			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	324,2
Input power	°,L	kW	60,3
Cooling total input current	°,L	A	94,0
EER	°,L	W/W	5,37
Water flow rate system side	°,L	l/h	55761
Pressure drop system side	°,L	kPa	34
Water flow rate source side	°,L	l/h	65750
Pressure drop source side	°,L	kPa	41
(1) Date 14511:2022; Water user side 12 $^{\circ}$ C / 7 $^{\circ}$ C;	Water source side 30 °C / 35 °C		
Size			300
Efficiency: U			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	280,1
Input power	°,L	kW	48,9
Cooling total input current	°,L	A	78,0
EER	°,L	W/W	5,72
Water flow rate system side	°,L	l/h	48180
Pressure drop system side	°,L	kPa	25
Water flow rate source side	°,L	l/h	56338
	***	1.0	

Pressure drop source side (1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			300
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	8,99
SEEK	U	W/W	9,04
Concornal officioness	A	%	356,6%
Seasonal efficiency	U	%	358,5%
SEPR - (EN 14825: 2018) High temperatu	re (2)		
SEPR	A	W/W	9,70
JEFR	U	W/W	10,35

kPa

ELECTRIC DATA

LLLC I III C D/II/I			
Size			300
Efficiency: A, U			
Electric data			
Maximum current (FLA)	°,L	A	135,0
Peak current (LRA)	°.L	A	6.0

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

GENERAL TECHNICAL DATA

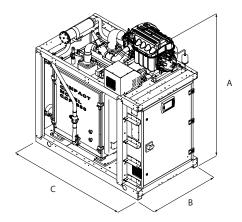
Size			300
Efficiency: A, U			
Compressor			
Туре	°,L	type	Centrifugal
Compressor regulation	°,L	Туре	Inverter
Number	°,L	no.	1
Circuits	°,L	no.	1
Refrigerant	°,L	type	R134a
Source side heat exchanger			
Туре	°,L	type	Shell and tube - flooded compact
Number	°,L	no.	1
Connections (in/out)	°,L	Туре	Grooved joints
Sizes (in/out)	°,L	Ø	4"
System side heat exchanger			
Туре	°,L	type	Shell and tube - flooded compact with Spray system
Number	°,L	no.	1
Connections (in/out)	°,L	Туре	Grooved joints
Sizes (in/out)	°,L	Ø	4"
Size			300
Efficiency: A			
Sound data calculated in cooling	g mode (1)		
Cound nower level	0	dB(A)	90,0
Sound power level	L	dB(A)	84,0

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size		300							
Efficiency: U	Efficiency: U								
Sound data calculated in cooling									
Carrad manner larval	0	dB(A)	85,0						
Sound power level	L	dB(A)	78.0						

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			300
Efficiency: A, U			
Dimensions and weights			
	0	mm	1905
Α	L	mm	1942
В	°,L	mm	1041
(°,L	mm	1770
Empty weight	0	kg	2025
	L	kg	2210

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WMG

Water-water chiller

Cooling capacity 282,3 ÷ 312,4 kW



- High efficiency also at partial loads ESEER 8.4
- Compact design
- Extremely flexible and reliable





DESCRIPTION

Indoor unit for the production of chilled water, equipped with magnetic levitation centrifugal compressors and system side, flooded source heat exchangers that guarantee a 50% reduction of the refrigerant load in comparison to conventional flooded heat exchangers.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

The technological choices made, always oriented to the highest quality and efficiency can reach 5.71 EER values (class A for the working conditions Eurovent).

EFFICIENCY

A High efficiency **U** Very high efficiency

Both units can be silenced.

FEATURES

- 5 times lighter than an equivalent screw compressor.
- Extremely compact wide to allow access through a standard doorway.
- High efficiency with generously sizes heat exchanger.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:

da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430:

with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

Two-stage, oil-free centrifugal compressor with latestgeneration magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.

Provided with inverter technology that permits capacity modulation down to 30% A version.

Built-in device to reduce starting current (only 6 Amps!)

Operating field

Water produced from 20 °C up to 55 °C on Condenser side and from 5 °C up to 20 °C on Evaporator side.

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP. SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

CONFIGURATOR

Field	Description
1,2,3	WMG
4,5,6	Size 300
7	Efficiency
Α	High efficiency

Field	Description
U	Very high efficiency
8	Version
0	Standard
L	Silenced

PERFORMANCE SPECIFICATIONS

Size			300
Efficiency: A			
Cooling performance 12 °C/7 °C(1)			
Cooling capacity	°,L	kW	312,4
Input power	°,L	kW	57,6
Cooling total input current	°,L	A	85,0
EER	°,L	W/W	5,42
Water flow rate system side	°,L	l/h	53731
Pressure drop system side	°,L	kPa	31
Water flow rate source side	°,L	l/h	63303
Pressure drop source side	°,L	kPa	36
(1) Date 14511:2022; Water user side 12 °C / 7 °C; V	Vater source side 30 °C / 35 °C		
Size			300
Efficiency: U		_	
Cooling performance 12 °C / 7 °C (1)			
C. P. St.	0.1	IW	202.2

Size			300
Efficiency: U			
Cooling performance 12 °C/7 °C(1)			
Cooling capacity	°,L	kW	282,3
Input power	°,L	kW	49,1
Cooling total input current	°,L	A	74,0
EER	°,L	W/W	5,75
Water flow rate system side	°,L	l/h	48548
Pressure drop system side	°,L	kPa	25
Water flow rate source side	°,L	l/h	56739
Pressure drop source side	°,L	kPa	29

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			300
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	8,88
SEEK	U	W/W	8,91
Concornal officioness	A	%	352,0%
Seasonal efficiency	U	%	353,4%
SEPR - (EN 14825: 2018) High te	emperature (2)		
SEPR	A	W/W	9,96
JEFK	U	W/W	10,37

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature. (2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			300
Efficiency: A, U			
Electric data			
Maximum current (FLA)	°,L	A	150,0
Peak current (LRA)	°,L	A	6,0

GENERAL TECHNICAL DATA

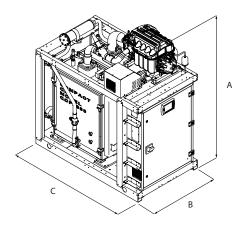
Size			300
Efficiency: A, U			
Compressor			
Туре	°,L	type	Centrifugal
Compressor regulation	°,L	Туре	Inverter
Number	°,L	no.	1
Circuits	°,L	no.	1
Refrigerant	°,L	type	R1234ze
Source side heat exchanger			
Туре	°,L	type	Shell and tube - flooded compact
Number	°,L	no.	1
Connections (in/out)	°,L	Туре	Grooved joints
Sizes (in/out)	°,L	Ø	4"
System side heat exchanger			
Туре	°,L	type	Shell and tube - flooded compact with Spray system
Number	°,L	no.	1
Connections (in/out)	°,L	Туре	Grooved joints
Sizes (in/out)	°,L	Ø	4"
Size			300
Efficiency: A		_	
Sound data calculated in cooling	mode (1)		
Cound nowar loval	0	dB(A)	90,0
Sound power level	L	dB(A)	85,0

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			300						
Efficiency: U	Efficiency: U								
Sound data calculated in cooling mode (1)									
Carrad manner larval	0	dB(A)	84,0						
Sound power level	L	dB(A)	78,0						

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			300
Efficiency: A, U Dimensions and weights			
Dimensions and weights			
Λ.	0	mm	1905
н	L	mm	1942
В	°,L	mm	1041
(°,L	mm	1770
Empty weight	0	kg	2065
	L	kg	2250

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WTX

Water-water chiller

Cooling capacity 222,9 ÷ 1958,4 kW



- High efficiency ESEER up to 9
- Extended operating range
- Possibility of selecting between heat exchangers with 1 or 2 passes on water side





DESCRIPTION

Indoor unit producing chilled water equiped with magnetic levitation centrifugal compressors and shell & tube heat exchangers.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

The technological choices made always focus on maximum quality and efficiency, thereby achieving EER > 6 values (class A for Eurovent operating conditions).

EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

Two-stage, oil-free centrifugal compressor with latestgeneration magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.

The compressor is equipped with an inverter for continuous load modulation by varying rpm (from 30% to 100%).

Built-in device to reduce starting current (only 6 Amps!)



Operating field

Water produced from 15 °C up to 50 °C on Condenser side and from 5 °C up to 25 °C on Evaporator side.

Flooded Evaporator with subcooler

Subcooler effect

- Superheats compressor gas intake;
- Subcools thermostatic valve fluid intake;
- Increases chiller yield and ensures gas suction from compressor.

Condenser

— With refrigerant on shell side and water on pipe side

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

FL: Flow switch.

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MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

AVX: Spring anti-vibration supports.

811

ACCESSORIES COMPATIBILITY

Model	Ver	1300	1350	2300	2350	3300	3325	3350	4325	4350
AER485P1	A,U	•	•	•	•	•	•	•	•	•
AERBACP	A,U	•	•	•	•	•	•	•	•	•
FL	A,U		•	•	•	•		•	•	•
MULTICHILLER EVO	AII		•		•	•				•

■ With the MULTICHILLER_EVO accessory, it is necessary to add AER485P1 for each connected unit.

Antivibration

Ver	1300	1350	2300	2350	3300	3325	3350	4325	4350
A,U	AVX (1)								

Field

Description

(1) Contact us.

CONFIGURATOR

Field	Description
1,2,3	WTX
4,5,6,7	Size 1300, 1350, 2300, 2350, 3300, 3325, 3350, 4325, 4350
8	Efficiency
Α	High efficiency
U	Very high efficiency
9	Exchanger
1	One pass on water side (1)

EXCHANGERS

Over-sized tube core exchangers ensure excellent performances at full and partial loads.

Flooded evaporator: with level adjustment through an electronic valve controlled by a level sensor.

Backflow condenser: with refrigerant on shell side and water on tube side.

■ From size 1300 to 2350, heat exchangers have 2 passes on the water side

2 Two passes on water side

10 Version

Standard

L Silenced

11 Power supply

400V ~ 3 50Hz with circuit breakers on compressors and auxiliary circuit

(1) Option available only for size from 3300 to 4350.

Starting from size WTX 3300, heat exchangers are available as versions with one or two passes on the water side, to meet any plant installation requirement. The dimensions of the two configurations ensure similar performances (same approach to heat exchangers). The difference is that the version with two passes on the water side due offers the convenience of water connections all on the same side, against a generally higher but nonetheless limited drop in pressure compared to the version with one pass on the water side.



PERFORMANCE SPECIFICATIONS

WTX - A

Size		1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	-	-	-	-	1054,4	1214,3	1466,1	1716,2 (2)	1955,0 (2)
Input power	kW	-	-	-	-	211,4	219,9	281,6	315,3	375,1
Cooling total input current	A	-	-	-	-	317,0	356,0	435,0	503,0	580,0
EER	W/W	-	-	-	-	4,99	5,52	5,21	5,44	5,21
Water flow rate system side	I/h	-	-	-	-	181266	208751	252017	294970	336022
Pressure drop system side	kPa	-	-	-	-	32	39	31	24	31
Water flow rate source side	I/h	-	-	-	-	218376	247239	301544	350417	402059
Pressure drop source side	kPa	-	-	-	-	31	38	31	42	31

Size		1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	351,3	488,5	702,8	899,4	1054,3	1215,9	1466,0	1715,9 (2)	1958,4 (2)
Input power	kW	70,8	94,3	141,8	164,1	212,6	220,6	283,8	318,8	380,0
Cooling total input current	A	106,0	145,0	212,0	255,0	317,0	356,0	435,0	503,0	580,0
EER	W/W	4,96	5,18	4,96	5,48	4,96	5,51	5,17	5,38	5,15
Water flow rate system side	I/h	60422	84006	120844	154630	181266	209053	252017	294970	336647
Pressure drop system side	kPa	32	30	40	33	54	77	54	60	82
Water flow rate source side	I/h	72792	100515	145584	183481	218376	247235	301544	350417	402062
Pressure drop source side	kPa	31	33	35	28	28	35	33	41	53

WTX - U

Size		1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1										
Cooling performance 12 °C/7 °C(1)										
Cooling capacity	kW	-	-	-	-	669,0	869,6	1002,7	1179,6	1336,9
Input power	kW	-	-	-	-	112,2	144,9	166,9	195,3	222,3
Cooling total input current	A	-	-	-	-	180,0	237,0	273,0	316,0	364,0
EER	W/W	-	-	-	-	5,96	6,00	6,01	6,04	6,01
Water flow rate system side	l/h	-	-	-	-	115004	149476	172333	202737	229777
Pressure drop system side	kPa	-	-	-	-	12	18	14	10	14
Water flow rate source side	l/h	-	-	-	-	135049	175273	202156	237660	269542
Pressure drop source side	kPa	-	-	-	-	12	17	13	17	13
(1) Date 14511:2022; Water user side 12 °C	C / 7 °C; Water so	urce side 30 °C / 35	°℃							
Size		1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2										
Cooling performance 12 °C/7 °C(1)										
Cooling capacity	kW	222,9	334,1	445,9	559,7	669,0	840,1	1006,1	1191,4	1342,6
Input power	kW	37,5	55,9	75,1	94,3	112,5	140,7	167,2	198,4	223,4
Cooling total input current	A	60,0	91,0	120,0	158,0	180,0	237,0	273,0	316,0	364,0
EER	W/W	5,95	5,98	5,94	5,93	5,95	5,97	6,02	6,01	6,01
Water flow rate system side	I/h	38335	57444	76669	96214	115004	144425	172942	204799	230804
Pressure drop system side	kPa	12	13	16	12	21	32	24	26	37
Water flow rate source side	l/h	45016	67385	90033	113067	135049	169344	202690	240041	270255
	10									

⁽¹⁾ Date 14511:2022; Water user side 12 °C/7 °C; Water source side 30 °C/35 °C

kPa

12

14

ENERGY INDICES (REG. 2016/2281 EU)

Pressure drop source side

FIATURE IMPICES (ME	.0. 2010/220	DI LU,									
Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
SEER - 12/7 (EN14825: 2018) (1)					-						
CLLD	A	W/W	-	-	-	-	8,25	8,64	8,78	8,76	8,95
SEER	U	W/W	-	-	-	-	9,70	9,54	9,85	9,59	9,92
Comment off down	A	%	-	-	-	-	326,8%	342,6%	348,2%	347,2%	354,8%
Seasonal efficiency	U	%	-	-	-	-	384,8%	378,4%	390,8%	380,6%	393,7%
SEPR - (EN 14825: 2018) High temp	erature (2)				-						
CEDD	A	W/W	-	-	-	-	8,75	9,92	9,33	9,71	9,35
SEPR	U	W/W	-	-	-	-	11,80	11,36	11,44	11,49	11,47

13

10

15

18

23

813

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Sizes 4325 and 4350 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
SEER - 12/7 (EN14825: 2018) (1)											
SEER	A	W/W	8,40	8,59	8,19	8,76	8,03	8,34	8,45	8,32	8,39
SECK	U	W/W	9,69	9,07	9,47	9,73	9,54	9,31	9,66	9,28	9,60
Consend off size or	A	%	332,9%	340,6%	324,5%	347,3%	318,1%	330,4%	334,9%	329,8%	332,6%
Seasonal efficiency	U	%	384,4%	359,9%	375,6%	386,3%	378,6%	369,5%	383,5%	368,1%	380,8%
SEPR - (EN 14825: 2018) High tempera	ture (2)										
SEPR	A	W/W	8,26	9,17	8,25	9,70	8,64	9,75	9,17	9,48	9,08
SEPR	U	W/W	11,65	11,34	11,62	11,17	11,70	11,20	11,37	11,30	11,31

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Electric data											
Maximum current (FLA)	A,U	А	135,0	210,0	270,0	420,0	405,0	405,0	630,0	630,0	630,0
Peak current (LRA)	A,U	А	6,0	6,0	141,0	216,0	276,0	276,0	426,0	426,0	426,0

GENERAL TECHNICAL DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Compressor											
Туре	A,U	type					Centrifugal - Oil Free	1			
Compressor regulation	A,U	Туре					Inverter				
Number	A,U	no.	1	1	2	2	3	3	3	4	4
Circuits	A,U	no.	1	1	1	1	1	1	1	1	1
Refrigerant	A,U	type					R134a				
Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
System side heat exch	nanger										
Туре	A,U	type	-	-		-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1
Connections (in/out)	A,U	Type	-	_	-	-	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	-	_	-	-	6"	10"	10"	6"	8"
Source side heat exch	anger										
Туре	A,U	type	-	_	-	_	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	_	-	-	1	1	1	1	1
Connections (in/out)	A,U	Туре	-		-	-	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	-	-	-	-	6"	6"	10"	8"	8"
Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
System side heat exch	nanger										
Туре	A,U	type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube				
Number	A,U	no.	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,U	Туре	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints				
Sizes (in/out)	A,U	Ø	5"	5"	5"	6"	6"	10"	6"	8"	8"
Source side heat exch	anger										
Туре	A,U	type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube				
Number	A,U	no.	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,U	Туре	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints				
Sizes (in/out)	A,U	Ø	5"	5"	6"	6"	6"	6"	8"	8"	8"

SOUND DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: A											
Sound data calculated in cooling mode (1)										
Country work and	0	dB(A)	90,0	91,0	93,0	93,5	96,0	95,5	97,0	98,5	100,0
Sound power level -	L	dB(A)	84,0	85,0	87,0	87,5	90,0	89,5	91,0	92,5	94,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: U											
Sound data calculated in cooling mode (1)										
Country work and	0	dB(A)	87,0	88,0	90,0	88,0	90,0	91,0	94,0	94,0	97,0
Sound power level -	L	dB(A)	81,0	82,0	84,0	82,0	84,0	85,0	88,0	88,0	91,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: A											
Sound data calculated in cooling mode (1)										
Count manual land	0	dB(A)	90,0	91,0	93,0	93,5	96,0	95,5	97,0	98,5	100,0
Sound power level –	L	dB(A)	84,0	85,0	87,0	87,5	90,0	89,5	91,0	92,5	94,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

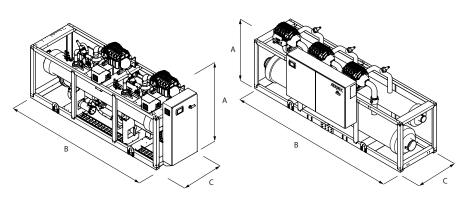
Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: U											
Sound data calculated in cooling mode (1)										
Count manual land	0	dB(A)	87,0	88,0	90,0	88,0	90,0	91,0	94,0	94,0	97,0
Sound power level	L	dB(A)	81,0	82,0	84,0	82,0	84,0	85,0	88,0	88,0	91,0

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

WTX 1300 - 2350

WTX 3300 - 4350



Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
Dimensions and weights											
A	A,U	mm	-	-	-	-	1970	2010	2010	2010	2280
В	A,U	mm	-	-	-	-	4966	4966	4966	4966	4966
C	A,U	mm	-	-	-	-	1640	1640	1640	1640	1732
Empty weight	A,U	kg	-	-	-	-	4090	4430	5120	5690	6640
Weight functioning	A,U	kg	-	-	-	-	4430	4810	5620	6250	7450
Size			1300	1350	2200	2250	3300	3325	2250	4225	4250
			1300	1330	2300	2350	3300	3323	3350	4325	4350
Exchanger: 2			1300	1330	2300	2330	3300	3323	3330	4323	4330
			1300	1330	2300	2550	3300	3323	3330	4525	4330
Exchanger: 2	A,U	mm	1850	1950	1970	2010	2240	2280	2280	2280	2280
Exchanger: 2	A,U A,U	mm mm									
Exchanger: 2			1850	1950	1970	2010	2240	2280	2280	2280	2280
Exchanger: 2	A,U	mm	1850 3040	1950 3040	1970 3340	2010 3440	2240 3990	2280 3990	2280 3990	2280 4966	2280 4966

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WTG

Water-water chiller

Cooling capacity 246,6 ÷ 1959,4 kW



- Extended operating range
- Possibility of selecting between heat exchangers with 1 or 2 passes on water side





DESCRIPTION

Indoor unit producing chilled water equiped with magnetic levitation centrifugal compressors and shell & tube heat exchangers.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

The technological choices made always focus on maximum quality and efficiency, thereby achieving EER > 6 values (class A for Eurovent operating conditions).

EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

Two-stage, oil-free centrifugal compressor with latest-

generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.

The compressor is equipped with an inverter for continuous load modulation by varying rpm (from 30% to 100%).

Built-in device to reduce starting current (only 6 Amps!)



Operating field

Water produced from 15 °C up to 50 °C on Condenser side and from 5 °C up to 25 °C on Evaporator side.

Flooded Evaporator

Evaporator

Low charge content

Condenser

— With refrigerant on shell side and water on pipe side

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

FL: Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

AVX: Spring anti-vibration supports.

817

ACCESSORIES COMPATIBILITY

Model	Ver	1310	1490	2310	2490	3310	3400	3490	4400	4490
AER485P1	A,U	•	•	•	•	•	•	•	•	•
AERBACP	A,U	•	•	•	•	•	•	•	•	•
FL	A,U		•		•		•	•	•	•
MULTICHILLER EVO	A.U	•	•	•	•	•	•	•	•	•

■ With the MULTICHILLER_EVO accessory, it is necessary to add AER485P1 for each connected unit.

Antivibration

Ver	1310	1490	2310	2490	3310	3400	3490	4400	4490
A,U	AVX (1)								

(1) Contact us.

CONFIGURATOR

Field	Description
1,2,3	WTG
4,5,6,7	Size 1310, 1490, 2310, 2490, 3310, 3400, 3490, 4400, 4490
8	Version
Α	High efficiency
U	Very high efficiency
9	Exchanger
1	One pass on water side

Field	Description
2	Two passes on water side
10	Set-up
0	Standard
L	Silenced
11	Power supply
0	400V ~ 3 50Hz with circuit breakers on compressors and auxiliary circuit
12	Refrigerant gas
0	R1234ze

EXCHANGERS

Over-sized tube core exchangers ensure excellent performances at full and partial loads.

Flooded evaporator: with level adjustment through an electronic valve controlled by a level sensor.

Backflow condenser: with refrigerant on shell side and water on tube side

■ From size 1310 to 2490, heat exchangers have 2 passes on the water side

Starting from size WTG 3310, heat exchangers are available as versions with one or two passes on the water side, to meet any plant installation requirement. The dimensions of the two configurations ensure similar performances (same approach to heat exchangers). The difference is that the version with two passes on the water side due offers the convenience of water connections all on the same side, against a generally higher but nonetheless limited drop in pressure compared to the version with one pass on the water side.



PERFORMANCE SPECIFICATIONS

WTG - A

Size	1	1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1	1	1310	1470	2310	2470	3310	3400	3470	1100	4470
Cooling performance 12 °C/7 °C (1)										
Cooling capacity	kW	-	-	-	-	1049,5	1199,4	1409,4	1679,3 (2)	1955,0 (2)
Input power	kW	-	-	-	-	194,3	202,4	245,0	286,4	334,3
Cooling total input current	A	-	-	-	-	310,0	324,0	389,0	457,0	532,0
EER	W/W	-	-	-	-	5,40	5,93	5,75	5,86	5,85
Water flow rate system side	I/h	-	-	-	-	180402	206174	242254	288643	336022
Pressure drop system side	kPa	-	-	-	-	24	32	27	29	28
Water flow rate source side	I/h	-	-	-	-	213103	240238	283553	336857	392518
Pressure drop source side	kPa	-	-	-	-	23	23	24	27	19

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Sizes 4400 and 4490 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

Size		1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	349,7	469,7	699,6	899,3	1049,3	1199,2	1409,2	1679,2 (2)	1958,5 (2)
Input power	kW	66,4	81,4	132,2	158,8	196,5	204,4	248,0	290,2	339,1
Cooling total input current	A	106,0	130,0	211,0	250,0	310,0	324,0	389,0	457,0	532,0
EER	W/W	5,27	5,77	5,29	5,66	5,34	5,87	5,68	5,79	5,78
Water flow rate system side	I/h	60134	80751	120268	154630	180402	206174	242254	288643	336647
Pressure drop system side	kPa	24	14	22	50	45	49	40	44	46
Water flow rate source side	l/h	71250	94518	142500	181033	213103	240238	283553	336857	393148
Pressure drop source side	kPa	23	18	23	32	33	32	42	47	39

I/h

kPa

I/h

kPa

WTG - U

Size		1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1										
Cooling performance 12 °C/7 °C(1)										
Cooling capacity	kW	-	-	-	-	736,7	869,6	999,1	1159,6	1336,9
Input power	kW	-	-	-	-	120,2	140,2	153,5	186,2	211,9
Cooling total input current	A	-	-	-	-	205,0	233,0	254,0	311,0	349,0
EER	W/W	-	-	-	-	6,13	6,20	6,51	6,23	6,31
Water flow rate system side	l/h	-	-	-	-	126626	149476	171729	199301	229777
Pressure drop system side	kPa	-	-	-	-	12	17	14	14	13
Water flow rate source side	I/h	-	-	-	-	147066	173222	197868	230962	265867
Pressure drop source side	kPa	-	-	-	-	16	22	18	19	18
(1) Date 14511:2022; Water user side 12 °C / 7 °C; Wa	ter source side 30 °C / 35	5℃								
Size		1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2	'									
Cooling performance 12 °C/7 °C(1)										
Cooling capacity	kW	246,4	334,3	492,9	669,8	736,6	869,5	999,1	1159,5	1342,8
Input power	kW	40,1	50,9	80,1	105,5	120,7	140,3	154,1	187,0	212,7
Cooling total input current	A	69,0	85,0	137,0	173,0	205,0	233,0	254,0	311,0	349,0
EER	W/W	6.15	6.57	6,16	6.35	6,10	6.20	6,48	6.20	6,31

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ELECTRIC DATA

Water flow rate system side

Pressure drop system side

Water flow rate source side

Pressure drop source side

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Electric data											
Maximum current (FLA)	A,U	Α	150,0	217,0	300,0	434,0	450,0	651,0	651,0	868,0	868,0
Peak current (LRA)	A.U	A	6.0	6.0	156.0	223.0	306.0	440.0	440.0	657.0	657.0

⁽¹⁾ Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C (2) Sizes 4400 and 4490 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

GENERAL TECHNICAL DATA

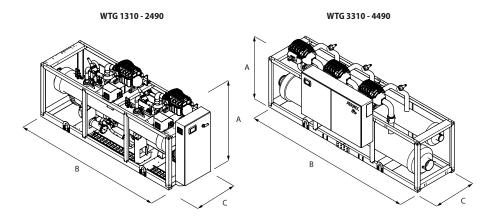
Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Compressor											
Туре	A,U	type					Centrifugal - Oil Fr	ee			
Compressor regulation	A,U	Туре					Inverter				
Number	A,U	no.	1	1	2	2	3	3	3	4	4
Circuits	A,U	no.	1	1	1	1	1	1	1	1	1
Refrigerant	A,U	type					R1234ze				
Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
System side heat exchanger											
Туре	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1
Source side heat exchanger											
Туре	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1
Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2											
System side heat exchanger											
Туре	A,U	type					Shell and tube				
Number	A,U	no.	1	1	1	1	1	1	1	1	1
Source side heat exchanger											
Туре	A,U	type					Shell and tube				
Number	A,U	no.	1	1	1	1	1	1	1	1	1

SOUND DATA

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Set-up: °											
Sound data calculated in cooling mode (1	1)										
Carrad marriage large	A	dB(A)	89,0	91,0	92,0	94,0	94,0	93,0	96,0	94,0	97,0
Sound power level	II	dR(A)	86.0	88.0	89.0	91.0	91.0	93.0	93.0	94.0	94.0

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
Dimensions and weights											
A	A,U	mm	-	-	-	-	2010	2010	2010	2280	2280
В	A,U	mm	-	-	-	-	4966	4966	4966	4966	4966
C	A,U	mm	-	-	-	-	1640	1640	1640	1732	1732
Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Euchaman 3											
Exchanger: 2											
Dimensions and weights											
	A,U	mm	1850	1970	2010	2280	2280	2280	2280	2280	2280
Dimensions and weights	A,U A,U	mm mm	1850 3040	1970 3040	2010 3340	2280 4390	2280 3990	2280 3990	2280 4966	2280 4966	2280 4966

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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MULTI-PURPOSE

Thanks to the special architecture of the refrigerant circuit and advanced control logic, the multi-purpose heat pump is able to simultaneously satisfy different installation requirements and to independently modulate the power delivered on each of them.

The ability to simultaneously meet the demand of the hot and cold circuit, whatever the proportion of the load on the two circuits may be, derives from the capacity of its control to switch the operation between the various possible modes.

	MULTI-PURP	OSE	Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	NRP 0200-0750	Air-water multipurpose (plate heat exchanger)		43-185	46-205	822
	NRP 0804-2406	Air-water multipurpose (plate heat exchanger)		207-639	208-662	829
new	NPG 0800-2400	Air-water multipurpose (plate heat exchanger)		206,5-657,8	212,0-670,8	836
	CPS	Multifunction unit with multiple temperature level capability		164-491	176-505	845
	NXP 0500-1650	Water-water multipurpose (plate heat exchanger)		108-502	122-549	850





















NRP 0200-0750

Air-water multipurpose

Cooling capacity 43 ÷ 185 kW Heating capacity 46 ÷ 205 kW



- · High efficiency also at partial loads
- Units designed for 2 or 4-pipe systems
- Simultaneous and independent production of hot and chilled water
- Compact dimensions





DESCRIPTION

Multipurpose external units designed for 2 or 4-pipe systems. With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency **E** Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15 $^{\circ}$ C outside air temperature in winter, and up to 46 $^{\circ}$ C in summer. Hot water production up to 55 $^{\circ}$ C (for more details refer to the selection software and technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Option integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.

The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL PCO⁵

822

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

Possibility to control two units in a Master-Slave configuration

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

GP: Anti-intrusion grid.

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VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
AFD40FD1	A							•	•	•	•	•	•
AER485P1	E		•	•				•	•	•	•	•	•
AFDDACD	A										•		
AERBACP	E		•	•	•			•	•		•	•	•
AERNET	A							•	•	•	•	•	•
ACRINCI	E												
MULTICHILLER EVO	A							•	•	•	•	•	•
MOLITCHILLER_EVO	E												
PGD1	A							•	•		•	•	
PGDT	E			•	•				•		•	•	

Anti-intrusion grid

Ver	0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
A	-	-	-	-	-	-	GP2 x 2 (1)	GP2 x 3 (1)	GP10 x 3 (1)			
E	GP3	GP3	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 3 (1)	GP10 x 3 (1)			

⁽¹⁾ x _ indicates the quantity to buy

Antivibration

Version	System side - pumps	Recovery side - pumps	0200	0240	0280
A	00	00,R1,R2,R3,R4	-	-	-
A	01,02,03,04,05,06,07,08	00	-	-	-
A	P1,P2,P3,P4	00,R1,R2,R3,R4	-	-	-
E	00,P1,P2,P3,P4	00,R1,R2,R3,R4	VT17	VT17	VT17
E	01,02,03,04,05,06,07,08	00	VT13	VT13	VT13
Version	System side - pumps	Recovery side - pumps	0300	0330	0350
A	00	00,R1,R2,R3,R4	-	-	-
A	01,02,03,04,05,06,07,08	00	-	-	-
A	P1,P2,P3,P4	00,R1,R2,R3,R4	-	-	-
E	00,P1,P2,P3,P4	00,R1,R2,R3,R4	VT17	VT17	VT17
E	01,02,03,04,05,06,07,08	00	VT13	VT13	VT13
Version	System side - pumps	Recovery side - pumps	0500	0550	0600
A	00	00,R1,R2,R3,R4	VT11	VT11	VT11
A	01,02,03,04,05,06,07,08	00	VT11	VT11	VT11
A	P1,P2,P3,P4	00,R1,R2,R3,R4	VT11	VT11	VT11
E	00	00,R1,R2,R3,R4	VT11	VT11	VT11
E	01,02,03,04,05,06,07,08	00	VT11	VT11	VT11
E	P1,P2,P3,P4	00,R1,R2,R3,R4	VT11	VT11	VT11
Version	System side - pumps	Recovery side - pumps	0650	0700	0750
A	00	00,R1,R2,R3,R4	VT11	VT22	VT23
A	01,02,03,04,05,06,07,08	00	VT11	VT22	VT23
A	P1,P2,P3,P4	00,R1,R2,R3,R4	VT11	VT22	VT23
E	00	00,R1,R2,R3,R4	VT11	VT22	VT23
E	01,02,03,04,05,06,07,08	00	VT11	VT22	VT23
				VT22	VT23

not available

Device for peak current reduction

Ver	0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Power supply: °												
A	-	-	-	-	-	-	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)
E	DRE281 (1)	DRE281 (1)	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)

⁽¹⁾ Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
A	-	-	-	-	-	-	RIF52	RIF52	RIF53	RIF53	RIF53	RIF53
E	RIF54	RIF54	RIF50	RIF50	RIF50	RIF51	RIF52	RIF52	RIF53	RIF53	RIF53	RIF53

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	NRP
4,5,6,7	Size 0200, 0240, 0280, 0300, 0330, 0350, 0500, 0550, 0600, 0650, 0700, 0750
8	Version
Α	High efficiency
E	Silenced high efficiency (1)
9	System type
2	2-pipe system
4	4-pipe system
10	Coils
0	Copper-aluminium
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
11	Fans
0	Standard (2)
J	Inverter (3)
M	Oversized (4)
12	Power supply
•	400V ~ 3N 50Hz with magnet circuit breakers
1	220V ~ 3 50Hz with magnet circuit breakers (5)
13,14	System side - pumps
00	Without hydronic kit
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
05	Storage tank with holes for heaters and single low head pump (6)
06	Storage tank with holes for heaters and pump low head + stand-by pump (6)
07	Storage tank with holes for heaters and single high head pump (6)
08	Storage tank with holes for heaters and pump high head + stand-by pump (6)
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
15,16	Recovery side - pumps
00	Without hydronic kit
R1	Single pump low head
R2	Pump low head + stand-by pump
R3	Single pump high head
R4	Pump high head + stand-by pump

- (1) The size up 0200 to 0350 are only available in the silenced versions (E)
 (2) As standard in sizes from 0500 to 0750
 (3) Standard for size from 0200 to 0350 without useful static pressure, option for other sizes
 (4) Available only for size from 0200 to 0350
 (5) Not available for size 0750
 (6) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRP - 2-pipe system version A

Size		0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling system side 2-pipe system (1)													
Cooling capacity	kW	-	-	-	-	-	-	99,8	103,7	123,7	140,7	159,7	184,6
Input power	kW	-	-	-	-	-	-	32,4	36,0	44,1	50,5	55,2	64,6
Cooling total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
EER	W/W	-	-	-	-	-	-	3,08	2,89	2,80	2,79	2,89	2,86
Water flow rate system side	l/h	-	-	-	-	-	-	17181	17868	21305	24225	27490	31785
Pressure drop system side	kPa	-	-	-	-	-	-	37	39	37	48	56	67
Heating system side 2-pipe system (2)													
Heating capacity	kW	-	-	-	-	-	-	106,3	112,3	137,3	152,3	173,3	205,4
Input power	kW	-	-	-	-	-	-	32,6	35,1	41,3	45,8	53,8	62,8
Heating total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
COP	W/W	-	-	-	-	-	-	3,26	3,20	3,33	3,33	3,22	3,27
Water flow rate system side	I/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop system side	kPa	-	-	-	-	-	-	43	46	46	57	67	84
Heating domestic hot water side 2-pipe system ((3)				-					-		-	
Heating capacity	kW	-	-	-	-	-	-	106,2	112,2	137,3	152,3	173,4	205,3
Input power	kW	-	-	-	-	-	-	32,5	34,9	41,3	45,7	53,5	62,3
Heating total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
COP	W/W	-	-	-	-	-	-	3,27	3,21	3,32	3,34	3,24	3,29
Water flow rate domestic hot water side	l/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop domestic hot water side	kPa	-	-	-	-	-	-	30	34	51	48	35	49
Simultaneous operation (heating + cooling), 2 p	ipes (4)												
Cooling capacity	kW	-	-	-	-	-	-	103,3	111,3	133,8	148,5	169,2	202,7
Recovered heating power	kW	-	-	-	-	-	-	132,2	142,2	174,3	193,3	218,4	261,3
Input power	kW	-	-	-	-	-	-	30,8	32,9	43,2	48,0	52,5	63,0
Water flow rate system side	I/h	-	-	-	-	-	-	17181	17868	21305	24225	27490	31785
Pressure drop system side	kPa	-	-	-	-	-	-	37	39	37	48	56	67
Water flow rate domestic hot water side	l/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop domestic hot water side	kPa	-	-	-	-	-	-	30	34	51	48	35	49

⁽¹⁾ Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified (2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b. / 6 °C w.b. (3) Water exchanger to the total recovery side 40 °C/45 °C; (4) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

NRP - 2-pipe system version E

Size		0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling system side 2-pipe system (1)													
Cooling capacity	kW	42,9	49,9	55,9	63,9	67,9	79,8	94,8	98,8	115,8	130,7	152,7	178,7
Input power	kW	13,9	16,5	18,9	20,8	23,2	27,0	35,2	38,9	48,3	55,5	61,9	70,6
Cooling total input current	Α	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
EER	W/W	3,08	3,02	2,97	3,07	2,93	2,96	2,70	2,54	2,40	2,35	2,47	2,53
Water flow rate system side	l/h	7388	8591	9621	10996	11683	13745	16322	17009	19930	22507	26287	30754
Pressure drop system side	kPa	26	37	22	29	22	31	34	35	32	41	51	63
Heating system side 2-pipe system (2)													
Heating capacity	kW	46,1	53,2	60,1	75,2	80,2	84,2	106,3	112,3	137,3	152,3	173,3	205,4
Input power	kW	13,3	15,6	17,7	22,4	23,9	25,6	32,6	35,1	41,3	45,7	53,8	62,8
Heating total input current	Α	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
COP	W/W	3,47	3,42	3,40	3,36	3,36	3,28	3,26	3,20	3,33	3,33	3,22	3,27
Water flow rate system side	l/h	7995	9211	10428	13035	13904	14599	18423	19466	23812	26417	30067	35629
Pressure drop system side	kPa	30	43	26	41	31	35	43	46	46	56	67	85
Heating domestic hot water side 2-pipe system (3)													
Heating capacity	kW	46,1	53,1	60,1	75,2	80,2	84,1	106,2	112,2	137,3	152,3	173,4	205,3
Input power	kW	13,2	15,4	17,7	22,3	24,0	25,5	32,5	34,9	41,3	45,7	53,5	62,3
Heating total input current	Α	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
COP	W/W	3,49	3,44	3,40	3,37	3,35	3,30	3,27	3,21	3,32	3,34	3,24	3,29
Water flow rate domestic hot water side	I/h	7995	9211	10428	13035	13904	14599	18423	19466	23810	26417	30067	35629
Pressure drop domestic hot water side	kPa	13	17	21	33	38	19	30	34	51	48	35	49
Simultaneous operation (heating + cooling), 2 pipes	(4)												
Cooling capacity	kW	45,6	52,4	58,3	68,9	74,0	87,1	103,3	111,4	133,9	148,5	169,2	202,7
Recovered heating power	kW	58,1	67,1	75,1	88,2	95,2	111,1	132,2	142,2	174,3	193,3	218,4	261,3
Input power	kW	13,2	15,5	17,8	20,5	22,5	25,5	30,7	32,8	43,1	47,9	52,5	62,9
Water flow rate system side	l/h	7388	8591	9621	10996	11683	13745	16322	17009	19930	22507	26287	30754
Pressure drop system side	kPa	26	37	22	29	22	31	34	35	32	41	51	63
Water flow rate domestic hot water side	l/h	7995	9211	10428	13035	13904	14599	18423	19446	23810	26417	30067	35629
Pressure drop domestic hot water side	kPa	13	17	21	33	38	19	30	34	51	48	35	49

⁽¹⁾ Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified (2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b. / 6 °C w.b. (3) Water exchanger to the total recovery side 40 °C/45 °C; (4) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

NRP - 4-pipe system version A

Size		0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling system side 4-pipe system (1)													
Cooling capacity	kW	-	-	-	-	-	-	99,8	103,7	123,7	140,7	159,7	184,6
Input power	kW	-	-	-	-	-	-	32,4	36,0	44,1	50,5	55,2	64,6
Cooling total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
EER	W/W	-	-	-	-	-	-	3,08	2,89	2,80	2,79	2,89	2,86
Water flow rate system side	l/h	-	-	-	-	-	-	17181	17868	21305	24225	27490	31785
Pressure drop system side	kPa	-	-	-	-	-	-	37	39	37	48	56	67
Heating system side 4-pipe system (2)													
Heating capacity	kW	-	-	-	-	-	-	106,2	112,2	137,3	152,3	173,4	205,3
Input power	kW	-	-	-	-	-	-	32,5	39,9	41,3	45,7	53,5	62,3
Heating total input current	A	-	-	-	-	-	-	55,0	59,0	72,0	82,0	88,0	113,0
COP	W/W	-	-	-	-	-	-	3,27	3,21	3,32	3,34	3,24	3,29
Water flow rate system side	I/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop system side	kPa	-	-	-	-	-	-	30	34	51	48	35	49
Simultaneous operation (heating + cooling), 4 pip	es (3)												
Cooling capacity	kW	-	-	-	-	-	-	103,3	111,3	133,8	148,5	169,2	202,7
Recovered heating power	kW	-	-	-	-	-	-	132,2	142,2	174,3	193,3	218,4	261,3
Input power	kW	-	-	-	-	-	-	30,8	32,9	43,2	48,0	52,5	63,0
Water flow rate cold side	I/h	-	-	-	-	-	-	17181	17868	21305	24225	27490	31785
Pressure drop cold side	kPa	-	-	-	-	-	-	37	39	37	48	56	67
Water flow rate hot side	l/h	-	-	-	-	-	-	18423	19466	23810	26417	30067	35629
Pressure drop hot side	kPa	-	-	-	-	-	-	30	34	51	48	35	49

(1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C (2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b. /6 °C w.b. (3) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

NRP - 4-pipe system version E

NKF - 4-pipe system version E													
Size		0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling system side 4-pipe system (1)													
Cooling capacity	kW	42,9	49,9	55,9	63,9	67,9	79,8	94,8	98,8	115,8	130,7	152,7	178,7
Input power	kW	13,9	16,5	18,9	20,8	23,2	27,0	35,2	38,9	48,3	55,5	61,9	70,6
Cooling total input current	Α	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
EER	W/W	3,08	3,02	2,97	3,07	2,93	2,96	2,70	2,54	2,40	2,35	2,47	2,53
Water flow rate system side	l/h	7388	8591	9621	10996	11683	13745	16322	17009	19930	22507	26287	30754
Pressure drop system side	kPa	26	37	22	29	22	31	34	35	32	41	51	63
Heating system side 4-pipe system (2)													
Heating capacity	kW	46,1	53,1	60,1	75,2	80,2	84,1	106,2	112,2	137,3	152,3	173,4	205,3
Input power	kW	13,2	15,4	17,7	22,3	24,0	25,5	32,5	34,9	41,3	45,7	53,5	62,3
Heating total input current	Α	28,0	33,0	38,0	41,0	45,0	52,0	60,0	64,0	79,0	91,0	99,0	120,0
COP	W/W	3,49	3,44	3,40	3,37	3,35	3,30	3,27	3,21	3,32	3,34	3,24	3,29
Water flow rate system side	l/h	7995	9211	10428	13035	13904	14599	18423	19466	23810	26417	30067	35629
Pressure drop system side	kPa	13	17	21	33	38	19	30	34	51	48	35	49
Simultaneous operation (heating + cooling), 4 pipes	(3)												
Cooling capacity	kW	45,6	52,4	58,3	68,9	74,0	87,1	103,3	111,4	133,9	148,5	169,2	202,7
Recovered heating power	kW	58,1	67,1	75,1	88,2	95,2	111,1	132,2	142,2	174,3	193,3	218,4	261,3
Input power	kW	13,2	15,5	17,8	20,5	22,5	25,5	30,7	32,8	43,1	47,9	52,5	62,9
Water flow rate cold side	l/h	7388	8591	9621	10996	11683	13745	16322	17009	19930	22507	26287	30754
Pressure drop cold side	kPa	26	37	22	29	22	31	34	35	32	41	51	63
Water flow rate hot side	l/h	7995	9211	10428	13035	13904	14599	18423	19466	23810	26417	30067	35629
Pressure drop hot side	kPa	13	17	21	33	38	19	30	34	51	48	35	49

(1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C (2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b. /6 °C w.b. (3) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

ENERGY DATA

Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling capacity with low leaving water temp (UE n° 2016/2281)														
SEER -	Α	W/W	-	-	-	-	-	-	3,62	3,34	3,78	3,83	3,86	3,92
	E	W/W	3,78	3,74	3,77	3,70	3,74	4,00	3,53	3,29	3,67	3,72	3,75	3,76
ηςς	Α	%	-	-	-	-	-	-	141,60	130,60	148,00	150,10	151,30	153,70
	E	%	148,20	146,50	147,70	145,00	146,50	157,10	138,10	128,50	143,60	145,70	146,90	147,50
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)														
Pdesignh	Α	kW	-	-	-	-	-	-	90,00	95,00	116,00	129,00	147,00	174,00
	E	kW	39,00	45,00	51,00	64,00	68,00	71,00	90,00	95,00	116,00	129,00	147,00	174,00
SCOP	Α	W/W	-	-	-	-	-	-	3,53	3,50	3,60	3,68	3,55	3,60
	E	W/W	3,60	3,53	3,55	3,50	3,50	3,43	3,53	3,50	3,70	3,68	3,55	3,60
ηsh	A	%	-	-	-	-	-	-	138,00	137,00	145,00	144,00	139,00	141,00
	E	%	141,00	138,00	139,00	137,00	137,00	134,00	138,00	137,00	145,00	144,00	139,00	141,00

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Power supply: °														
Electric data														
Maximum current (FLA)	A	Α	-	-	-	-	-	-	76,0	81,0	100,0	112,0	122,0	144,0
	E	A	36,0	41,0	46,0	53,0	58,0	63,0	76,0	81,0	100,0	112,0	122,0	144,0
Deels word (LDA)	A	A	-	-	-	-	-	-	214,0	220,0	232,0	243,0	261,0	320,0
Peak current (LRA)	E	A	119,0	150,0	155,0	184,0	190,0	200,0	214,0	220,0	232,0	243,0	261,0	320,0

Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Compressor														-
Туре	A	type	-	-	-	-	-	-	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
71	E	type							roll					
Number	A	no.	-	-	-	-	-	-	3	3	4	4	4	4
	E	no.	2	2	2	2	2	2	3	3	4	4	4	4
Circuits	A	no.	-	-	-	-	-	-	2	2	2	2	2	2
	E	no.	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A E	type	-	-		-			R410A	R410A	R410A	R410A	R410A	R410A
	A	type kg	_	_	-	-	_	- N4	10A 33,0	33,0				
Refrigerant charge (1)	F	kg kg	16,0	16,0	16,0	20,0	20,0	20,0	33,0	33,0		-		
2-pipe system - System side he			10,0	10,0	10,0	20,0	20,0	20,0	33,0	33,0				
z-pipe system - system side ne	A A	type							Rrazed nlate	Rrazed nlate	Rrazed nlate	Brazed plate	Rrazed nlate	Brazed nla
Гуре	E	type						Rrazo	d plate	Diazeu piate	Diazca piate	Diazeu piate	Diazcu piate	Diazeu pie
	A	no.					-	-	u piate 1	1	1	1	1	1
Number	E	no.	1	1	1	1	1	1	1	1	1	1	1	1
	A	Type	- '-	-	-	-	-	-	G.s.	G.s.	G.s.	G.s.	G.s.	G.s.
Connections (in/out)	E	Туре							.S.	V.J.	4.3.	J.J.	4.3.	0.5.
	A	Ø	_	_	-	-	-	-	2″1/2	2″1/2	2″1/2	2" 1/2	2"1/2	3"
Size (in)	E	Ø	2"1/2	2"1/2	2″1/2	2"1/2	2"1/2	2″1/2	2"1/2	2"1/2	2"1/2	2" 1/2	2"1/2	3"
	Α	Ø			-			-	2"1/2	2"1/2	2"1/2	2" 1/2	2"1/2	3"
Size (out)	E	Ø	2"1/2	2" 1/2	2"1/2	2"1/2	2"1/2	2″1/2	2"1/2	2"1/2	2"1/2	2" 1/2	2"1/2	3"
2-pipe system - Recovery side	heat exchange	er (domestic l												
	A	type	-	-	-	-	-	-	Brazed plate	Brazed pla				
Туре	E	type						Braze	d plate					
N 1	A	no.	-	-	-	-	-	-	2	2	2	2	2	2
Number	E	no.	2	2	2	2	2	2	2	2	2	2	2	2
M :(1)	A	Туре	-	-	-	-	-	-	-	G.s.	G.s.	G.s.	G.s.	G.s.
Manifold connection (in/out)	E	Type						G	.S.					
M:(-1.1.1:/:)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	3"
Manifold diameter (in)	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	3"
M :(111: . / .)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	3"
Manifold diameter (out)	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	3"
4-pipe system - System side he	at exchanger	(cold side)												
Tuna	А	type	-	-	-	-	-	-	Brazed plate	Brazed pla				
Туре	E	type						Braze	d plate					
Normalian	A	no.	-	-	-	-	-	-	1	1	1	1	1	1
Number	E	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in faut)	A	Туре	-	-	-	-	-	-	G.s.	G.s.	G.s.	G.s.	G.s.	G.s.
Connections (in/out)	E	Туре						G	.s.					
Ciza (in)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
Size (in)	E	Ø	2"1/2	2" 1/2	2"1/2	2"1/2	2" 1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3″
C:== (=t)	А	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	3″
Size (out)	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	3″
4-pipe system - Recovery side	heat exchange	er (hot side)												
Tuno	A	type	-	-	-	-	-	-		Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed pla
Туре	E	type						Braze	d plate					
Number	A	no.	-	-	-	-	-	-	2	2	2	2	2	2
NUMBEI	E	no.	2	2	2	2	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A	Туре	-	-	-	-	-	-	-	G.s.	G.s.	G.s.	G.s.	G.s.
iviannoiu connection (in/out)	E	Туре						G	.S.					
Manifold diameter (in)	A	Ø	-	-	-	-	-	-	2"1/2	2"1/2	2"1/2	2"1/2	2" 1/2	3"
Manifold diameter (in)	E	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
														3"
Manifold diameter (out)	Α	Ø	-	-	-	-	-	-	2"1/2	2" 1/2	2"1/2	2"1/2	2" 1/2)

Manifold diameter (out)

E

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2" 1/2

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G.s. = Grooved joints

FANS DATA

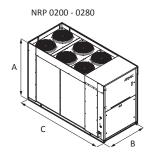
Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Fan														
Toma	Α	type	-	-	-	-	-	-	Axial	Axial	Axial	Axial	Axial	Axial
Type -	E	type	Axial											
Normalian	Α	no.	-	-	-	-	-	-	2	2	2	2	3	3
Number -	E	no.	6	6	6	8	8	8	2	2	2	2	3	3
A: A	Α	m³/h	-	-	-	-	-	-	37000	37000	36500	36500	58000	48000
Air flow rate	E	m³/h	20000	20000	20000	26000	26000	26000	20200	21100	21400	22400	31900	34600

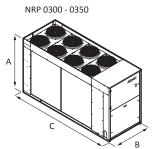
SOUND DATA

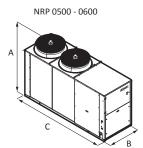
Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Sound data calculated in cooling mode (1)													
Sound nower level	Α	dB(A)	-	-	-	-	-	-	82,0	82,0	82,0	83,0	85,0	85,0
Sound power level	E	dB(A)	74,0	74,0	74,0	75,0	75,0	76,0	74,0	74,0	74,0	75,0	77,0	77,0
Sound pressure level (10 m)	А	dB(A)	-	-	-	-	-	-	50,0	50,0	50,0	51,0	53,0	53,0
	E	dB(A)	42.0	42.0	42.0	43.0	43.0	44.0	42.0	42.0	42.0	43.0	45.0	45.0

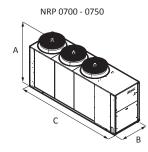
⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS









Size			0200	0240	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Dimensions and weights														
٨	Α	mm	-	-	-	-	-	-	1875	1875	1875	1875	1875	1975
A -	E	mm	1606	1606	1606	1606	1606	1606	1875	1875	1875	1875	1875	1975
	Α	mm	-	-	-	-	-	-	1100	1100	1100	1100	1100	1500
-	E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1500
(Α	mm	-	-	-	-	-	-	3342	3342	3342	3342	4342	4350
	E	mm	2700	2700	2700	3200	3200	3200	3342	3342	3342	3342	4342	4350
Empty weight	Α	kg	-	-	-	-	-	-	1233	1237	1359	1378	1591	1939
Empty weight	E	kg	788	790	792	862	872	894	1233	1237	1359	1378	1591	1939

[■] The weights are for standard units with plate heat exchangers and no hydronic kit.





















NRP 0804-2406

Air-water multipurpose

Cooling capacity 207 ÷ 639 kW Heating capacity 208 ÷ 662 kW



- Units designed for 2 or 4-pipe systems
- · High efficiency also at partial loads
- Simultaneous and independent production of hot and chilled water
- Also available with Shell and tube heat exchanger





DESCRIPTION

Multipurpose external units designed for 2 or 4-pipe systems. With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 50 °C in summer. Hot water production up to 55 °C (for more details refer to the selection software and technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Exchangers

All the units have plate heat exchangers on service and recovery as standard but, upon request, they can be supplied with a shell & tube heat exchanger

If the customer chooses a unit with tube core exchangers, it is not possible to add a hydronic kit.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Option integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.

The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

■ The flow switch is available as an accessory for both the system side and the recovery side, and is compulsory; if it is not installed, the warranty will be considered invalid.

CONTROL PCO⁵

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS proto-

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FL:** Flow switch.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

BRC1: Condensate drip tray. Consider 1 for each V-block.

ACCESSORIES COMPATIBILITY

Model	Ver	0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•		•	•	•	•		•	•	•
AERNET	A,E						•					•
FL	A,E	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	A,E	•	•	•	•		•	•	•	•	•	•
PGD1	A,E	•	•	•			•	•	•			•

Antivibration

luvibrau	OII .										
			0804	0904	1004	1104	1204	1414	1604	1805	2006
	IDR IMP	IDR REC									
	00	00	AVX882	AVX887	AVX887	AVX887	AVX887	AVX871	AVX871	AVX875	AVX875
Α	PA-DJ	00	AVX886	AVX887	AVX887	AVX887	AVX887	AVX872	AVX872	AVX875	AVX884
	00	RA-SJ	AVX886	AVX887	AVX887	AVX887	AVX883	AVX873	AVX873	AVX876	AVX876
	PA-DJ	RA-SJ	AVX870	AVX883	AVX883	AVX883	AVX883	AVX874	AVX874	AVX876	AVX884
	00	00	AVX886	AVX871	AVX871	AVX871	AVX871	AVX875	AVX877	AVX878	AVX878
E	PA-DJ	00	AVX886	AVX872	AVX872	AVX872	AVX872	AVX875	AVX877	AVX878	AVX865
E	00	RA-SJ	AVX870	AVX873	AVX873	AVX873	AVX873	AVX876	AVX877	AVX865	AVX865
	PA-DJ	RA-SJ	AVX870	AVX874	AVX874	AVX874	AVX874	AVX876	AVX877	AVX879	AVX865
			2206	2406							
	IDR IMP	IDR REC									
	00	00	AVX877	AVX877							
Α	PA-DJ	00	AVX877	AVX885							
	00	RA-SJ	AVX885	AVX885							
	PA-DJ	RA-SJ	AVX885	AVX885							
	00	00	AVX866	AVX866							
E	PA-DJ	00	AVX866	AVX866							
E	00	RA-SJ	AVX867	AVX867							
	PA-DJ	RA-SJ	AVX867	AVX867							

Device for peak current reduction

Ver	0804	0904	1004	1104	1204	1414
A,E	DRENRP0804	DRENRP0904	DRENRP1004	DRENRP1104	DRENRP1204 (1)	DRENRP1404 (2)

A grey background indicates the accessory must be assembled in the factory

Ver	1604	1805	2006	2206	2406
A,E	DRENRP1604 (1)	DRENRP1805	DRENRP2006	DRENRP2206	DRENRP2406

(1) Only for power supply 400V 3N \sim 50Hz e 400V 3 \sim 50Hz. A grey background indicates the accessory must be assembled in the factory

Power factor correction

	Ver	0804	0904	1004	1104	1204	1414
Ī	A	RIFNRP0804A	RIFNRP0904A	RIFNRP1004A	RIFNRP1104A	RIFNRP1204A	RIFNRP1404
	E	RIFNRP0804E	RIFNRP0904E	RIFNRP1004E	RIFNRP1104E	RIFNRP1204E	RIFNRP1404

A grey background indicates the accessory must be assembled in the factory

· j· · /j· · / ·	,				
Ver	1604	1805	2006	2206	2406
A,E	RIFNRP1604	RIFNRP1805	RIFNRP2006	RIFNRP2206	RIFNRP2406

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

ver	0804	0904	1004	1104	1204	1414	
A	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	Ī
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP5VN	
A hl							

$\underline{\textbf{A}}$ grey background indicates the accessory must be assembled in the factory

Ver	1604	1805	2006	2206	2406
A	GP4VN	GP5VN	GP5G	GP6V	GP6V
E	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory $% \left(x\right) =\left(x\right) +\left(x\right)$

Ver	0804	0904	1004	1104	1204	1414
A,E	BRC1 (1)					

(1) Condensate drip tray. Consider 1 for each V-block. A grey background indicates the accessory must be assembled in the factory

	,				
Ver	1604	1805	2006	2206	2406
A,E	BRC1 (1)				

⁽¹⁾ Only for power supply 400V 3N \sim 50Hz e 400V 3 \sim 50Hz. (2) Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.

⁽¹⁾ Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description									
1,2,3	NRP									
4,5,6,7	Size 0804, 0904, 1004, 1104, 1204, 1414, 1604, 1805, 2006, 2206, 2406									
8	Version									
Α	High efficiency (1)									
E	Silenced high efficiency									
9	System type									
2	2-pipe system									
4	4-pipe system									
10	Coils									
0	Copper-aluminium									
R	Copper pipes-copper fins									
S	Copper pipes-Tinned copper fins									
٧	Copper pieps-Coated aluminium fins									
11	Fans									
0	AC standard									
J	EC Inverter motors									
12	Power supply									
0	400V ~ 3 50Hz with magnet circuit breakers									
13,14	System side - pumps									
00	Without hydronic kit									
DA	Pump A + stand-by pump									
DB	Pump B + stand-by pump									
DC	Pump C + stand-by pump									
DD	Pump D + stand-by pump									
DE	Pump E + stand-by pump									
DF	Pump F + stand-by pump									
DG	Pump G + stand-by pump									
DH	Pump H + stand-by pump									
DI	Pump I + stand-by pump									

Field	Description
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
15,16	Recovery side - pumps
00	Without hydronic kit
RA	Pump A
RB	Pump B
RC	Pump C
RD	Pump D
RE	Pump E
RF	Pump F
RG	Pump G
RH	Pump H
RI	Pump I
SA	Pump A + stand-by pump
SB	Pump B + stand-by pump
SC	Pump C + stand-by pump
SD	Pump D + stand-by pump
SE	Pump E + stand-by pump
SF	Pump F + stand-by pump
SG	Pump G + stand-by pump
SH	Pump H + stand-by pump
SI	Pump I + stand-by pump

⁽¹⁾ Unit 804 version A cannot be configured with a twin pump on both the system side and the recovery side.

PERFORMANCE SPECIFICATIONS

NRP - 2-pipe system version A

Size		0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Cooling system side 2-pipe system (1)	-											
Cooling capacity	kW	206,7	230,6	259,2	299,6	332,2	386,3	426,2	490,5	544,3	598,2	638,8
Input power	kW	69,4	76,3	86,1	99,5	116,2	128,1	146,7	165,5	189,8	202,0	220,3
Cooling total input current	A	124,0	138,0	155,0	172,0	195,0	218,0	247,0	280,0	319,0	341,0	371,0
EER	W/W	2,98	3,02	3,01	3,01	2,86	3,02	2,91	2,96	2,87	2,96	2,90
Water flow rate system side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611	102896	109845
Pressure drop system side	kPa	24	33	34	42	43	36	36	49	54	64	47
Heating system side 2-pipe system (2)												
Heating capacity	kW	209,9	246,0	272,7	306,2	340,5	396,2	437,6	504,8	562,7	618,6	660,8
Input power	kW	66,8	79,6	85,5	95,7	107,8	125,7	136,8	159,6	180,8	199,7	209,7
Heating total input current	A	120,0	143,0	154,0	166,0	183,0	214,0	233,0	272,0	306,0	337,0	356,0
COP	W/W	3,14	3,09	3,19	3,20	3,16	3,15	3,20	3,16	3,11	3,10	3,15
Water flow rate system side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop system side	kPa	25	34	39	50	41	52	35	47	51	62	47
Heating domestic hot water side 2-pipe system (3)												
Heating capacity	kW	209,9	246,0	272,7	306,2	340,6	396,2	437,6	504,9	562,7	618,7	660,8
Input power	kW	66,9	79,8	85,6	95,7	108,3	125,4	137,0	159,8	180,9	199,9	209,9
Heating total input current	A	120,0	143,0	154,0	166,0	183,0	214,0	233,0	272,0	306,0	337,0	356,0
COP	W/W	3,14	3,08	3,19	3,20	3,15	3,16	3,19	3,16	3,11	3,10	3,15
Water flow rate domestic hot water side	I/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop domestic hot water side	kPa	34	47	39	49	61	42	44	53	55	66	50
Simultaneous operation (heating + cooling), 2 pipes	s (4)											
Cooling capacity	kW	211,2	236,7	258,2	306,9	350,5	398,0	446,2	510,6	584,4	630,2	680,0
Recovered heating power	kW	270,3	304,4	331,0	392,1	448,5	510,5	570,1	653,9	749,6	810,9	871,0
Input power	kW	62,8	72,4	77,7	91,3	105,2	120,2	132,4	153,7	177,2	194,7	204,6
TER	W/W	7,67	7,48	7,58	7,66	7,60	7,56	7,68	7,58	7,53	7,40	7,58
Water flow rate system side	I/h	35565	39671	44593	51536	57151	66430	73295	84370	93611	102896	109845
Pressure drop system side	kPa	24	33	34	42	43	36	36	49	54	64	47
Water flow rate domestic hot water side	I/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop domestic hot water side	kPa	34	47	39	49	61	42	44	53	55	66	50

⁽¹⁾ Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified (2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b. / 6 °C w.b. (3) Water exchanger to the total recovery side 40 °C/45 °C; (4) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

NRP - 2-pipe system version E

Size		0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Cooling system side 2-pipe system (1)												
Cooling capacity	kW	200,7	225,7	255,3	296,9	332,7	382,2	427,0	487,6	549,9	598,5	639,4
Input power	kW	66,0	73,4	83,2	96,4	113,0	125,6	139,1	159,0	182,6	195,9	214,0
Cooling total input current	A	113,0	125,0	142,0	159,0	182,0	203,0	225,0	256,0	294,0	315,0	344,0
EER	W/W	3,04	3,07	3,07	3,08	2,94	3,04	3,07	3,07	3,01	3,05	2,99
Water flow rate system side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585	102947	109954
Pressure drop system side	kPa	25	33	34	43	44	37	38	49	54	64	48
Heating system side 2-pipe system (2)												
Heating capacity	kW	207,4	240,7	262,4	300,7	338,4	389,4	436,7	503,3	567,2	618,5	661,8
Input power	kW	63,8	74,6	80,5	92,8	104,9	121,1	134,3	155,5	181,7	199,3	209,7
Heating total input current	A	109,0	126,0	136,0	153,0	170,0	195,0	217,0	250,0	293,0	320,0	338,0
COP	W/W	3,25	3,22	3,26	3,24	3,23	3,22	3,25	3,24	3,12	3,10	3,16
Water flow rate system side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop system side	kPa	25	33	37	48	40	50	35	46	52	62	47
Heating domestic hot water side 2-pipe system (3)												
Heating capacity	kW	207,3	240,7	262,4	300,7	338,5	389,4	436,8	503,3	567,3	618,5	661,8
Input power	kW	64,0	74,8	80,5	92,8	105,4	120,8	134,6	155,7	181,9	199,5	209,9
Heating total input current	A	109,0	126,0	136,0	153,0	170,0	195,0	217,0	250,0	293,0	320,0	338,0
COP	W/W	3,24	3,22	3,26	3,24	3,21	3,22	3,24	3,23	3,12	3,10	3,15
Water flow rate domestic hot water side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop domestic hot water side	kPa	34	45	38	48	60	41	44	53	55	66	50
Simultaneous operation (heating + cooling), 2 pipes	(4)											
Cooling capacity	kW	211,0	236,8	258,3	306,6	350,0	397,8	445,0	509,9	583,9	630,2	679,9
Recovered heating power	kW	270,0	304,5	331,0	391,9	448,2	510,5	569,2	653,4	749,1	810,9	871,0
Input power	kW	62,8	72,3	77,6	91,4	105,3	120,3	132,7	153,9	177,3	194,7	204,7
TER	W/W	7,66	7,49	7,59	7,64	7,58	7,55	7,64	7,56	7,52	7,40	7,58
Water flow rate system side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585	102947	109954
Pressure drop system side	kPa	25	33	34	43	44	37	38	49	54	64	48
Water flow rate domestic hot water side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop domestic hot water side	kPa	34	45	38	48	60	41	44	53	55	66	50

⁽¹⁾ Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C; All units are Eurovent certified (2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b. / 6 °C w.b. (3) Water exchanger to the total recovery side 40 °C/45 °C; (4) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

NRP - 4-pipe system version A

Size		0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Cooling system side 4-pipe system (1)												
Cooling capacity	kW	206,7	230,6	259,2	299,6	332,2	386,3	426,2	490,5	544,3	598,2	638,8
Input power	kW	69,4	76,3	86,1	99,5	116,2	128,1	146,7	165,5	189,8	202,0	220,3
Cooling total input current	Α	124,0	138,0	155,0	172,0	195,0	218,0	247,0	280,0	319,0	341,0	371,0
EER	W/W	2,98	3,02	3,01	3,01	2,86	3,02	2,91	2,96	2,87	2,96	2,90
Water flow rate system side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611	102896	109845
Pressure drop system side	kPa	24	33	34	42	43	36	36	49	54	64	47
Heating system side 4-pipe system (2)												
Heating capacity	kW	209,9	246,0	272,7	306,2	340,6	396,2	437,6	504,9	562,7	618,7	660,8
Input power	kW	66,9	79,8	85,6	95,7	108,3	125,4	137,0	159,8	180,9	199,9	209,9
Heating total input current	Α	120,0	143,0	154,0	166,0	183,0	214,0	233,0	272,0	306,0	337,0	356,0
COP	W/W	3,14	3,08	3,19	3,20	3,15	3,16	3,19	3,16	3,11	3,10	3,15
Water flow rate system side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop system side	kPa	34	47	39	49	61	42	44	53	55	66	50
Simultaneous operation (heating + cooling), 4 pipes (3)											
Cooling capacity	kW	211,2	236,7	258,2	306,9	350,5	398,0	446,2	510,6	584,4	630,2	680,0
Recovered heating power	kW	270,3	304,4	331,0	392,1	448,5	510,5	570,1	653,9	749,6	810,9	871,0
Input power	kW	62,8	72,4	77,7	91,3	105,2	120,2	132,4	153,7	177,2	194,7	204,6
TER	W/W	7,67	7,48	7,58	7,66	7,60	7,56	7,68	7,58	7,53	7,40	7,58
Water flow rate cold side	l/h	35565	39671	44593	51536	57151	66430	73295	84370	93611	102896	109845
Pressure drop cold side	kPa	24	33	34	42	43	36	36	49	54	64	47
Water flow rate hot side	l/h	36426	42701	47339	53155	59117	68781	75976	87653	97701	107407	114743
Pressure drop hot side	kPa	34	47	39	49	61	42	44	53	55	66	50

- (1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C (2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b. /6 °C w.b. (3) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

NRP - 4-pipe system version E

Size		0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Cooling system side 4-pipe system (1)												
Cooling capacity	kW	200,7	225,7	255,3	296,9	332,7	382,2	427,0	487,6	549,9	598,5	639,4
Input power	kW	66,0	73,4	83,2	96,4	113,0	125,6	139,1	159,0	182,6	195,9	214,0
Cooling total input current	А	113,0	125,0	142,0	159,0	182,0	203,0	225,0	256,0	294,0	315,0	344,0
EER	W/W	3,04	3,07	3,07	3,08	2,94	3,04	3,07	3,07	3,01	3,05	2,99
Water flow rate system side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585	102947	109954
Pressure drop system side	kPa	25	33	34	43	44	37	38	49	54	64	48
Heating system side 4-pipe system (2)												
Heating capacity	kW	207,3	240,7	262,4	300,7	338,5	389,4	436,8	503,3	567,3	618,5	661,8
Input power	kW	64,0	74,8	80,5	92,8	105,4	120,8	134,6	155,7	181,9	199,5	209,9
Heating total input current	А	109,0	126,0	136,0	153,0	170,0	195,0	217,0	250,0	293,0	320,0	338,0
COP	W/W	3,24	3,22	3,26	3,24	3,21	3,22	3,24	3,23	3,12	3,10	3,15
Water flow rate system side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop system side	kPa	34	45	38	48	60	41	44	53	55	66	50
Simultaneous operation (heating + cooling), 4 pipes	(3)											
Cooling capacity	kW	211,0	236,8	258,3	306,6	350,0	397,8	445,0	509,9	583,9	630,2	679,9
Recovered heating power	kW	270,0	304,5	331,0	391,9	448,2	510,5	569,2	653,4	749,1	810,9	871,0
Input power	kW	62,8	72,3	77,6	91,4	105,3	120,3	132,7	153,9	177,3	194,7	204,7
TER	W/W	7,66	7,49	7,59	7,64	7,58	7,55	7,64	7,56	7,52	7,40	7,58
Water flow rate cold side	l/h	34534	38826	43915	51070	57226	65736	73434	83856	94585	102947	109954
Pressure drop cold side	kPa	25	33	34	43	44	37	38	49	54	64	48
Water flow rate hot side	l/h	35981	41776	45554	52195	58753	67603	75830	87384	98488	107379	114913
Pressure drop hot side	kPa	34	45	38	48	60	41	44	53	55	66	50

- (1) Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C
 (2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b. /6 °C w.b.
 (3) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

ENERGY DATA

Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Fans: °													
Cooling capacity with low leaving water t	temp (UE n° 2	016/2281)											
SEER	Α	W/W	3,94	4,04	4,00	3,89	4,03	4,14	4,21	4,23	4,24	4,24	4,25
SEER	Е	W/W	4,22	4,30	4,21	4,08	4,12	4,25	4,24	4,28	4,27	4,28	4,28
ncc	Α	%	154,60	158,50	156,90	152,80	158,20	162,50	165,50	166,00	166,60	166,60	166,80
ηςς	E	%	166,00	169,00	165,40	160,10	161,70	167,00	166,80	168,20	167,80	168,20	168,00
UE 813/2013 performance in average am	bient conditi	ons (average)	- 35 °C - Pdes	ignh ≤ 400 k	W (1)								
SCOP	Α	W/W	3,53	3,27	3,44	3,49	3,60	3,53	3,66	-	-	-	-
Scor	E	W/W	3,71	3,59	3,69	3,70	3,82	3,70	3,75	-	-	-	-
nch	Α	%	138,30	127,70	134,50	136,70	140,90	138,40	143,60	-	-	-	-
ηsh	E	%	145,50	140,60	144,70	144,90	149,70	145,20	147,20	-	-	-	-

⁽¹⁾ Efficiencies for low temperature applications (35 °C)

Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Fans: J					1001	1101	1201		1001	1005			2100
Cooling capacity with low leaving w	ater temp (UE n° 2	016/2281)				-							
	A	W/W	4,25	4,36	4,32	4,21	4,35	4,47	4,55	4,56	4,58	4,58	4,59
SEER	E	W/W	4,56	4,64	4,55	4,40	4,45	4,59	4,58	4,62	4,61	4,62	4,62
nee	A	%	167,20	171,40	169,70	165,20	171,10	175,80	179,00	179,50	180,10	180,20	180,40
ηςς	E	%	179,50	182,80	178,80	173,10	174,90	180,60	180,30	181,80	181,50	181,90	181,70
UE 813/2013 performance in averag	e ambient conditio	ons (average)	- 35 °C - Pdes	ignh ≤ 400 k	(W (1)								
SCOP	A	W/W	3,53	3,27	3,44	3,49	3,60	3,53	3,66	-	-	-	-
	E	W/W	3,71	3,59	3,69	3,70	3,82	3,70	3,75	-	-	-	-
ηsh	A	%	138,30	127,70	134,50	136,70	140,90	138,40	143,60	-	-	-	
(1) Efficiencies for low temperature app	elications (25 °C)	%	145,50	140,60	144,70	144,90	149,70	145,20	147,20	-	-	-	-
(1) Efficiencies for low temperature app	piications (55°C)												
ELECTRIC DATA													
			0004	0004	1004	1104	1204	1414	1604	1005	2006	2206	2406
Size Electric data			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Liectricuata	A	A	163,0	188,0	205,0	233,0	261,0	303,0	337,0	386,0	427,0	468,0	502,0
Maximum current (FLA)	E	A	170,0	196,0	213,0	241,0	269,0	311,0	352,0	401,0	442,0	484,0	518,0
	A	A	368,0	431,0	449,0	485,0	513,0	636,0	670,0	638,0	679,0	801,0	835,0
Peak current (LRA)	E	A	376,0	439,0	456,0	493,0	521,0	644,0	685,0	653,0	694,0	817,0	851,0
			/-	/-	/ -	/-	. 1-	- /-			. ,-	,-	
GENERAL TECHNICAL	DATA												
Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Compressor													
Туре	A,E	type						Scroll					
Number	A,E	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type						R410A					
Potential global heating	A,E	GWP						2088kgCO₂eq					
Refrigerant charge (1)	A	kg	41,1	61,0	61,4	62,7	62,8	83,6	83,6	106,1	107,6	129,2	129,2
nemyerani charge (1)	E	kg	61,0	80,8	81,2	82,9	83,0	103,9	124,1	147,2	149,3	170,9	170,9
2-pipe system - System side heat ex	changer (hot/cold)												-
Туре	A,E	type						Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Туре						Grooved joints					
Size (in)	A,E	Ø	3″	3″	3"	3"	3"	4"	4"	4"	4"	4"	5″
Size (out)	A,E	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"
2-pipe system - Recovery side heat e								D 11.					
Туре	A,E	type						Brazed plate					
Number	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Manifold connection (in/out) Manifold diameter (in)	A,E	Туре	3"	3"	3"	3"	3"	G.s. 4"	4"	4"	4"	Α"	Ε"
Manifold diameter (iii)	A,E A,E	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	5″ 5″
4-pipe system - System side heat exc			3	3	3	3	3	4	4	4	- 4	4	J
Type	A,E	type						Brazed plate					-
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Туре	•					Grooved joints			· · · · · ·	· ·	
Size (in)	A,E	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"
Size (out)	A,E	Ø	3"	3″	3″	3″	3"	4"	4"	4"	4"	4"	5"
4-pipe system - Recovery side heat e	exchanger (hot side	2)											
Туре	A,E	type						Brazed plate					
Number	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Manifold connection (in/out)	A,E	Туре						Grooved joints					
Manifold diameter (in)	A,E	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"
Manifold diameter (out)	A,E	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"
Fan													
Туре	A,E	type						Axial					
Fan motor	A,E	type						On-Off					
Number	A	no.	4	6	6	6	6	8	8	10	10	12	12
	E	no.	6	8	8	8	8	10	12	14	14	16	16
	Λ	m ³ /h	00000	120000	120000	120000	120000	160000	160000	200000	200000	240000	240000

^{86,1}

120000

110000

91,6

80000

80000

89,5

84,6

no. m³/h

 ${\rm m}^{\rm 3}/{\rm h}$

dB(A)

dB(A)

Air flow rate

Sound power level

Sound data calculated in cooling mode (2)

120000

110000

91,6

86,1

120000

110000

91,6

86,1

120000

110000

91,6

86,1

160000

130000

93,1

87,2

160000

160000

93,1

88,2

200000

180000

94,2

89,4

200000

180000

94,2

89,9

240000

210000

95,1

91,1

240000

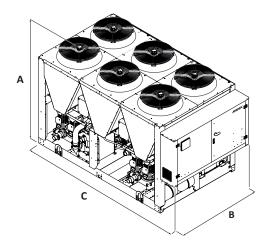
210000

95,1

91,6

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
Dimensions and weights													
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	mm	2780	3970	3970	3970	3970	4760	4760	5950	6350	7140	7140
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520
Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
System type: 2													
Weights													
Francische	A	kg	2642	3152	3262	3452	3722	4409	4569	5419	5829	6479	6756
Empty weight	E	kg	3072	3712	3822	4012	4282	4879	5449	6359	6789	7469	7736
Size			0804	0904	1004	1104	1204	1414	1604	1805	2006	2206	2406
System type: 4													
Weights													
Format and the	A	kg	2632	3132	3252	3442	3692	4379	4539	5389	5799	6449	6716
Empty weight	E	kg	3052	3692	3812	4002	4252	4849	5419	6319	6759	7429	7706

[■] The weights are for standard units with plate heat exchangers and no hydronic kit.





















NPG 0800-2400

Air-water multipurpose

Cooling capacity 206,5 ÷ 657,8 kW Heating capacity 212 ÷ 670,8 kW



- Units designed for 2 or 4-pipe systems
- · High efficiency also at partial loads
- Simultaneous and independent production of hot and chilled water





DESCRIPTION

Multipurpose external units designed for 2 or 4-pipe systems. With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency

E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15,00 °C outside air temperature in winter, and up to 49,0 °C in summer. Hot water production up to 60,0 °C (for more information refer to the the selection program Magellano or dedicated documentations)

Refrigerant HFC R32

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.

Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO₂ values.

■ The leak detector is supplied as per standard.

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Option integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.

The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

The flow switch is available as an accessory for both the system side and the recovery side, and is compulsory; if it is not installed, the warranty will be considered invalid.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and the ad adjustment includes complete management of the alarms and their log.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- "EASYLOG" data logger as per standard: allows all operating data read by the pCO5 to be stored on an SD card.
- Night Mode: it is possible to set a silenced operation profile. Perfect
 for night operation since it guarantees greater acoustic comfort in the
 evenings, and a high efficiency in the time of greater load.

836 www.aermec.com NPG-0800-2400-HP_Y_UN50_01



In the 'BMS card' port, the compatible accessories are:

- AER485P1
- AERBACP
- MULTICHILLER_EVO (if available) + AER485P1

In the 'J25-BMS2' port, the compatible accessories are:

— AERNET

■ Note:

- "BMS card" and "J25-BMS2" are two ports on the unit's control board.
 Only one accessory can be connected to each port.
- An 'EASYLOG' diagnostic device may be present in port 'J25-BMS2', possibly disconnect it to connect the accessory AERNET.
- For other requirements, please contact the company.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis. **FL:** Flow switch.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•					•					•
FL	A,E	•	•	•		•	•	•	•	•	•	•

Antivibration

Version	System side - pumps	Recovery side - pumps	0800	0900	1000	1100	1200	1400
А	00	00	AVX1210	AVX1212	AVX1212	AVX1212	AVX1214	AVX1214
A	00	MA,MB,MC,MD,ME,MF, MG,MH,MI,NA,NB,NC,N D,NE,NF,NG,NH,NI,RA,R B,RC,RD,RE,RF,RG,RH,RI, RJ,SA,SB,SC,SD,SE,SF,SG ,SH,SI,SJ	AVX1211	AVX1213	AVX1213	AVX1213	AVX1215	AVX1215
A	DA,DB,DC,DD,DE,DF,DG,D H,DI,DJ,IA,IB,IC,ID,IE,IF,IG ,IH,II,JA,JB,JC,JD,JE,JF,JG, JH,JI,PA,PB,PC,PD,PE,PF,P G,PH,PI,PJ	ND,NE,NF,NG,NH,NI,RA,	AVX1211	AVX1213	AVX1213	AVX1213	AVX1215	AVX1215
E	00	00	AVX1212	AVX1214	AVX1214	AVX1214	AVX1217	AVX1217
E	00	MA,MB,MC,MD,ME,MF, MG,MH,MI,NA,NB,NC,N D,NE,NF,NG,NH,NI,RA,R B,RC,RD,RE,RF,RG,RH,RI, RJ,SA,SB,SC,SD,SE,SF,SG ,SH,SI,SJ	AVX1213	AVX1215	AVX1215	AVX1215	AVX1218	AVX1218
E	DA,DB,DC,DD,DE,DF,DG,D H,DI,DJ,IA,IB,IC,ID,IE,IF,IG ,IH,II,JA,JB,JC,JD,JE,JF,JG, JH,JI,PA,PB,PC,PD,PE,PF,P G,PH,PI,PJ	ND,NE,NF,NG,NH,NI,RA,	AVX1213	AVX1215	AVX1215	AVX1215	AVX1218	AVX1218

Version	System side - pumps	Recovery side - pu	ımps	1600	18	00	2000		2200		2400
A	00	00		AVX1216	AVX	1217	AVX1217		AVX1219	A\	/X1219
		MA,MB,MC,MD,ME,N	IF,MG,								
		MH,MI,NA,NB,NC,ND,	NE,NF,								
A	00	NG,NH,NI,RA,RB,RC,R	D,RE,R	AVX1215	AVX	1218	AVX1218		AVX1219	A\	/X1219
		F,RG,RH,RI,RJ,SA,SB,S	C,SD,S								
		E,SF,SG,SH,SI,S.	l								
	DA,DB,DC,DD,DE,DF,DG,DH,D	00,MA,MB,MC,MD,ME									
	I,DJ,IA,IB,IC,ID,IE,IF,IG,IH,II,J	G,MH,MI,NA,NB,NC,N									
A	A,JB,JC,JD,JE,JF,JG,JH,JI,PA,F	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		AVX1215	AVX	1218	AVX1218		AVX1219	A\	/X1219
	B,PC,PD,PE,PF,PG,PH,PI,PJ	NF,NU,NH,NI,NJ,SA,SD									
		SE,SF,SG,SH,SI,S	J								
E	00	00		AVX1219	AVX	1220	AVX1220		AVX1222	A\	/X1222
		MA,MB,MC,MD,ME,N									
-	00	MH,MI,NA,NB,NC,ND,		110/4240	1100	1224	110/4224		11/1/4222	41	N4222
E	00	NG,NH,NI,RA,RB,RC,R		AVX1219	AVX	1221	AVX1221		AVX1222	A\	/X1222
		F,RG,RH,RI,RJ,SA,SB,S									
		E,SF,SG,SH,SI,S									
	DA,DB,DC,DD,DE,DF,DG,DH,D	00,MA,MB,MC,MD,MI									
E	I,DJ,IA,IB,IC,ID,IE,IF,IG,IH,II,J			AVX1219	AVX	1771	AVX1221		AVX1222	Α\	/X1222
С	A,JB,JC,JD,JE,JF,JG,JH,JI,PA,F	RF,RG,RH,RI,RJ,SA,SB		AVAIZIS	AVA	1221	AVAIZZI		AVAIZZZ	A	111222
	B,PC,PD,PE,PF,PG,PH,PI,PJ	SE,SF,SG,SH,SI,S									
		ייי אריטריטריטר	J								
Device for peak	current reduction										
Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A,E	DRENPGO	0800 DRENPG0900	DRENPG1000	DRENPG1100	DRENPG1200	DRENPG1400	DRENPG1600	DRENPG1800	DRENPG2000	DRENPG2200	DRENPG2400
A grev background indica	ites the accessory must be asse	mbled in the factory									
Power factor cor											
Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A,E	RIFNPGO		RIFNPG1000	RIFNPG1100	RIFNPG1200	RIFNPG1400	RIFNPG1600	RIFNPG1800	RIFNPG2000	RIFNPG2200	RIFNPG2400
.,,_	1							01000			02 100

A grey background indicates the accessory must be assembled in the factory

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver

GP2VN becomes GP2VNA if configured with a hydronic kit for size 0800 A

0800

GP2VN

GP3G

0900

GP3G

GP4GM

1000

GP3G

GP4GM

1100

GP3G

GP4GM

1200

GP4GM

GP5GM

1400

GP4GM

GP5GM

1600

GP4GM

GP6G

1800

GP5G

GP7G

2000

GP5G

GP7G

2200

GP6G

GP8G

2400

GP6G

GP8G

CONFIGURATOR

Configuration options

Fiel	d	Description
1,2,		NPG
		Size
4,5,	6,7	0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400
8		Version
	Α	High efficiency
	Е	Silenced high efficiency
9		System type
	2	2-pipe system
	4	4-pipe system
10		Coils
	0	Copper-aluminium
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V V	Copper pieps-Coated aluminium fins
11	•	Fans
	0	Standard with DCPX
	J	Inverter
12	,	Power supply
14	0	400V ~ 3 50Hz with magnet circuit breakers
12 1	14	System side - pumps
13,1	00	Without hydronic kit
	00	Pump n° 1 pump + stand-by pump
	DΛ	Pump A + stand-by pump
	DA	
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (1)
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF.	Pump F equipped with inverter device to work at fixed speed (2)
	IG	Pump G equipped with inverter device to work at fixed speed (2)
	IH	Pump H equipped with inverter device to work at fixed speed (2)
	II	Pump I equipped with inverter device to work at fixed speed (2)
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed (2)
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (3)
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (3)
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (3)
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (3)
		Kit with n° 1 pump
	PA PB	Pump B

Field	Description
	Description
PCPC_	Pump C
PD PE	Pump D
PE PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (1)
15,16	Recovery side - pumps
00	Without hydronic kit
	Kit with n° 1 inverter pump to fixed speed
MA	Pump A equipped with inverter device to work at fixed speed
MB	Pump B equipped with inverter device to work at fixed speed
MC	Pump C equipped with inverter device to work at fixed speedr
MD	Pump D equipped with inverter device to work at fixed speed
ME	Pump E equipped with inverter device to work at fixed speed
MF	Pump F equipped with inverter device to work at fixed speed (2)
MG	Pump G equipped with inverter device to work at fixed speed (2)
MH	Pump H equipped with inverter device to work at fixed speed (2)
MI	Pump I equipped with inverter device to work at fixed speed (2)
	Kit with n° 1 inverter pump + stand-by pump to fixed speed
NA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
NB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
NC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
ND	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
NE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed (2)
NF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (3)
NG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (3)
NH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (3)
NI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (3)
	Kit with n° 1 pump
RA	Pump A
RB	Pump B
RC	Pump C
RD	Pump D
RE	Pump E
RF	Pump F
RG	Pump G
RH	Pump H
RI	Pump I
RJ	Pump J (1)
	Pump n° 1 pump + stand-by pump
SA	Pump A + stand-by pump
SB	Pump B + stand-by pump
SC	Pump C + stand-by pump
SD	Pump D + stand-by pump
SE	Pump E + stand-by pump
SF	Pump F + stand-by pump
SG	Pump G + stand-by pump
SH	Pump H + stand-by pump
SI	Pump I + stand-by pump
SJ	Pump J + stand-by pump (1)
	Tumps T stand by pamp (1)

- (1) Contact the factory
 (2) Hydronic kit not available with sizes 0800-1600 version A, 0800-1100 version E.
 (3) Hydronic kit not available with sizes 0800-2000 version A, 0800-1400 version E.

PERFORMANCE SPECIFICATIONS

NPG - 2 TUBI - version A

NPG - 2 TUBI - version A												
Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: °, J												
Cooling system side 2-pipe system												
Cooling capacity	kW	206,5	238,8	262,1	298,1	349,6	385,1	424,0	492,6	549,2	601,9	634,7
Input power	kW	72,5	78,2	87,8	105,5	116,8	134,0	151,5	172,2	199,9	209,9	227,0
Cooling total input current	Α	128,0	142,0	158,0	184,0	203,0	228,0	254,0	292,0	337,0	355,0	381,0
EER	W/W	2,85	3,06	2,98	2,83	2,99	2,87	2,80	2,86	2,75	2,87	2,80
Water flow rate system side	l/h	35537	41084	45096	51279	60134	66248	72915	84728	94449	103520	109133
Pressure drop system side	kPa	30	41	37	43	47	48	38	47	51	50	36
Heating system side 2-pipe system												
Heating capacity	kW	212,0	246,3	270,7	308,5	363,1	401,6	436,7	507,2	565,1	617,3	654,9
Input power	kW	67,3	79,4	86,7	99,8	116,0	129,1	138,3	161,0	179,3	195,0	208,9
Heating total input current	A	121,0	143,0	156,0	175,0	201,0	221,0	235,0	276,0	308,0	335,0	355,0
COP	W/W	3,15	3,10	3,12	3,09	3,13	3,11	3,16	3,15	3,15	3,17	3,13
Water flow rate system side	I/h	36787	42745	46996	53553	63027	69719	75833	88058	98099	107197	113726
Pressure drop system side	kPa	26	35	35	45	56	39	35	47	61	37	42
Heating domestic hot water side 2-pipe system	KI U	20			LTJ.	50			1/	U1	31	TL
Heating capacity	kW	212,6	247,4	272,1	309,6	361,5	399,4	433,8	508,6	565,9	607,8	644,6
Input power	kW	64,9	76,7	83,1	95,4	110,8	123,0	132,9	156,0	175,8	186,5	198,8
Heating total input current	A	118,0	140,0	152,0	170,0	194,0	213,0	228,0	269,0	303,0	323,0	341,0
COP	W/W	3,28	3,22	3,28			3,25				3,26	3,24
					3,25	3,26		3,26	3,26	3,22		
Water flow rate domestic hot water side	I/h	36883	42934	47229	53737	62755	69347	75327	88302	98238	105551	111934
Pressure drop domestic hot water side	kPa	26	35	35	45	55	38	35	47	62	36	40
Simultaneous operation (heating + cooling), 2 pipes	12**	202 =	225	252 =	202.4	2277	27.2	42.17	402.4	F 47 0	F02.2	(31.0
Cooling capacity	kW	203,7	225,7	253,7	292,1	337,7	374,2	424,7	483,4	547,9	592,0	631,0
Recovered heating power	kW	261,4	290,8	325,1	376,1	432,7	481,8	541,8	619,8	703,9	754,4	805,3
Input power	kW	61,2	69,7	76,2	90,0	102,1	115,2	125,0	146,2	167,7	173,9	186,2
Water flow rate system side	l/h	35537	41084	45096	51279	60134	66248	72915	84728	94449	103520	109133
Pressure drop system side	kPa	30	41	37	43	47	48	38	47	51	50	36
Water flow rate domestic hot water side	l/h	36883	42934	47229	53737	62755	69347	75327	88302	98238	105551	111934
Pressure drop domestic hot water side	kPa	26	35	35	45	55	38	35	47	62	36	40
TER	W/W	7,60	7,41	7,59	7,42	7,55	7,43	7,73	7,55	7,46	7,74	7,71
NPG - 2 TUBI - version E												
Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Size Fans: °, J		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Size Fans: °, J Cooling system side 2-pipe system (1)												
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity	kW	213,9	243,4	269,6	308,8	360,8	398,4	444,6	512,8	573,9	620,0	657,8
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power	kW	213,9 68,7	243,4 76,3	269,6 85,4	308,8 101,5	360,8 114,3	398,4 130,4	444,6 142,5	512,8 165,0	573,9 189,3	620,0 201,0	657,8 217,2
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current	kW A	213,9 68,7 121,0	243,4	269,6 85,4 151,0	308,8 101,5 174,0	360,8 114,3 194,0	398,4 130,4 218,0	444,6 142,5 236,0	512,8 165,0 275,0	573,9	620,0	657,8
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER	kW	213,9 68,7	243,4 76,3	269,6 85,4	308,8 101,5	360,8 114,3	398,4 130,4	444,6 142,5	512,8 165,0	573,9 189,3	620,0 201,0	657,8 217,2
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current	kW A	213,9 68,7 121,0	243,4 76,3 136,0	269,6 85,4 151,0	308,8 101,5 174,0	360,8 114,3 194,0	398,4 130,4 218,0	444,6 142,5 236,0	512,8 165,0 275,0	573,9 189,3 316,0	620,0 201,0 335,0	657,8 217,2 359,0
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER	kW A W/W	213,9 68,7 121,0 3,11	243,4 76,3 136,0 3,19	269,6 85,4 151,0 3,16	308,8 101,5 174,0 3,04	360,8 114,3 194,0 3,16	398,4 130,4 218,0 3,06	444,6 142,5 236,0 3,12	512,8 165,0 275,0 3,11	573,9 189,3 316,0 3,03	620,0 201,0 335,0 3,08	657,8 217,2 359,0 3,03
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W I/h	213,9 68,7 121,0 3,11 36805	243,4 76,3 136,0 3,19 41878	269,6 85,4 151,0 3,16 46384	308,8 101,5 174,0 3,04 53119	360,8 114,3 194,0 3,16 62049	398,4 130,4 218,0 3,06 68513	444,6 142,5 236,0 3,12 76468	512,8 165,0 275,0 3,11 88195	573,9 189,3 316,0 3,03 98704	620,0 201,0 335,0 3,08 106600	657,8 217,2 359,0 3,03 113102
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W I/h	213,9 68,7 121,0 3,11 36805	243,4 76,3 136,0 3,19 41878	269,6 85,4 151,0 3,16 46384	308,8 101,5 174,0 3,04 53119	360,8 114,3 194,0 3,16 62049	398,4 130,4 218,0 3,06 68513	444,6 142,5 236,0 3,12 76468	512,8 165,0 275,0 3,11 88195	573,9 189,3 316,0 3,03 98704	620,0 201,0 335,0 3,08 106600	657,8 217,2 359,0 3,03 113102
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2)	kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33	243,4 76,3 136,0 3,19 41878 33	269,6 85,4 151,0 3,16 46384 36	308,8 101,5 174,0 3,04 53119 41	360,8 114,3 194,0 3,16 62049 38	398,4 130,4 218,0 3,06 68513 34	444,6 142,5 236,0 3,12 76468 42	512,8 165,0 275,0 3,11 88195 44	573,9 189,3 316,0 3,03 98704 53	620,0 201,0 335,0 3,08 106600 34	657,8 217,2 359,0 3,03 113102 33
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity	kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33	243,4 76,3 136,0 3,19 41878 33	269,6 85,4 151,0 3,16 46384 36	308,8 101,5 174,0 3,04 53119 41	360,8 114,3 194,0 3,16 62049 38	398,4 130,4 218,0 3,06 68513 34	444,6 142,5 236,0 3,12 76468 42	512,8 165,0 275,0 3,11 88195 44	573,9 189,3 316,0 3,03 98704 53	620,0 201,0 335,0 3,08 106600 34	657,8 217,2 359,0 3,03 113102 33
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power	kW A W/W I/h kPa kW kW	213,9 68,7 121,0 3,11 36805 33 221,1 68,9	243,4 76,3 136,0 3,19 41878 33	269,6 85,4 151,0 3,16 46384 36 275,3 87,0	308,8 101,5 174,0 3,04 53119 41 315,3 99,8	360,8 114,3 194,0 3,16 62049 38 365,1 112,1	398,4 130,4 218,0 3,06 68513 34 404,5 124,1	444,6 142,5 236,0 3,12 76468 42 453,0 140,1	512,8 165,0 275,0 3,11 88195 44 521,7 160,5	573,9 189,3 316,0 3,03 98704 53 583,4 179,3	620,0 201,0 335,0 3,08 106600 34 630,5 196,0	657,8 217,2 359,0 3,03 113102 33 670,8 207,7
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current	kW A W/W I/h kPa kW kW A	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Heating domastic hot water side 2-pipe system (3)	kW A W/W I/h kPa kW kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating capacity Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current	kW A W/W I/h kPa kW kW A W/W I/h kPa kW A W/W A KW A A KW A A KW A	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP	kW A W/W I/h kPa kW kW A W/W I/h kPa kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP Water flow rate domestic hot water side	kW A W/W I/h kPa kW kW A W/W I/h kPa kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32 38186	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25 43543	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28 54917	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30 63434	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29 70267	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31 78140	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29 90658	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27 101283	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30 107870	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29 114640
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP Water flow rate domestic hot water side Pressure drop domestic hot water side Pressure drop domestic hot water side	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP Water flow rate domestic hot water side Pressure drop domestic hot water side Pressure drop domestic hot water side Simultaneous operation (heating + cooling), 2 pipes (6)	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa kW kW A W/W I/h kPa KW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32 38186 28	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25 43543 36	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31 48035 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28 54917	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30 63434 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29 70267 39	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31 78140 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29 90658 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27 101283 65	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30 107870 37	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29 114640 42
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP Water flow rate domestic hot water side Pressure drop domestic hot water side Pressure drop domestic hot water side Simultaneous operation (heating + cooling), 2 pipes (cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa kW L/h kPa kW kW A W/W kW A W/W kW A W/W L/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32 38186 28	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25 43543 36	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31 48035 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28 54917 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30 63434 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29 70267 39	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31 78140 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29 90658 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27 101283 65	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30 107870 37	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29 114640 42
Size Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP Water flow rate domestic hot water side Pressure drop domestic hot water side Pressure drop domestic hot water side Simultaneous operation (heating + cooling), 2 pipes (Cooling capacity) Recovered heating power	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A W/W I/h kPa kPa kW	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32 38186 28	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25 43543 36	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31 48035 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28 54917 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30 63434 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29 70267 39	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31 78140 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29 90658 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27 101283 65 550,4 705,8	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30 107870 37	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29 114640 42
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating capacity Input power Heating total input current COP Water flow rate system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating total input current COP Water flow rate domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP Water flow rate domestic hot water side Pressure drop domestic hot water side Simultaneous operation (heating + cooling), 2 pipes (Cooling capacity Recovered heating power Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A kW A W/W I/h kPa kW kW A W/W L/h kPa kW kW kW kW	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32 38186 28 203,9 261,2	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25 43543 36 227,9 292,9 69,3	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31 48035 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28 54917 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30 63434 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29 70267 39	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31 78140 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29 90658 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27 101283 65 550,4 705,8 167,3	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30 107870 37	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29 114640 42 637,5 811,0 185,4
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating capacity Input power Heating total input current COP Water flow rate system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating total input current COP Water flow rate domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP Water flow rate domestic hot water side Pressure drop domestic hot water side Simultaneous operation (heating + cooling), 2 pipes (Cooling capacity Recovered heating power Input power Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A kW A W/W I/h kPa kW kW KW L/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32 38186 28 203,9 261,2 61,0 36805	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25 43543 36 227,9 292,9 69,3 41878	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31 48035 36 255,4 326,5 75,9 46384	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28 54917 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30 63434 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29 70267 39 380,9 488,2 114,6 68513	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31 78140 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29 90658 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27 101283 65 550,4 705,8 167,3 98704	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30 107870 37	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29 114640 42
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating capacity Input power Heating total input current COP Water flow rate system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating total input current COP Water flow rate domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP Water flow rate domestic hot water side Pressure drop domestic hot water side Simultaneous operation (heating + cooling), 2 pipes (Cooling capacity Recovered heating power Input power Water flow rate system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW L/h kPa kW kW kW kW kW	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32 38186 28 203,9 261,2 61,0 36805 33	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25 43543 36 227,9 292,9 69,3 41878 33	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31 48035 36 255,4 326,5 75,9 46384 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28 54917 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30 63434 57 344,0 438,7 101,7 62049 38	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29 70267 39 380,9 488,2 114,6 68513 34	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31 78140 38 424,9 541,4 124,7 76468 42	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29 90658 50 491,4 627,4 145,9 88195 44	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27 101283 65 550,4 705,8 167,3 98704 53	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30 107870 37 595,8 757,3 172,6 106600 34	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29 114640 42
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating total input current COP Water flow rate domestic hot water side Pressure drop domestic hot water side Simultaneous operation (heating + cooling), 2 pipes (Cooling capacity Recovered heating power Input power Water flow rate system side Pressure drop system side Pressure drop system side Pressure drop system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa kW KW A W/W I/h kPa kW KW A W/W I/h kPa I/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32 38186 28 203,9 261,2 61,0 36805 33 38186	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25 43543 36 227,9 292,9 69,3 41878 33 43543	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31 48035 36 255,4 326,5 75,9 46384 36 48035	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28 54917 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30 63434 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29 70267 39 380,9 488,2 114,6 68513 34 70267	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31 78140 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29 90658 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27 101283 65 550,4 705,8 167,3 98704 53 101283	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30 107870 37	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29 114640 42
Fans: °, J Cooling system side 2-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating capacity Input power Heating total input current COP Water flow rate system side 2-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Heating domestic hot water side 2-pipe system (3) Heating total input current COP Water flow rate domestic hot water side 2-pipe system (3) Heating capacity Input power Heating total input current COP Water flow rate domestic hot water side Pressure drop domestic hot water side Simultaneous operation (heating + cooling), 2 pipes (Cooling capacity Recovered heating power Input power Water flow rate system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW A W/W I/h kPa kW kW L/h kPa kW kW kW kW kW	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 220,1 66,3 118,0 3,32 38186 28 203,9 261,2 61,0 36805 33	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 250,9 77,1 136,0 3,25 43543 36 227,9 292,9 69,3 41878 33	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 276,7 83,5 148,0 3,31 48035 36 255,4 326,5 75,9 46384 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 316,4 96,3 167,0 3,28 54917 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 365,5 110,8 189,0 3,30 63434 57 344,0 438,7 101,7 62049 38	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 404,7 123,1 207,0 3,29 70267 39 380,9 488,2 114,6 68513 34	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 450,0 136,1 227,0 3,31 78140 38 424,9 541,4 124,7 76468 42	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 522,2 158,5 266,0 3,29 90658 50 491,4 627,4 145,9 88195 44	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 583,4 178,5 300,0 3,27 101283 65 550,4 705,8 167,3 98704 53	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 621,2 188,1 317,0 3,30 107870 37 595,8 757,3 172,6 106600 34	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 660,2 200,4 335,0 3,29 114640 42

⁽¹⁾ Data 14511:2022; System side water heat exchanger 12 °C/7 °C; Extemal ir 35 °C; All units are Eurovent certified
(2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b./6 °C w.b.
(3) Water exchanger to the total recovery side 40 °C/45 °C;
(4) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

NPG - 4 TUBI - version A

NPG - 4 TUBI - version A												
Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: °, J												
Cooling system side 4-pipe system												
Cooling capacity	kW	206,5	238,8	262,1	298,1	349,6	385,1	424,0	492,6	549,2	601,9	634,7
Input power	kW	72,5	78,2	87,8	105,5	116,8	134,0	151,5	172,2	199,9	209,9	227,0
Cooling total input current	A	128,0	142,0	158,0	184,0	203,0	228,0	254,0	292,0	337,0	355,0	381,0
EER	W/W	2,85	3,06	2,98	2,83	2,99	2,87	2,80	2,86	2,75	2,87	2,80
Water flow rate system side	l/h	35537	41084	45096	51279	60134	66248	72915	84728	94449	103520	109133
Pressure drop system side	kPa	30	41	37	43	47	48	38	47	51	50	36
Heating system side 4-pipe system												
Heating capacity	kW	212,0	246,3	270,7	308,5	363,1	401,6	436,7	507,2	565,1	617,3	654,9
Input power	kW	67,3	79,4	86,7	99,8	116,0	129,1	138,3	161,0	179,3	195,0	208,9
Heating total input current	Α	121,0	143,0	156,0	175,0	201,0	221,0	235,0	276,0	308,0	335,0	355,0
COP	W/W	3,15	3,10	3,12	3,09	3,13	3,11	3,16	3,15	3,15	3,17	3,13
Water flow rate system side	l/h	36787	42745	46996	53553	63027	69719	75833	88058	98099	107197	113726
Pressure drop system side	kPa	26	35	35	45	56	39	35	47	61	37	42
Simultaneous operation (heating + cooling), 4 pipes						-						
Cooling capacity	kW	203,7	225,7	253,7	292,1	337,7	374,2	424,7	483,4	547,9	592,0	631,0
Recovered heating power	kW	261,4	290,8	325,1	376,1	432,7	481,8	541,8	619,8	703,9	754,4	805,3
Input power	kW	61,2	69,7	76,2	90,0	102,1	115,2	125,0	146,2	167,7	173,9	186,2
Total input current	A	107	121	133	153	169	189	203	239	274	285	303
TER	W/W	7,60	7,41	7,59	7,42	7,55	7,43	7,73	7,55	7,46	7,74	7,71
Water flow rate cold side	I/h	35537	41084	45096	51279	60134	66248	72915	84728	94449	103520	109133
Pressure drop cold side	kPa	30	41	37	43	47	48	38	47	51	50	36
Water flow rate hot side	I/h	36883	42934	47229	53737	92755	69347	75327	88302	98238	105551	111934
Pressure drop hot side	kPa	26	35	35	45	55	38	35	47	62	36	40
Tressure and prior state	N. G											
NPG - 4 TUBI - version E												
NPG - 4 TUBI - version E Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Size Fans: °, J	kW	0800 213,9	0900 243,4	1000	1100 308,8	1200 360,8	1400 398,4	1600	1800 512,8	2000 573,9	2200 620,0	2400 657,8
Size Fans: °, J Cooling system side 4-pipe system (1)	kW kW											
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity		213,9	243,4	269,6	308,8	360,8	398,4	444,6	512,8	573,9	620,0	657,8
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power	kW	213,9 68,7	243,4 76,3	269,6 85,4	308,8 101,5	360,8 114,3	398,4 130,4	444,6 142,5	512,8 165,0	573,9 189,3	620,0 201,0	657,8 217,2
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER	kW A	213,9 68,7 121,0 3,11	243,4 76,3 136,0 3,19	269,6 85,4 151,0 3,16	308,8 101,5 174,0 3,04	360,8 114,3 194,0 3,16	398,4 130,4 218,0 3,06	444,6 142,5 236,0 3,12	512,8 165,0 275,0 3,11	573,9 189,3 316,0 3,03	620,0 201,0 335,0 3,08	657,8 217,2 359,0 3,03
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side	kW A W/W	213,9 68,7 121,0	243,4 76,3 136,0	269,6 85,4 151,0	308,8 101,5 174,0 3,04 53119	360,8 114,3 194,0	398,4 130,4 218,0	444,6 142,5 236,0	512,8 165,0 275,0	573,9 189,3 316,0	620,0 201,0 335,0	657,8 217,2 359,0
Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side	kW A W/W I/h	213,9 68,7 121,0 3,11 36805	243,4 76,3 136,0 3,19 41878	269,6 85,4 151,0 3,16 46384	308,8 101,5 174,0 3,04	360,8 114,3 194,0 3,16 62049	398,4 130,4 218,0 3,06 68513	444,6 142,5 236,0 3,12 76468	512,8 165,0 275,0 3,11 88195	573,9 189,3 316,0 3,03 98704	620,0 201,0 335,0 3,08 106600	657,8 217,2 359,0 3,03 113102
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2)	kW A W/W I/h	213,9 68,7 121,0 3,11 36805 33	243,4 76,3 136,0 3,19 41878 33	269,6 85,4 151,0 3,16 46384 36	308,8 101,5 174,0 3,04 53119 41	360,8 114,3 194,0 3,16 62049 38	398,4 130,4 218,0 3,06 68513 34	444,6 142,5 236,0 3,12 76468 42	512,8 165,0 275,0 3,11 88195 44	573,9 189,3 316,0 3,03 98704 53	620,0 201,0 335,0 3,08 106600 34	657,8 217,2 359,0 3,03 113102 33
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity	kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33	243,4 76,3 136,0 3,19 41878 33	269,6 85,4 151,0 3,16 46384 36	308,8 101,5 174,0 3,04 53119 41	360,8 114,3 194,0 3,16 62049 38	398,4 130,4 218,0 3,06 68513 34	444,6 142,5 236,0 3,12 76468 42	512,8 165,0 275,0 3,11 88195 44	573,9 189,3 316,0 3,03 98704 53	620,0 201,0 335,0 3,08 106600 34	657,8 217,2 359,0 3,03 113102 33
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power	kW A W/W I/h kPa kW	213,9 68,7 121,0 3,11 36805 33 221,1 68,9	243,4 76,3 136,0 3,19 41878 33	269,6 85,4 151,0 3,16 46384 36 275,3 87,0	308,8 101,5 174,0 3,04 53119 41 315,3 99,8	360,8 114,3 194,0 3,16 62049 38 365,1 112,1	398,4 130,4 218,0 3,06 68513 34 404,5 124,1	444,6 142,5 236,0 3,12 76468 42 453,0 140,1	512,8 165,0 275,0 3,11 88195 44 521,7 160,5	573,9 189,3 316,0 3,03 98704 53 583,4 179,3	620,0 201,0 335,0 3,08 106600 34 630,5 196,0	657,8 217,2 359,0 3,03 113102 33 670,8 207,7
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current	kW A W/W I/h kPa kW kW A	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP	kW A W/W I/h kPa kW kW A W/W	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side	kW A W/W I/h kPa kW kW A W/W I/h	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side	kW A W/W I/h kPa kW kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Simultaneous operation (heating + cooling), 4 pipes (5)	kW A W/W I/h kPa kW A W/W I/h kPa 33)	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Cooling capacity Cooling capacity	kW A W/W I/h kPa kW kW A W/W I/h kPa kW KW A W/W KPA KPA	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Cooling capacity Recovered heating power	kW A W/W I/h kPa kW kW A W/W I/h kPa 3)	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 203,9 261,2	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 380,9 488,2	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 491,4 627,4	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Cooling capacity Input power Heating total input current COP COP Water flow rate system side Cooling capacity Recovered heating power Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa 3) kW kW	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 203,9 261,2 61,0	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 227,9 292,9 69,3	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 255,4 326,5 75,9	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 294,4 378,1 89,7	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 344,0 438,7 101,7	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 380,9 488,2 114,6	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 424,9 541,4 124,7	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 491,4 627,4 145,9	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 550,4 705,8 167,3	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 595,8 757,3 172,6	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Simultaneous operation (heating + cooling), 4 pipes (2) Cooling capacity Recovered heating power Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa 3) kW kW A	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 203,9 261,2 61,0	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 227,9 292,9 69,3 121	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 255,4 326,5 75,9	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 294,4 378,1 89,7 153	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 344,0 438,7 101,7 170	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 380,9 488,2 114,6 189	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 424,9 541,4 124,7 203	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 491,4 627,4 145,9 239	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 550,4 705,8 167,3 275	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 595,8 757,3 172,6 285	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 637,5 811,0 185,4 303
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Cooling capacity Recovered heating power Input power	kW A W/W I/h kPa kW kW A W/W I/h kPa 33) kW kW A W/W	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 203,9 261,2 61,0 107 7,63	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 227,9 292,9 69,3 121 7,51	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 255,4 326,5 75,9 133 7,66	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 294,4 378,1 89,7 153 7,49	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 344,0 438,7 101,7 170 7,70	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 380,9 488,2 114,6 189 7,59	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 424,9 541,4 124,7 203 7,75	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 491,4 627,4 145,9 239 7,67	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 550,4 705,8 167,3 275 7,51	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 595,8 757,3 172,6 285 7,84	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 637,5 811,0 185,4 303 7,81
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Simultaneous operation (heating + cooling), 4 pipes (2) Cooling capacity Recovered heating power Input power Total input current TER Water flow rate cold side	kW A W/W I/h kPa kW kW A W/W I/h kPa 33) kW kW A W/W I/h	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 203,9 261,2 61,0 107 7,63 36805	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 227,9 292,9 69,3 121 7,51 41878	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 255,4 326,5 75,9 133 7,66 46384	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 294,4 378,1 89,7 153 7,49 53119	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 344,0 438,7 101,7 170 7,70 62049	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 380,9 488,2 114,6 189 7,59 68513	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 424,9 541,4 124,7 203 7,75 76468	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 491,4 627,4 145,9 239 7,67 88195	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 550,4 705,8 167,3 275 7,51 98704	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 595,8 757,3 172,6 285 7,84 106600	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 637,5 811,0 185,4 303 7,81
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Simultaneous operation (heating + cooling), 4 pipes (2) Cooling capacity Recovered heating power Input power Total input current TER Water flow rate cold side Pressure drop cold side	kW A W/W I/h kPa kW kW A W/W I/h kPa 33) kW kW kW A W/W I/h kPa	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 203,9 261,2 61,0 107 7,63 36805 33	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 227,9 292,9 69,3 121 7,51 41878 33	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 255,4 326,5 75,9 133 7,66 46384 36	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 294,4 378,1 89,7 153 7,49 53119 41	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 344,0 438,7 101,7 170 7,70 62049 38	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 380,9 488,2 114,6 189 7,59 68513 34	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 424,9 541,4 124,7 203 7,75 76468 42	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 491,4 627,4 145,9 239 7,67 88195 44	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 550,4 705,8 167,3 275 7,51 98704 53	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 595,8 757,3 172,6 285 7,84 106600 34	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 637,5 811,0 185,4 303 7,81 113102 33
Size Fans: °, J Cooling system side 4-pipe system (1) Cooling capacity Input power Cooling total input current EER Water flow rate system side Pressure drop system side Heating system side 4-pipe system (2) Heating capacity Input power Heating total input current COP Water flow rate system side Pressure drop system side Pressure drop system side Simultaneous operation (heating + cooling), 4 pipes (2) Cooling capacity Recovered heating power Input power Total input current TER Water flow rate cold side	kW A W/W I/h kPa kW kW A W/W I/h kPa 33) kW kW A W/W I/h	213,9 68,7 121,0 3,11 36805 33 221,1 68,9 121,0 3,21 38375 28 203,9 261,2 61,0 107 7,63 36805	243,4 76,3 136,0 3,19 41878 33 252,2 79,7 140,0 3,16 43773 37 227,9 292,9 69,3 121 7,51 41878	269,6 85,4 151,0 3,16 46384 36 275,3 87,0 153,0 3,16 47791 36 255,4 326,5 75,9 133 7,66 46384	308,8 101,5 174,0 3,04 53119 41 315,3 99,8 171,0 3,16 54724 47 294,4 378,1 89,7 153 7,49 53119	360,8 114,3 194,0 3,16 62049 38 365,1 112,1 191,0 3,26 63379 57 344,0 438,7 101,7 170 7,70 62049	398,4 130,4 218,0 3,06 68513 34 404,5 124,1 209,0 3,26 70236 39 380,9 488,2 114,6 189 7,59 68513	444,6 142,5 236,0 3,12 76468 42 453,0 140,1 233,0 3,23 78653 38 424,9 541,4 124,7 203 7,75 76468	512,8 165,0 275,0 3,11 88195 44 521,7 160,5 269,0 3,25 90570 50 491,4 627,4 145,9 239 7,67 88195	573,9 189,3 316,0 3,03 98704 53 583,4 179,3 302,0 3,25 101283 65 550,4 705,8 167,3 275 7,51 98704	620,0 201,0 335,0 3,08 106600 34 630,5 196,0 328,0 3,22 109498 39 595,8 757,3 172,6 285 7,84 106600	657,8 217,2 359,0 3,03 113102 33 670,8 207,7 345,0 3,23 116479 44 637,5 811,0 185,4 303 7,81

⁽¹⁾ Data 14511:2022; System side water heat exchanger 12 °C/7 °C; External air 35 °C
(2) Data 14511:2022; System side water heat exchanger 40 °C/45 °C; Outside air 7 °C d.b. /6 °C w.b.
(3) Water exchanger to the total recovery side */45 °C; Water to the system side heat exchanger */7 °C;

ENERGY DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: °													
SEER - 12/7 (EN14825: 2018) (1)													
SEER	Α	W/W	3,91	4,19	4,10	4,02	4,24	4,11	4,20	4,23	4,17	- (2)	- (2)
SEER	E	W/W	4,28	4,43	4,45	4,37	4,51	4,39	4,53	4,50	4,38	4,56	- (2)
Seasonal efficiency	Α	%	153,42	164,55	160,94	157,62	166,50	161,53	165,09	166,23	163,91	- (2)	- (2)
Seasonal enricency	E	%	168,35	174,04	174,86	171,66	177,32	172,45	178,03	176,91	172,17	179,53	- (2)
SEER - 23/18 (EN14825: 2018) (3)													
CEED	А	W/W	4,55	4,79	4,75	4,59	4,77	4,67	4,76	4,80	4,74	4,79	4,83
SEER	E	W/W	4,97	5,10	5,07	4,98	5,08	5,02	5,10	5,09	4,93	5,22	5,12
	А	%	179,15	188,60	186,82	180,78	187,65	183,75	187,30	188,88	186,64	188,56	190,36
Seasonal efficiency	E	%	195,67	201,20	199,97	196,33	200,32	197,97	200,81	200,73	194,03	205,60	201,99
Performance in average ambient condi-	tions (average)) - 35 °C (4)											
Dalasianda	A	kW	186	214	236	271	315	351	382	387	392	534	569
Pdesignh	E	kW	190	216	239	275	317	353	393	391	396	543	578
CCOD	A	W/W	3,75	3,52	3,68	3,66	3,60	3,75	3,86	3,82	3,87	3,90	3,94
SCOP	E	W/W	3,65	3,51	3,61	3,70	3,57	3,64	3,79	3,71	3,77	3,85	3,88
	A	%	147	138	144	143	141	147	151	150	152	153	155
ηsh	E	%	143	137	142	145	140	143	149	145	148	151	152
Performance in average ambient condi	tions (average)) - 55 °C (5)											
Dalasianda	A	kW	186	213	236	272	314	350	382	387	392	532	568
Pdesignh	E	kW	189	215	237	274	314	351	388	391	396	538	574
CCOD	А	W/W	3,06	2,94	3,05	3,02	2,98	3,02	3,06	3,12	3,13	3,15	3,17
SCOP	E	W/W	3,03	2,94	3,01	3,06	2,99	2,96	3,04	3,05	3,07	3,14	3,15
	A	%	119	115	119	118	116	118	120	122	122	123	124
ηsh	E	%	118	115	117	120	116	115	119	119	120	122	123

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.
(4) Efficiencies for low temperature applications (35°C)
(5) Efficiencies for average temperature applications (55°C)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
SEER - 12/7 (EN14825: 2018) (1)													
CEED	A	W/W	4,20	4,40	4,29	4,19	4,41	4,29	4,43	4,49	4,47	4,56	4,56
SEER	E	W/W	4,57	4,65	4,63	4,55	4,70	4,60	4,71	4,73	4,68	4,76	4,67
Casanal off sian su	A	%	165,03	172,97	168,76	164,40	173,36	168,76	174,26	176,46	175,86	179,30	179,22
Seasonal efficiency	E	%	179,65	183,16	182,27	179,15	185,06	181,08	185,47	186,03	184,37	187,25	183,96
SEER - 23/18 (EN14825: 2018) (2)				-	-	-							
CEED	Α	W/W	4,89	5,03	4,96	4,79	4,97	4,86	5,01	5,07	5,08	5,13	5,19
SEER	E	W/W	5,28	5,36	5,28	5,20	5,32	5,26	5,30	5,33	5,23	5,42	5,34
Caranal officiana	Α	%	192,45	198,11	195,26	188,53	195,85	191,60	197,44	199,91	200,14	202,39	204,66
Seasonal efficiency	E	%	208,28	211,38	208,24	205,01	209,61	207,42	208,88	210,16	203,23	213,78	210,79
Performance in average ambient condi	itions (average) - 35 °C (3)											
Dalarianh	Α	kW	186	214	236	271	315	351	383	447	498	534	569
Pdesignh	E	kW	190	216	239	275	317	353	393	455	508	543	578
CCOD	A	W/W	3,87	3,63	3,78	3,76	3,69	3,83	3,95	3,93	3,94	4,00	4,04
SCOP	E	W/W	3,77	3,62	3,70	3,79	3,66	3,77	3,88	3,85	3,86	3,97	3,99
nch	Α	%	152	142	148	147	145	150	155	154	155	157	159
ηsh	E	%	148	142	145	149	144	148	152	151	152	156	156
Performance in average ambient condi	itions (average) - 55 °C (4)											
Ddarianh	Α	kW	186	213	236	272	314	350	382	387	392	532	568
Pdesignh	E	kW	189	215	237	274	314	351	388	391	396	538	574
CCOD	A	W/W	3,16	3,03	3,14	3,10	3,05	3,08	3,13	3,22	3,13	3,23	3,25
SCOP	E	W/W	3,14	3,03	3,08	3,14	3,07	3,07	3,12	3,18	3,07	3,24	3,24
nch	A	%	123	118	122	121	119	120	122	126	122	126	127
ηsh	E	%	123	118	120	123	120	120	122	124	120	127	127

⁽¹⁾ Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

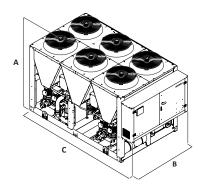
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Electric data													
Marrian arrant (FLA)	Α	А	158,8	185,4	204,2	232,0	267,6	295,4	323,2	376,2	421,4	457,0	484,8
Maximum current (FLA)	E	А	166,6	193,2	212,0	239,8	275,4	303,2	338,8	391,8	437,0	472,6	500,4
Deals surrent (LDA)	Α	А	363,0	427,2	446,0	695,0	730,6	758,4	786,2	839,2	884,4	920,0	947,8
Peak current (LRA)	E	A	370,8	435,0	453,8	702,8	738,4	766,2	801,8	854,8	900,0	935,6	963,4

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Compressor													
Туре	A,E	type						Scroll					
Compressor regulation	A,E	Туре						On-Off					
Number	A,E	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type						R32					
Refrigerant load circuit 1 (1)	A	kg	19,6	27,3	27,3	28,0	25,2	40,4	42,0	48,3	51,1	53,2	54,6
Keirigerant ioau circuit i (1)	E	kg	24,5	37,1	36,4	39,2	42,0	51,8	54,6	60,2	67,6	72,8	72,8
Defrigerant lead circuit 2 (1)	A	kg	19,6	27,3	27,3	28,0	25,2	40,4	42,0	48,3	51,1	53,2	54,6
Refrigerant load circuit 2 (1)	E	kg	24,5	37,1	36,4	39,2	42,0	51,8	54,6	60,2	67,6	72,8	72,8
2-pipe system - System side heat exc	hanger (hot/cold)												
Туре	A,E	type						Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Туре						Grooved joints					
Sizes (in/out)	A	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
Sizes (III/Out)	E	Ø	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"
2-pipe system - Recovery side heat e	xchanger (domesti	ic hot water)											
Туре	A,E	type						Brazed plate					
Number	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Connections (in/out)	A,E	Туре						Grooved joints					
Sizes (in/out)	A,E	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
4-pipe system - System side heat exc	hanger (cold side)												
Туре	A,E	type						Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E	Туре						Grooved joints					
Sizes (in/out)	A	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
	E	Ø	3"	3"	3"	3"	4"	4"	4"	4"	4"	5"	5"
4-pipe system - Recovery side heat e	xchanger (hot side	ı)											
Туре	A,E	type						Brazed plate					
Number	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Connections (in/out)	A,E	Туре						Grooved joints					
Sizes (in/out)	A,E	Ø	3"	3"	3"	3"	3"	4"	4"	4"	4"	5"	5"
Fan													
Туре	A,E	type						Axial					
Fan motor	A,E	type						On-Off					
Number	A	no.	4	6	6	6	8	8	8	10	10	12	12
number	E	no.	6	8	8	8	10	10	12	14	14	16	16
Air flow rate	A	m³/h	82403	123609	123609	123605	164779	164779	164779	205996	205998	247152	247152
All HOW Idle	E	m³/h	102378	136491	136491	136491	170613	170613	204757	238871	238871	272982	272982
Sound data calculated in cooling mo	de (2)												
Sound power level	A	dB(A)	90,5	92,2	92,2	92,3	93,6	93,6	93,7	94,6	94,7	95,4	95,5
Journa power level	E	dB(A)	85,2	86,2	86,2	87,0	88,3	88,8	89,7	90,1	90,2	90,9	91,2

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



<u>c:</u>					4000		4200	4400	1400	4000			
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Dimensions and weights without hydron	ic kit												
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
(Α	mm	2780	3970	3970	3970	5160	5160	5160	6350	6350	7540	7540
	E	mm	3970	5160	5160	5160	6350	6350	7540	8730	8730	9920	9920
Frankrissinkk	Α	kg	2575	3120	3130	3325	4115	4305	4605	5400	5805	6640	6740
Empty weight	E	kg	3085	3745	3755	3955	4690	4865	5565	6400	6780	7690	7825
Dimensions and weights with pump/s													
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
В	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	А	mm	3970	3970	3970	3970	5160	5160	5160	6350	6350	7540	7540
C	E	mm	3970	5160	5160	5160	6350	6350	7540	8730	8730	9920	9920
Farantarian	А	kg	3795	3920	3930	4125	4910	5155	5455	6250	6650	7530	7655
Empty weight	E	kg	3880	4545	4555	4755	5490	5665	6385	7250	7625	8580	8740

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CPS

Multifunction unit with multiple temperature level capability

Cooling capacity 164 ÷ 491 kW Heating capacity 176 ÷ 505 kW



- Multipurpose 6 pipes plug and play system
- Simultaneous and independent production of chilled water, medium temperature hot water and high temperature hot water (also suitable for domestic use)
- Uses heat recovery for simultaneous cooling and heating



DESCRIPTION

The multi-purpose 6-pipe units CPS are designed for residential buildings and accommodation facilities that require the simultaneous availability of heating and cooling for the rooms, along with high-temperature water (up to 73°C on the machine outlet) for heating needs and/or DHW production.

Each single service (cooling, medium-temperature heating, high-temperature hot water) can be supplied independently of the request for the others.

The versatile functions, extended operating limits and simplified installation of these units mean that they can also be used in a variety of different industrial processes.

CPS the ideal solution for both new installations and upgrading existing systems.

FEATURES

Operating field

Possibility to produce water up to 73°C, using mainly free-heating for cooling requests.

2 dual circuit units

Created by combining and optimising, in a single system, an NRP series 4-pipe multifunction air-water unit (with scroll compressors and R410A refrigerant) for the production of chilled water and medium temperature hot water on the heating/cooling circuit side, and a WWB series water-water heat pump (with scroll compressors and R134a refrigerant) for the production of domestic hot water (DHW).

Constructional characteristics of unit

CPS units can be installed and operated even in locations with limit space, offering significant time savings in terms of both system planning and installation, while tried-and-tested, optimised management logic makes it possible to create plug-and-play systems with superior reliability and efficiency.

These units consist of:

4 cooling circuits

— 2 circuits (C1/C2) with R410A gas

— 2 circuits (C2/C3) with R134a gas

3 plate heat exchanger

- 1 Plate heat exchanger for chilled water
- 1 Plate heat exchanger for medium temperature hot water
- 1 Inspectable stainless steel plate heat exchanger for high temperature hot water production (DHW)

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Option integrated hydronic kit

To create a solution which offers both cost savings and facilitated installation, these units may be configured with an integrated hydronic kit on the chilled water utility side. A hydronic kit must always be used, however, on the medium temperature water side.

These kits include all the main plumbing components necessary, and are available in a variety of configurations with either a single pump or with a backup pump to offer a choice of different total head values.

Flow switches must be installed on both the cold and medium temperature water utility circuits to protect the heat exchangers. Failure to do so will render the warranty null and void.

CONTROL PCO⁵

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

 Floating HP control: Allows, with continuous fan modulation, to optimize the operation of the unit in any operating point, ensuring an increase in the energy efficiency at partial load. ESEER up to +7% with inverter fans Night Mode: it is possible to set a silenced operation profile. Perfect
for night operation since it guarantees greater acoustic comfort in
the evenings, and a high efficiency in the time of greater load.

CONFIGURATOR

Field	Description							
1,2,3	CPS							
4,5,6,7	Size 0704, 1004, 1805							
8	Coils							
0	Copper-aluminium							
R	Copper pipes-copper fins							
S	Copper pipes-Tinned copper fins							
V	Copper pieps-Coated aluminium fins							
9	Fans							
0	Asynchronous + DCPX							
J	Inverter							
10	Power supply							
0	400V ~ 3 50Hz with magnet circuit breakers							
S	400V ~ 3 50Hz with soft-start							
11,12	Hydronic kit integrated on chilled water utility side							
00	Without hydronic kit							
DA	Pump A + stand-by pump							
DB	Pump B + stand-by pump							
DC	Pump C + stand-by pump							
DD	Pump D + stand-by pump							
DE	Pump E + stand-by pump							
DF	Pump F + stand-by pump							
DG	Pump G + stand-by pump							
DH	Pump H + stand-by pump							
DI	Pump I + stand-by pump							
PA	Pump A							
PB	Pump B							

These kits include all the main plumbing components necessary, and are available in a variety of configurations with either a single pump or with a backup pump to offer a choice of different total head values.

F: 11	B 1.2
Field	Description
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
13,14	Hydronic kit integrated on medium temperature water utility side
RA	Pump A
RB	Pump B
RC	Pump C
RD	Pump D
RE	Pump E
RF	Pump F
RG	Pump G
RH	Pump H
RI	Pump I
SA	Pump A + stand-by pump
SB	Pump B + stand-by pump
SC	Pump C + stand-by pump
SD	Pump D + stand-by pump
SE	Pump E + stand-by pump
SF	Pump F + stand-by pump
SG	Pump G + stand-by pump
SH	Pump H + stand-by pump
SI	Pump I + stand-by pump

The following table illustrates the compatibility between different unit sizes and the hydronic kits.

All units must be configured with the medium temperature water side hydronic kit.

		CPS0704	CPS1004	CPS1805
	PA-DA	PA-DA		
	PB-DB	PB-DB		
	PC-DC	PC-DC	PC-DC	
	PD-DD	PD-DD	PD-DD	
Pumps - COLD WATER side	PE-DE	PE-DE	PE-DE	PE-DE
COLD WITEHOUCE	PF-DF		PF-DF	PF-DF
	PG-DG			PG-DG
	PH-DH			PH-DH
	PI-DI			PI-DI

		CPS0704	CPS1004	CPS1805
	RA-SA	RA-SA		
	RB-SB	RB-SB		
	RC-SC	RC-SC	RC-SC	
Pumps -	RD-SD	RD-SD	RD-SD	
HOT WATER (AVERAGE TEMPERATURE)	RE-SE		RE-SE	RE-SE
side	RF-SF		RF-SF	RF-SF
	RG-SG			RG-SG
	RH-SH			RH-SH
	RI-SI			RI-SI

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PERFORMANCE SPECIFICATIONS

		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
lousehold system side cooling (1)		440.0	250.0	100 5
cooling capacity	kW	163,9	259,2	490,5
nput power	kW .	53,2	86,3	165,7
ooling total input current	A	97,0	128,0	239,0
ER	W/W	3,08	3,00	2,96
Vater flow rate system side	l/h	28212	44593	84370
Pressure drop system side	kPa	32	34	49
Nedium temperature system heating (2)				
leating capacity	kW	175,2	271,8	503,5
nput power	kW	55,8	86,5	161,7
leating total input current	A	104,0	136,0	250,0
OP	W/W	3,14	3,14	3,11
Vater flow rate system side	l/h	30521	47339	87653
Jseful head system side	kPa	99	120	113
ligh temperature system side heating (DHW)	(3)			
leating capacity (DHW)	kW	90,7	177,4	251,9
nput power	kW	48,4	85,3	144,3
leating total input current	A	88,0	134,0	211,0
OP	W/W	1,87	2,08	1,75
/ater flow rate domestic hot water side	I/h	7897	15442	21924
ressure drop domestic hot water side	kPa	30	40	39
imultaneous operation (cooling + medium te				
ooling capacity	kW	163,3	258,3	466,2
leating capacity	kW	207,8	330,2	600,6
nput power	kW	48,4	78,7	147,7
otal input current	A	92	136	253
ER	W/W	7,66	7,47	7,22
Vater flow rate cold side	I/h	28212	45593	84370
		32		
ressure drop cold side	kPa		34	49
Vater flow rate hot side	I/h	30521	47339	87653
Jseful head system side	kPa	99	120	113
imultaneous operation (cooling + high temp				
ooling capacity	kW	160,0	250,0	463,5
leating capacity (DHW)	kW	90,7	177,4	251,9
nput power	kW	70,7	124,1	217,0
otal input current	A	126	191	333
ER	W/W	3,54	3,45	3,30
Vater flow rate cold side	I/h	27536	43003	79720
ressure drop cold side	kPa	30	31	44
Vater flow rate domestic hot water side	I/h	7899	15442	21924
ressure drop domestic hot water side	kPa	30	40	39
imultaneous operation (medium temperatur	e heating + high temperature D	HW production) (6)		
leating capacity	kW	101,4	129,5	304,2
leating capacity (DHW)	kW	90,5	177,0	251,3
nput power	kW	73,7	123,9	215,6
otal input current	A	137	196	341
ER	W/W	2,60	2,47	2,58
Vater flow rate hot side	I/h	17696	22604	53038
seful head system side	kPa	158	189	256
Vater flow rate domestic hot water side	I/h	7897	15442	21924
ressure drop domestic hot water side	kPa	30	40	39
imultaneous operation (cooling + medium te				
poling capacity	kW	163,3	258,3	466,2
eating capacity	kW	134,0	187,9	401,4
eating capacity (DHW)	kW	90,5	177,0	251,3
otal input power	kW	66,7	116,6	204,1
otal input power otal input current		125	199	347
otal input current ER	A W/W			
		5,81	5,35	5,48
Vater flow rate cold side	l/h	28212	44593	84370
Pressure drop cold side	kPa	32	34	49
Vater flow rate hot side	l/h	30521	47339	87653
Jseful head system side	kPa	99	120	113
Nater flow rate domestic hot water side	l/h	7897	15442	21924
Pressure drop domestic hot water side	kPa	30	40	39

⁽¹⁾ Data 14511:2022; System side water heat exchanger 12 °C / 7 °C; External air 35 °C
(2) Data 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data 14511:2022; Heat exchanger - services side (DHW at high temperature) 55 °C / 65 °C; Outside air 7 °C D.B. / 6 °C W.B.
(4) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;
(5) Data 14511:2022; Heat exchanger water (services side) 12 °C / 7 °C; Outside air 3 °C; Data (1511:2022); Heat exchanger water (DHW side) 55 °C / 65 °C
(6) Data 14511:2022; Heat exchanger water (services side) * °C / 45 °C; Outside air 7 °C D.B. / 6 °C W.B.; Heat exchanger water (DHW side) 55 °C / 65 °C
(7) Heat exchanger - services side (cold water) * / 7 °C; Heat exchanger - services side (hot water at average temperature) * / 45 °C; Heat exchanger - services side (hot water at high temperature) 55 °C / 65 °C

ENERGY DATA

		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
Cooling capacity with low leaving w	ater temp (UE n° 2016/2281)			
SEER	W/W	-	-	4,56
ηςς	%	-	-	180%
UE 813/2013 performance in average	e ambient conditions (average) - 55 °C	- Pdesignh ≤ 400 kW (1)		
Pdesignh	kW	150	241	-
SCOP	W/W	2,66	2,76	-
ηsh	%	103%	107%	-
UE 813/2013 performance in average	e ambient conditions (average) - 35 °C	- Pdesignh ≤ 400 kW (2)		
Pdesignh	kW	158	246	-
SCOP	W/W	3,26	3,44	-
ηsh	%	128%	135%	-

⁽¹⁾ Efficiencies for average temperature applications (55 °C) (2) Efficiencies for low temperature applications (35 °C)

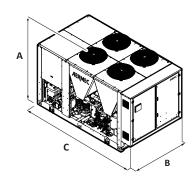
ELECTRIC DATA

		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
Cooling only mode				
Maximum current (FLA)	A	153,0	220,0	420,0
Peak current (LRA)	A	293,0	459,0	746,0
Medium temperature heating mode ope	ration only			
Maximum current (FLA)	A	153,0	220,0	420,0
Peak current (LRA)	A	293,0	459,0	746,0
High temperature DHW production oper	ating mode only)			
Maximum current (FLA)	A	121,0	203,0	320,0
Peak current (LRA)	A	261	442	645
Simultaneous operation (medium tempe	erature heating + cooling)			
Maximum current (FLA)	A	138,0	197,0	381,0
Peak current (LRA)	A	278	436	707
Simultaneous operation (medium tempe	erature heating + high temper	ature DHW production)		
Maximum current (FLA)	A	197,0	308,0	549,0
Peak current (LRA)	A	337	547	874
Simultaneous operation (cooling + DHW	production operating)			
Maximum current (FLA)	A	189,0	300,0	533,0
Peak current (LRA)	A	329	539	858
Simultaneous operation (cooling + medi	ium temperature heating + hi	gh temperature DHW production)		
Maximum current (FLA)	A	181,0	284,0	510,0
Peak current (LRA)	A	321	523	835

GENERAL TECHNICAL DATA

		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
Compressor - Circuit (C1/C2)		<u> </u>		<u> </u>
Туре	type		Scroll	
Number	no.	4	4	5
Circuits	no.	2	2	2
Refrigerant	type		R410A	
Refrigerant charge	kg	45,0	61,0	106,0
Thermostatic expansion valve	type		Meccanica	
Compressor - Circuit (C3/C4)				
Туре	type		Scroll	
Number	no.	2	2	2
Circuits	no.	2	2	2
Refrigerant	type		R134a	
Refrigerant charge	kg	7,0	15,0	20,0
Thermostatic expansion valve	type		Elettronica	
Jtility side heat exchanger (cooling)				
ype	type		Brazed plate	
Number	no.	1	1	1
Connections (in/out)	Туре		Grooved joints	
Sizes (in/out)	Ø	2″1/2	3"	4"
Jtility side heat exchanger (medium ten	nperature heating)			
ype	type		Brazed plate	
Number	no.	2	2	2
Manifold connection (in/out)	Туре		Grooved joints	
Manifold diameter (in/out)	Ø	2″ 1/2	3"	4"
Jtility side heat exchanger (high temper	rature heating)			
ype	type		Brazed plate	
lumber	no.	1	1	1
Connections (in/out)	Туре		Gas	
iizes (in/out)	Ø		2″M	
an				
Гуре	type		Axial	
an motor	type		Asynchronous with phase cut	<u> </u>
Number	no.	4	6	10
Air flow rate	m³/h	88000	116500	194100

DIMENSIONS



		CPS0704°°°00RA	CPS1004°°°00RC	CPS1805°°°00RE
Dimensions and weights				
A	mm	2450	2450	2450
В	mm	2200	2200	2200
C	mm	3975	5760	8143

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NXP 0500 - 1650

Water-water multipurpose

Cooling capacity 108 ÷ 502 kW Heating capacity 122 ÷ 549 kW



- Units designed for 2 or 4-pipe systems
- · High efficiency also at partial loads
- Simultaneous and independent production of hot and chilled water





DESCRIPTION

Multi-purpose indoor model designed for applications with 2 or 4-pipe systems. Just one unit is capable of satisfying the yearly hot and cold water demand simultaneously and independently.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard

L Standard silenced

FEATURES

Operating field

Work at full load with chilled water production from 4 to 18°C at the evaporator and hot water at the condenser up to 55 °C.

(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Exchangers

All standard units have user-side heat exchangers and plate recovery, optimised to take advantage of the excellent heat exchange characteristics of the R410A.

Option integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.

The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

The flow switch is available as an accessory for both the system side and the recovery side, and is compulsory; if it is not installed, the warranty will be considered invalid.

CONTROL PCO⁵

Microprocessor adjustment, with keyboard and LCD display, for easy access on the unit is a menu available in several languages.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervision systems with MODBUS protocol.

AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP. SNMP

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
AER485P1	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,L		•	•	•			•	•	•		•	•	•
AERNET	°,L	•						•	•	•	•	•		•
FL	°,L		•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_EVO	°,L	•		•	•			•	•		•	•	•	•
PGD1	°,L													

Antivibration

Version System side - pumps	•	Recovery side	0500	0550	0600	0650	0700	0750	0800
	- pumps	- pumps							
0	0	0	AVX350	AVX350	AVX351	AVX351	AVX351	AVX351	AVX352
0	0	U,V	AVX357	AVX357	AVX358	AVX358	AVX358	AVX359	AVX360
0	M,N	°,U,V,W,Z	AVX357	AVX357	AVX358	AVX358	AVX358	AVX359	AVX360
0	0,P	U,V	AVX357	AVX357	AVX358	AVX358	AVX358	AVX359	AVX360
0	0	W,Z	AVX357	AVX357	AVX359	AVX359	AVX359	AVX359	AVX363
0	0,P	°,W,Z	AVX357	AVX357	AVX359	AVX359	AVX359	AVX359	AVX363
L	0	0	AVX351	AVX351	AVX355	AVX355	AVX355	AVX356	AVX353
L	0	U,V	AVX358	AVX358	AVX359	AVX359	AVX359	AVX360	AVX360
L	M,N	°,U,V	AVX358	AVX358	AVX359	AVX359	AVX359	AVX360	AVX360
L	°,M,N	W,Z	AVX359	AVX359	AVX359	AVX359	AVX359	AVX363	AVX363
L	0,P	°,U,V,W,Z	AVX359	AVX359	AVX359	AVX359	AVX359	AVX363	AVX363

Version	System side - pumps R	ecovery side - pumps	0900	1000	1250	1400	1500	1650
0	0	0	AVX352	AVX353	AVX353	AVX353	AVX354	AVX354
0	0	U,V	AVX360	AVX361	AVX361	AVX361	AVX361	AVX361
0	M,N	°,U,V,W,Z	AVX360	AVX361	AVX361	AVX361	AVX361	AVX361
0	0,P	U,V	AVX360	AVX361	AVX361	AVX361	AVX361	AVX361
0	0	W,Z	AVX363	AVX364	AVX364	AVX364	AVX364	AVX364
0	0,P	°,W,Z	AVX363	AVX364	AVX364	AVX364	AVX364	AVX364
L	0	0	AVX353	AVX353	AVX354	AVX354	AVX354	AVX354
L	0	U,V	AVX360	AVX361	AVX361	AVX362	AVX362	AVX362
L	M,N	°,U,V	AVX360	AVX361	AVX361	AVX362	AVX362	AVX362
L	°,M,N	W,Z	AVX364	AVX364	AVX364	AVX364	AVX364	AVX364
L	0,P	°,U,V,W,Z	AVX364	AVX364	AVX364	AVX364	AVX364	AVX364

Device for peak current reduction

Ver	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
°,L	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)	DRE801 (1)	DRE901 (1)	DRE1001 (1)	DRE1251 (1)	DRE1401 (1)	DRE1401 (1)	DRE1401 (1)

⁽¹⁾ Only for supplies of 400V 3N \sim 50Hz and 400V 3 \sim 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered. A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
°,L	RIF98	RIF98	RIF95	RIF95	RIF95	RIF95	RIF95	RIF96	RIF97	RIF97	RIF97	RIF97	RIF97

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A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Configuration options

Field	Description
1,2,3	NXP
4,5,6,7	Size 0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1250, 1400, 1500, 1650
8	Operating field
۰	Standard mechanic thermostatic valve
9	System type
2	2-pipe system
4	4-pipe system
10	Version
0	Standard
L	Standard silenced
11	Power supply
0	400V ~ 3 50Hz with magnet circuit breakers
4	220V ~ 3 50Hz with magnet circuit breakers (1)
5	500V ~ 3 50Hz with magnet circuit breakers (2)
12	System side - pumps
0	Without hydronic kit
M	Single pump low head
N	Pump low head + stand-by pump
0	Single pump high head
P	Pump high head + stand-by pump
13	Recovery side - pumps
0	Without hydronic kit
U	Single pump low head
V	Pump low head + stand-by pump
W	Single pump high head
Z	Pump high head + stand-by pump

⁽¹⁾ Only for sizes from 0500 to 0700 (2) Only for sizes from 0800 to 1000

PERFORMANCE SPECIFICATIONS

NXP - 2-pipe system versions °/L

Size		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Cooling system side 2-pipe system (1)														
Cooling capacity	kW	108,9	117,0	141,5	157,5	192,7	218,5	252,2	281,0	305,8	345,2	392,3	447,2	502,4
Input power	kW	24,0	26,1	30,9	35,1	42,6	48,9	56,0	62,5	66,3	75,7	85,2	98,4	110,3
Cooling input current	А	47,0	50,0	58,0	65,0	84,0	90,0	92,0	101,0	106,0	135,0	149,0	169,0	188,0
EER	W/W	4,54	4,48	4,58	4,49	4,52	4,47	4,51	4,50	4,61	4,56	4,60	4,55	4,55
Water flow rate source side	I/h	22711	24436	29455	32877	40143	45586	52705	58706	63673	71963	81633	93177	104621
Pressure drop source side	kPa	33	37	41	50	59	69	28	34	26	32	36	45	49
Water flow rate system side	I/h	18734	20124	24349	27108	33155	37599	43386	48338	52596	59364	67464	76904	86389
Pressure drop system side	kPa	19	21	21	25	27	29	20	25	19	23	26	32	34
Heating system side 2-pipe system (2)														
Heating capacity	kW	122,4	131,0	158,2	175,7	210,0	238,7	289,0	320,9	352,6	383,7	433,5	489,5	549,4
Input power	kW	29,6	32,0	38,5	43,3	51,7	59,6	70,9	79,3	84,0	91,7	103,4	118,6	132,1
Heating input current	A	54,0	58,0	68,0	76,0	95,0	103,0	112,0	123,0	130,0	154,0	173,0	196,0	217,0
COP	W/W	4,13	4,09	4,11	4,05	4,06	4,00	4,08	4,05	4,20	4,18	4,19	4,13	4,16
Water flow rate source side	I/h	27209	29066	35169	38937	46642	52841	63935	70917	78660	85555	96778	108934	122632
Pressure drop source side	kPa	47	52	58	69	79	92	41	50	39	45	51	62	67
Water flow rate system side	l/h	21232	22726	27452	30476	36453	41427	50177	55720	61233	66632	75270	84987	95403
Pressure drop system side	kPa	25	27	27	32	32	36	27	33	25	29	32	39	42
Heating domestic hot water side 2-pipe system (3)														
Heating capacity	kW	124,5	133,2	161,0	178,8	213,6	242,8	293,3	325,1	354,8	390,1	439,8	496,5	558,6
Input power	kW	29,2	31,6	37,8	42,6	50,9	58,4	70,0	78,4	83,2	91,1	102,6	117,8	131,6
Heating total input current	A	54,0	57,0	67,0	75,0	95,0	103,0	110,0	122,0	129,0	153,0	171,0	194,0	216,0
COP	W/W	4,26	4,21	4,26	4,20	4,19	4,16	4,19	4,15	4,26	4,28	4,29	4,21	4,24
Water flow rate source side	l/h	27905	29767	36085	39952	47734	54174	65416	72379	79441	87568	98845	111238	125462
Pressure drop source side	kPa	37	42	41	50	53	58	42	50	38	46	52	66	70
Water flow rate domestic hot water side	l/h	21604	23109	27936	31015	37062	42149	50928	56446	61601	67743	76363	86215	96994
Pressure drop domestic hot water side	kPa	23	26	25	30	33	36	26	32	23	28	33	40	43
Simultaneous operation (heating + cooling), 2 pipes														
Cooling capacity	kW	96,2	102,5	124,8	138,9	165,4	190,6	225,7	250,3	282,6	308,1	340,2	392,0	444,9
Recovered heating power	kW	123,3	131,9	160,0	178,4	212,6	244,6	290,8	322,7	360,1	392,6	435,1	500,6	566,0
Input power	kW	28,2	30,5	36,5	40,9	49,0	56,2	67,8	75,5	80,9	88,2	99,2	113,9	126,6
Water flow rate system side	l/h	18734	20124	24349	27108	33155	37599	43386	48338	52596	59364	67464	76904	86389
Pressure drop system side	kPa	19	21	21	25	27	29	20	25	19	23	26	32	34
Water flow rate domestic hot water side	I/h	21604	23109	27936	31015	37062	42149	50928	56446	61601	67743	76363	86215	96994
Pressure drop domestic hot water side	kPa	23	26	25	30	33	36	26	32	23	28	33	40	43

- (1) Date 14511:2022; Water user side 12 °C/7 °C; Water source side 30 °C/35 °C; All the units are Eurovent certified (2) Date 14511:2022; Water user side 40 °C/45 °C; Water source side 10 °C/7 °C (3) Water exchanger to the total recovery side 40 °C/45 °C; Water source side 10 °C/7 °C (4) Water exchanger to the total recovery side ** / 45 °C; Water to the system side heat exchanger ** / 7 °C;

NXP - 4-pipe system versions °/L

Size		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Cooling system side 4-pipe system (1)														
Cooling capacity	kW	108,9	117,0	141,5	154,5	192,7	218,5	252,2	281,0	305,8	345,2	392,3	447,2	502,4
Input power	kW	24,0	26,1	30,9	35,1	42,6	48,9	56,0	62,5	66,3	75,7	85,2	98,4	110,3
Cooling input current	A	47,0	50,0	58,0	65,0	84,0	90,0	92,0	101,0	106,0	135,0	149,0	169,0	188,0
EER	W/W	4,54	4,48	4,58	4,49	4,52	4,47	4,51	4,50	4,61	4,56	4,60	4,55	4,55
Water flow rate source side	l/h	22711	24436	29455	32877	40143	45586	52705	58706	63673	71963	81633	93177	104621
Pressure drop source side	kPa	33	37	41	50	59	69	28	34	26	32	36	45	49
Water flow rate system side	l/h	18734	20124	24349	27108	33155	37599	43386	48338	52596	59364	67464	76904	86389
Pressure drop system side	kPa	19	21	21	25	27	29	20	25	29	23	26	32	34
Heating system side 4-pipe system (2)														
Heating capacity	kW	124,5	133,2	161,0	178,8	213,6	242,8	293,3	325,1	354,8	390,1	439,8	496,5	588,6
Input power	kW	29,2	31,6	37,8	42,6	50,9	58,4	70,0	78,4	83,2	91,1	102,6	117,8	131,6
Heating total input current	A	54,0	57,0	67,0	75,0	95,0	103,0	110,0	122,0	129,0	153,0	171,0	194,0	216,0
COP	W/W	4,26	4,21	4,26	4,20	4,19	4,16	4,19	4,15	4,26	4,28	4,29	4,21	4,24
Water flow rate source side	I/h	27905	29767	36085	39952	47734	54174	65416	72379	79441	87568	98845	111238	125462
Pressure drop source side	kPa	37	42	41	50	53	58	42	50	38	46	52	66	70
Water flow rate system side	l/h	21604	23109	27935	31015	37062	42149	50928	54446	61601	67743	76363	46215	96994
Pressure drop system side	kPa	23	26	25	30	33	36	26	32	23	28	33	40	43
Simultaneous operation (heating + cooling), 4	pipes (3)													
Cooling capacity	kW	96,2	102,5	124,8	138,9	165,4	190,6	225,7	250,3	282,6	308,1	340,2	392,0	444,9
Recovered heating power	kW	123,3	131,9	160,0	178,4	212,6	244,6	290,8	322,7	360,1	392,6	435,1	500,6	566,0
Input power	kW	28,2	30,5	36,5	40,9	49,0	56,2	67,8	75,5	80,9	88,2	99,2	113,4	126,6
Water flow rate cold side	l/h	18734	20124	24349	27108	33155	37599	43386	48338	52596	59364	67464	76904	86389
Pressure drop cold side	kPa	19	21	21	25	27	29	20	25	19	23	26	32	34
Water flow rate hot side	I/h	21604	23109	27936	31015	37062	42149	50928	56446	61601	67743	76363	86215	96944

- (1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C; All the units are Eurovent certified (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C (3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

Size		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Pressure drop hot side	kPa	23	26	25	30	33	36	26	32	23	28	33	40	43

- (1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C; All the units are Eurovent certified (2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C (3) Water exchanger to the total recovery side * / 45 °C; Water to the system side heat exchanger * / 7 °C;

ENERGY INDICES (REG. 2016/2281 EU)

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,L	W/W	5,25	5,44	5,52	5,43	5,52	5,39	5,61	5,82	6,09	6,00	6,05	6,43	6,45
Seasonal efficiency	°,L	%	207,0%	214,6%	217,8%	214,2%	217,8%	212,6%	221.4%	229,9%	240,5%	237,1%	239,1%	254,2%	254,9%
SEPR - (EN 14825: 2018) High temperatur	re (2)														
SEPR	°,L	W/W	-	-	-	-	-	-	-	7,08	7,30	7,21	7,23	-	-
UE 813/2013 performance in average am	bient conditi	ons (averag	e) - 55 °C - F	designh ≤	400 kW (3)										
Pdesignh	°,L	kW	163	173	212	234	280	318	385	-	-	-	-	-	-
SCOP	°,L	W/W	4,78	4,68	4,78	4,65	4,65	4,58	4,73	-	-	-	-	-	-
ηsh	°,L	%	183.0%	179.0%	183.0%	178.0%	178.0%	175.0%	181.0%	-	-	-	-	-	-
Energy index															
TER	°,L	W/W	7,77	7,68	7,80	7,75	7,71	7,75	7,62	7,59	7,94	7,94	7,82	7,87	7,99

- (1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
 (2) Calculation performed with FIXED water flow rate.
 (3) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

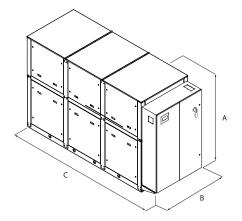
Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Electric data															
Maximum current (FLA)	°,L	Α	71,0	77,0	91,0	102,0	124,0	135,0	163,0	179,0	195,0	208,0	237,0	266,0	295,0
Peak current (LRA)	°,L	Α	214,0	220,0	206,0	216,0	267,0	323,0	332,0	340,0	356,0	459,0	488,0	600,0	629,0

GENERAL TECHNICAL DATA

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Compressor															
Туре	°,L	type							Scroll						
Number	°,L	no.	3	3	4	4	4	4	4	4	4	4	4	4	4
Circuits	°,L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R410A						
2-pipe system - System side heat exchanger	(hot/cold)														
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Туре							rooved join	ts					
Sizes (in/out)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3″	3″	3″	3″	3"
2-pipe system - Recovery side heat exchange	er (domest	tic hot wate	r)												
Туре	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Туре							rooved join	ts					
Sizes (in/out)	°,L	Ø	2"1/2	2" 1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3″	3″	3"	3″	3″
4-pipe system - System side heat exchanger	(cold side))													
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Туре							rooved join	ts					
Sizes (in/out)	°,L	Ø	2"1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"	3"	3"	3"	3″	3″
4-pipe system - Recovery side heat exchange	er (hot side	e)													
Туре	°,L	type							Brazed plate	2					
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type							irooved join	ts					
Sizes (in/out)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2″1/2	2" 1/2	3"	3"	3"	3"	3″	3″	3″
Sound data calculated in cooling mode (1)															
Sound power level —	0	dB(A)	78,0	79,0	79,0	80,0	82,0	86,0	88,0	88,0	88,0	90,0	90,0	92,0	92,0
Journa power rever	L	dB(A)	72,0	73,0	73,0	74,0	76,0	80,0	82,0	82,0	82,0	84,0	84,0	86,0	86,0
Sound pressure level (10 m)	0	dB(A)	46,0	47,0	47,0	48,0	50,0	54,0	56,0	56,0	56,0	58,0	58,0	60,0	60,0
Journa pressure rever (10 III)	L	dB(A)	40,0	41,0	41,0	42,0	44,0	48,0	50,0	50,0	50,0	52,0	52,0	54,0	54,0

⁽¹⁾ Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			()500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Dimensions and w	eiahts															
		0	mm	1976	1976	1976	1976	1976	1976	2021	2021	2021	2021	2021	2021	2021
A		L			2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120
В		°,L	mm '	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250
С		°,L	mm 2	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600	2600
Dimensions and w	eights with pun	ıp/s														
A .		٥	mm	1976	1976	1976	1976	1976	1976	2021	2021	2021	2021	2021	2021	2021
A		L	mm 2	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120	2120
В		°,L	mm ´	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250	1250
<i>C</i>		٥	mm 3	3452	3452	3452	3452	3452	3452	3452	3452	3750	3750	3750	3750	3750
		L	mm 3	3452	3452	3452	3452	3452	3750	3750	3750	3750	3750	2600	2600	2600
	Version	System side	Recovery si	de			0500		0550	060		0650		0700		750
	version	- pumps	- pumps				0000		0550	000	10	0030		0/00		1/50
	0	0	۰		kg		990		1000	111	0	1130		1180		1380
		0	U/V		kg		1230		1240	136	0	1380		1450	1	1690
	0	M/N	°/U/V		kg		1230		1240	136	0	1380		1450		1690
	0	°/M/N	W/Z		kg		1340		1350	149	0	1500		1600	1	1880
Empty weight	0	0/P	°/U/V/W/2	!	kg		1340		1350	149	0	1500		1600	1	1880
Empty weight	L	0	0		kg		1230		1230	134		1360		1420		1570
	L	0	U/V		kg		1560		1570	169	0	1710		1780		2020
	L	M/N	°/U/V		kg		1560		1570	169		1710		1780		2020
	L	°/M/N	W/Z		kg		1670		1680	182		1830		1930		2210
	L	0/P	°/U/V/W/Z	!	kg		1670		1680	182	.0	1830		1930		2210
		System side	Recovery side								4250	-		4500		4450
	Version	- pumps	- pumps			0800		0900	1000		1250	14	100	1500		1650
_	0	۰	0	kg		1680		1700	1890		1960	20	060	2100		2270
_	0	0	U/V	kg		1960		2060	2310		2380	25	500	2540		2720
_	0	M/N	°/U/V	kg		1960		2060	2310		2380	25	500	2540		2720
_	0	°/M/N	W/Z	kg		2110		2300	2560		2630	27	770	2810		3010
_	0	0/P	°/U/V/W/Z	kg		2110		2300	2560		2630		770	2810		3010
Empty weight -	L	0	0	kg		1910		1930	2120		2190		270	2400		2500
-	L	0	U/V	kg		2290		2390	2660		2730		350	2890		3070
_	L	M/N	°/U/V	kg		2290		2390	2660		2730	28	350	2890		3070
	L	°/M/N	W/Z	kg		2240		2630	2910		2980	31	120	3160		3360
_	L	0	°/U/V/W/Z	kg		2240		2630	2910		2980		120	3160		3360
_	L	P	°/U/V/W	kg		2240		2630	2910		2980	31	120	3160		3360

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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2440

2630

2910

2980

3120

3160

3360

PRECISION AIR CONDITIONERS

Aermec is well established in the data centre market, with a multiple year experience and prestigious projects aimed at reducing the overall cost of ownership of modern data centres.

This process is achieved by applying state of the art product solutions with a strong focus on integrated design and sophisticated analyses of individual data centre customer requirements, with the aim of achieving a personalised and optimised solution for each and every individual installation site.

Air flow rate Cool. Cap. Heat. Cap. Page **PRECISION AIR CONDITIONING** (kW) (m³/h) (kW) P 10-932 Direct expansion (air or water cooled); chilled water G 070-1342 Direct expansion (air or water cooled); chilled water 50-222 863 R 20-361 10-37 Direct expansion (air or water cooled); chilled water

















P 10-932

Precision Air Conditioners

Cooling capacity 7 ÷ 160 kW



- Strict control of room temperature and humidity
- High efficiency values
- Wide selection of configurations
- Reduced ground view clearance





control panel

DESCRIPTION

P series precision air conditioning units have design and operational features suitable for rooms where sensible nature heat loads are prevailing.

CONFIGURATIONS

PXO: upwards flow air conditioners with direct expansion with air or water condensation.

PWO: upwards flow air conditioners with chilled water.

PXU: downwards flow air conditioners with direct expansion with air or water condensation.

PWU: downwards airflow air conditioners with chilled water.

FEATURES

The **P** series precision air conditioning units are designed for precision air conditioning of technological rooms characterized by elevated thermal loads to be eliminated, such as computing centres and other applications where high performances and maximum reliability are required.

Precision Air Conditioning units can be customized as per necessities, in order to offer a complete control of temperature, of humidity and of air quality through accessories such as humidifier, after-heating and high efficiency filters.

In order to guarantee the maximum reliability and flexibility, there are available both solutions with double circuit and solution with different cooling mediums:

Two Sources

The Twin Sources system ensures cooling continuity in case of unavailability, for whatever reason, of the primary source: overhead, maintenance, night or seasonal stop or stop for any emergency.

This system includes the assembly inside the air conditioner of a second cooling source, complete with its regulation and completely independent from the primary one.

They only share the aluminium finned pack, allowing both a high thermal exchange efficiency.

Free Cooling

This system employs external air, a renewable energy source, for cooling the Free Cooling water circuit by an external dry cooler.

The Free Cooling circuit works in place of, or along, the mechanical cooling with direct expansion.

STRUCTURE

The structure consists of a steel frame painted with dark grey epoxy powders (RAL7024) guaranteeing a durable finish. Acoustic insulation self-extinguishing panels covered with anti-friction film.

Centrifugal fans with backward curved blades (plug fans) with EC motor directly coupled to the electronic control to minimize power consumption and noise emissions.

Corrugated baffle filters, not regenerable, self-extinguishing, G4 efficiency class (according to EN 779).

Differential pressure switch (STANDARD) for dirty filter alarm.

The control of filter dirt conditions via Modbus is available as an option.

ELECTRONIC CONTROLLER

The evolved electronic adjustment maximises energy saving and optimizes all operating modes of the units, both direct expansion and

- The controller allows to supervise all main components of the unit, with more than 50 different variables that guarantee real time monitoring of all operating cycles.
- The units have a standard RS485 Modbus board, BACnet, LonWorks and SNMP are available as options, for a simple and quick interface with BMS (Building Management System) supervising systems.
- View of all operating parameters in 8 languages.

CHILLED WATER COILS

Only for W configurations

Large surface batteries, positioned in such a way as to optimise airflow and heat transfer, made of refrigerating quality copper tubes with aluminium louvers mechanically merged, fitted with motorised 3way valve (2way is also available in the selection process).

COMPRESSORS

Only for X configurations

High efficiency scroll compressor with low power consumption.

ACCESSORIES

Direct expansion

- DC brushless compressors with inverter control
- Electric power supply line for remote condenser
- Electric power supply line with speed adjustment for remote con-
- Condenser adjustment with 0-10V signal for remote condenser with EC fans
- Water condenser
- Condensate adjustment pressure valve
- "LAC" (Low Ambient Control) valve has the function of bypassing the condenser, injecting warm gas in the liquid piping, to maintain the refrigerant pressure stable. Use is recommended in very cold climates, in case of inverter compressors and in case of oversized condensers with respect to the real necessities of the units.

Chilled water

- Two ways modulating valves
- Inlet and outlet water temperature probes
- "Power Valve" kit: automatic adjustment and balancing valve of the water circuit, which allows to guarantee a constant water flow rate and monitor the efficiency of the unit in real time.

Heating

- Low thermal inertia electric batteries with differentiated stages regulation
- Low thermal inertia electric batteries with modulating regulation
- Water heating batteries with 2 or 3 ways modulating valve (available on request on some models only)

Humidification

- Room humidity probe
- Flow humidity probe
- Submerged electrodes humidifier (also available with low conductivity cylinder)

Water presence detection

 Available as punctual probe or fabric belt (length 5 m) Allows to have an alarm in case water presence, even partial, is detected.

SMARTNET

The innovative **SMARTNET** system revolutionises the local area network concept.

This system, using the modulation capabilities of its components, allows dividing the workload across all units in the local area network. Compared to the Duty Stand-by (n+1 o n+n) redundancy system, where the backup units were stopped waiting for a problem to arise,

These units in the direct expansion configurations work with R410A refrigerant, which does not damage the ozone layer.

In dual circuit configuration you can control the power output thanks to electronic adjustment that automatically manages the compressors activation depending on the load request.

Electronic expansion valve standard on all sizes.

Mechanicals and structural

- Condensate discharge pump
- Condensation and humidifier drain pump
- Flow overpressure dampers
- Motorised damper on suction
- M5 (EU5) efficiency air filter on air supply
- Flow plenum with adjustable grills.
- Sub-base plenum with front grids.
- Plenum Free Cooling: available for direct expansion and downward flow versions, complete with motorised dampers and the external air temperature probe. Used to perform direct Free Cooling taking advantage of external air and will work in place of or supporting the direct expansion mechanical cooling.
- Height adjustable support for raised floor installation
- Grilled panels for front flow
- Closed panels for downwards air intake
- Panels with "sandwich" counter-panels (available on request on some models only)
- Panels with increased soundproof upholstery (available on request on some models only)

Electrical

- The unit has a standard power supply 400V ~ 3N 50Hz. The following voltages are available as an alternative: 400V ~ 3N 60Hz, 230V ~ 3 60Hz, 380V ~ 3N 60Hz
- Electric power supply line without neutral
- "Basic" version automatic transfer switch (ATS)
- Advanced" version automatic transfer switch (ATS)

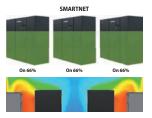
Regulation

- Constant flow rate ventilation adjustment
- Constant pressure ventilation adjustment
- Local area network configuration and cable
- User terminal for remote installation
- For further details refer to the technical documentation or to the selection program.

the SMARTNET system allows to maintain the units connected on the network always active with various advantages:

- greater efficiency of the units with partial loads;
- optimal air distribution, eliminating the risk of environment hotspots;
- internal system redundancy,





TECHNICAL DATA

PXO: upwards airflow - direct expansion with air or water condensation

		PX0 071	PX0 141	PXO 211	PX0 251	PX0 321	PX0 322	PX0 361	PXO 422	PX0 461	PX0 512	PX0 662	PX0 852	PXO 932
Cooling performances (1)														
Total cooling capacity	kW	8,2	14,7	21,0	27,4	35,2	33,8	38,1	43,7	48,1	57,8	67,3	84,4	94,9
Sensible cooling capacity	kW	7,9	12,9	21,0	25,7	35,2	33,8	38,1	43,7	46,8	53,6	66,2	73,7	86,3
EER (2)	W/W	3,83	3,40	3,30	3,14	3,13	3,34	3,57	3,47	3,63	3,34	3,26	3,27	3,64
Fans														
Туре	type						Plu	g-fan EC inve	rter					
Air flow rate	m³/h	2200	3200	7000	7000	12000	12000	14000	14000	14000	14000	18000	18000	21000
Refrigerant circuit														
Number	no.	1	1	1	1	1	2	1	2	1	2	2	2	2
Sound data														
Sound pressure (3)	dB(A)	51	59	56	57	67	67	58	58	58	59	61	61	61
Possible configurations														
Free Cooling		-	-	-	-	Yes	-	-	-	Yes	-	Yes	Yes	-
Two Sources		-	-	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes
Electric data														
Power supply							4	00V ~ 3N 50	Hz					

- (1) Condensation temperature 45 °C; incoming air 24 °C / 45 % u.r.; external static pressure: 30Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system. (2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers). (3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

PWO: upwards airflow - with chilled water

		PW0 10	PW0 20	PW0 30	PW0 50	PW0 60	PW0 70	PW0 80	PW0 110	PW0 160	PW0 220
Cooling performances (1)											
Total cooling capacity	kW	9,9	17,2	30,0	41,0	52,8	63,1	65,5	80,0	110,0	160,0
Sensible cooling capacity	kW	9,3	14,9	27,8	36,2	47,4	54,2	61,8	73,0	99,7	146,0
EER (2)	W/W	38,26	29,13	30,00	24,54	22,75	24,17	24,79	24,17	29,33	21,17
Fans											
Туре	type					Plug-fan l	C inverter				
Air flow rate	m³/h	2200	3200	7000	8000	12000	12000	16000	18000	24000	36000
Refrigerant circuit											
Number	no.	1	1	1	1	1	1	1	1	1	1
Sound data											
Sound pressure (3)	dB(A)	51	59	56	60	67	68	61	62	62	65
Possible configurations											
Free Cooling		-	-	-	-	-	-	-	-	-	-
Two Sources		-	-	-	Yes	-	-	-	Yes	Yes	-
Electric data											
Power supply						400V ~	3N 50Hz				

- (1) Incoming air 24°C / 45 % r.h.; water 7°C / 12°C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system. (2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers). (3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

PXU: downwards airflow - direct expansion with air or water condensation

i Ao. downwards an no	No. downwards an now an extension with an or water condensation													
		PXU 071	PXU 141	PXU 211	PXU 251	PXU 321	PXU 322	PXU 361	PXU 422	PXU 461	PXU 512	PXU 662	PXU 852	PXU 932
Cooling performances (1)														
Total cooling capacity	kW	8,2	14,7	21,0	27,4	35,2	33,8	38,1	43,7	48,1	57,8	67,3	84,4	94,9
Sensible cooling capacity	kW	7,9	12,9	21,0	25,7	35,2	33,8	38,1	43,7	46,8	53,6	66,2	73,7	86,3
EER (2)	W/W	3,74	3,29	3,24	3,10	3,09	3,29	3,50	3,41	3,57	3,30	3,15	3,18	3,59
Fans														
Туре	type Plug-fan EC inverter													
Air flow rate	m³/h	2200	3200	7000	7000	12000	12000	14000	14000	14000	14000	18000	18000	21000
Refrigerant circuit														
Number	no.	1	1	1	1	1	2	1	2	1	2	2	2	2
Sound data														
Sound pressure (3)	dB(A)	51	57	62	62	67	68	59	59	59	59	63	63	62
Possible configurations														
Free Cooling		-	-	-	-	Yes	-	-	-	Yes	-	Yes	Yes	-
Two Sources		-	-	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes
Electric data														
Power supply	-						4	00V ~ 3N 50	Hz					

- (1) Condensation temperature 45 °C; incoming air 24 °C / 45 % u.r.; external static pressure: 30Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
- (2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).

 (3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

PWU: downwards airflow - with chilled water

		PWU 10	PWU 20	PWU 30	PWU 50	PWU 60	PWU 70	PWU 80	PWU 110	PWU 160	PWU 220
Cooling performances (1)											
Total cooling capacity	kW	9,9	17,2	30,0	41,0	52,8	63,1	65,4	80,0	110,0	160,0
Sensible cooling capacity	kW	9,3	14,9	27,8	36,2	47,4	54,2	61,8	73,0	99,7	146,0
EER (2)	W/W	32,09	23,54	27,03	20,91	21,28	22,77	23,21	19,80	24,39	19,80
Fans											
Туре	type					Plug-fan	EC inverter				
Air flow rate	m³/h	2200	3200	7400	8200	12000	12000	16000	18000	24000	36000
Refrigerant circuit											
Number	no.	1	1	1	1	1	1	1	1	1	1
Sound data											
Sound pressure (3)	dB(A)	51	60	57	62	68	68	62	63	63	66
Possible configurations											
Free Cooling		-	-	-	-	-	-	-	-	-	-
Two Sources		-	-	-	Yes	-	-	-	Yes	Yes	-
Electric data	•										
Power supply						400V ~	3N 50Hz				

- (1) Incoming air 24 °C / 45 % r.h.; water 7 °C / 12 °C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system. (2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers). (3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

UPWARDS FLOW CONFIGURATIONS



Standard version with frontal air intake and upwards flow.



Version with front air intake and frontal air flow with distribution plenum with grid.



Version with air intake from the bottom, stand for raised floor, blind front panel and upflow air supply.

DOWNWARDS FLOW CONFIGURATIONS



Standard version with upwards suction and downwards airflow, with sub-base for raised flooring.

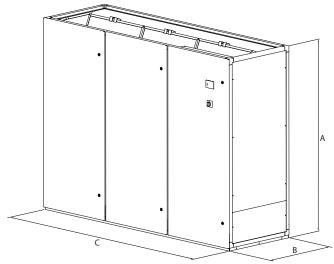


Version with upwards suction with frontal air flow with grilled plenum distribution.



Version with upwards suction with frontal air flow with grilled front panel.

DIMENSIONS



								_						
		PX0 071	PX0 141	PX0 211	PXO 251	PX0 321	PX0 322	PXO 361	PX0 422	PX0 461	PX0 512	PXO 662	PX0 852	PXO 932
Dimensions and weights														
A	mm	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
В	mm	600	600	880	880	850	850	880	880	880	880	880	880	880
C	mm	750	750	860	860	1410	1410	1750	1750	1750	1750	2300	2300	2640
Empty weight	kg	180	210	270	270	365	390	440	450	450	500	640	660	860
		PW0 10	PWC	20	PW0 30	PW0 50	PW0	60 P	W0 70	PW0 80	PW0 11	0 PW	0 160	PW0 220
Dimensions and weights														
A	mm	1990	19	90	1990	1990	1990)	1990	1990	1990	1	990	1990
В	mm	600	60	0	880	880	850		850	880	880	80 880		880
C	mm	750	750		860	860	1410	1410 1410		1750	1750	2640		3495
Empty weight	kg	155	160		220	240	240	240 260		340	360	540		700
		PXU 071	PXU 141	PXU 211	PXU 251	PXU 321	PXU 322	PXU 361	PXU 422	PXU 461	PXU 512	PXU 662	PXU 852	PXU 932
Dimensions and weights														
A	mm	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
В	mm	600	600	880	880	850	850	880	880	880	880	880	880	880
C	mm	750	750	860	860	1410	1410	1750	1750	1750	1750	2300	2300	2640
Empty weight	kg	180	210	270	270	365	390	440	450	450	500	640	660	860
		PWU 10	PWU	J 20	PWU 30	PWU 50	PWU	60 P	WU 70	PWU 80	PWU 11	0 PW	U 160	PWU 220
Dimensions and weights														
A	mm	1990	19	90	1990	1990	1990)	1990	1990	1990	1	990	1990
В	mm	600	60	0	880	880	850		850	880	880	8	380	880
С	mm	750	75	0	860	860	1410)	1410	1750	1750	2	640	3495
Empty weight	kg	155	16		220				260		360		540	700

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G 070-1342

Precision Air Conditioners

Cooling capacity 50 ÷ 222 kW



- Separate ventilating section for installation under raised floor
- Reduced energy consumption of fans
- High ratio between supplied cooling capacity and footprint
- Optimised distribution of air in the raised floor



Last generation control panel



DESCRIPTION

Precision air conditioners of the series ${\bf G}$ their construction and operating features are suitable to meet the design criteria of last generation Data Centers.

CONFIGURATIONS

GXU: downwards flow air conditioners with direct expansion with air or water condensation.

GWU: downwards flow air conditioners with chilled water.

For the configuration **W** there is also the version **XH** (**Extra Height**). By increasing the height, performance can be enhanced thanks to the larger coil.

FEATURES

Precision air conditioners of the series ${\bf G}$ they are designed for air-conditioning of utility rooms for high power density applications.

In these applications, the structures are characterised by technical floors as high as 1000 mm, creating ample space below to house the flow fans.

The fans are supplied inside a sub-base supplied separately, without increasing the size of the unit, thus optimising the available space with considerable advantages:

- The enlarged coils with ample heat exchange surface enhance performance with less energy consumption.
- Greater filtering surface reducing pressure drops so that less maintenance is needed as they get less dirty.
- Horizontal flow of fans in sub-base with lower pressure drops.

STRUCTURE

The structure consists of a steel frame painted with dark grey epoxy powders (RAL7024) guaranteeing a durable finish. Acoustic insulation self-extinguishing panels covered with anti-friction film.

The ventilating sub-base is supplied separately and must be electrically connected at the worksite or on-site.

EANG

Centrifugal fans with backward curved blades (plug fans) with EC motor directly coupled to the electronic control to minimize power consumption and noise emissions.

FILTERS

Corrugated baffle filters, not regenerable, self-extinguishing, G4 efficiency class (according to EN 779).

Differential pressure switch (STANDARD) for dirty filter alarm.

The control of filter dirt conditions via Modbus is available as an option.

ELECTRONIC CONTROLLER

The evolved electronic adjustment maximises energy saving and optimizes all operating modes of the units, both direct expansion and chilled water.

- The controller allows to supervise all main components of the unit, with more than 50 different variables that guarantee real time monitoring of all operating cycles.
- The units have a standard RS485 Modbus board, BACnet, LonWorks and SNMP are available as options, for a simple and quick interface with BMS (Building Management System) supervising systems.
- View of all operating parameters in 8 languages.

CHILLED WATER COILS

Only for W configurations

Large surface coils, positioned in such a way as to optimise airflow and heat transfer, made of copper tubes with aluminium louvers mechanically merged, fitted with 2-way modulating valve (3-way is also available in the selection process).

COMPRESSORS

Only for X configurations

High efficiency scroll compressor with low power consumption. These units in the direct expansion configurations work with R410A refrigerant, which does not damage the ozone layer. The dual circuit configuration controls the power output thanks to electronic adjustment that automatically manages the compressors activation depending on the load request.

ACCESSORIES

Direct expansion

- DC brushless compressors with inverter control
- Electric power supply line for remote condenser
- Electric power supply line with speed adjustment for remote condenser
- Condenser adjustment with 0-10V signal for remote condenser with EC fans
- Water condenser
- Condensate adjustment pressure valve
- "LAC" (Low Ambient Control) valve has the function of bypassing the condenser, injecting warm gas in the liquid piping, to maintain the refrigerant pressure stable. Use is recommended in very cold climates, in case of inverter compressors and in case of oversized condensers with respect to the real necessities of the units.

Chilled water

- Three-way modulating valves
- Inlet and outlet water temperature probes
- "Power Valve" kit: automatic adjustment and balancing valve of the water circuit, which allows to guarantee a constant water flow rate and monitor the efficiency of the unit in real time.

Heating

Low thermal inertia electric batteries with differentiated stages regulation

Humidification

- Room humidity probe
- Flow humidity probe
- Submerged electrodes humidifier (also available with low conductivity cylinder)

SMARTNET

The innovative **SMARTNET** system revolutionises the local area network concept.

This system, using the modulation capabilities of its components, allows dividing the workload across all units in the local area network. Compared to the Duty Stand-by (n+1 o n+n) redundancy system, where the backup units were stopped waiting for a problem to arise,

Electronic expansion valve standard on all sizes.

Water presence detection

 Available as punctual probe or fabric belt (length 5 m) Allows to have an alarm in case water presence, even partial, is detected.

Mechanicals and structural

- Condensate discharge pump
- Condensation and humidifier drain pump
- Motorised damper on suction
- M5 (EU5) efficiency air filter on air supply
- Ventilated plenum with panelling for front or rear flow
- Ventilated plenum with panelling for downflow (installation above raised floor)
- Panels with "sandwich" counter-panels (available on request on some models only)
- Panels with increased soundproof upholstery (available on request on some models only)

Flectrical

- The unit has a standard power supply 400V \sim 3N 50Hz. The following voltages are available as an alternative: 400V \sim 3N 60Hz, 460V \sim 3 60Hz, 380V \sim 3N 60Hz
- Electric power supply line without neutral
- "Basic" version automatic transfer switch (ATS)
- Advanced" version automatic transfer switch (ATS)

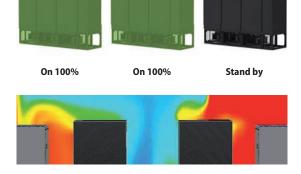
Regulation

- Constant flow rate ventilation adjustment
- Constant pressure ventilation adjustment
- Local area network configuration and cable
- User terminal for remote installation
- For further details refer to the technical documentation or to the selection program.

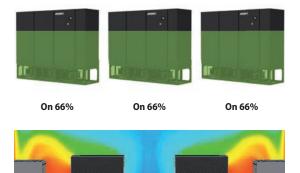
the SMARTNET system allows to maintain the units connected on the network always active with various advantages:

- greater efficiency of the units with partial loads;
- optimal air distribution, eliminating the risk of environment hotspots;
- internal system redundancy,

DUTY / STAND-BY



SMARTNET



TECHNICAL DATA

GXU: downwards airflow - direct expansion with air or water condensation

	'	GXU 932	GXU 1342	
Cooling performances (1)				
Total cooling capacity	kW	91,2	130,5	
Sensible cooling capacity	kW	77,5	121,2	
EER (2)	W/W	3,70	3,81	
Fans				
Туре	type		Plug-fan EC inverter	
Air flow rate	m³/h	18000	31500	
Refrigerant circuit				
Number	no.	2	2	
Sound data				
Sound pressure (3)	dB(A)	56	61	
Electric data				
Power supply			400V ~ 3N 50Hz	

⁽¹⁾ Condensation temperature 45 °C; incoming air 24 °C / 45 % u.r.; external static pressure: 30Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system. (2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers). (3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

GWU: downwards airflow - with chilled water

		GWU 070	GWU 150	GWU 230	GWU 300	
Cooling performances (1)						
Total cooling capacity	kW	58,6	96,4	143,6	208,8	
Sensible cooling capacity	kW	49,0	79,4	118,0	184,3	
EER (2)	W/W	31,83	46,92	62,41	33,68	
Fans						
Туре	type	Plug-fan EC inverter				
Air flow rate	m³/h	11000	17600	25800	45200	
Refrigerant circuit						
Number	no.	2	2	2	2	
Sound data						
Sound pressure (3)	dB(A)	58	55	56	62	
Electric data						
Power supply		400V ~ 3N 50Hz				

⁽¹⁾ Incoming air 24 °C / 45 % r.h.; water 7 °C / 12 °C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system. (2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers). (3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

	•	GWU 150 XH	GWU 230 XH
Cooling performances (1)			·
Total cooling capacity	kW	113,2	222,9
Sensible cooling capacity	kW	93,1	178,2
EER (2)	W/W	55,78	79,32
Fans			
Туре	type		Plug-fan EC inverter
Air flow rate	m³/h	20400	36000
Refrigerant circuit			
Number	no.	2	2
Sound data			
Sound pressure (3)	dB(A)	57	63
Electric data			
Power supply			400V ~ 3N 50Hz

⁽¹⁾ Incoming air 24 °C / 45 % r.h.; water 7 °C / 12 °C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system. (2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers). (3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

DOWNWARDS FLOW CONFIGURATIONS



Standard execution for perimeter installation inside Data Centres: the height of the raised flooring must be minimum 550 mm.

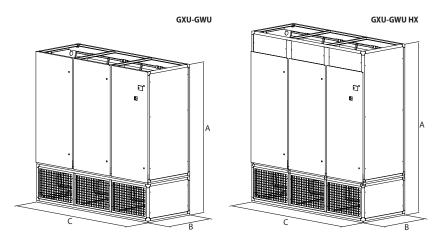


Execution for perimeter installation inside Data Centre. In this case, the sub-base side closure panels must be installed above the flooring. It is in any case essential to make sure that the height of the ceiling allows good air intake.



Execution for installation outside Data Centre, without raised flooring and rear delivery. In this case, the sub-base side closure panels and rear delivery grilles. Installation of the plenum with the rear return system is optional, if there is no channelling system.

DIMENSIONS



			GXU 932			GXU 1342	
Dimensions and weights							
A	mm		1990			1990	
В	mm		921			921	
C	mm		2390			3290	
Empty weight	kg		870			1000	
		CHILLARA	CHILLER	CHILLERANI	CHILL 224	CWIII 220 VIII	CWIII 200

		GWU 070	GWU 150	GWU 150 XH	GWU 230	GWU 230 XH	GWU 300
Dimensions and weights							
A	mm	1990	1990	2350	1990	2350	1990
В	mm	921	921	1050	921	1050	921
C	mm	1320	1840	1840	2740	2740	4020
Empty weight	kg	610	750	640	930	950	1250

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R 20-361

Precision Air Conditioners

Cooling capacity 10 ÷ 37 kW



- "In row" installation between the server lines
- Horizontal air flow to offer an effective localised cooling
- Rear and front accessibility for simplified maintenance
- Front and side air flow





Last generation control panel

DESCRIPTION

Precision air conditioners of the R **Series** have construction features and sizes so that they can be installed next to the servers of the Data Center.

CONFIGURATIONS

RXA: air conditioners with delivery downwards and direct expansion with air or water condensation.

RXU: air conditioners with air delivery horizontal with cooled water. Both configurations are available in compact version with reduced depth.

FEATURES

Precision air conditioners in the ${\bf R}$ series are designed and built to have the same dimensions as the racks, rear intake from the warm corridor and front delivery towards the cold corridor.

Two Sources

The Twin Sources system ensures cooling continuity in case of unavailability, for whatever reason, of the primary source: overhead, maintenance, night or seasonal stop or stop for any emergency.

This system includes the assembly inside the air conditioner of a second cooling source, complete with its regulation and completely independent from the primary one.

They only share the aluminium finned pack, allowing both a high thermal exchange efficiency.

Free Cooling

This system employs external air, a renewable energy source, for cooling the Free Cooling water circuit by an external dry cooler.

The Free Cooling circuit works in place of, or along, the mechanical cooling with direct expansion.

STRUCTURE

The structure consists of a steel frame painted with dark grey epoxy powders (RAL7024) guaranteeing a durable finish. Acoustic insulation self-extinguishing panels covered with anti-friction film.

FAN:

Centrifugal fans with backward curved blades (plug fans) with EC motor directly coupled to the electronic control to minimize power consumption and noise emissions.

FILTERS

Corrugated baffle filters, not regenerable, self-extinguishing, G4 efficiency class (according to EN 779).

Differential pressure switch (STANDARD) for dirty filter alarm.

The control of filter dirt conditions via Modbus is available as an option.

ELECTRONIC CONTROLLER

The evolved electronic adjustment maximises energy saving and optimizes all operating modes of the units, both direct expansion and chilled water.

- The controller allows to supervise all main components of the unit, with more than 50 different variables that guarantee real time monitoring of all operating cycles.
- The units have a standard RS485 Modbus board, BACnet, LonWorks and SNMP are available as options, for a simple and quick interface with BMS (Building Management System) supervising systems.
- View of all operating parameters in 8 languages.

CHILLED WATER COILS

Only for U configurations.

Large surface batteries, positioned in such a way as to optimise airflow and heat transfer, made of refrigerating quality copper tubes with aluminium louvers mechanically merged, fitted with motorised 3way valve (2way is also available in the selection process).

COMPRESSORS

Only for A configurations

Single circuit configurations with DC brushless compressor with inverter, which allows to optimise the provided power guaranteeing a low electrical absorption.

These units work with R410A refrigerant, which does not damage the ozone layer.

Electronic expansion valve standard on all sizes.

ACCESSORIES

Direct expansion

- Electric power supply line for remote condenser
- Electric power supply line with speed adjustment for remote condenser
- Condenser adjustment with 0-10V signal for remote condenser with EC fans
- Water condenser
- Condensate adjustment pressure valve
- "LAC" (Low Ambient Control) valve has the function of bypassing the condenser, injecting warm gas in the liquid piping, to maintain the refrigerant pressure stable. Use is recommended in very cold climates, in case of inverter compressors and in case of oversized condensers with respect to the real necessities of the units.

Chilled water

- Two ways modulating valves
- Inlet and outlet water temperature probes
- "Power Valve" kit: automatic adjustment and balancing valve of the water circuit, which allows to guarantee a constant water flow rate and monitor the efficiency of the unit in real time.

Heating

— Single stage electric coils with low thermal inertia.

Humidification

- Room humidity probe
- Flow humidity probe

SMARTNET

The innovative **SMARTNET** system revolutionises the local area network concept.

This system, using the modulation capabilities of its components, allows dividing the workload across all units in the local area network. Compared to the Duty Stand-by (n+1 o n+n) redundancy system, where the backup units were stopped waiting for a problem to arise,

Submerged electrodes humidifier (also available with low conductivity cylinder)

Water presence detection

 Available as punctual probe or fabric belt (length 5 m) Allows to have an alarm in case water presence, even partial, is detected.

Mechanicals and structural

- Condensate discharge pump
- M5 (EU5) efficiency air filter on air supply
- Closed front panel for side flow
- Closed side panels for front flow
- Wheels for movement

Electrical

- The unit has a standard power supply $400V \sim 3N$ 50Hz. The following voltages are available as an alternative: $400V \sim 3N$ 60Hz, $230V \sim 3$ 60Hz, $380V \sim 3N$ 60Hz
- Electric power supply line without neutral
- "Basic" version automatic transfer switch (ATS)
- Advanced" version automatic transfer switch (ATS)

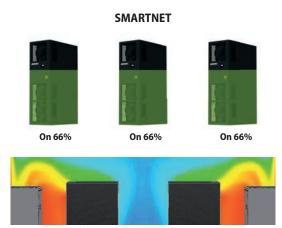
Regulation

- Constant flow rate ventilation adjustment
- Constant pressure ventilation adjustment
- Local area network configuration and cable
- User terminal for remote installation
- For further details refer to the technical documentation or to the selection program.

the SMARTNET system allows to maintain the units connected on the network always active with various advantages:

- greater efficiency of the units with partial loads;
- optimal air distribution, eliminating the risk of environment hotspots;
- internal system redundancy,

DUTY / STAND-BY On 100% On 100% Stand by



TECHNICAL DATA

RXA: horizontal air delivery - direct expansion with air or water condensation

	'	RXA 121	RXA 201	RXA 231	RXA 361	
Cooling performances (1)	'					
Total cooling capacity	kW	9,6	19,3	20,8	32,5	
Sensible cooling capacity	kW	9,6	15,1	17,2	26,3	
EER (2)	W/W	3,14	3,09	3,36	3,43	
Fans						
Туре	type		Plug-fan E	Cinverter		
Air flow rate	m³/h	3200	3600	6000	6600	
Refrigerant circuit						
Number	no.	1	1	1	1	
Sound data						
Sound pressure (3)	dB(A)	51	54	54	57	
Possible configurations						
Free Cooling		-	-	Yes	-	
Two Sources		-	-	Yes	-	
Electric data						
Power supply		400V ~ 3N 50Hz				

- (1) Condensation temperature 45 °C; incoming air 24 °C / 45 % u.r.; external static pressure: 30Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system.
 (2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers).
 (3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

RXU: horizontal air delivery - cooled water

		RXU 20	RXU 40	
Cooling performances (1)	'			
Total cooling capacity	kW	24,9	37,8	
Sensible cooling capacity	kW	22,2	33,9	
EER (2)	W/W	22,81	27,78	
Fans				
Туре	type	Plug-fan EC inverter		
Air flow rate	m³/h	5600	9000	
Refrigerant circuit				
Number	no.	1	1	
Sound data				
Sound pressure (3)	dB(A)	54	62	
Possible configurations				
Free Cooling		-	-	
Two Sources		-	Yes	
Electric data				
Power supply		400V ~ 3N 50Hz		

- (1) Incoming air 24 °C / 45 % r.h.; water 7 °C / 12 °C; external static pressure: 30 Pa. Stated performances do not take into account the heat generated by the fans which must be added to the heat load of the system. (2) EER: Energy Efficiency Ratio; total cooling capacity / input power to the compressors + the power of fans (excluding air condensers). (3) Sound pressure: stated data 2m away, in free field according to UNI EN ISO 3744:2010

HORIZONTAL FLOW CONFIGURATIONS



Standard execution for "In-row" installation with front and side air delivery (RXA 121-201, RXU 20).



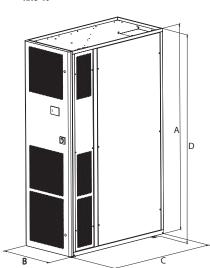
Execution for "In-row" installation with only front air delivery (RXA 231-361, RXU 40).

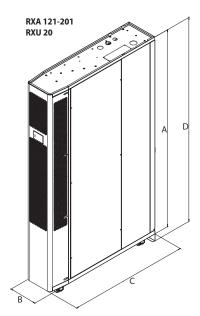


Execution for "In-row" installation with only side air delivery (RXA 231-361, RXU 40).

DIMENSIONS







		RXA 121	RXA 201	RXA 231	RXA 361
Dimensions and weights					
A	mm	1975	1975	1985	1985
В	mm	300	300	600	600
C	mm	1200	1200	1222	1222
D	mm	2045	2045	2015	2015
Empty weight	kg	200	215	215	215

		RXU 20	RXU 40
Dimensions and weights			
A	mm	1975	1985
В	mm	300	600
C	mm	1200	1222
D	mm	2045	2015
Empty weight	kg	120	190



ROOM AIR CONDITIONERS

A complete range of units designed to meet all climate control requirements: Aermec the answer to air conditioning.

A vast choice not only in terms of models but also alternatives and possibilities: state-of-the-art technology such as the inverter that optimises performance at all times according to the set temperature to achieve maximum energy saving; versatile installation options to solve all problems of space.

Quality design and materials, cooling and heating power suited to cover all requirements both in the residential and commercial sector, exclusive elegant design complete the range features, ranking Aermec among the leaders on the market.

	ROOM AIR CO	ONDITIONERS	Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Monobloc					
	FK	Monobloc window		2,7-3,6		874
	CMP (COMPACT)	Monobloc without outdoor unit		2,35	2,36	877
	PSL	Portable air conditioner		2,6-3,4	2,3-2,7	880
	Monosplit					
	SPG	Monosplit		2,5-6,2	2,8-6,5	883
	SGE	Monosplit		2,8-5,9	2,9-6,0	888
new	SCG	Monosplit		7,2-12,5	7,9-14,5	892
	CKG	Monosplit		2,7-6,6	2,9-6,8	896
	LPG	Monosplit		3,5-16,0	4,0-17,0	901
	MVAS	Monosplit high head duct		22,4-28,0	24,0-30,0	910
	Multisplit					
	MPG	Multisplit		4,1-12,1	4,4-13,0	913
	MGE	Multisplit		4,1-7,9	4,4-8,2	930











FK

Monobloc window

Cooling capacity 2,7 ÷ 3,6 kW



- New R32 ecological refrigerant gas.
- Flush-mounting installation on the window.
- Plug & Play.





DESCRIPTION

The packed air-conditioners of the FK range, for flush-mounting window installation, are ideal for use in commercial contexts such as shops, hotels, offices, laboratories and prefabricated garages.

FEATURES







Inner and outer side

- Remote control and holder standard supply with each unit.
- Fans with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Clean filter signal function.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- Inner side 3-speed fan, to meet every possible need.
- Auto function for a continuous speed variation.Sleep night time function well-being program.
- DC inverter rotary compressor.

General features

- New R32 ecological refrigerant gas with low GWP.
- Monobloc Plug & Play unit equipped with power supply with schuko plug.
- Operating mode: cooling, dehumidification and fan only.
- Condensate discharge tub included.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.— Self-diagnosis function.
- Sell-diagnosis function.

INSTALLATION TYPE



PERFORMANCE SPECIFICATIONS

		FK260	FK360
Nominal cooling performances			
Cooling capacity (1)	kW	2,70	3,65
Cooling input power (1)	kW	0,78	1,03
EER (2)	W/W	3,45	3,54
Moisture removed	l/h	1,0	1,6
Maximum cooling performances			
Cooling input current	A	3,5	4,6
Seasonal efficiency			
SEER	W/W	5,20	5,40
Efficiency energy class (3)		A	A
Pdesignc	kW	2,7	3,7
Annual power consumption	kWh/annum	182	240

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m. (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication. (3) Data in accordance with Delegated Regulation (EU) No. 626/2011.

GENERAL DATA

		FK260	FK360
Electric data			
Rated power input (1)	kW	1,10	1,30
Rated current input (1)	A	5,5	6,5
Power supply			
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

INNER SIDE

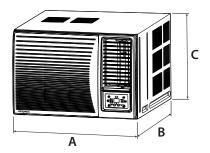
		FK260	FK360
Inner side			
Type of fan	Туре	Inverter centrifugal	Inverter centrifugal
Inner side air flow rate			
Maximum	m³/h	400	480
Average	m³/h	360	430
Minimum	m³/h	320	380
Inner side sound pressure			
Maximum	dB(A)	50,0	50,0
Average	dB(A)	48,0	48,0
Minimum	dB(A)	46,0	46,0
Inner side sound power			
Maximum	dB(A)	59,0	59,0
Average	dB(A)	57,0	57,0
Minimum	dB(A)	55,0	55,0

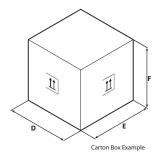
OUTER SIDE

		FK260	FK360
Outer side			
Type of fan	Туре	Inverter axial	Inverter axial
Outer side air flow rate			
Maximum	m³/h	800	1200
Outer side sound power			
Maximum	dB(A)	65,0	65,0
Average	dB(A)	63,0	63,0
Minimum	dB(A)	61,0	61,0
Outer side sound pressure			
Maximum	dB(A)	56,0	56,0
Average	dB(A)	54,0	54,0
Minimum	dB(A)	52,0	52,0
Compressor			
Туре	type	Inverter rotary	Inverter rotary
Compressor			
Refrigerant	type	R32	R32
Refrigerant charge (1)	kg	0,5	0,6
Compressor			
Potential global heating	GWP	675kgCO₂eq	675kgCO₂eq
Equivalent CO ₂	t	0,34	0,43
Outer side			
Protection rating		IPX4	IPX4

⁽¹⁾ The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DIMENSIONS AND WEIGHTS





		FK260	FK360
Dimensions and weights			
A	mm	560	660
В	mm	710	700
C	mm	375	428
D	mm	623	739
E	mm	806	793
F	mm	425	505
Net weight	kg	43,0	50,0
Weight for transport	kg	47,0	54,0











Monobloc without outdoor unit

Cooling capacity 2,35 kW Heating capacity 2,36 kW



- Two holes, no outdoor units.
- Modern design to blend with all furnishing styles.
- Extremely thin, with a depth of just 165 mm.







DESCRIPTION

The air-conditioners of the CMP range are of the single-block type and are ideal for heating, cooling, dehumidification or ventilation only, whether in the home or the office.

The absence of an outdoor unit permits installation in all those cases where architectural restraints prevent the positioning of a split air-conditioner. The unit boasts a compressor and a fan with inverter technology.

FEATURES

Unit

Indoor unit designed for installation on internal walls.

- No need for an outdoor unit just make two 162 mm holes in the outer wall so the air-conditioner can exchange heat with the external environment.
- Folding grilles included.
- On-board control panel with display and soft-touch keys.
- Included remote control.

Cooling operation with outside temperatures up to 35 °C. Heating operation with outdoor temperatures down to 7 °C.







Folding grilles

With two folding grilles which, activated by the inlet and outlet air, open when the machine is working and close when the machine is switched off. In this way they guarantee enhanced indoor comfort, less dust, noise and pollution, reduced maintenance and are even less visible from the outside.

Control panel

The on-board control panel with display and soft-touch keys allows you to set the required temperature set-point easily and accurately.

The "heating" function is deactivated by a simple intervention on the control panel: the device then works in "cooling only" mode, without requiring the condensate discharge tube.

The air delivery fin is easily orientated by means of the relative key.

Remote control

Handy remote control that's not too bulky.

Fitted with a practical magnet so it can be fixed to the unit.

All the control panel functions are available via the remote control too.

GENERAL FEATURES

- Condensate drip tray constantly pre-heated in the winter during heat pump operation, without any risk of the water freezing.
- Operating mode: cooling, dehumidification and fan only.
- Particularly quiet operation.
- Microproccessor control.

ACCESSORIES AS STANDARD

- Condensate drip.
- Two folding grilles.
- Remote control.

PERFORMANCE SPECIFICATIONS

		CMP23I	
Nominal cooling performances	'		
Cooling capacity (1)	kW	2,35	
Cooling input power (1)	kW	0,73	
EER (2)	W/W	3,22	
Maximum cooling performances			
Cooling capacity	kW	3,10	
Nominal cooling performances			
Moisture removed	l/h	1,1	
Seasonal efficiency			
Efficiency energy class (3)		A+	
Annual power consumption	kWh/annum	425	
Nominal heating performances			
Heating capacity (4)	kW	2,36	
Heating input power (4)	kW	0,72	
COP (2)	W/W	3,28	
Maximum heating performances	<u> </u>		
Heating capacity	kW	3,05	
Seasonal efficiency (temperate climate)	<u> </u>		
Efficiency energy class (3)		A	

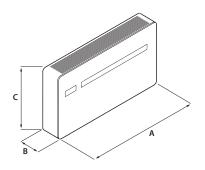
- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
 (3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
 (4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

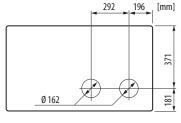
GENERAL DATA

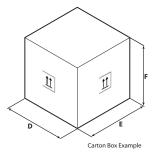
	·	CMP23I	
Fan			
Туре	type	Inverter centrifugal	
Number	no.	1	
Inner side air flow rate			
Maximum	m³/h	400	
Average	m³/h	320	
Minimum	m³/h	270	
Outer side air flow rate			
Maximum	m³/h	480	
Average	m³/h	390	
Minimum	m³/h	340	
Compressor			
Number	no.	1	
Refrigerant	type	R410A	
Refrigerant charge (1)	kg	0,6	
Potential global heating	GWP	2088kgCO₂eq	
Sound data calculated in cooling mode (2)			
Sound power level	dB(A)	58,0	
Sound pressure level (1,5 m)	dB(A)	46,0	

- (1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
 (2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS AND WEIGHTS







		CMP23I	
Dimensions and weights	'		
A	mm	1030	
В	mm	170	
C	mm	555	
D	mm	1100	
E	mm	260	
F	mm	660	
Net weight	kg	48,0	
Weight for transport	kg	49,0	

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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Portable air conditioner



Cooling capacity 2,6 ÷ 3,4 kW Heating capacity 2,3 ÷ 2,7 kW



PSL

4

- New R290 natural refrigerant gas.
- Reversible heat pump.
- Compact, manoeuvrable and silent.
- Modern design to blend with all furnishing styles.
- Special coil with fin blue coating.







DESCRIPTION

PSL portable air conditioner, ideal for heating, cooling, dehumidification or ventilation only both at home and at the office.

Adapts to any kind of decor, thanks to its compact and elegant design; it is mounted on wheels and can be used in multiple rooms, and is easily transportable and installable.

Equipped with a specific tank to collect the moisture removed from the environment during cooling, heating or dehumidification.

The on-board control panel with display, allows to easily and precisely set the desired temperature set-points.

FEATURES







Operation

The cooled, heated and/or dehumidified air exits the front grille and directed vertically by movable louvers. The air to be treated is drawn through filters from the rear. The hot air is expelled through a hose that is attached by means of a special flange on the rear of the portable air conditioner unit. The air filters are easy to remove and wash.

Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



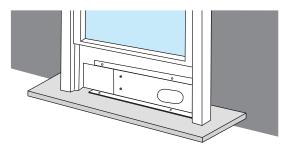
GENERAL FEATURES

- Remote control standard supply with each indoor unit.
- New R290 natural refrigerant gas.
- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Regenerable air filter easy to remove and clean.
- Particularly quiet operation.
- Timer for programming switch-off and switch-on.
- Indoor unit front panel with LED display and indicator lights.
- 3-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Auto-restart function.

ACCESSORIES AS STANDARD

- Hot air expulsion hose with special joints and collectors.
- Condensate discharge hose, discharge tap and relative fixing accesso-
- Window kit and protection mesh to connect the hot air expulsion hose.
- Cap for the wall and connection for the hot air expulsion hose.
- Remote control.

WINDOW KIT



FLEXIBLE PIPE

		PSL350	
Flexible pipe			
Minimum length	mm	270	
Maximum length	mm	1500	

PERFORMANCE SPECIFICATIONS

		PSL350	
Nominal cooling performances			
Cooling capacity (1)	kW	3,40	
EER (2)	W/W	2,60	
Seasonal efficiency			
Efficiency energy class (3)		A	
Nominal heating performances			
Heating capacity (4)	kW	2,70	
COP (2)	W/W	2,80	
Seasonal efficiency (temperate clima	ate)		
Efficiency energy class (3)		A+	

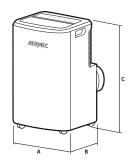
- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m. (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication. (3) Data in accordance with Delegated Regulation (EU) No. 626/2011. (4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

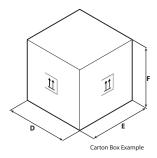
GENERAL DATA

		PSL350
Electric data		
Rated power input (1)	kW	1,50
Rated current input (1)	A	8,0
Fan		
Туре	type	Centrifugal on/off
Air flow rate		
Maximum	m³/h	390
Average	m³/h	360
Minimum	m³/h	330
Sound power		
Maximum	dB(A)	64,0
Average	dB(A)	63,5
Minimum	dB(A)	63,0
Sound pressure (2)		
Maximum	dB(A)	35,0
Average	dB(A)	33,0
Minimum	dB(A)	31,0
Compressor		
Туре	type	Rotary on/off
Number	no.	1
Refrigerant	type	R290
Refrigerant charge (3)	kg	0,2
Power supply cable		
Type of power supply cable	Туре	3G1,0 mm2/L= 2,85 m/Schuko plug
Power supply		
Power supply		220-240V ~ 50Hz
Indoor unit		
Condensate discharge diameter	mm	13,5

- (1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40. (2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source. (3) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DIMENSIONS AND WEIGHTS





		PSL350	
Dimensions and weights			
A	mm	476	
В	mm	385	
(mm	710	
D	mm	545	
E	mm	435	
F	mm	885	
Net weight	kg	34,0	
Weight for transport	kg	39,0	

















SPG

Monosplit

Cooling capacity 2,5 ÷ 6,2 kW Heating capacity 2,8 ÷ 6,5 kW



- New R32 ecological refrigerant gas.
- Wi-fi control using the relative accessory.
- Modern design to blend with all furnishing styles.
- Special coil with fin blue coating.
- Indoor units compatible with multisplit systems.







DESCRIPTION

The monosplit air conditioners of the SPG range are combined with SPG_W (Wall) indoor units for wall installation.

Universal indoor units: some indoor units can be combined with both multisplit outdoor units of the series MPG and monosplit outdoor units of the series SPG:

	Indoor units SPG_W					
	SPG200W SPG250W SPG350W SPG500W SPG700W					
Monosplit outdoor units SPG		•	•	•	•	
Multisplit utdoor units MPG	•	•	•			

The external unit boasts a compressor and a fan with inverter technology.

FEATURES







Indoor unit

Wall indoor unit designed to be installed on indoor walls.

- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- 3-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- Sleep night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.

 iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.

Outdoor unit

Monosplit air conditioner.

Reversible air/air heat pump with DC inverter technology.

— Compressor and fan with DC inverter technology.

X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.







Smart APP Ewpe

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.



Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



General features

- New R32 ecological refrigerant gas with low GWP.
- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Easy installation and maintenance.

ACCESSORIES

CC2: Centralised control with 7" touchscreen display for managing several indoor units within a number of multisplit systems. The centralised control has an integrated external contact. For more information, refer to the specific documentation. *

WRCA: Wired panel with liquid crystal display and soft-touch buttons. This accessory can be used to control not only the traditional system functions but also a weekly timer with a maximum of 8 daily time bands.

* The CC2 centralised control can manage up to 36 SPG system.

In order to use accessory CC2, for each indoor unit, the WRCA wired panel (accessory) must be installed, with the IC-2P adapter accessory.

DCK: Remote Contact Kit. This accessory allows you to switch the system on and off using an external contact.

WIFIKITO1: Plug & Play module to be installed in the indoor unit for Wi-Fi control, equipped with Bluetooth® connection to ensure a better connection with smart devices. (Cable length 250 mm)



DTG1: Diagnostic tool for indoor and outdoor units of the entire series (tool reserved for service centres or installers).

ACCESSORIES COMPATIBILITY

Accessory			SPG700W			
CC2 (1)		•		•		
WRCA (1)		•		•		
(1) Auto-restart function.						
Accessory	SPG500W SPG700W					
IC-2P		•	,	•		
Accessory	SPG200W	SPG250W	SPG350W	SPG500W	SPG700W	
DCK				•	•	
WIFIKIT01	•	•	•	•	•	

PERFORMANCE SPECIFICATIONS

Indoor unit	,	SPG250W	SPG350W	SPG500W	SPG700W
Outdoor unit		SPG250	SPG350	SPG500	SPG700
Nominal cooling performances					
Cooling capacity (1)	kW	2,50	3,20	4,60	6,20
Cooling input power (1)	kW	0,72	0,99	1,36	1,77
EER (2)	W/W	3,47	3,23	3,39	3,50
Moisture removed	I/h	0,6	1,4	1,8	1,8
Minimum cooling performances					
Cooling capacity	kW	0,50	0,90	1,00	1,60
Cooling input power	kW	0,15	0,22	0,42	0,45
Maximum cooling performances					
Cooling capacity	kW	3,25	3,60	5,30	6,90
Cooling input power	kW	1,30	1,30	1,80	2,20
Cooling input current	A	3,2	4,4	5,9	7,9
Seasonal efficiency					
Annual power consumption	kWh/annum	135	184	251	319
SEER	W/W	6,50	6,10	6,40	6,80
Efficiency energy class (3)		A++	A++	A++	A++
Nominal heating performances					
Heating capacity (4)	kW	2,80	3,40	5,20	6,50
Heating input power (4)	kW	0,75	0,91	1,34	1,65
COP (2)	W/W	3,73	3,71	3,88	3,95
Minimum heating performances					
Heating capacity	kW	0,50	0,90	1,00	1,30
Heating input power	kW	0,14	0,22	0,42	0,45
Maximum heating performances					
Heating capacity	kW	3,50	4,00	5,65	7,91
Heating input power	kW	1,50	1,50	1,90	2,20
Heating input current	A	3,2	4,0	5,8	7,3
Seasonal efficiency (temperate climate)					
Annual power consumption	kWh/annum	875	945	1295	1645
Efficiency energy class (3)		A+	A+	A+	A+
SCOP	W/W	4,00	4,00	4,00	4,00

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
 (3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
 (4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

INDOOR UNIT DATA

		SPG250W	SPG350W	SPG500W	SPG700W
Indoor unit					
Type of fan	Туре		Inverter o	entrifugal	
Air flow rate					
Turbo	m³/h	500	590	850	1100
Maximum	m³/h	470	520	800	950
Average	m³/h	390	400	700	750
Minimum	m³/h	270	320	600	650
Sound power (1)					
Turbo	dB(A)	55,0	56,0	54,0	61,0
Maximum	dB(A)	48,0	49,0	52,0	58,0
Average	dB(A)	44,0	45,0	48,0	52,0
Minimum	dB(A)	34,0	38,0	44,0	49,0
Sound pressure (1 m) (2)					
Turbo	dB(A)	38,0	41,0	44,0	47,0
Maximum	dB(A)	36,0	37,0	42,0	44,0
Average	dB(A)	32,0	33,0	38,0	38,0
Minimum	dB(A)	22,0	26,0	34,0	35,0
Indoor unit					
Condensate discharge diameter	mm	16,0	16,0	16,0	16,0
Power supply					
Indoor unit power supply			220-240	V ~ 50Hz	

- (1) Sound power calculated in free field, in accordance with UNI EN ISO 3744. (2) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

OUTDOOR UNIT DATA

		SPG250	SPG350	SPG500	SPG700
Outdoor unit					
Type of fan	Туре		Invert	er axial	
Air flow rate					
Maximum	m³/h	1950	1950	1950	2800
Sound power (1)					
Maximum	dB(A)	62,0	64,0	63,0	67,0
Sound pressure (1 m) (2)					
Maximum	dB(A)	51,0	51,0	55,0	58,0
Compressor					
Туре	type		Inverte	er rotary	
Refrigerant	type		R	32	
Refrigerant charge	kg	0,50	0,55	0,75	1,30
Potential global heating	GWP		675kg	gCO₂eq	
Equivalent CO ₂	t	0,34	0,37	0,51	0,88
Outdoor unit					
Condensate discharge diameter	mm	16,0	16,0	16,0	16,0

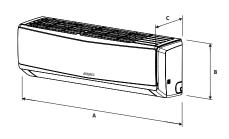
GENERAL DATA

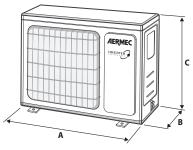
Indoorunit		SPG250W	SPG350W	SPG500W	SPG700W
Outdoor unit		SPG250	SPG350	SPG500	SPG700
Electric data					
Rated power input (1)	kW	1,50	1,50	1,90	2,20
Rated current input (1)	A	7,5	7,5	9,0	10,0
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")
Refrigerant to be added	g/m	16	16	16	16
Maximum refrigerant tube length	m	15	15	25	25
Maximum refrigerant line level difference	m	10,0	10,0	10,0	10,0
Power supply					
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

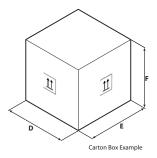
⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

⁽¹⁾ Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

DIMENSIONS AND WEIGHTS







		SPG250W	SPG350W	SPG500W	SPG700W
Indoor unit					
A	mm	696	770	972	1081
В	mm	251	251	300	325
-	mm	190	190	225	248
)	mm	747	822	1022	1137
	mm	324	324	374	407
	mm	262	262	299	334
Vet weight	kg	7,5	8,5	13,5	16,5
Weight for transport	kg	9,0	10,0	16,0	19,5
		SPG250	SPG350	SPG500	SPG700
Outdoor unit					
A	mm	732	732	732	873
3	mm	330	330	330	376
(mm	550	550	555	555
	mm	792	792	794	951
)					
) <u> </u>	mm	393	393	376	431
) <u>-</u>			393 615	376 615	431 620
D E F Net weight	mm	393			























SGE

Monosplit

Cooling capacity 2,8 ÷ 5,9 kW Heating capacity 2,9 ÷ 6,0 kW



- New R32 ecological refrigerant gas.
- Air Purifiers (Cold Plasma).
- Possibility of Wi-Fi control.
- Innovative design sleek curved lines.
- Special coil with fin golden coating.









DESCRIPTION

The monosplit air conditioners of the SGE range are combined with SGE_W (Wall) indoor units for wall installation.

The external unit boasts a compressor with inverter technology.

FEATURES

Innovative design

SGE has an elegant and essential design. Its curved lines emphasize a kind of structure with innovative and functional style. The display with working parameters is elegantly integrated in the satin-finish cover and visible only when the unit is on.







Indoor unit

Wall indoor unit designed to be installed on indoor walls.

- Remote control standard supply with each indoor unit.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- 3-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- followMe function for activating the ambient temperature probe inside the remote control, for improved comfort.

Outdoor unit

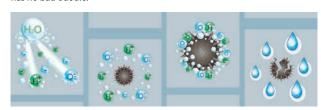
Monosplit air conditioner.

Reversible air/air heat pump with DC inverter technology.

Compressor and fan with DC inverter technology.

Air Purifiers (Cold Plasma)

Capable of reducing pollutants breaking down their molecules using electric discharges, causing the splitting of the water molecules in the air into positive and negative ions. These ions neutralise the molecules of the gaseous pollutants obtaining products that are normally present in clean air. The device can eliminate 90% of bacteria. The result is clean, ionised air that has no bad odours.



Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



Nethome Plus app

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.









General features

- New R32 ecological refrigerant gas with low GWP.
- New R32 ecological retrigerant gas with low gwr.

 Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.— Easy installation and maintenance.

ACCESSORIES

WIFIKEY: Plug & Play module to be installed in the indoor unit for Wi-Fi control.

Accessories compatibility

Accessory	SGE250W	SGE350W	SGE500W	SGE700W
WIFIKEY	•	•	•	•

PERFORMANCE SPECIFICATIONS

Indoor unit		SGE250W	SGE350W	SGE500W	SGE700W
Outdoor unit		SGE250	SGE350	SGE500	SGE700
Nominal cooling performances					
Cooling capacity (1)	kW	2,77	3,46	5,27	5,86
Cooling input power (1)	kW	0,77	1,06	1,55	1,81
EER (2)	W/W	3,60	3,25	3,40	3,24
Moisture removed	I/h	1,0	1,2	1,8	2,7
Minimum cooling performances					
Cooling capacity	kW	0,91	1,11	3,39	2,08
Cooling input power	kW	0,10	0,13	0,56	0,42
Maximum cooling performances					
Cooling capacity	kW	3,39	4,16	5,83	7,91
Cooling input power	kW	1,24	1,58	2,05	3,15
Cooling input current	A	3,3	4,6	6,7	7,9
Seasonal efficiency					
SEER	W/W	6,30	6,40	7,40	6,80
Efficiency energy class (3)		A++	A++	A++	A++
Annual power consumption	kWh/annum	156	190	247	300
Nominal heating performances					
Heating capacity (4)	kW	2,93	3,57	4,97	6,00
Heating input power (4)	kW	0,73	0,96	1,29	1,61
COP (2)	W/W	4,00	3,71	3,83	3,73
Minimum heating performances					
Heating capacity	kW	0,82	1,08	3,10	1,61
Heating input power	kW	0,12	0,10	0,78	0,30
Maximum heating performances					
Heating capacity	kW	3,37	4,22	5,85	7,91
Heating input power	kW	1,20	1,68	2,00	2,75
Heating input current	A	3,2	4,2	5,6	7,0
Seasonal efficiency (temperate climate)					
SCOP	W/W	4,00	4,00	4,00	4,00
Efficiency energy class (3)		A+	A+	A+	A+
Annual power consumption	kWh/annum	910	945	1435	1818
Seasonal efficiency (hot climate)					
SCOP	W/W	5,10	5,10	5,10	5,00
Efficiency energy class (3)		A+++	A+++	A+++	A++
Annual power consumption	kWh/annum	714	686	1260	1705

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m. (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication. (3) Data in accordance with Delegated Regulation (EU) No. 626/2011. (4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

INDOOR UNIT

		SGE250W	SGE350W	SGE500W	SGE700W
Indoor unit					
Type of fan	Туре		Tang	ential	
Air flow rate					
Maximum	m³/h	466	540	840	980
Average	m³/h	360	430	680	817
Minimum	m³/h	325	314	540	662
Sound power (1)					
Maximum	dB(A)	54,0	55,0	56,0	59,0
Sound pressure (1 m) (2)					
Maximum	dB(A)	38,5	40,5	42,5	45,0
Average	dB(A)	32,0	34,5	36,0	40,5
Minimum	dB(A)	25,0	25,0	26,0	36,0

OUTDOOR UNIT

		SGE250	SGE350	SGE500	SGE700
Outdoor unit		741174			
Type of fan	Туре	Axial	Axial	Axial	Axial
Air flow rate	71	·			
Maximum	m³/h	1750	1800	2100	3500
Sound power (1)					
Maximum	dB(A)	62,0	63,0	63,0	67,0
Sound pressure (1 m) (2)					
Maximum	dB(A)	55,5	56,0	56,0	59,0
Compressor					
Туре	type	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary
Refrigerant	type	R32	R32	R32	R32
Refrigerant charge	kg	0,55	0,55	1,08	1,42
Potential global heating	GWP	675kgCO₂eq	675kgCO₂eq	675kgCO₂eq	675kgCO₂eq
Equivalent CO ₂	t	0,37	0,37	0,73	0,96

GENERAL DATA

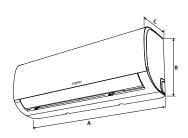
Indoor unit		SGE250W	SGE350W	SGE500W	SGE700W
Outdoor unit		SGE250	SGE350	SGE500	SGE700
Electric data					
Rated power input (1)	kW	2,20	2,20	2,50	3,50
Rated current input (1)	A	10,0	10,0	13,0	15,5
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	15,9 (5/8")
Maximum refrigerant tube length	m	25	25	30	50
Maximum refrigerant line level difference	m	10,0	10,0	20,0	25,0
Refrigerant to be added	g/m	12	12	12	24
Power supply					
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

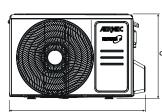
⁽¹⁾ Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

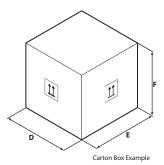
⁽¹⁾ Sound power calculated in free field, in accordance with UNI EN ISO 3744. (2) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

DIMENSIONS AND WEIGHTS









		CCTATANI	CCF2FAW	CCFFOOW	CCFTANU
		SGE250W	SGE350W	SGE500W	SGE700W
Indoor unit					
A	mm	805	805	957	1040
3	mm	285	285	302	327
	mm	194	194	213	220
)	mm	870	870	1035	1120
E	mm	270	270	295	405
F	mm	365	365	385	315
Net weight	kg	7,6	7,6	10,0	12,3
Weight for transport	kg	9,7	9,8	13,0	15,8
		SGE250	SGE350	SGE500	SGE700
Outdoor unit					
A	mm	720	720	805	890
В	mm	270	270	330	342
[mm	495	495	554	673
D	mm	835	835	915	995
E	mm	300	300	370	398
	mm	540	540	615	740
			22.2	77.7	42.0
Net weight	kg	23,2	23,2	32,7	42,9

















SCG_1

Monosplit

Cooling capacity 7,2 kW ÷ 12,5 kW Heating capacity 7,9 kW ÷ 14,5 kW



- New R32 ecological refrigerant gas.
- Standard Wi-Fi module.
- Modern design to blend with all furnishing styles.
- Easy installation and maintenance.
- Ideal for installations in the service sector: hotels, restaurants, offices.



DESCRIPTION

The monosplit air conditioners of the SCG_1 range are combined with SCG_1V (column) indoor units for floor installation.

Thanks to their compact size, ease of installation and modern design, they are suitable for environments such as shops, restaurants, shopping centers, doctor's offices, etc.

The outdoor unit features a compressor with inverter technology and an electronic valve.

FEATURES







X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.







Indoor unit

Indoor unit **column** designed to be installed for indoor floor installation.

- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
 3-speed fan, to meet every possible need.
- **Turbo** function to attain the desired temperature as quickly as possible.
- Sleep night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Auto function for a continuous speed variation.

Outdoor unit

Monosplit air conditioner.

Reversible air/air heat pump with DC inverter technology.

- Compressor and fan with DC inverter technology.
- Fitted with an electronic expansion valve.

Smart APP Ewpe

This system is fitted **standard** with a wi-fi module that can be used, along with the app for iOS and Android devices (available free on Apple Store and Google Play), to control the system remotely on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.









Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



General features

- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Easy installation and maintenance.

ACCESSORIES

DTG1: Diagnostic tool for indoor and outdoor units of the entire series (tool reserved for service centres or installers).

PERFORMANCE SPECIFICATIONS

Indoor unit		SCG701V	SCG1201V	SCG1201VT
Outdoor unit		SCG701	SCG1201	SCG1201T
Nominal cooling performances				
Cooling capacity (1)	kW	7,20	12,30	12,50
Cooling input power	kW	2,05	4,17	3,79
Cooling input current	A	9,0	18,0	5,6
EER (2)	W/W	3,51	2,95	3,30
Moisture removed	l/h	2,5	5,0	5,0
Minimum cooling performances				
Cooling capacity (1)	kW	0,97	1,50	3,10
Cooling input power	kW	0,35	0,55	0,30
Maximum cooling performances				
Cooling capacity (1)	kW	8,40	13,50	14,50
Cooling input power	kW	2,95	5,06	5,70
Seasonal efficiency				
SEER	W/W	6,10	5,70	6,10
Efficiency energy class (3)		A++	-	-
Annual power consumption	kWh/annum	413	-	-
ηςς	%	-	227,00	241,00
Nominal heating performances				
Heating capacity (4)	kW	7,90	12,60	14,50
Heating input power	kW	2,33	3,82	3,86
Heating input current	A	10,5	16,0	5,7
COP (2)	W/W	3,39	3,30	3,76
Minimum heating performances				
Heating capacity (4)	kW	0,64	2,50	3,30
Heating input power	kW	0,39	0,50	0,64
Maximum heating performances				
Heating capacity (4)	kW	8,80	14,00	16,50
Heating input power	kW	3,03	5,06	4,70
Seasonal efficiency (temperate climate)			
SCOP	W/W	3,80	3,70	4,00
Efficiency energy class (3)		A	-	-
Annual power consumption	kWh/annum	2063	-	-
ηsh	%	-	146,00	157,00

- (1) Cooling (EN-14511 and EN-14825) Ambient air temperature 27°C D.B. / 19°C W.B.; Outside air temperature 35°C; Max speed; Length of Refrigerant Lines 5m. (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication. (3) Data in accordance with Delegated Regulation (EU) No. 626/2011. (4) Heating (EN-14511 and EN-14825) Ambient air temperature 20°C D.B.; Outside air temperature 7°C D.B./6°C W.B.; Max speed; Length of Refrigerant Lines 5m.

INDOOR UNIT DATA

		SCG701V	SCG1201V	SCG1201VT
Indoor unit				
Type of fan	Туре		Centrifugal	
Air flow rate				
Turbo	m³/h	1250	2000	2400
Maximum	m³/h	950	1850	2200
Average	m³/h	850	1700	2000
Minimum	m³/h	750	1580	1800
Sound power (1)				
Turbo	dB(A)	56,0	64,0	66,0
Maximum	dB(A)	52,0	61,0	64,0
Average	dB(A)	50,0	60,0	63,0
Minimum	dB(A)	46,0	58,0	61,0
Sound pressure (2)				
Turbo	dB(A)	45,0	53,0	56,0
Maximum	dB(A)	41,0	51,0	54,0
Average	dB(A)	39,0	50,0	53,0
Minimum	dB(A)	35,0	48,0	51,0

OUTDOOR UNIT DATA

		SCG701	SCG1201	SCG1201T
Outdoor unit				
Type of fan	Туре		Axial	
Air flow rate				
Maximum	m³/h	3600	4000	5200
Sound power (1)				
Maximum	dB(A)	70,0	73,0	74,0
Sound pressure (2)				
Maximum	dB(A)	61,0	63,0	63,0
Compressor				
Туре	type		Rotativo Inverter	
Refrigerant	type		R32	
Potential global heating	GWP		675kgCO₂eq	·
Refrigerant charge	kg	1,50	2,00	2,80
Equivalent CO ₂	t	1,01	1,35	1,89

⁽¹⁾ Sound power calculated in free field, in accordance with UNI EN ISO 3744. (2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

⁽¹⁾ Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

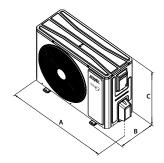
GENERAL DATA

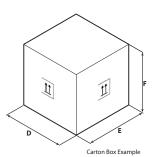
Indoor unit		SCG701V	SCG1201V	SCG1201VT
Outdoor unit		SCG701	SCG1201	SCG1201T
Electric data				
Rated power input (1)	kW	3,03	5,06	5,70
Rated current input - cooling	Α	14,5	20,0	9,8
Rated current input - heating	A	13,5	22,0	8,1
Refrigerant lines				
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Maximum refrigerant tube length	m	25	30	30
Maximum refrigerant line level difference	m	10,0	20,0	20,0
Maximum length of refrigerant lines without addition of refrigerant	m	5	5	5
Refrigerant to be added	g/m	40	50	40
Power supply				
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	380-415V ~ 3N 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

DIMENSIONS AND WEIGHTS







		SCG701V	SCG1201V	SCG1201VT
Indoor unit				
A	mm	507	587	587
В	mm	320	394	394
	mm	1770	1882	1882
)	mm	608	718	718
	mm	410	485	485
F	mm	1983	2128	2128
Net weight	kg	38,0	53,0	57,0
Weight for transport	kg	47,0	65,0	69,0
		SCG701	SCG1201	SCG1201T
Outdoor unit				
A	mm	958	1000	1020
<u>4</u> 3	mm mm	958 402	1000 427	1020 427
A 3 C				
A 3 5	mm	402	427	427
A 3 C 0	mm mm	402 660	427 746	427 820
A 3 C C C C C C C C C C C C C C C C C C	mm mm mm	402 660 1032	427 746 1080	427 820 1093
A B C D E F Net weight	mm mm mm mm	402 660 1032 456	427 746 1080 483	427 820 1093 497

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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CKG

Universal

Cooling capacity 2,7 ÷ 6,6 kW Heating capacity 2,9 ÷ 6,8 kW



- · Standard Wi-Fi module.
- New R32 ecological refrigerant gas.
- Air Purifiers (Cold Plasma).
- Low cooling function: cooling operation with outdoor temperatures down to -15 °C.
- Low heating function: heating operation with outdoor temperatures down to -22 °C.







DESCRIPTION

The monosplit air conditioners of the CKG range are combined with CKG_FS (Console) indoor units with an inverter fan unit, offering twin delivery for optimum air flow control and enhanced environmental comfort.

Universal indoor units:

all indoor units can be combined with both multisplit outdoor units of the series MPG and MLG and monosplit outdoor units of the series CKG.

CKG_FS	CKG260FS	CKG360FS	CKG500FS
Universal indoor units compatible with MPG multisplit system	•	•	•
Universal indoor units compatible with MLG multisplit			

The outdoor unit features a compressor with inverter technology, an electronic valve and electric heater to ensure proper winter operation and prevent ice formation on the coil.

FEATURES







Indoor unit

Console indoor unit designed to be installed on indoor floors.

- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Indoor unit front panel with LED display and indicator lights.
- 5-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- Turbo function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.

Outdoor unit

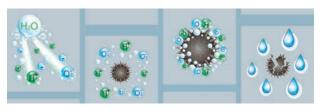
Monosplit air conditioner.

Reversible air/air heat pump with DC inverter technology.

- Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
- Compressor and fan with DC inverter technology.
- Fitted with an electronic expansion valve.

Air Purifiers (Cold Plasma)

Capable of reducing pollutants breaking down their molecules using electric discharges, causing the splitting of the water molecules in the air into positive and negative ions. These ions neutralise the molecules of the gaseous pollutants obtaining products that are normally present in clean air. The device can eliminate 90% of bacteria. The result is clean, ionised air that has no bad odours.



X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.



Smart APP Ewpe

This system is fitted **standard** with a wi-fi module that can be used, along with the app for iOS and Android devices (available free on Apple Store and Google Play), to control the system remotely on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.



General features

- New R32 ecological refrigerant gas with low GWP.
- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.

IC-2P

- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Easy installation and maintenance.

ACCESSORIES

CC2: Centralised control with 7" touchscreen display for managing several indoor units within a number of multisplit systems. The centralised control has an integrated external contact. For more information, refer to the specific documentation. *

WRCA: Wired panel with liquid crystal display and soft-touch buttons. This accessory can be used to control not only the traditional system functions but also a weekly timer with a maximum of 8 daily time bands.

DTG1: Diagnostic tool for indoor and outdoor units of the entire series (tool reserved for service centres or installers).

* The CC2 centralised control can manage up to 36 CKG system.

In order to use accessory CC2, for each indoor unit, the WRCA wired panel (accessory) must be installed, with the IC-2P adapter accessory.







Single air delivery





Dual air delivery (default)





Intake



ACCESSORIES COMPATIBILITY

ACCESSORIES COMITA	The state of the s				
Accessory	CKG260FS	CKG360FS	CKG500FS		
CC2	•	•	•		
WRCA	•	•	•		
The accessory CC2 version 01 is compatible with the indoor units of the CKG_FS series, from version 01.					
Accessory	CKG260FS	CKG360FS	CKG500FS		

PERFORMANCE SPECIFICATIONS

Indoor unit		CKG260FS	CKG360FS	CKG500FS
Outdoor unit		CKG260	CKG360	CKG500
Nominal cooling performances				
Cooling capacity (1)	kW	2,70	3,52	5,20
Cooling input power (1)	kW	0,72	1,00	1,55
EER (2)	W/W	3,75	3,52	3,35
Moisture removed	l/h	0,8	1,2	1,8
Minimum cooling performances				
Cooling capacity	kW	0,70	0,80	1,26
Cooling input power	kW	0,17	0,16	0,38
Maximum cooling performances				
Cooling capacity	kW	3,40	4,40	6,60
Cooling input power	kW	1,30	1,50	2,45
Cooling input current	A	3,5	4,5	7,1
Seasonal efficiency				
SEER	W/W	7,20	7,00	6,60
Efficiency energy class (3)		A++	A++	A++
Annual power consumption	kWh/annum	131	175	276
Nominal heating performances				
Heating capacity (4)	kW	2,90	3,80	5,33
Heating input power (4)	kW	0,73	0,96	1,50
COP (2)	W/W	3,97	3,96	3,55
Minimum heating performances				
Heating capacity	kW	0,60	1,10	1,12
Heating input power	kW	0,13	0,17	0,35
Maximum heating performances				
Heating capacity	kW	3,50	4,40	6,80
Heating input power	kW	1,35	1,50	2,50
Heating input current	A	3,6	4,3	6,7
Seasonal efficiency (temperate climate)				
SCOP	W/W	4,00	4,10	4,10
Efficiency energy class (3)		A+	A+	A+
Annual power consumption	kWh/annum	910	1093	1750

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

 (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.

 (3) Data in accordance with Delegated Regulation (EU) No. 626/2011.

 (4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

INDOOR UNIT DATA

		CKG260FS	CKG360FS	CKG500FS
Indoor unit				
Input power	W	35	40	50
Type of fan	Туре		Inverter centrifugal	
Air flow rate				
Turbo	m³/h	500	600	700
Maximum	m³/h	430	520	650
Average	m³/h	370	440	520
Minimum	m³/h	280	360	410
Sound power (1)				
Turbo	dB(A)	50,0	54,0	57,0
Maximum	dB(A)	48,0	50,0	55,0
Average	dB(A)	44,0	46,0	51,0
Minimum	dB(A)	38,0	39,0	47,0
Sound pressure (2)				
Turbo	dB(A)	39,0	44,0	47,0
Maximum	dB(A)	36,0	40,0	45,0
Average	dB(A)	31,0	36,0	41,0
Minimum	dB(A)	26,0	29,0	37,0
Indoor unit				
Condensate discharge diameter	mm	17,0	17,0	17,0

⁽¹⁾ Sound power calculated in free field, in accordance with UNI EN ISO 3744. (2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

OUTDOOR UNIT DATA

		CKG260	CKG360	CKG500
Outdoor unit				
Type of fan	Туре		Inverter axial	
Air flow rate				
Maximum	m³/h	1600	2200	3200
Sound power (1)				
Maximum	dB(A)	60,0	62,0	65,0
Sound pressure (2)				
Maximum	dB(A)	49,0	52,0	57,0
Compressor				
Туре	type		Inverter rotary	
Refrigerant	type		R32	
Refrigerant charge	kg	0,55	0,75	0,95
Potential global heating	GWP		675kgCO₂eq	
Equivalent CO ₂	t	0,37	0,51	0,64
Outdoor unit				
Condensate discharge diameter	mm	15,8	15,8	15,8

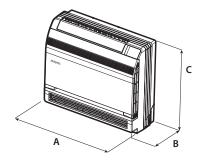
GENERAL DATA

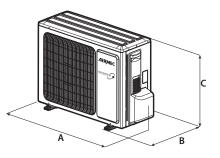
Indoor unit		CKG260FS	CKG360FS	CKG500FS
Outdoor unit		CKG260	CKG360	CKG500
Electric data				
Rated power input (1)	kW	1,40	1,50	2,50
Rated current input (1)	Α	6,0	6,7	11,1
Refrigeration pipework				
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")
Maximum refrigerant tube length	m	15	20	25
Maximum refrigerant line level difference	m	10,0	10,0	10,0
Refrigerant to be added	g/m	16	16	16
Power supply				
Power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

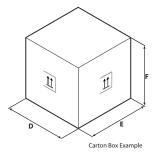
⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

⁽¹⁾ Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

DIMENSIONS AND WEIGHTS







	-	CKG260FS	CKG360FS	CKG500FS
Indoor unit				
A	mm	700	700	700
В	mm	215	215	215
	mm	600	600	600
)	mm	788	788	788
	mm	283	283	283
	mm	697	697	697
Vet weight	kg	15,5	15,5	15,5
Weight for transport	kg	18,5	18,5	18,5
		CKG260	CKG360	CKG500
Outdoor unit	'			
4	mm	782	848	965
}	mm	320	320	396
	mm	540	596	700
	IIIIII			
)	mm	823	881	1029
)			881 363	1029 458
	mm	823		
-) : : : !et weight	mm mm	823 358	363	458

















LPG

Monosplit

Cooling capacity 3,5 ÷ 16,0 kW Heating capacity 4,0 ÷ 17,0 kW



- SEER up to 7.2.
- Wi-fi control using the relative accessory.







DESCRIPTION

The monosplit air conditioners of the LPG range are combined with:

- LPG_D (Duct) for duct type horizontal installation.
- LPG_C / CS (Cassette) for false ceiling installation.
- LPG_F (Floor ceiling) wall and/or ceiling installation.

TYPE OF INDOOR UNIT

Indoor unit LPG_D

Duct indoor unit, designed for indoor duct type horizontal installation.







- Every indoor unit comes with a remote control and a remote control holder.
- WRC50 wired panel standard supply with each indoor unit.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Equipped with condensate drain pump.

Indoor unit LPG CS

Indoor unit **Cassette** of dimensions (570x570 mm) designed to be installed on suspended ceiling indoors.







- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- Auto function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Equipped with condensate drain pump.

Indoor unit LPG C

Indoor unit **Cassette** of dimensions (840x840 mm) designed to be installed on suspended ceiling indoors.







 Every indoor unit comes with a remote control and a remote control holder.

- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- **Auto** function for a continuous speed variation.
- Turbo function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Equipped with condensate drain pump.

Indoor unit LPG F

Indoor unit **Floor ceiling** designed to be installed on the wall or ceiling indoors.







- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- Auto function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.

General features

- New R32 ecological refrigerant gas with low GWP.
- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Easy installation and maintenance.

Low cooling function

cooling operation with outdoor temperatures down to -20 °C.

Low heating function

heating with external temperatures up to -20 °C.

X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.







Smart APP Ewpe

Using the specific WRC50W panel, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.









Special blue fin coil

unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



TYPE OF OUTDOOR UNIT

Outdoor unit

Reversible air/air heat pump with DC inverter technology.

- Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
- Compressor and fan with DC inverter technology.
- Fitted with an electronic expansion valve.

ACCESSORIES

CC2: Centralised control with 7" touchscreen display for managing several indoor units within a number of multisplit systems. The centralised control has an integrated external contact. For more information, refer to the specific documentation. *

WRC50: Wired panel with liquid crystal display and soft-touch buttons.

WRC50W: Flush panel with LCD display and Soft-Touch keys. With this accessory it is possible to control not only the traditional system functions but also a weekly timer with daily time slots. It is equipped with WiFi and Bluetooth® connection for better connection stability.

For more information about the accessories and their functions (such as the auto-restart function), refer to the specific documentation of the single accessory.

DCG10: This accessory makes it possible to remotely control the main functions of the unit via the relay externally with third-party loads that are suitably powered and sized.

ECD10: This accessory makes it possible to manage the switching on/off of the indoor units via the ON-OFF device.

GLG 40: Air supply and flow grid with dimensions (950x950 mm) for cassette internal unit.

GLG 405: Air supply and flow grid with dimensions (620x620 mm) for cassette internal unit.

MINIMODBUS20: Thanks to its compact size, this accessory can be easily installed inside the indoor unit. It allows the units to communicate with each other by providing a ModBus RTU serial on RS485 for supervision with external BMS.

* The CC2 centralised control can manage up to 36 LPG systems.















Accessories compatibility

LPG_D

Accessory	LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1200D	LPG1400D	LPG1600D
CC2 (1)	•	•	•	•	•	•	•	•
WRC50W	•	•	•	•	•	•	•	•

(1) Auto-restart function.

The use of the CC2 centralised control requires the installation of 1 MINIMODBUS20 for each indoor unit installed. Wired panel WRC50 standard supply.

Accessory	LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1200D	LPG1400D	LPG1600D
DCG10	•	•	•	•	•	•	•	•
ECD10	•	•	•	•	•	•	•	•
MINIMODBUS20 (1)	•		•	•			•	•

(1) The units can only be routed using the wired control panel. For more information about the procedure refer to the user manual.

LPG_C/CS

Accessory	LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
CC2 (1)	•	•	•	•	•	•	•	•
WRC50	•	•	•	•	•	•	•	•
WRC50W	•	•	•	•	•	•	•	•

(1) Auto-restart function

The use of the CC2 centralised control requires the installation of 1 MINIMODBUS20 for each indoor unit installed.

Accessory	LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
DCG10	•	•	•	•	•	•	•	•
ECD10	•	•	•	•	•	•	•	•
MINIMODBUS20 (1)	•	•	•		•	•	•	

(1) The units can only be routed using the wired control panel. For more information about the procedure refer to the user manual.

Accessory	LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
GLG40 (1)				•	•	•	•	•
GIG40S (1)								

(1) Mandatory accessory.

LPG F

Accessory	LPG350F	LPG500F	LPG700F	LPG850F	LPG1000F	LPG1200F	LPG1400F	LPG1600F
CC2 (1)	•	•	•	•	•	•	•	•
WRC50	•	•	•	•	•	•	•	•
WRC50W	•			•	•	•	•	

(1) Auto-restart function

The use of the CC2 centralised control requires the installation of 1 MINIMODBUS20 for each indoor unit installed.

Accessory	LPG350F	LPG500F	LPG700F	LPG850F	LPG1000F	LPG1200F	LPG1400F	LPG1600F
DCG10	•	•	•	•	•	•	•	•
ECD10	•	•	•	•	•	•	•	•
MINIMODBUS20 (1)	•	•	•	•	•	•	•	•

⁽¹⁾ The units can only be routed using the wired control panel. For more information about the procedure refer to the user manual.

OUTDOOR UNIT PERFORMANCE DATA

		LPG350	LPG500	LPG700	LPG850	LPG1000	LPG1000T	LPG1200	LPG1200T	LPG1400	LPG1400T	LPG1600T
Outdoor unit												
Type of fan	Туре	Inverter axial										
Air flow rate					-							
Maximum	m³/h	1800	2200	3600	3600	4800	4800	5200	5200	5200	5200	5500
Sound power (1)												
Maximum	dB(A)	56,0	65,0	69,0	70,0	70,0	70,0	73,0	73,0	73,0	75,0	75,0
Sound pressure (2)												
Maximum	dB(A)	48,0	52,0	55,0	57,0	57,0	57,0	58,0	58,0	59,0	59,0	60,0
Compressor												
Tune	tuno	Inverter										
Туре	type	rotary										
Refrigerant	type	R32										
Refrigerant charge	kg	0,57	0,85	1,50	1,50	2,10	2,10	2,25	2,25	2,80	2,80	3,50
Potential global heating	GWP	675kgCO₂eq										
Equivalent CO ₂	t	0,38	0,57	1,01	1,01	1,42	1,42	1,52	1,52	1,89	1,89	2,36
Refrigeration pipework												
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Maximum refrigerant tube length	m	30	30	30	30	75	75	75	75	75	75	75
Maximum refrigerant line level difference	m	15,0	20,0	20,0	25,0	30,0	30,0	30,0	30,0	30,0	30,0	30,0
Refrigerant to be added	g/m	16	16	20	20	20	20	20	20	35	35	35
Power supply												
Outdoor unit nouser cumbu		220-240V ~	380-415V ~	220-240V ~	380-415V ~	220-240V ~	380-415V ~	380-415V ~				
Outdoor unit power supply		50Hz	50Hz	50Hz	50Hz	50Hz	3N 50Hz	50Hz	3N 50Hz	50Hz	3N 50Hz	3N 50Hz

⁽¹⁾ Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

INDOOR UNIT PERFORMANCE DATA

LPG D

EI 6_D												
Indoor unit		LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1000D	LPG1200D	LPG1200D	LPG1400D	LPG1400D	LPG1600D
Outdoor unit		LPG350	LPG500	LCG700	LPG850	LPG1000	LPG1000T	LPG1200	LPG1200T	LPG1400	LPG1400T	LPG1600T
Nominal cooling performances												
Cooling capacity (1)	kW	3,50	5,30	7,10	8,50	10,50	10,50	12,10	12,10	13,40	13,40	16,00
Cooling input power (1)	kW	1,03	1,51	1,92	2,50	3,00	3,00	3,58	3,58	4,50	4,50	5,40
EER (2)	W/W	3,40	3,51	3,70	3,40	3,50	3,50	3,38	3,38	2,98	2,98	2,96
Moisture removed	l/h	1,0	1,7	2,4	2,8	3,3	3,3	3,7	3,7	3,9	3,9	4,6
Minimum cooling performances												
Cooling capacity	kW	0,90	1,60	2,40	2,90	3,20	3,20	3,60	3,60	4,00	4,00	4,80
Cooling input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum cooling performances												
Cooling capacity	kW	4,00	5,80	7,60	9,00	11,00	11,00	13,10	13,10	14,20	14,20	17,00
Cooling input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency												
SEER	W/W	6,50	6,30	6,60	6,40	6,40	6,40	6,10	6,10	6,10	6,10	6,10
Efficiency energy class (3)		A++	A++	A++	A++	A++	A++	-	-	-	-	-
Pdesignc	kW	3,5	5,3	7,1	8,5	10,5	10,5	-	-	-	-	-
Annual power consumption	kWh/annum	189	294	377	465	574	574	-	-	-	-	-
Nominal heating performances												
Heating capacity (4)	kW	4,00	5,60	8,00	8,80	11,50	11,50	13,50	13,50	15,50	15,50	17,00
Heating input power (4)	kW	1,00	1,42	2,00	2,25	2,80	2,80	3,70	3,70	4,50	4,50	4,70
COP (2)	W/W	4,00	3,94	4,00	3,91	4,11	4,11	3,65	3,65	3,44	3,44	3,62
Minimum heating performances												
Heating capacity	kW	0,90	1,60	2,20	2,50	3,00	3,00	3,60	3,60	3,90	3,90	4,50
Heating input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum heating performances			-	-							-	-
Heating capacity	kW	4,50	6,10	8,60	9,50	12,50	12,50	14,50	14,50	16,00	16,00	18,00
Heating input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency (temperate climate)												
SCOP	W/W	4,00	4,00	4,10	4,10	4,20	4,20	4,10	4,10	4,00	4,00	4,00
Efficiency energy class (3)		A+	A+	A+	A+	A+	A+	-	-	-	-	-
Pdesignh	kW	3,00	3,90	4,70	6,00	7,00	7,00	-	-	-	-	-
Annual power consumption	kWh/annum	1050	1365	1605	2049	2333	2333	-	-	-	-	-
Electric data												
Rated power input (5)	kW	1,30	1,90	2,80	3,30	4,70	4,40	5,30	5,30	5,60	5,60	6,80
Rated current input (5)	A	6,0	9,5	14,0	15,0	21,0	7,0	23,0	9,0	25,0	11,0	12,0
Refrigeration pipework												
Diameter of liquid refrigerant connections	mm (inch)	6.35 (1/4")	6.35 (1/4")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
Diameter of refrigerant gas connections	mm (inch)	9.52 (3/8")	12.7 (1/2")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
Nominal length of refrigerant lines	m	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0	7,5	7,5	7,5
Power supply												
Dowersupply		220-240V ~	380-415V	220-240V ~	380-415V	220-240V ~	380-415V	380-415V				
Power supply		50Hz	50Hz	50Hz	50Hz	50Hz	3N~ 50/60Hz	50Hz	3N~ 50/60Hz	50Hz	3N~ 50/60Hz	3N~ 50/60Hz

⁽¹⁾ Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1200D	LPG1400D	LPG1600D
Indoor unit	•								
T	T	Inverter							
Type of fan	Туре	centrifugal							
Air flow rate									
Turbo	m³/h	600	900	1100	1400	1700	2000	2300	2600
Maximum	m³/h	550	800	1000	1300	1600	1800	2100	2300
Average	m³/h	500	700	900	1100	1400	1600	1800	2000
Minimum	m³/h	400	600	800	1000	1200	1400	1500	1700
High static pressure									
Nominal	Pa	25	25	25	37	50	50	50	50
Maximum	Pa	80	80	160	160	155	155	200	200
Sound pressure									
Turbo	dB(A)	35,0	36,0	37,0	43,0	39,0	43,0	43,0	46,0
Maximum	dB(A)	33,0	35,0	35,0	41,0	38,0	42,0	42,0	44,0
Average	dB(A)	32,0	33,0	33,0	39,0	37,0	41,0	40,0	42,0
Minimum	dB(A)	30,0	31,0	31,0	37,0	36,0	40,0	38,0	40,0
Indoor unit	-								
Condensate discharge diameter	mm	26,0	26,0	26,0	26,0	26,0	26,0	26,0	26,0

Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source (1,5m for type Duct and Cassette)

LPG CS/C

LPG_CS / C												
<u>Indoor unit</u>		LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1000C	LPG1200C	LPG1200C	LPG1400C	LPG1400C	LPG1600C
<u>Outdoor unit</u>		LPG350	LPG500	LPG700	LPG850	LPG1000	LPG1000T	LPG1200	LPG1200T	LPG1400	LPG1400T	LPG1600T
Nominal cooling performances												
Cooling capacity (1)	kW	3,50	5,00	7,10	8,50	10,50	10,50	12,10	12,10	13,40	13,40	14,50
Cooling input power (1)	kW	0,92	1,47	2,03	2,50	3,10	3,10	3,90	3,90	4,60	4,60	1,50
EER (2)	W/W	3,80	3,40	3,50	3,40	3,40	3,40	3,10	3,10	2,91	2,91	2,74
Moisture removed	l/h	1,0	1,7	2,4	2,8	3,3	3,3	3,7	3,7	3,9	3,9	4,8
Minimum cooling performances												
Cooling capacity	kW	0,90	1,60	2,40	2,90	3,20	3,20	3,60	3,60	4,00	4,00	4,80
Cooling input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum cooling performances												
Cooling capacity	kW	4,00	5,20	7,60	9,00	11,00	11,00	13,10	13,10	14,20	14,20	15,00
Cooling input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency												
SEER	W/W	7,10	6,60	6,70	6,90	6,60	6,60	6,10	6,10	6,30	6,30	6,10
Efficiency energy class (3)		A++	A++	A++	A++	A++	A++	-	-	-	-	-
Pdesignc	kW	3,5	5,0	7,1	8,5	10,5	10,5	-	-	-	-	-
Annual power consumption	kWh/annum	173	266	371	432	557	557	-	-	-	-	-
Nominal heating performances												
Heating capacity (4)	kW	4,00	5,60	7,80	8,80	11,50	11,50	13,50	13,50	15,50	15,50	17,00
Heating input power (4)	kW	1,00	1,60	2,00	2,25	2,95	2,95	3,97	3,97	4,70	4,70	5,70
COP (2)	W/W	4,00	3,50	3,90	3,90	3,90	3,90	3,40	3,40	3,30	3,30	2,98
Minimum heating performances		.,,,,,	-,		-,	-,		-,	-,	-,	-,	_,-,-
Heating capacity	kW	0,90	1,60	2,20	2,50	3,00	3,00	3,60	3,60	3,90	3,90	4,50
Heating input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum heating performances		-,		-,	-,		-,	.,	.,	.,,==	.,,==	.,
Heating capacity	kW	4,50	6,10	8,60	9,50	12,50	12,50	14,50	14,50	16,00	16,00	17,50
Heating input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency (temperate climate)		.,,,,,,	.,,		-,	.,,,,,	.,	-,	-,			-,
SCOP	W/W	4,20	4,00	4,30	4,30	4,40	4,40	4,10	4,10	4,00	4,00	4,00
Efficiency energy class (3)		A+	A+	A+	A+	A+	A+	-	-	-	-	-
Pdesignh	kW	3,10	3,90	5,00	6,00	7,00	7,00	_				
Annual power consumption	kWh/annum	1034	1365	1628	1954	2227	2227					
Electric data	ittii, aiii aii	1051	.505	1020	.,,,,							
Rated power input (5)	kW	1,30	1,90	2,80	3,30	4,70	4,40	5,30	5,30	5,60	5,60	6,80
Rated current input (5)	A	6,0	9,5	14,0	15,0	21,0	7,0	23,0	9,0	25,0	11,0	12,0
Refrigeration pipework	n	0,0	درر	יידו	13,0	21,0	1,0	23,0	2,0	23,0	11,0	12,0
Diameter of liquid refrigerant connections	mm (inch)	6.35 (1/4")	6.35 (1/4")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8"
Diameter of refrigerant gas connections	mm (inch)	9.52 (3/8")	12.7 (1/2")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8"
Nominal length of refrigerant lines	m	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0	7,5	7,5	7,5
Power supply		טינכ	3,0	٥,٥	טינכ	٥,٧	3,0	3,0	3,0	נ, ו	נ, ו	د, ۱
r ower supply		220-240V ~	220-240V ~	220-240V ~	220-240V ~	220-240V ~	380-415V	220-240V ~	380-415V	220-240V ~	380-415V	380-415V
Power supply		50Hz	50Hz	50Hz	220-240√ ~ 50Hz	220-240√ ~ 50Hz	300-413V 3N~ 50Hz	50Hz	300-413V 3N~ 50Hz	50Hz	3N~ 50Hz	3N~ 50Hz
		JUПZ	JVIIZ	JUПZ	JUПZ	JUПZ	∠חטכ ∽אוכ	JUΠZ	∠חטכ ∽אוכ	JVПZ	∠חטכ ∽ווכ	JIV⊂ ⊃VIIZ

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

 (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.

 (3) Data in accordance with Delegated Regulation (EU) No. 626/2011.

 (4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

 (5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
Indoor unit									
Type of fan	Tuno	Inverter							
type of fall	Туре	centrifugal							
Air flow rate									
Turbo	m³/h	600	720	1100	1400	1500	1700	2000	2300
Maximum	m³/h	550	650	1000	1300	1400	1500	1800	2100
Average	m³/h	500	600	900	1100	1200	1300	1600	1900
Minimum	m³/h	400	500	800	1000	1000	1100	1400	1600
Sound pressure									
Turbo	dB(A)	36,0	43,0	39,0	47,0	43,0	48,0	50,0	52,0
Maximum	dB(A)	35,0	41,0	38,0	46,0	41,0	46,0	48,0	50,0
Average	dB(A)	33,0	39,0	36,0	42,0	39,0	43,0	45,0	48,0
Minimum	dB(A)	29,0	35,0	34,0	38,0	38,0	39,0	41,0	44,0
Indoor unit									
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0

Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source (1,5m for type Duct and Cassette)

LPG F

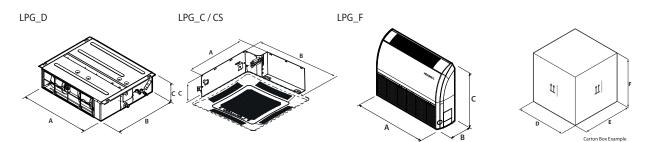
LPG_F		LDC2F0F	LCCTOOL	LDCZOOF	LDCOFOE	I DC1000F	I DC1000F	I DC1200F	I DC1200F	10014005	I DC1 400F	I DC1 COOF
Indoor unit		LPG350F	LCG500F	LPG700F	LPG850F	LPG1000F	LPG1000F	LPG1200F	LPG1200F	LPG1400F	LPG1400F	LPG1600F
Outdoor unit		LPG350	LPG500	LPG700	LPG850	LPG1000	LPG1000T	LPG1200	LPG1200T	LPG1400	LPG1400T	LPG1600T
Nominal cooling performances	1111	2.50	F 20	7.10	0.50	40.00	10.00	12.10	12.10	42.40	42.40	16.00
Cooling capacity (1)	kW	3,50	5,30	7,10	8,50	10,00	10,00	12,10	12,10	13,40	13,40	16,00
Cooling input power (1)	kW	0,92	1,56	2,03	2,50	2,94	2,94	3,67	3,67	4,30	4,30	5,30
EER (2)	W/W	3,80	3,40	3,50	3,40	3,40	3,40	3,30	3,30	3,12	3,12	3,02
Moisture removed	I/h	1,1	1,7	2,4	2,8	3,3	3,3	3,7	3,7	3,9	3,9	4,7
Minimum cooling performances												
Cooling capacity	kW	0,90	1,60	2,40	2,90	3,20	3,20	3,60	3,60	4,00	4,00	4,80
Cooling input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum cooling performances												
Cooling capacity	kW	4,00	5,50	7,60	9,00	10,50	10,50	13,10	13,10	14,20	14,20	17,00
Cooling input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency												
SEER	W/W	7,20	6,50	7,20	6,80	6,30	6,30	6,30	6,30	6,30	6,30	6,10
Efficiency energy class (3)		A++	A++	A++	A++	A++	A++	-	-	-	-	-
Pdesignc	kW	3,5	5,3	7,1	8,5	10,0	10,0	-	-	-	-	-
Annual power consumption	kWh/annum	170	285	345	438	556	556	-	-	-	-	-
Nominal heating performances												
Heating capacity (4)	kW	4,00	5,60	7,70	8,80	11,50	11,50	13,50	13,50	15,50	15,50	17,00
Heating input power (4)	kW	0,93	1,44	1,95	2,25	2,95	2,95	3,75	3,75	4,20	4,20	4,80
COP (2)	W/W	4,30	3,90	3,95	3,90	3,90	3,90	3,60	3,60	3,69	3,69	3,54
Minimum heating performances												
Heating capacity	kW	0,90	1,60	2,20	2,50	3,00	3,00	3,60	3,60	3,90	3,90	4,50
Heating input power	kW	0,20	0,30	0,50	0,75	0,90	0,90	1,10	1,10	1,35	1,35	1,50
Maximum heating performances				-								
Heating capacity	kW	4,50	6,10	8,40	9,50	12,00	12,00	14,50	14,50	16,00	16,00	18,00
Heating input power	kW	1,30	1,80	2,60	3,30	4,00	4,00	5,30	5,30	5,60	5,60	6,80
Seasonal efficiency (temperate climate)												
SCOP	W/W	4,10	4,20	4,30	4,50	4,20	4,20	4,00	4,00	4,00	4,00	4,00
Efficiency energy class (3)		A+	A+	A+	A+	A+	A+	-	-	-	-	-
Pdesignh	kW	3,10	3,90	4,70	6,00	7,00	7,00	-	-	-	-	-
Annual power consumption	kWh/annum	1059	1300	1530	1867	2333	2333	-	-	-	-	-
Electric data												
Rated power input (5)	kW	1,30	1,90	2,80	3,30	4,70	4,40	5,30	5,30	5,60	5,60	6,80
Rated current input (5)	A	6,0	9,5	14,0	15,0	21,0	7,0	23,0	9,0	25.0	11,0	12,0
Refrigeration pipework				,		,	,				,	
Diameter of liquid refrigerant connections	mm (inch)	6.35 (1/4")	6.35 (1/4")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
Diameter of refrigerant gas connections	mm (inch)	9.52 (3/8")	12.7 (1/2")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
Nominal length of refrigerant lines	m	5,0	5,0	5,0	5,0	5,0	5,0	5,0	5,0	7,5	7,5	7,5
Power supply			-,-									
		220-240V ~	380-415V	220-240V ~	380-415V	220-240V ~	380-415V	380-415V				
Power supply		50Hz	50Hz	50Hz	50Hz	50Hz	3N~ 50Hz	50Hz	3N~ 50Hz	50Hz	3N∼ 50Hz	3N∼ 50Hz

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
 (3) Data in accordance with Delegated Regulation (EU) No. 626/2011.
 (4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

	'	LPG350F	LPG500F	LPG700F	LPG850F	LPG1000F	LPG1200F	LPG1400F	LPG1600F
Indoor unit									
Type of fan	Туре	Inverter centrifugal							
Air flow rate									
Turbo	m³/h	650	900	1250	1400	1600	1900	2300	2400
Maximum	m³/h	600	800	1100	1300	1500	1800	2100	2200
Average	m³/h	500	700	1000	1200	1400	1600	1800	1900
Minimum	m³/h	400	600	900	1000	1200	1400	1500	1600
Sound pressure									
Turbo	dB(A)	35,0	41,0	41,0	46,0	48,0	45,0	51,0	53,0
Maximum	dB(A)	34,0	40,0	39,0	45,0	46,0	43,0	48,0	51,0
Average	dB(A)	31,0	38,0	37,0	43,0	45,0	40,0	45,0	48,0
Minimum	dB(A)	28,0	36,0	35,0	39,0	43,0	38,0	43,0	44,0
Indoor unit									
Condensate discharge diameter	mm	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0

Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source (1,5m for type Duct and Cassette)

INDOOR UNIT WEIGHTS AND DIMENSIONS



LPG_D

		LPG350D	LPG500D	LPG700D	LPG850D	LPG1000D	LPG1200D	LPG1400D	LPG1600D
Indoor unit									
A	mm	710	1000	900	900	1340	1340	1400	1400
В	mm	450	450	655	655	655	655	700	700
C	mm	200	200	260	260	260	260	300	300
Net weight	kg	18,0	24,0	29,5	29,5	43,0	43,0	52,0	55,0
Dimensions and weights for transport									
D	mm	1008	1308	1115	1115	1568	1568	1601	1601
E	mm	568	568	772	772	770	770	813	813
F	mm	275	275	320	320	323	323	365	365
Weight for transport	kg	22,0	29,0	33,5	33,5	49,0	49,0	58,0	62,0

LPG_C/CS

		LPG350CS	LPG500CS	LPG700C	LPG850C	LPG1000C	LPG1200C	LPG1400C	LPG1600C
Indoor unit									
A	mm	570	570	840	840	840	840	840	840
В	mm	570	570	840	840	840	840	840	840
C	mm	260	260	200	200	240	240	290	290
Net weight	kg	17,0	17,0	21,0	21,0	23,0	23,0	25,0	26,0
Dimensions and weights for transport									
D	mm	698	698	943	943	933	933	933	933
E	mm	653	653	923	923	903	903	903	903
F	mm	295	295	245	245	272	272	335	335
Weight for transport	kg	21,0	21,0	27,0	27,0	29,0	29,0	32,0	33,0

LPG_F

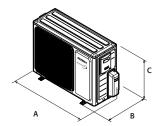
		LPG350F	LPG500F	LPG700F	LPG850F	LPG1000F	LPG1200F	LPG1400F	LPG1600F
Indoor unit									
A	mm	870	870	1200	1200	1200	1570	1570	1570
В	mm	235	235	235	235	235	235	235	235
С	mm	665	665	665	665	665	665	665	665
Net weight	kg	24,0	25,0	31,0	32,0	32,0	40,0	42,0	42,0
Dimensions and weights for transport									
D	mm	973	973	1303	1303	1303	1669	1669	1669
E	mm	770	770	770	770	770	770	770	770
F	mm	300	300	300	300	300	300	300	300
Weight for transport	kg	28,0	29,0	36,0	37,0	37,0	47,0	49,0	49,0

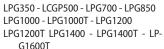
Grid dimensions and weights GLG40 - GLG40S

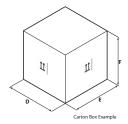
		GLG40	GLG40S
Indoor unit			
A	mm	950	620
В	mm	950	620
C	mm	52	48
D	mm	1033	701
E	mm	1038	701
F	mm	112	125
Net weight	kg	6,0	3,0
Weight for transport	kg	10,0	5,0

Mandatory accessory to be provided when ordering.

OUTDOOR UNIT WEIGHTS AND DIMENSIONS







		LPG350	LPG500	LPG700	LPG850	LPG1000	LPG1000T	LPG1200	LPG1200T	LPG1400	LPG1400T	LPG1600T
Outdoor unit												
A	mm	732	802	958	958	1020	1020	1020	1020	1020	1020	1070
В	mm	330	350	402	402	427	427	427	427	427	427	427
C	mm	553	555	660	660	820	820	820	820	820	820	960
Net weight	kg	24,5	30,5	41,5	46,0	65,0	75,0	66,0	76,0	73,0	81,0	94,0
Dimensions and weights for transport												
D	mm	794	872	1032	1032	1095	1095	1095	1095	1095	1095	1150
E	mm	376	398	456	456	500	500	500	500	500	500	475
F	mm	605	609	730	730	955	955	955	955	955	955	1095
Weight for transport	kg	27,0	33,0	45,0	50,0	72,0	88,0	73,0	89,0	86,0	94,0	103,0















MVAS

Monosplit high head duct

Cooling capacity 22,4 ÷ 28,0 kW Heating capacity 24,0 ÷ 30,0 kW



- Suitable for long-distance channels.
- Effective static pressure that can reach 150 Pa.
- · Special coil with fin golden coating.



DESCRIPTION

The monosplit air conditioners of the MVAS range are combined with MVA_DH monosplit (high head duct) indoor units for duct type horizontal installation.

The outdoor unit features a compressor with inverter technology, an electronic valve and electric heater to ensure proper winter operation and prevent ice formation on the coil.

FEATURES







Indoor unit

High head duct indoor unit, designed for indoor duct type horizontal installation.

- Every indoor unit comes with a remote control and a remote control holder.
- $\,$ WRC wired panel standard supply with each indoor unit.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- 5-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- Sleep night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.

Outdoor unit

Monosplit air conditioner.

Reversible air/air heat pump with DC inverter technology.

- Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
- Compressor and fan with DC inverter technology.
- Fitted with an electronic expansion valve.

X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.







Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



General features

- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Easy installation and maintenance.

ACCESSORIES

MVAGW: This accessory allows you to manage up to 16 MV systems (with a maximum of 255 total indoor units), making available a serial in ModBus RTU protocol on RS485, ModBus TCP or BACnet / IP for supervision with an external BMS.

USBDC / USBDC1: The kit includes a converter (from CanBus to ModBus) and the VRF debugger software. IT is designed to meet the requirements of after sales services and qualified technicians who need to carry out control and debugging procedures on the MV_ranges.

WRC: Wired panel with liquid crystal display and soft-touch buttons.

WRC1: Simplified wired panel with liquid crystal display and soft-touch buttons with built-in external contact. This panel is particularly suitable for hotel applications.

For more information about the accessories and their functions (such as the auto-restart function), refer to the specific documentation of the single accessory.

WRC1







PERFORMANCE SPECIFICATIONS

Indoor unit		MVA2240DH	MVA2800DH
Outdoor unit		MVAS2242T	MVAS2803T
Nominal cooling performances			
Cooling capacity (1)	kW	22,40	28,00
Cooling input power (1)	kW	6,12	13,02
Cooling input current	A	10,9	-
EER (2)	W/W	3,66	2,15
Nominal heating performances			
Heating capacity (3)	kW	24,00	28,00
Heating input power (3)	kW	4,90	8,00
Heating input current	A	8,8	-
COP (2)	W/W	4.90	3,50

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
- (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
 (3) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

INDOOR UNIT

		MVA2240DH	MVA2800DH
Indoor unit			
Type of fan	Туре	Inverter centrifugal	Inverter centrifugal
Air flow rate			
Maximum	m³/h	4000	4400
High static pressure			
Nominal	Pa	150	150
Sound power (1)			
Maximum	dB(A)	64,0	65,0
Average	dB(A)	62,0	62,0
Minimum	dB(A)	59,0	60,0
Sound pressure (2)			
Maximum	dB(A)	54,0	55,0
Average	dB(A)	52,0	52,0
Minimum	dB(A)	49,0	50,0
Indoor unit			
Condensate discharge diameter	mm	30,0	30,0

- (1) Sound power calculated in free field, in accordance with UNI EN ISO 3744. (2) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

OUTDOOR UNIT

		MVAS 2242T	MVAS 2803T
Outdoor unit			·
Type of fan	Туре	Inverter axial	Inverter axial
Sound power (1)			
Maximum	dB(A)	74,0	-
Sound data calculated in cooling mode (2)		
Maximum sound pressure level	dB(A)	58,0	62,0
Maximum sound power level	dB(A)	78,0	80,0
Sound data calculated in heating mode (2	2)		
Maximum sound pressure level	dB(A)	58,0	64,0
Maximum sound power level	dB(A)	79,0	82,0
Compressor			
Туре	type	Rotary	Rotary
Refrigerant	type	R410A	R410A
Potential global heating	GWP	2088kgCO₂eq	2088kgCO₂eq

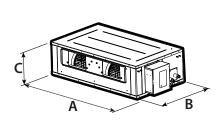
- (1) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 (2) Sound Pressure and Sound Power measured in Semi-Anechoic Chamber at 1 m from the source, according to EN 12102-1:2022

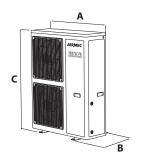
GENERAL DATA

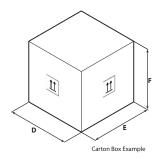
Indoor unit		MVA2240DH	MVA2800DH
Outdoor unit		MVAS2242T	MVAS2803T
Electric data			
Rated power input (1)	kW	9,60	-
Refrigeration pipework			
Type refrigerant connections	Туре	To be soldered	To be soldered
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	19,05 (3/4")	22,2 (7/8")
Power supply			
Power supply		380-415V ~ 3N 50/60Hz	380-415V ~ 3N 50/60Hz

⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

DIMENSIONS AND WEIGHTS







		MVA2240DH	MVA2800DH
Indoor unit			
A	mm	1483	1686
В	mm	791	870
C	mm	385	450
D	mm	1758	1788
E	mm	883	988
F	mm	470	580
Net weight	kg	82,0	105,0
Weight for transport	kg	104,0	140,0
		MVAS2242T	MVAS2803T
Outdoor unit			
A	mm	940	940
В	mm	320	460
(mm	1430	1615
D	mm	1038	1038
E	mm	438	578
F	mm	1580	1765
Net weight	kg	133,0	163,0

 $\label{lem:continuous} \mbox{Aermec reserves the right to make any modifications deemed necessary.}$ All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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MPG

Multisplit

Cooling capacity 4,1 ÷ 12,1 kW Heating capacity 4,4 ÷ 13,0 kW



- New R32 ecological refrigerant gas.
- Wi-fi control using the relative accessory.
- Modern design to blend with all furnishing styles.
- Wide choice of indoor units available.
- Special coil with fin blue coating.















DESCRIPTION

The multisplit air conditioners of the MPG range are combined with:

- **SPG_W Wall**, for wall installation.
- CKG_FS Console, for wall installation.
- MLG_F Floor ceiling, for wall and/or ceiling installation.
- MPG_CS and MPG_C Cassette, for false ceiling installation.
- MPG_D and MPG_DH Duct, for duct type horizontal installation.

Outdoor units equipped with base electric resistance to avoid the possible formation of ice and facilitate the disposal of condensate during heating operation, compressor and fan with DC inverter technology and electronic expansion valve.

TYPE OF INDOOR UNIT

SPG W indoor unit

Wall indoor unit designed to be installed on indoor walls.

Universal indoor units: some indoor units can be combined with both multisplit outdoor units of the series MPG and monosplit outdoor units of the series SPG:

	Indoor units SPG_W									
	SPG200W SPG250W SPG350W SPG500W SPG700W									
Monosplit outdoor units SPG		•	•	•	•					
Multisplit utdoor units MPG	•	•	•	•	•					







- Every indoor unit comes with a remote control and a remote control holder
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
 Indoor unit front panel with LED display and indicator lights.
- 3-speed fan, to meet every possible need.

- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.

Smart APP Ewpe

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play), the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.

CKG FS indoor unit

Console indoor unit designed to be installed on indoor floors.

Universal indoor units: all indoor units can be combined with both multisplit outdoor units of the series MPG and monosplit outdoor units of the series CKG.







- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Indoor unit front panel with LED display and indicator lights.
- 5-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- Sleep night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Air Purifiers (Cold Plasma) is able to reduce pollutants.
- Standard Wi-Fi module.

Single air delivery





Dual air delivery (default)





Intake



Smart APP Ewpe

The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.

Air Purifiers (Cold Plasma)

Capable of reducing pollutants breaking down their molecules using electric discharges, causing the splitting of the water molecules in the air into positive and negative ions. These ions neutralise the molecules of the gaseous pollutants obtaining products that are normally present in clean air. The device can eliminate 90% of bacteria. The result is clean, ionised air that has no bad odours.

MLG_F indoor unit

Indoor unit **floor ceiling** designed to be installed on the wall or ceiling indoors.







- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- 3-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- Sleep night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.

MPG CS indoor unit

Indoor unit ${\it cassette}$ of dimensions (570x570 mm) designed to be installed on suspended ceiling indoors.







- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- 7-speed fan, to meet every possible need.
- Auto function for a continuous speed variation.
- Turbo function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Equipped with condensate drain pump.

MPG Cindoor unit

Indoor unit **cassette** of dimensions (840x840 mm) designed to be installed on suspended ceiling indoors.







- Every indoor unit comes with a remote control and a remote control holder.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- 7-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Equipped with condensate drain pump.

MPG_D indoor unit

Duct indoor unit designed for indoor duct type installation.







- Every indoor unit comes with a remote control and a remote control holder.
- WRCB wired panel standard supply with each indoor unit.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- 7-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- Turbo function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Equipped with condensate drain pump.

MPG DH indoor unit

Duct indoor unit designed for indoor duct type installation.







- Every indoor unit comes with a remote control and a remote control holder.
- **WRCB** wired panel standard supply with each indoor unit.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- 7-speed fan, to meet every possible need.
- Auto function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- **Sleep** night time function well-being program.
- X-fan prolonged ventilation function, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- iFeel function for activating the ambient temperature probe inside the remote control, for improved comfort.
- Equipped with condensate drain pump.

General features

- New R32 ecological refrigerant gas with low GWP.
- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Systems with multi-line refrigerant connections, where every indoor unit is connected directly to the outdoor unit via dedicated refrigerant lines.
- Easy installation and maintenance.

X-fan function

This self-cleaning system foresees that the fan of the indoor unit continues its operation for a few minutes after the unit is turned off, in order to perfectly dry the coil and avoid the formation and proliferation of pathogens.







Smart APP Ewpe

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.







Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



Supplied components for indoor units

Models	SPG_W	CKG_FS	MLG_F	MPG_CS	MPG_C	MPG_D	MPG_DH
Remote control	•	•	•	•	•	•	•
Remote control holder	•	•	•	•	•	•	•
WRCB wired panel WRCB with integrated Wi-Fi module						•	•
Air Purifiers (Cold Plasma)		•					
Wi-Fi module		•					
Condensate discharge pump				•	•	•	•

TYPE OF OUTDOOR UNIT

MPG outdoor unit

Multisplit reversible air/air heat pump with DC inverter technology.

Types:

- Dualsplit: outdoor units MPG420 and MPG520 can be combined with 1 or 2 indoor units.
- Trialsplit: outdoor units MPG630 and MPG730 can be combined with 2 or 3 indoor units.
- Quadrisplit: outdoor unit MPG840 and MPG1040 can be combined with 2, 3 or 4 indoor units.
- Pentasplit: outdoor unit MPG1250 can be combined with 2, 3, 4 or indoor units.

Main features:

- Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
- Compressor and fan with DC inverter technology.
- Fitted with an electronic expansion valve.

INDOOR UNIT VERSIONS AVAILABLE

Nominal cooling capacity in kBTU/h				Indoor units			
7	SPG200W						
9	SPG250W	CKG260FS	MLG250F			MPG250D	MPG250DH
12	SPG350W	CKG360FS	MLG350F	MPG350CS		MPG350D	MPG350DH
18	SPG500W	CKG500FS	MLG500F	MPG500CS		MPG500D	MPG500DH
24	SPG700W		MLG700F		MPG700C	MPG700D	MPG700DH

ALLOWED COMBINATIONS OF INDOOR UNITSFor trialsplit, quadrisplit, pentasplit it is mandatory to install at least 2 indoor units for correct functioning of the system.

For further information, please refer to the technical documentation on the website www.aermec.com

	MPG420 (14kBTU/h)		MPG520 (18kBTU/h)		
		N° unit	à interne		
1	2	1	2	2	3
7	7+7	9	7+7	7+7	7+7+7
9	7+9	12	7+9	7+9	7+7+9
12	7+12		7+12	7+12	7+7+12
	9+9		9+9	7+18	7+9+9
	9+12		9+12	9+9	7+9+12
			12+12	9+12	7+12+12
				9+18	9+9+9
				12+12	9+9+12
				12+18	

	G730 BTU/h)		MPG840 (28kBTU/h)	
2	3	2	3	4
7+7	7+7+7	7+7	7+7+7	7+7+7+7
7+9	7+7+9	7+9	7+7+9	7+7+7+9
7+12	7+7+12	7+12	7+7+12	7+7+7+12
7+18	7+7+18	7+18	7+7+18	7+7+7+18
9+9	7+9+9	9+9	7+9+9	7+7+9+9
9+12	7+9+12	9+12	7+9+12	7+7+9+12
9+18	7+9+18	9+18	7+9+18	7+7+9+18
12+12	7+12+12	12+12	7+12+12	7+7+12+12
12+18	9+9+9	12+18	7+12+18	7+9+9+9
18+18	9+9+12	18+18	9+9+9	7+9+9+12
	9+9+18		9+9+12	7+9+12+12
	9+12+12		9+9+18	9+9+9+9
	12+12+12		9+12+12	9+9+9+12
			9+12+18	9+9+12+12
			12+12+12	
			12+12+18	

Any configuration outside of those listed in the above tables will cause errors on the external drives, resulting in system failure and/or damage.

	MPG1040 (36kBTU/h)					G1250 BTU/h)		
2	3	4	2	3		4		5
7+12	7+7+7	7+7+7+7	7+18	7+7+7	7+7+7+7	7+12+12+12	7+7+7+7	7+9+9+9+9
7+18	7+7+9	7+7+7+9	7+21	7+7+9	7+7+7+9	7+12+12+21	7+7+7+7	7+9+9+9+12
7+21	7+7+12	7+7+7+12	7+24	7+7+12	7+7+7+12	7+12+12+24	7+7+7+7+12	7+9+9+9+18
7+24	7+7+18	7+7+7+18	9+12	7+7+18	7+7+7+18	7+12+18+18	7+7+7+7+18	7+9+9+9+21
9+9	7+7+21	7+7+7+21	9+18	7+7+21	7+7+7+21	7+12+18+21	7+7+7+7+21	7+9+9+9+24
9+12	7+7+24	7+7+7+24	9+21	7+7+24	7+7+7+24	7+12+18+24	7+7+7+74	7+9+9+12+12
9+18	7+9+9	7+7+9+9	9+24	7+9+9	7+7+9+9	7+12+21+21	7+7+7+9+9	7+9+9+12+18
9+21	7+9+12	7+7+9+12	12+12	7+9+12	7+7+9+12	7+18+18+18	7+7+7+9+12	7+9+9+12+21
9+24	7+9+18	7+7+9+18	12+18	7+9+18	7+7+9+18	9+9+9+9	7+7+7+9+18	7+9+9+12+24
12+12	7+9+21	7+7+9+21	12+21	7+9+21	7+7+9+21	9+9+9+12	7+7+7+9+21	7+9+9+18+18
12+18	7+9+24	7+7+9+24	12+24	7+9+24	7+7+9+24	9+9+9+18	7+7+7+9+24	7+9+12+12+12
12+21	7+12+12	7+7+12+12	18+18	7+12+12	7+7+12+12	9+9+9+21	7+7+7+12+12	7+9+12+12+18
12+24	7+12+18	7+7+12+18	18+21	7+12+18	7+7+12+18	9+9+9+24	7+7+7+12+18	7+9+12+12+21
18+18	7+12+21	7+7+12+21	18+24	7+12+21	7+7+12+21	9+9+12+12	7+7+7+12+21	7+12+12+12+12
18+21 18+24	7+12+24 7+18+18	7+7+12+24	21+21 21+24	7+12+24	7+7+12+24	9+9+12+18	7+7+7+12+24 7+7+7+18+18	7+12+12+12+18
		7+7+18+18		7+18+18	7+7+18+18	9+9+12+21		9+9+9+9+9
21+21	7+18+21	7+7+18 +21 7+9+9+9	24+24	7+18+21	7+7+18 +21	9+9+12+24	7+7+7+18+21	9+9+9+9+12
21+21 24+24	7+18+24 7+21+21	7+9+9+9		7+18+24 7+21+21	7+7+18 +24 7+7+21 +21	9+9+18+18 9+9+18+21	7+7+7+18+24 7+7+7+21+21	9+9+ 9+9+18 9+9+ 9+9+21
24+24	7+21+21	7+9+9+12		7+21+21	7+7+21 +21	9+9+18+21	7+7+7+21+21	9+9+9+9+21
	9+9+9	7+9+9+10		7+21+24	7+7+21+24	9+9+21+21	7+7+9+9+12	9+9+9+12+12
	9+9+12	7+9+9+24		9+9+9	7+9+9+9	9+9+21+24	7+7+9+9+18	9+9+9+12+18
	9+9+18	7+9+12+12		9+9+12	7+9+9+12	9+12+12+12	7+7+9+9+10	9+9+9+12+21
	9+9+21	7+9+12+18		9+9+18	7+9+9+18	9+12+12+18	7+7+9+9+24	9+9+9+12+24
	9+9+24	7+9+12+21		9+9+21	7+9+9+21	9+12+12+21	7+7+9+12+12	9+9+9+18+18
	9+12+12	7+9+12+24		9+9+24	7+9+9+24	9+12+12+24	7+7+9+12+18	9+9+12+12+12
	9+12+18	7+9+18+18		9+12+12	7+9+12+12	9+12+18+18	7+7+9+12+21	9+9+12+12+18
	9+12+21	7+12+12+12		9+12+18	7+9+12+18	9+12+18+21	7+7+9+12+24	9+9+12+12+21
	9+12+24	7+12+12+18		9+12+21	7+9+12+21	9+12+18+24	7+7+9+18+18	9+12+12+12+12
	9+18+18	7+12+12+21		9+12+24	7+9+12+24	9+12+21+21	7+7+9+18+21	9+12+12+12+18
	9+18+21	9+9+9+9		9+18+18	7+9+18+18	9+18+18+18	7+7+12+12+12	12+12+12+12
	9+18+24	9+9+9+12		9+18+21	7+9+18+21	12+12+12+12	7+7+12+12+18	
	9+21+21	9+9+9+18		9+18+24	7+9+18+24	12+12+12+18	7+7+12+12+21	
	9+21+24	9+9+9+21		9+21+21	7+9+21+21	12+12+12+21	7+7+12+12+24	
	12+12+12	9+9+9+24		9+21+24	7+9+21+24	12+12+12+24	7+7+12+18+18	
	12+12+18	9+9+12+12		9+24+24		12+12+18+18		
	12+12+21	9+9+12+18		12+12+12		12+12+18+21		
	12+12+24	9+9+12+21		12+12+18				
	12+18+18	9+9+12+24		12+12+21				
	12+18+21	9+9+18+18		12+12+24				
	12+18+24	9+12+12+12		12+18+18				
	12+21+21	9+12+12+18		12+18+21				
	18+18+18	9+12+12+21		12+18+24				
		12+12+12+12		12+21+21				
		12+12+12+18		12+21+24 12+24+24				
				18+18+18				
				18+18+21				
				18+18+24				
				18+21+21				
				18+21+24				
				21+21+21				

Any configuration outside of those listed in the above tables will cause errors on the external drives, resulting in system failure and/or damage.

ACCESSORIES

CC2: Centralised control with 7" touchscreen display for managing several indoor units within a number of multisplit systems. The centralised control has an integrated external contact. For more information, refer to the specific documentation. *

WRCA: Wired panel with liquid crystal display and soft-touch buttons. This accessory can be used to control not only the traditional system functions but also a weekly timer with a maximum of 8 daily time bands.

WRCB: Wired panel with liquid crystal display and soft-touch buttons, equipped with an integrated wi-fi module for remote control of the unit (via the dedicated EWPE Smart App).

* The CC2 centralised control can manage up to 36 MPG systems.

In order to use accessory CC2, for each indoor unit, the WRCA / WRCB wired panel (accessory) must be installed, with the IC-2P adapter accessory.

For more information about the accessories and their functions (such as the auto-restart function), refer to the specific documentation of the single accessory.

DCK: Remote Contact Kit. This accessory allows you to switch the system on and off using an external contact.

WIFIKITO1: Plug & Play module to be installed in the indoor unit for Wi-Fi control, equipped with Bluetooth® connection to ensure a better connection with smart devices. (Cable length 250 mm)

The accessories WRCA and WIFIKIT01 are compatible with one another and can therefore be connected to the same indoor unit simultaneously.

GLG405: Air supply and flow grid with dimensions (620x620 mm) for cassette internal unit.

GLG40: Air supply and flow grid with dimensions (950x950 mm) for cassette internal unit.



DTG1: Diagnostic tool for indoor and outdoor units of the entire series (tool reserved for service centres or installers).

ACCESSORIES COMPATIBILITY

SPG_W

Accessory	SPG500W			SPG700W			
CC2 (1)		•		•			
WRCA (1)		•		•			
(1) Auto-restart function.							
Accessory	SPG	500W		SPG700	W		
IC-2P		•		•			
Accessory	SPG200W	SPG250W	SPG350W	SPG500W	SPG700W		
DCK				•	•		
WIFIKIT01	•	•	•	•	•		
CKG_FS							
Accessory	CKG260FS		CKG360FS		CKG500FS		
CC2 (1)	•		•		•		
WRCA (1)	•		•	,	•		
(1) Auto-restart function.							
Accessory	CKG260FS		CKG360FS		CKG500FS		
IC-2P	•		•		•		
MLG_F							
Accessory	MLG250F	MLG350F		MLG500F	MLG700F		
CC2 (1)	•	•		•	•		
WRCA (1)	•	•		•	•		
WRCB (1)	•	•	,	•	•		
(1) Auto-restart function.							
Accessory	MLG250F	MLG350F		MLG500F	MLG700F		
IC-2P	•	•		•	•		
Accessory	MLG250F	MLG350F	,	MLG500F	MLG700F		
DCK	•	•		•	•		
MPG_CS							
Accessory	MPG	350CS		MPG500	OCS		
CC2 (1)		•		•			
WRCA (1)		•					

⁽¹⁾ Auto-restart function.

WRCB (1)

Accessory	Accessory	MPG	350CS		MPG500CS
GLOSE (1)	IC-2P		•		•
Messary Mess	Accessory	MPG	350CS		MPG500CS
Accessory MPGSDOC CCD (C) MPG (C) Accessory MPGTDOC CCD (1) WRCB (1) UNRAC (2) UNRAC (3) UN AUGUSTATION (2000) GEP Accessory MPGTDOC GEW MPGTDOC DCK MPGTDOC Accessory MPGTDOC DCK MPGTDOC Accessory MPGTDOC CCC (1) Accessory MPGTDOC MPG D Accessory MPGTDOD APGTDOD Accessory MPGTDOD APGTDOD APGTDOD CCC (1) NMGA (1) NMGA (1) MACE (20) MPGST	GLG40S (1)		•		•
MPG C Accessory	(1) Mandatory accessory.				
MPG C Accessory	Accessory	MPG	350CS		MPG500CS
Accessory	DCK		•		•
CC2(1)	MPG_C				
WRC (1)	Accessory		MI	PG700C	
MRCSTOP				•	
(1) Auto-restart function. Accessory MPG700C (C-2P					
MPG700C C.2P	WRCB (1)			•	
C2P	(1) Auto-restart function.				
Accessory MPG700C	· ·		MI		
GG-0(1)	IC-2P				
The Accessory			MI		
Accessory MPG700C MPG_D . Accessory MPG250D MPG350D MPG500D MPG700D CC1(1) .	GLG40 (1)			•	
MPG_D	(1) Mandatory accessory.				
MPG_D Accessory MPG250D MPG350D MPG500D MPG700D CC2(1) .			MI	PG700C	
Accessory MPG250D MPG350D MPG500D MPG700D CC2 (1) -	DCK			•	
CC2 (1)	MPG_D				
WRCA (1) • • • WRCB (1) • • • (1) Auto-restart function. Wired panel WRCB standard supply. WPG250D MPG350D MPG500D MPG700D IC-2P • • • • • • Accessory MPG250D MPG350D MPG500D MPG700D MPG700DH MP		MPG250D	MPG350D	MPG500D	MPG700D
WRCB (1)					
(1) Auto-restart function. Wired panel WRCB standard supply. Accessory MPG250D MPG350D MPG500D MPG700D IC-2P · · · · · · Accessory MPG250D MPG350D MPG500D MPG700D DCK · · · · · · MPG350D MPG500D MPG700D MPG700D CCX · · · · · · · MPG3DH Accessory MPG250DH MPG350DH MPG30DH MPG500DH MPG700DH CC2 (1) · · · · · · · WRCA (1) · · · · · · · WRCB (1) · · · · · · · In third-restart function. Wired panel WRCB standard supply. Accessory MPG250DH MPG350DH MPG350DH MPG500DH MPG700DH IC-2P · · · · · · Accessory MPG250DH MPG350DH MPG500DH MPG500DH MPG700DH IC-2P · · · · · · · Accessory MPG250DH MPG350DH MPG500DH MPG500DH MPG700DH					
Wired panel WRCB standard supply. Accessory MPG250D MPG350D MPG500D MPG700D IC-2P • <t< th=""><th></th><th>•</th><th>•</th><th>•</th><th>•</th></t<>		•	•	•	•
C-2P	(1) Auto-restart function. Wired panel WRCB standard supply.				
Accessory MPG250D MPG350D MPG500D MPG700D DCK • • • • • MPG_DH Accessory MPG250DH MPG350DH MPG500DH MPG700DH CQ (1) • • • • • WRCA (1) • • • • • WRCB (1) • • • • • (1) Auto-restart function. Wired panel WRCB standard supply. Wred panel WRCB standard supply. MPG500DH MPG500DH MPG700DH IC-2P • • • • • Accessory MPG250DH MPG350DH MPG500DH MPG700DH Accessory MPG250DH MPG350DH MPG500DH MPG700DH					
DCK • • • • MPG_DDH Accessory MPG250DH MPG350DH MPG500DH MPG700DH CC2 (1) • • • • • WRCA (1) • • • • • WRCB (1) • • • • • (1) Auto-restart function. Wired panel WRCB standard supply. Accessory MPG250DH MPG350DH MPG500DH MPG700DH Accessory MPG250DH MPG350DH MPG500DH MPG700DH	IC-2P	•	•	•	
MPG_DH Accessory MPG250DH MPG350DH MPG500DH MPG700DH CC2 (1) • • • • • WRCA (1) • • • • • WRCB (1) • • • • • (1) Auto-restart function. Wired panel WRCB standard supply. Accessory MPG250DH MPG350DH MPG500DH MPG700DH IC-2P • • • • • Accessory MPG250DH MPG350DH MPG500DH MPG700DH Accessory MPG250DH MPG350DH MPG500DH MPG700DH		MPG250D	MPG350D	MPG500D	MPG700D
Accessory MPG250DH MPG350DH MPG500DH MPG700DH CC2 (1) • • • • WRCA (1) • • • • WRCB (1) • • • • (1) Auto-restart function. Wired panel WRCB standard supply. Accessory MPG250DH MPG350DH MPG500DH MPG700DH IC-2P • • • • • Accessory MPG250DH MPG350DH MPG500DH MPG500DH MPG700DH Accessory MPG250DH MPG350DH MPG500DH MPG700DH	DCK	•	•	•	•
CC2 (1) • </th <th>MPG_DH</th> <th></th> <th></th> <th></th> <th></th>	MPG_DH				
WRCA (1) • • • WRCB (1) • • • (1) Auto-restart function. Wried panel WRCB standard supply. Accessory MPG250DH MPG350DH MPG500DH MPG700DH IC-2P • • • • • Accessory MPG250DH MPG350DH MPG500DH MPG700DH		MPG250DH	MPG350DH	MPG500DH	MPG700DH
WRCB (1) •<		•	•		•
Accessory MPG250DH MPG350DH MPG500DH MPG700DH IC-2P • • • • Accessory MPG250DH MPG350DH MPG500DH MPG700DH IC-2P • • • • • • Accessory MPG250DH MPG350DH MPG500DH MPG700DH		•	•	•	•
Wired panel WRCB standard supply. Accessory MPG250DH MPG350DH MPG500DH MPG700DH IC-2P • • • • • Accessory MPG250DH MPG350DH MPG500DH MPG700DH	WRCB (1)	•	•	•	•
IC-2P • • • • Accessory MPG250DH MPG350DH MPG500DH MPG700DH	(1) Auto-restart function. Wired panel WRCB standard supply.				
Accessory MPG250DH MPG350DH MPG500DH MPG700DH		MPG250DH	MPG350DH	MPG500DH	MPG700DH
	IC-2P	•	•	•	•
	Accessory	MPG250DH	MPG350DH	MPG500DH	MPG700DH

OUTDOOR UNIT PERFORMANCE DATA

		MPG420	MPG520	MPG630	MPG730	MPG840	MPG1040	MPG1250
Nominal cooling performances	LW	440	5.20	(10	7.10	0.00	10.60	42.40
Cooling capacity (1)	kW	4,10	5,30	6,10	7,10	8,00	10,60	12,10
Cooling input power (1)	kW	1,10	1,48	1,48	1,88	2,12	3,00	3,40
EER (2)	W/W	3,73	3,58	4,12	3,78	3,77	3,53	3,56
Minimum cooling performances								
Cooling capacity	kW	2,05	2,14	2,20	2,30	2,30	2,60	2,60
Cooling input power	kW	0,20	0,30	0,40	0,60	0,80	0,60	0,60
Maximum cooling performances								
Cooling capacity	kW	5,00	5,80	8,30	9,20	11,00	12,00	15,20
Cooling input power	kW	2,20	2,50	2,90	3,40	3,60	4,60	4,60
Seasonal efficiency								
SEER	W/W	6,70	6,50	6,90	6,50	6,10	6,50	6,48
Annual power consumption	kWh/annum	214	285	309	382	459	571	-
Efficiency energy class (3)		A++	A++	A++	A++	A++	A++	-
Nominal heating performances								
Heating capacity (4)	kW	4,40	5,65	6,50	8,60	9,50	12,00	13,00
Heating input power (4)	kW	0,97	1,25	1,43	2,23	2,20	3,04	3,19
COP (2)	W/W	4,54	4,52	4,55	3,86	4,32	3,95	4,08
Minimum heating performances								
Heating capacity	kW	2,49	2,58	3,60	3,65	3,65	3,00	3,00
Heating input power	kW	0,30	0,40	0,40	0,60	0,70	0,80	0,80
Maximum heating performances		.,			.,	., .	.,	.,
Heating capacity	kW	5,40	6,50	8,50	9,20	10,25	14,00	15,50
Heating input power	kW	2,25	2,50	2,90	3,00	3,60	5,00	5,00
Seasonal efficiency (temperate climate)		2,23	2,50	2/20	3,00	5,00	5,00	3,00
SCOP	W/W	4,00	4,00	3,80	3,80	4,00	3,80	3,80
Annual power consumption	kWh/annum	1295	1435	2247	2247	2345	3795	-
Efficiency energy class (3)	KWII/ dillidill	A+	A+	A A	A A	A+	A A	
Outdoor unit		N I	N I	, , ,	N	N1	N	
Type of fan	Туре	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial
Air flow rate	турс	IIIVCI CCI AXIAI	IIIVCI ICI AXIAI	IIIVCI CI UNIUI	IIIVCI CI ANIAI	IIIVCI CI UNIUI	IIIVCITCI ANIAI	IIIVCITCI UNIUI
Maximum	m³/h	2300	2300	3800	3800	3800	5800	5800
	111 /11	2300	2300	3000	3000	3000	3000	3000
Sound power (5) Maximum	dB(A)	62.0	640	600	60.0	600	70.0	74.0
	UD(A)	62,0	64,0	68,0	68,0	68,0	70,0	74,0
Sound pressure (1 m) (6)	JD(A)	F2.0	F4.0	50.0	50.0	50.0	CO O	(0.0
Maximum	dB(A)	52,0	54,0	58,0	58,0	58,0	60,0	60,0
Compressor	4	Incompanie de la constante de		Investment on	Incompany to the second	Investment on	Incomb more to more	l
Туре	type	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary
Refrigerant	type	R32	R32	R32	R32	R32	R32	R32
Refrigerant charge	kg	0,75	0,90	1,60	1,70	1,80	2,40	2,40
Potential global heating	GWP	675kgCO₂eq	675kgCO₂eq	675kgCO₂eq	675kgCO₂eq	675kgCO₂eq	675kgCO₂eq	675kgCO₂eq
Equivalent CO ₂	t	0,51	0,61	1,08	1,15	1,22	1,62	1,62
Electric data								
Rated power input (7)	kW	2,30	2,50	2,90	3,40	3,60	5,00	5,00
Rated current input (7)	A	10,0	11,0	12,9	15,0	16,0	21,7	21,7
Refrigeration pipework								
Maximum refrigerant tube length	m	40	40	60	60	70	80	100
Maximum single cooling line length	m	20	20	20	20	20	25	25
Maximum unit (indoor/external) cooling line level	m	15,0	15,0	15,0	15,0	15,0	25,0	25,0
difference in height	m	13,0	13,0	0,01	1,0	0,01	23,0	23,0
Maximum (indoor/outdoor) cooling line level difference	m	15,0	15,0	15,0	15,0	15,0	25,0	25,0
Refrigerant to be added	g/m	20	20	20	20	20	20	20
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
			. ,	. ,	. , . (-, -)	.,. ,-,-,	.,. ,,	. , . = (-, -)
Power supply								

⁽¹⁾ Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

(2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.

(3) Data in accordance with Delegated Regulation (EU) No. 626/2011.

(4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

(5) Sound power calculated in free field, in accordance with UNI EN ISO 3744.

(6) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

(7) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

All technical data refer to the respective reference combinations of the indoor units.

INDOOR UNIT PERFORMANCE DATA

SPG W

		SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
Nominal cooling performances						
Cooling capacity (1)	kW	2,20	2,50	3,20	4,60	6,20
Moisture removed	l/h	0,6	0,6	1,4	1,8	1,8
Nominal heating performances						
Heating capacity (2)	kW	2,40	2,80	3,40	5,20	6,50
ndoor unit						
Type of fan	Туре			Inverter centrifugal		
nput power	W	13	13	23	38	38
Air flow rate						
Minimum	m³/h	250	270	320	600	650
Average	m³/h	420	390	400	700	750
Maximum	m³/h	470	470	520	800	950
Turbo	m³/h	500	500	590	850	1100
Sound power (3)						
Minimum	dB(A)	34,0	34,0	38,0	44,0	49,0
Average	dB(A)	45,0	44,0	45,0	48,0	52,0
Maximum	dB(A)	49,0	48,0	49,0	52,0	58,0
Turbo Turbo	dB(A)	55,0	55,0	56,0	54,0	61,0
Sound pressure (1 m) (4)						
Minimum	dB(A)	22,0	22,0	26,0	34,0	35,0
Average	dB(A)	33,0	32,0	33,0	38,0	38,0
Maximum	dB(A)	36,0	36,0	37,0	42,0	44,0
Turbo	dB(A)	39,0	38,0	41,0	44,0	47,0
ndoor unit						
Condensate discharge diameter	mm	16,0	16,0	16,0	16,0	16,0
Power supply						
Indoor unit power supply				220-240V ~ 50Hz		

⁽¹⁾ Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(4) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
Sound power calculated in free field, in accordance with UNI EN ISO 3744.

CKG FS

CKU_F3				
		CKG260FS	CKG360FS	CKG500FS
Nominal cooling performances				
Cooling capacity (1)	kW	2,70	3,50	5,20
Moisture removed	l/h	0,8	1,2	1,8
Nominal heating performances				
Heating capacity (2)	kW	2,90	3,80	5,33
Indoor unit				
Type of fan	Туре		Inverter centrifugal	
Input power	W	35	40	50
Air flow rate				
Minimum	m³/h	280	360	410
Average	m³/h	370	440	520
Maximum	m³/h	430	520	650
Turbo	m³/h	500	600	700
Sound power (3)				
Minimum	dB(A)	38,0	39,0	47,0
Average	dB(A)	44,0	46,0	51,0
Maximum	dB(A)	48,0	50,0	55,0
Turbo	dB(A)	50,0	54,0	57,0
Sound pressure (4)				
Minimum	dB(A)	26,0	29,0	37,0
Average	dB(A)	31,0	36,0	41,0
Maximum	dB(A)	36,0	40,0	45,0
Turbo	dB(A)	39,0	44,0	47,0
Indoor unit				
Condensate discharge diameter	mm	17,0	17,0	17,0
Power supply		·		
Indoor unit power supply			220-240V ~ 50Hz	

⁽¹⁾ Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(4) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.
Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MLG F

		MLG250F	MLG350F	MLG500F	MLG700F
Nominal cooling performances					
Cooling capacity (1)	kW	2,60	3,50	4,50	7,10
Moisture removed	l/h	0,8	1,4	1,8	2,5
Nominal heating performances					
Heating capacity (2)	kW	2,70	4,00	5,00	8,00
Electric data					
Rated power input (3)	W	38	38	38	60
Indoor unit					
Type of fan	Туре		Inverter of	entrifugal	
Input power	W	38	38	38	60
Air flow rate					
Minimum	m³/h	420	420	410	720
Average	m³/h	540	540	520	800
Maximum	m³/h	610	610	590	870
Turbo	m³/h	700	700	680	950
Sound power (4)					
Minimum	dB(A)	40,0	40,0	40,0	41,0
Average	dB(A)	44,0	44,0	44,0	45,0
Maximum	dB(A)	49,0	49,0	49,0	52,0
Turbo	dB(A)	52,0	52,0	52,0	52,0
Sound pressure (5)					
Minimum	dB(A)	26,0	26,0	26,0	27,0
Average	dB(A)	30,0	30,0	30,0	31,0
Maximum	dB(A)	35,0	35,0	35,0	35,0
Turbo	dB(A)	38,0	38,0	38,0	38,0
Indoor unit					
Condensate discharge diameter	mm	17,0	17,0	17,0	17,0
Power supply					
Indoor unit power supply			220-240	V ~ 50Hz	

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

 (3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.

 (5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

 Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MPG_CS

		MPG350CS	MPG500CS
Nominal cooling performances			
Cooling capacity (1)	kW	3,50	5,00
Moisture removed	l/h	1,4	1,8
Nominal heating performances			
Heating capacity (2)	kW	4,00	5,50
Indoor unit			
Type of fan	Туре	I	nverter centrifugal
Input power	W	30	35
Air flow rate			
Minimum	m³/h	380	380
Average	m³/h	450	450
Maximum	m³/h	540	540
Turbo	m³/h	560	650
Sound power (3)			
Minimum	dB(A)	46,0	46,0
Average	dB(A)	50,0	50,0
Maximum	dB(A)	55,0	55,0
Turbo	dB(A)	57,0	59,0
Sound pressure (1 m) (4)			
Turbo	dB(A)	41,0	43,0
Minimum	dB(A)	30,0	30,0
Average	dB(A)	34,0	34,0
Maximum	dB(A)	39,0	39,0
Indoor unit			
Condensate discharge diameter	mm	25,0	25,0
Power supply			
Indoor unit power supply			220-240V ~ 50Hz

⁽¹⁾ Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

(3) Sound power calculated in free field, in accordance with UNI EN ISO 3744.

(4) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MPG C

0_0		MPG700C	
Nominal cooling performances			
Cooling capacity (1)	kW	7,00	
Moisture removed	l/h	2,5	
Nominal heating performances			
Heating capacity (2)	kW	8,00	
Indoor unit			
Type of fan	Туре	Inverter centrifugal	
Input power	W	50	
Air flow rate			
Minimum	m³/h	830	
Average	m³/h	910	
Maximum	m³/h	1050	
Turbo	m³/h	1100	
Sound pressure (1 m) (3)			
Turbo	dB(A)	44,0	
Minimum	dB(A)	38,0	
Average	dB(A)	40,0	
Maximum	dB(A)	43,0	
Sound power (4)			
Minimum	dB(A)	57,0	
Average	dB(A)	59,0	
Maximum	dB(A)	61,0	
Turbo	dB(A)	62,0	
Indoor unit			
Condensate discharge diameter	mm	25,0	
Power supply			
Indoor unit power supply		220-240V ~ 50Hz	

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (3) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MPG D

		MPG250D	MPG350D	MPG500D	MPG700D
Nominal cooling performances					
Cooling capacity (1)	kW	2,65	3,50	5,00	7,00
Moisture removed	I/h	0,8	1,4	1,8	2,5
Nominal heating performances					
Heating capacity (2)	kW	2,80	4,00	5,50	8,00
Indoorunit					
Type of fan	Туре		Inverter o	entrifugal	
Input power	W	70	80	80	200
Air flow rate					
Minimum	m³/h	220	300	420	900
Average	m³/h	340	420	610	1000
Maximum	m³/h	450	540	720	1200
Turbo	m³/h	560	600	800	1300
Sound pressure (1 m) (3)					
Turbo	dB(A)	32,0	36,0	36,0	46,0
Minimum	dB(A)	22,0	27,0	25,0	36,0
Average	dB(A)	22,0	27,0	25,0	36,0
Maximum	dB(A)	28,0	34,0	31,0	42,0
Sound power (4)					
Minimum	dB(A)	37,0	42,0	40,0	51,0
Average	dB(A)	40,0	46,0	43,0	55,0
Maximum	dB(A)	43,0	49,0	46,0	57,0
Turbo	dB(A)	47,0	51,0	51,0	61,0
Indoor unit					
Condensate discharge diameter	mm	26,0	26,0	26,0	26,0
Power supply					
Indoor unit power supply			220-240	V ~ 50Hz	

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (3) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.
 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 Sound power calculated in free field, in accordance with UNI EN ISO 3744.

MPG DH

		MPG250DH	MPG350DH	MPG500DH	MPG700DH
Nominal cooling performances					
Cooling capacity (1)	kW	2,65	3,50	5,00	7,00
Moisture removed	I/h	0,8	1,4	1,8	2,5
Nominal heating performances					
Heating capacity (2)	kW	2,80	4,00	5,50	8,00
Indoor unit					
Type of fan	Туре		Inverter o	entrifugal	
Input power	W	50	50	75	80
High static pressure					
Maximum	Pa	60	60	60	125
Air flow rate					
Minimum	m³/h	550	410	750	900
Average	m³/h	610	480	790	1000
Maximum	m³/h	670	560	840	1200
Turbo	m³/h	700	650	880	1500
Sound pressure (1 m) (3)					
Turbo	dB(A)	41,0	39,0	41,0	45,0
Minimum	dB(A)	35,0	33,0	37,0	36,0
Average	dB(A)	37,0	35,0	38,0	38,0
Maximum	dB(A)	39,0	37,0	39,0	40,0
Sound power (4)					
Minimum	dB(A)	51,0	49,0	53,0	53,0
Average	dB(A)	53,0	51,0	54,0	55,0
Maximum	dB(A)	55,0	53,0	55,0	57,0
Turbo	dB(A)	57,0	55,0	57,0	62,0
Indoor unit					
Condensate discharge diameter	mm	26,0	26,0	26,0	26,0
Power supply					
Indoor unit power supply			220-240	V ~ 50Hz	

⁽¹⁾ Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

(3) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.

Sound power calculated in free field, in accordance with UNI EN ISO 3744.

INDOOR UNIT COOLING FITTINGS

SPG_W

		SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
Refrigeration pipework						_
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")

CKG_FS

		CKG260FS	CKG360FS	CKG500FS
Refrigeration pipework				
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")

MLG_F

		MLG250F	MLG350F	MLG500F	MLG700F
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,7 (1/2)	15,9 (5/8)

MPG_CS

		MPG350CS	MPG500CS
Refrigeration pipework			
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	12,7 (1/2")

MPG_C

		MPG700C
Refrigeration pipework		
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")

MPG_D

		MPG250D	MPG350D	MPG500D	MPG700D
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	15,9 (5/8")

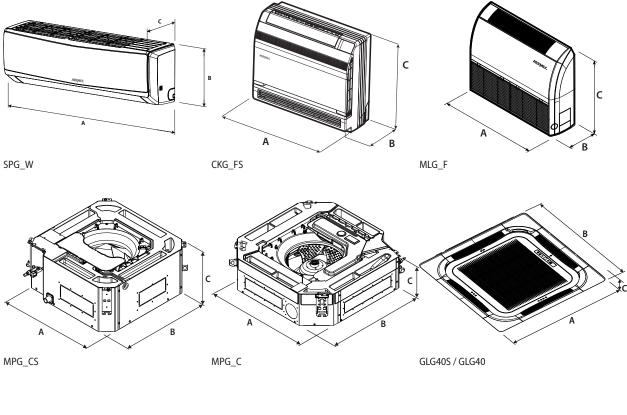
MPG_DH

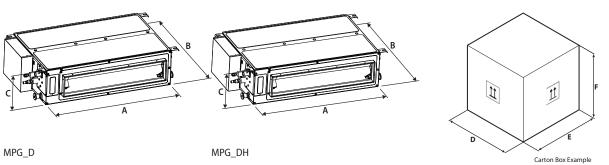
		MPG250DH	MPG350DH	MPG500DH	MPG700DH
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	15,9 (5/8")

OUTDOOR UNIT COOLING FITTINGS

Models			MPG420	MPG520	MPG630	MPG730	MPG840	MPG1040	MPG1250
Models			14kBtu/h	18kBtu/h	21kBtu/h	24kBtu/h	28kBtu/h	36kBtu/h	42kBtu/h
	A	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	В	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Liquid connections	(mm (inch)			9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	D	mm (inch)					9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	E	mm (inch)				9,52 (3/8") 9,5		9,52 (3/8")	
	A	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	В	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Gas connections	(mm (inch)			6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
•	D	mm (inch)					6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	E	mm (inch)							6,35 (1/4")

INDOOR UNIT WEIGHTS AND DIMENSIONS





SPG_W

		SPG200W	SPG250W	SPG350W	SPG500W	SPG700W
Indoor unit						
A	mm	696	696	770	972	1081
В	mm	251	251	251	300	325
	mm	190	190	190	225	248
)	mm	747	747	822	1022	1137
E	mm	324	324	324	374	407
	mm	262	262	262	299	334
Net weight	kg	7,5	7,5	8,5	13,5	16,5
Weight for transport	kg	9,0	9,0	10,0	16,0	19,5

CKG_FS

		CKG260FS	CKG360FS	CKG500FS
Indoor unit				
A	mm	700	700	700
В	mm	215	215	215
C	mm	600	600	600
D	mm	788	788	788
E	mm	283	283	283
F	mm	697	697	697
Net weight	kg	15,5	15,5	15,5
Weight for transport	kg	18,5	18,5	18,5

MLG_F

		MLG250F	MLG350F	MLG500F	MLG700F
Indoor unit					
A	mm	870	870	870	1200
В	mm	235	235	235	235
С	mm	665	665	665	665
D	mm	1033	1033	1033	1363
E	mm	300	300	300	300
F	mm	770	770	770	770
Net weight	kg	25,0	25,0	26,0	33,0
Weight for transport	kg	30,0	30,0	31,0	40,0

MPG_CS

		MPG350CS	MPG500CS
Indoor unit			
A	mm	570	570
В	mm	570	570
C	mm	265	265
D	mm	698	698
E	mm	653	653
F	mm	295	295
Net weight	kg	17,0	17,0
Weight for transport	kg	22,0	22,0

MPG_C

		MPG700C
Indoor unit		
A	mm	840
В	mm	840
C	mm	240
D	mm	963
E	mm	963
F	mm	325
Net weight	kg	29,0
Weight for transport	kg	36,0

GLG40S / GLG40

		GLG40S	GLG40
Indoor unit			
A	mm	620	950
В	mm	620	950
C	mm	48	52
D	mm	701	1033
E	mm	701	1038
F	mm	125	112
Net weight	kg	3,0	6,0
Weight for transport	kg	5,0	10,0

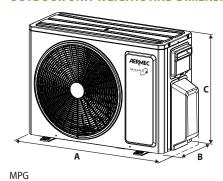
$\mathbf{MPG}_\mathbf{D}$

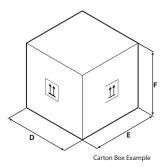
		MPG250D	MPG350D	MPG500D	MPG700D
Indoor unit					
A	mm	710	710	1010	900
В	mm	450	450	450	655
C	mm	200	200	200	260
D	mm	1008	1008	1308	1115
E	mm	568	568	568	772
F	mm	275	275	275	320
Net weight	kg	18,5	19,0	25,0	31,0
Weight for transport	kg	22,5	23,0	30,0	36,0

MPG_DH

		MPG250DH	MPG350DH	MPG500DH	MPG700DH
Indoor unit	'				
A	mm	710	710	1010	900
В	mm	450	450	450	655
C	mm	200	200	200	260
D	mm	1008	1008	1308	1115
E	mm	568	568	568	772
F	mm	275	275	275	320
Net weight	kg	18,5	19,0	25,0	31,0
Weight for transport	kg	22,5	23,0	30,0	36,0

OUTDOOR UNIT WEIGHTS AND DIMENSIONS





MPG

		MPG420	MPG520	MPG630	MPG730	MPG840	MPG1040	MPG1250
Outdoor unit								
A	mm	822	822	964	964	964	1020	1020
В	mm	352	352	402	402	402	427	427
C	mm	555	555	660	660	660	826	826
D	mm	872	872	1032	1032	1032	1095	1095
E	mm	398	398	456	456	456	500	500
F	mm	620	620	737	737	737	955	955
Net weight	kg	30,0	32,0	47,5	47,5	51,0	72,0	73,0
Weight for transport	kg	32,5	34,5	52,0	52,0	55,5	85,0 (1)	86,0 (1)

(1) Packaging + pallet

















MGE

Multisplit

Cooling capacity 4,1 ÷ 7,9 kW Heating capacity 4,4 ÷ 8,2 kW



- · New R32 ecological refrigerant gas.
- Wi-fi control using the relative accessory.
- Special golden fin coil.





MGE







DESCRIPTION

The multisplit air conditioners of the MGE range are combined with:

— SGE_W unit wall, for wall installation.

TYPE OF INDOOR UNIT

Indoor unit SGE W

Wall indoor unit designed to be installed on indoor walls.

SGE_W has an elegant and essential design. Its curved lines emphasize a kind of structure with innovative and functional style. The display with working parameters is elegantly integrated in the satin-finish cover and visible only when the unit is on.







Features

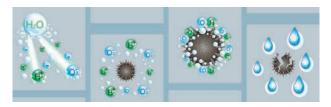
- $\ensuremath{\boldsymbol{--}}$ Remote control standard supply with each indoor unit.
- Fan with DC inverter technology.
- Regenerable air filter easy to remove and clean.
- Timer for programming switch-off and switch-on.
- Auxiliary emergency command integrated into the unit.
- Indoor unit front panel with LED display and indicator lights.
- 3-speed fan, to meet every possible need.
- **Auto** function for a continuous speed variation.
- **Turbo** function to attain the desired temperature as quickly as possible.
- Sleep night time function well-being program.
- Anti-freeze function that allows you to keep an inside minimum temperature of 8 °C in winter.
- followMe function for activating the ambient temperature probe inside the remote control, for improved comfort.

Air Purifiers (Cold Plasma)

Capable of reducing pollutants breaking down their molecules using electric discharges, causing the splitting of the water molecules in the air into positive and negative ions. These ions neutralise the molecules of the gas-

eous pollutants obtaining products that are normally present in clean air. The device can eliminate 90% of bacteria. The result is clean, ionised air that has no bad odours.

Not available for SGE200W



Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



Nethome Plus app

Using the specific **accessory**, the system offers wi-fi control thanks to the app for iOS and Android devices (available free on Apple Store and Google Play). The system can be controlled from a distance directly on your smartphone or tablet, or via Cloud with the aid of a wireless router connected to the Internet.











General features

- New R32 ecological refrigerant gas with low GWP.
- Operating mode: cooling, heating, dehumidification, automatic and fan only.

TYPE OF OUTDOOR UNIT

Outdoor unit

Multisplit air conditioner.

Reversible air/air heat pump with DC inverter technology.

Types

- Dualsplit: outdoor units MGE420 and MGE520 can be combined with 2 indoor units.
- Trialsplit: outdoor units MGE630 and MGE830 can be combined with 2 or 3 indoor units.

- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Air filter easily removed and cleaned.
- Systems with multi-line refrigerant connections, where every indoor unit is connected directly to the outdoor unit via dedicated refrigerant lines
- Easy installation and maintenance.

Low cooling function

cooling operation with outdoor temperatures down to -15 $^{\circ}\text{C}$

Low heating function

heating with external temperatures up to -15 °C.

General features

- Compressor and fan with DC inverter technology.
- Fitted with an electronic expansion valve.

ACCESSORIES

WIFIKEY: Plug & Play module to be installed in the indoor unit for Wi-Fi control.

ACCESSORIES COMPATIBILITY

Accessory	SGE200W	SGE250W	SGE350W	SGE500W
WIFIKFY	•	•	•	•

ALLOWED COMBINATIONS OF INDOOR UNITS

For trialsplit MGE units, it is mandatory to install at least 2 indoor units for correct functioning of the system.

For further information, please refer to the technical documentation on the website www.aermec.com $\,$

MGE420 (14kBtu/h)	MGE520 (18kBtu/h)	MGE630 (21kBtu/h)			E830 Btu/h)			
No. indoor unit								
2	2	2	3	2	3			
7+7	7+7	7+7	7+7+7	7+7	7+7+7			
7+9	7+9	7+9	7+7+9	7+9	7+7+9			
7+12	7+12	7+12	7+7+12	7+12	7+7+12			
9+9	9+9	7+18	7+9+9	7+18	7+9+9			
9+12	9+12	9+9	9+9+9	9+9	7+9+12			
	12+12	9+12	7+9+12	9+12	7+12+12			
		9+18		9+18	9+9+9			
,		12+12		12+12	9+9+12			
				12+18	9+12+12			
					12+12+12			
					7+7+18			
					7+9+18			

Reference combinations

OUTDOOR UNIT PERFORMANCE DATA

		MGE420	MGE520	MGE630	MGE830
Nominal cooling performances					
Cooling capacity (1)	kW	4,10	5,30	6,15	7,90
Cooling input power (1)	kW	1,27	1,64	1,91	2,45
EER (2)	W/W	3,23	3,23	3,23	3,23
Minimum cooling performances					
Cooling capacity	kW	1,47	2,29	1,99	3,18
Cooling input power	kW	0,12	0,69	0,18	0,29
Maximum cooling performances					
Cooling capacity	kW	4,98	5,71	6,59	8,21
Cooling input power	kW	1,67	2,00	2,20	3,10
Seasonal efficiency					
SEER	W/W	5,60	6,10	6,10	6,10
Efficiency energy class (3)		A+	A++	A++	A++
Annual power consumption	kWh/annum	258	309	350	453
Nominal heating performances					
Heating capacity (4)	kW	4,40	5,57	6,45	8,20
Heating input power (4)	kW	1,27	1,50	1,74	2,21
COP (2)	W/W	3,71	3,71	3,71	3,71
Minimum heating performances					
Heating capacity	kW	1,52	2,40	1,99	2,29
Heating input power	kW	0,12	0,60	0,35	0,37
Maximum heating performances					
Heating capacity	kW	4,98	5,74	6,68	8,50
Heating input power	kW	1,67	1,78	1,80	2,90
Seasonal efficiency (temperate climate)					
SCOP	W/W	3,80	3,80	4,00	4,00
Efficiency energy class (3)		A	A	A+	A+
Annual power consumption	kWh/annum	1400	1768	1910	1960
Power supply					
Outdoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

 (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.

 (3) Data in accordance with Delegated Regulation (EU) No. 626/2011.

 (4) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

Outdoor unit technical data

		MGE420	MGE520	MGE630	MGE830
Outdoor unit					
Type of fan	Туре	Axial	Axial	Axial	Axial
Air flow rate					
Maximum	m³/h	2100	2100	3000	3000
Sound power (1)					
Maximum	dB(A)	64,0	65,0	65,0	67,0
Sound pressure (1 m) (2)					
Maximum	dB(A)	56,0	54,0	58,0	58,0
Compressor					
Туре	type	Inverter rotary	Inverter rotary	Inverter rotary	Inverter rotary
Refrigerant	type	R32	R32	R32	R32
Refrigerant charge	kg	1,10	1,25	1,50	1,85
Potential global heating	GWP	675kgCO₂eq	675kgCO₂eq	675kgCO₂eq	675kgCO₂eq
Equivalent CO ₂	t	0,74	0,84	1,01	1,24
Outdoor unit					
Condensate discharge diameter	mm	16,0	16,0	16,0	16,0

- (1) Sound power calculated in free field, in accordance with UNI EN ISO 3744. (2) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

Outdoor unit general technical data

		MGE420	MGE520	MGE630	MGE830
Electric data					
Rated power input (1)	kW	2,80	3,10	3,90	4,10
Rated current input (1)	A	12,0	13,0	17,0	18,0
Refrigeration pipework					
Maximum refrigerant tube length	m	40	40	60	60
Maximum single cooling line length	m	25	25	30	30
Refrigerant to be added	g/m	12	12	12	12
Maximum unit (indoor/external) cooling line level difference in height	m	10,0	10,0	10,0	10,0
Maximum (indoor/outdoor) cooling line level difference	m	15,0	15,0	15,0	15,0
Diameter of liquid refrigerant connections	mm (inch)		6,35	(1/4")	
Diameter of refrigerant gas connections	mm (inch)		9,52	(3/8")	

⁽¹⁾ The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

INDOOR UNIT PERFORMANCE DATA

SGE W

		SGE200W	SGE250W	SGE350W	SGE500W
Nominal cooling performances					
Cooling capacity (1)	kW	2,05	2,77	3,46	5,27
Nominal heating performances					
Heating capacity (2)	kW	2,34	2,93	3,57	4,97
Indoor unit					
Type of fan	Туре	Tangential	Tangential	Tangential	Tangential
Air flow rate					
Maximum	m³/h	460	466	540	840
Average	m³/h	360	360	430	680
Minimum	m³/h	325	325	314	540
Sound power (3)					
Maximum	dB(A)	54,0	54,0	55,0	56,0
Average	dB(A)	-	-	-	-
Minimum	dB(A)	-	-	-	-
Sound pressure (1 m) (4)					
Minimum	dB(A)	21,0	25,0	25,0	26,0
Maximum	dB(A)	40,0	38,5	40,5	42,5
Average	dB(A)	26,0	32,0	34,5	36,0
Refrigeration pipework					
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12.7 (1/2")
Power supply					
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

 (3) Sound power calculated in free field, in accordance with UNI EN ISO 3744.

 (4) Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

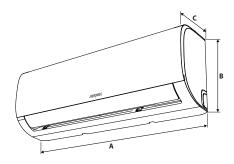
ADAPTERS SUPPLIED WITH THE OUTDOOR UNIT

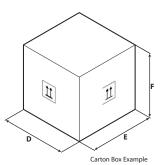
Unit	MGE420	420 MGE520 MGE630 MG		MGE830	Connections mi	m (inch)
OIIIC MGE4	WIGE420	MINIEDZU	MINICOSO	n MIGEOOD	Outdoor unit	Indoor unit
Quantity	0	0	1	1	9,52mm (3/8")	12,7mm (1/2")

For further information, please refer to the technical documentation on the website www.aermec.com $\,$

INDOOR UNIT WEIGHTS AND DIMENSIONS

SGE W

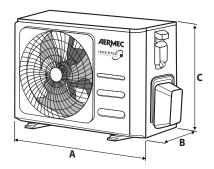


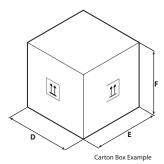


		SGE200W	SGE250W	SGE350W	SGE500W
Indoor unit					
A	mm	805	805	805	957
В	mm	285	285	285	302
(mm	194	194	194	213
D	mm	870	870	870	1035
E	mm	270	270	270	295
F	mm	360	365	365	385
Net weight	kg	7,9	7,6	7,6	10,0
Weight for transport	ka	9.7	9.7	9.8	13.0

OUTDOOR UNIT WEIGHTS AND DIMENSIONS

MGE





		MGE420	MGE520	MGE630	MGE830
Outdoor unit					
A	mm	877	877	1003	1003
3	mm	349	349	380	380
	mm	554	554	673	673
)	mm	915	915	1030	1030
	mm	370	370	438	438
	mm	615	615	750	750
Net weight	kg	31,6	35,0	43,3	48,0
Weight for transport	kg	34,7	38,0	47,1	51,8

Aermec S.p.A.Via Roma, 996 - 37040 Bevilacqua (VR) - Italy Tel. 0442633111 - Telefax 044293577 www.aermec.com



VRF SYSTEM

The VRFs are the direct expansion systems, with variable refrigerant flow

Unlike the Multisplits, which are characterised by a set flow of refrigerant, these systems allow users to adjust the amount of refrigerant in circulation, according to the actual load required by the indoor units in use.

They range of 12kW to 276 kW thanks to their modular configuration, and are available in a heat pump version with heat recovery and domestic hot water production.

These systems guarantee excellent energy efficiency, avoiding wasting energy pointlessly, and are amazingly quiet during operation.

VRF SYSTEM

Air flow rate | Cool. Cap. | Heat. Cap. | (kW)

MVBM - MVAS - MVBHR | Direct expansion variable refrigerant flow system VRF | - | 121-246.0 | 14.0-276.0 | 938.













MVBM - MVAS -MVBHR

Direct expansion variable refrigerant flow system VRF

Cooling capacity 12,1 ÷ 246,0 kW Heating capacity 14,0 ÷ 276,0 kW



- Units prepared for installations with two or three pipes.
- The correct balance between cost, efficiency and space.
- · Wide choice of indoor units available.
- Up to 80 connectible indoor units.



DESCRIPTION

The MV air conditioners from the MVBM, MVAS and MVBHR range are combined with indoor units:

- MVA_WL Wall.
- MVA D Horizontal duct.
- MVA_DH Horizontal duct, high head.
- MVA_DV Vertical duct.
- MVA_CS, MVA_C 8-way cassette .
- MVA_CB 4-way cassette .
- MVA_C1 1-way cassette. — MVA_F - Floor ceiling.
- MVA FS Console.
- MVA_V Column.
- MVA_ERV Heat recovery unit.

TYPE OF INDOOR UNIT

MVA WL

Wall indoor unit designed to be installed on indoor walls.

- Modern design to blend with all furnishing styles.
- Distributed air jet: air outlet louvers with horizontal and vertical adjustment facility.
- Anti-freeze function that allows a minimum temperature of 8 °C to be maintained in the environment during the winter period.

Duct indoor unit designed for indoor duct type installation.

MVA_D - Horizontal duct.

- Wired panel standard supply.
- Low noise levels.
- Easy installation in small assembly spaces, thanks to the limited dimen-
- Useful static pressure up to 80 Pa.

MVA DH

Duct indoor unit designed for indoor duct type installation.

MVA_DH - Horizontal duct, high head.

- Wired panel standard supply.
- Unit without cover, designed for duct type horizontal installation.
- Useful static pressure up to 200 Pa.

MVA DV

Duct indoor unit designed for indoor vertical installation.

MVA DV - Vertical duct.

- Wired panel standard supply.
- Unit without cover, designed for installation in wall recesses.
- Useful static pressure up to 60 Pa.

MVA_CS / MVA_C

8-way cassette indoor unit designed to be installed on false ceilings indoors.

MVA_CS - Cassette 570x570.

Mandatory accessory GLG40S.

MVA_C - Cassette 840x840.

Mandatory accessory GLG40.

- Wired panel standard supply.
- Condensate discharge pump as standard.
- Guarantees even air distribution, for optimum comfort.

4-way cassette indoor unit designed to be installed on false ceilings indoors.

MVA_CB - Cassette 910x910.

Mandatory accessory GL40B.

- Wired panel standard supply.
- Condensate discharge pump as standard.
- Guarantees even air distribution, for optimum comfort.

MVA C1

1-way cassette indoor unit designed to be installed on false ceilings indoors.

MVA_C1 - Cassette 987x385.

Mandatory accessory GLC1.

- Wired panel standard supply.
- Condensate discharge pump as standard.
- Compact size and minimum dimensions.

MVA I

Floor ceiling indoor unit to be installed on walls or ceiling.

- Low noise levels.
- Anti-freeze function.
- Flexible installation for any environment.

MVA FS

Console indoor unit designed to be installed on the floor.

- Anti-freeze function.
- 5-speed fan, to meet every possible need.
- Two delivery vents for optimal control of the air flow.

MVA V

Column indoor unit designed to be installed in large sized rooms.

- Easy installation and maintenance.
- Speed in reaching the defined set point in the shortest time possible.
- Ideal for installations in the service sector: hotels, restaurants, offices.

General features

- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Total capacity connected to the outdoor units between 50% and 135% of the rated capacity of the selected configuration.
- Indoor unit fitted standard with an electronic expansion valve.
- WRC wired panel standard supply with each indoor unit.
- Every indoor unit comes with a remote control and a remote control holder.
- Automatic unit adjustment function.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Easy installation and maintenance.

TYPE OF INDOOR UNIT - HEAT RECOVERY

MVA ERV



Heat recovery units designed for duct-type horizontal installation indoors. Fitted with a cross-flow enthalpic heat recovery unit with recovery efficiency higher than 70%. The heat exchanger allows energy to be transferred from the exhaust air to the fresh air, avoiding any direct mixing of the air flows. This range of heat recovery units ensures constantly clean and filtered fresh air, a constant air flow rate, and rooms with comfortable temperature and humidity levels, ensuring reduced energy consumption in every application. The device is also equipped with a direct expansion coil to allow the air flow delivered into the room to give off or absorb heat. This means that the unit not only guarantees correct air renewal, but also helps cool or heat the rooms and avoid air currents with a marked temperature difference in relation to the room temperature, to ensure optimum comfort for the occupants.

Operating mode

Every indoor unit comes with a wired panel. The wired panel can be used to set the standard cooling, heating, dehumidification and ventilation-only modes, plus the following operating modes.

 Bypass with free cooling and night-time free cooling operation: night-time free cooling operation reduces the thermal load in the rooms, taking advantage merely of the outside temperature difference

- and therefore boosting energy savings for the following day thanks to free night-time cooling.
- Control of different inlet and outlet air flow rates: known as "positive pressure operating mode" when the inlet air flow rate is higher than the recovery one, or "negative pressure operating mode" in the opposite situation.

Mixed connection indoor units + MVA_ERV

In case of mixed systems, i.e. consisting of indoor units of the VRF and units, MVA_ERV to guarantee the proper operation of the system, the nominal cooling powers of the indoor units is between 50% and 100% of the nominal cooling power of the system of external units and that the sum of the installed nominal power of the MVA_ERV units does not exceed 30% of the power of the external units system.

The MVA_ERV units are compatible with MVBHR systems.

Connections with MVA_ERV units only

In case of systems made up only by units, MVA_ERV to guarantee the proper operation of the system, check that the sum of the nominal cooling powers of the indoor units is between 50% and 100% of the nominal cooling power of the external units system.

General features

- Wired panel standard supply with each indoor unit.
- Particularly quiet operation.
- Centrifugal fans with 5-speed brushless DC motor.
- Units fitted with an electronic expansion valve as standard.
- Filters with G4 efficiency level on inlet and outlet air.
- Alarm signal for filter cleaning.
- Timer for programming unit switch-on and switch-off.
- Incorporated electrical panel with electronic card to control the ventilation and free cooling functions.
- Easy installation and maintenance.

TYPE OF OUTDOOR UNIT

MVAS

Standard multisplit VRF air conditioners.

Reversible air/air heat pump with DC inverter technology.

- From 1 to 16 connectible indoor units.
- Total maximum length of the refrigerant lines up to 300 m.
- The sizes MVAS 1201S MVAS 1401S MVAS 1601S e MVAS 1201T MVAS 1401T MVAS 1601T, are fitted with a base electric resistor to avoid possible formation of ice and encourage the disposal of the condensate during the heating operation.
- Compressor and fan with DC inverter technology.
- Fitted with an electronic expansion valve.

MVRN

Module multisplit VRF ambient air conditioner for 2-pipe systems. Reversible air/air heat pump with DC inverter technology.

- From 1 to 80 connectible indoor units.
- Total maximum length of the refrigerant lines up to 1000 m.
- Modular system with base modules that can be combined together, up to a maximum of 4, for a total of 33 recommended combinations.
- Compressor and fan with DC inverter technology.
- Fitted with an electronic expansion valve.
- Optimised management of the compressor operating time with partial loads.
- Emergency operation, in the event of problems with the compressors or fans, allows operation of the system with a reduced number of compressors and/or fans for a limited time.
- Channelled air delivery from 0 Pa (default) to 110 Pa of effective static head set via dip switches.
- For cooling line connections, refer to refnet joints in the accessories section.

MVRHR

Module multisplit VRF ambient air conditioner for 3-pipe systems. Reversible air/air heat pump with DC inverter technology.

- From 1 to 80 connectible indoor units.
- Total maximum length of the refrigerant lines up to 1000 m.
- Modular system with base modules that can be combined together, up to a maximum of 4, for a total of 33 recommended combinations.
- Compressor and fan with DC inverter technology.
- Fitted with an electronic expansion valve.
- Channelled air delivery from 0 Pa (default) to 110 Pa of effective static head set via dip switches.
- A system that permits managing the heating and cooling modes in an independent and simultaneous manner.
- Possibility of managing hot or cold modes independently and simultaneously.
- MVBHR 3-pipe outdoor units must be interfaced with two dual pipe MVA_Indoor units using the exchange module (MEB) available with one, two, four or eight branches.

MEB: mandatory accessory for 3-pipe systems.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



General features

- Operating mode: cooling, heating, dehumidification, automatic and fan only.
- Refrigerant connections with braze welded Y and F joints (mandatory accessories).
- Compressor and fan with DC inverter technology.
- Particularly quiet operation.
- Microproccessor control.
- Auto-restart function.
- Self-diagnosis function.
- Easy installation and maintenance.
- Serial communication in CanBus protocol.

ACCESSORIES

CC2: Centralised control with 7" touchscreen display for managing several indoor units within a number of multisplit systems. The centralised control has an integrated external contact. For more information, refer to the specific documentation. *

MVASZC: Simplified centralised control (4,3" touch screen display), which can be used to manage up to 32 Indoor Units distributed across a maximum of 16 Systems.

WLRC: Remote control with liquid crystal display and soft-touch buttons. **WRC:** Wired panel with liquid crystal display and soft-touch buttons.

WRC1: Simplified wired panel with liquid crystal display and soft-touch buttons with built-in external contact. This panel is particularly suitable for hotel applications.

* The CC2 centralised control can manage up to 255 indoor units distributed over a maximum of 16 VRF systems.

For more information about the accessories and their functions (such as the auto-restart function), refer to the specific documentation of the single accessory.

AHUKIT: Kit comprised of a box that contains the thermal expansion valve(s) complete with wiring and their control module, with pre-wired

probes, a wall-mounted control panel with external contact. The kit is intended to be combined with the direct expansion cooling and/or heating coil (using R410A) of an air treatment unit. The latter is not supplied as an MV_ component, but is functionally connected to an MV_ system and is suitably sized. AHUKIT, and the and the air treatment unit connected to it, treat the recirculated and/or fresh air that falls within the operating limits, regulating the recirculation/expulsion air temperature.

MINIMODBUS10: Thanks to its smaller size, this accessory can be easily installed in the outdoor unit. It allows you to manage up to 16 MV systems (with a maximum of 255 indoor units), with a ModBus RTU serial on RSA485 for supervision with an external BMS.

MVAGW: This accessory allows you to manage up to 16 MV systems (with a maximum of 255 total indoor units), making available a serial in ModBus RTU protocol on RS485, ModBus TCP or BACnet / IP for supervision with an external BMS.

USBDC / USBDC1: The kit includes a converter (from CanBus to ModBus) and the VRF debugger software. IT is designed to meet the requirements of after sales services and qualified technicians who need to carry out control and debugging procedures on the MV_ranges.

Accessories mandatory

Air delivery and recovery grille for indoor Cassette type units.

	, ,								
Grille model	Indoor unit model					4 WAY	1 WAY	Dimensions	Weight
drille illodei	MVA_CS	MVA_C	MVA_CB	MVA_C1	— 8 WAY	4 WAI	IWAI	LxHxW (mm)	Kg
GLG40S	•	-	-	-	•	-	-	620x620x47,5	3,0
GLG40	-	•	-	-	•	-	-	950x950x52	6,0
GL40B	-	-	•	-	-	•	-	1040x1040x65	8,0
GLC1	-	-	-	•	-	-		1200x460x55	4,2

Joints refnet

Connection between modular outdoor units.

The modules are easy to install and link together from the cooling point of view, thanks to the connections with dedicated refnet joints. Modularity is the fundamental characteristic of these systems as it also allows high-capacity systems to be created in a quick, simple way.

Y-joints for cooling connection between 2 Outdoor Units in Modular Systems. A modular system made up of n. base modules requires n-1 RNYMHR.-joints.

Mandatory accessory for modular systems.

MVBM 2-pipe system.	MVBHR 3-pipe system	MVBM 2-pipe system.	MVBHR 3-pipe system
Outdoor unit	Outdoor unit	Indoor units	Indoor units
RNYM01	RNYMHR10	- RNY11	RNY11
KINTINIUT	RNYMHR20	KNYTT	KNYII
AHUKIT	Outdoor units - MEB	RNY12	RNY12
RNYAHU	RNYHR10	RNY21	
RNYAHU20	RNYHR20	RNY31	
	RNYHR30	RNY41	
	RNYHR40	RNF14	
	RNYHR50	RNF18	
	RNYHR60	RNF18B	
	RNYHR70		

MVBM 2-pipe system

RNYM01

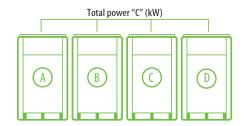
Accessory comprising 2 Y-joints, one for the liquid line and one for the discharge line.

MVBHR 3-pipe system

RNYMHR

Accessory comprising 3 Y-joints - one for the liquid line and two for the gas lines (one high pressure and the other low pressure).

Code	Туре
RNYMHR10	Υ
RNYMHR20	Υ



Connection between modular outdoor units and MEB - Exchange module

RNVHR

Accessory for connecting outdoor units with the MEB exchange module. Comprises three Y-joints one for the liquid line and two for the gas lines (one high pressure and the other low pressure).

Code	Туре
RNYHR10	Υ
RNYHR20	Υ
RNYHR30	Υ
RNYHR40	Υ
RNYHR50	Υ
RNYHR60	Υ
RNYHR70	Υ

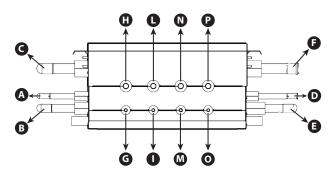
MEB

Exchange module with one, two, four or eight branches (each single branch can manage heating or cooling mode independently of the others, but simultaneously) for interfacing MVBHR 3-pipe outdoor units with the MV 2-pipe indoor units.

Code	Branches	Maximum manageable cooling capacity (per single branch)	Total power managed by the MEB	Connectible indoor units (per single branch)		
	No.	(kW)	(kW)	No.		
MEB12	1	16,00	≤ 16,00	8		
MEB22	2	16,00	≤ 28,00	8		
MEB42	4	16,00	≤ 45,00	8		
MEB82	8	16,00	≤ 85,00	8		

In order to connect indoor units with a capacity higher than 16kW, two branches must be used that are joined into one using suitable DIP-switch settings on the distribution box.

MEB exchange module



Refrigerant connection	Description	
A	Liquid (left side)	
В	Gas high pressure (left side)	
(Gas low pressure (left side)	
D	Liquid (right side)	
E	Gas high pressure (right side)	
F	Gas low pressure (right side)	
G	Liquid (branch 1)	
Н	Gas (branch 1)	
I	Liquid (branch 2)	
L	Gas (branch 2)	
M	Liquid (branch 3)	
N	Gas (branch 3)	
0	Liquid (branch 4)	
P	Gas (branch 4)	

Connection between indoor units

RNY

Accessory comprising 2 Y-joints, one for the liquid line and one for the discharge line.

RNF

Accessory made up of two F-joints, one for the liquid line and one for the discharge line.

Code	Syster	n type	Type of joint	Maximum 1-way connectible power	Connectible indoor units
code	2-pipe	2-pipe 3-pipe		(kW)	No.
RNY11	•	•	Υ	-	-
RNY12	•	•	Υ	-	-
RNY21	•		Υ	-	-
RNY31	•		Υ	-	-
RNY41	•		Υ	-	-
RNF14	•		F	16,00	from 2 to 4
RNF18	•		F	16,00	from 4 to 8
RNF18B	•		F	16,00	from 4 to 8

ADVANTAGES FOR VRF SYSTEMS: MVAS - MVBM - MVBHR

Compact design

Thanks to the reduced dimensions and compact design of these units, they are easy to move at the job site. All the models can in fact be transported easily right up to the roof, even using a lift.



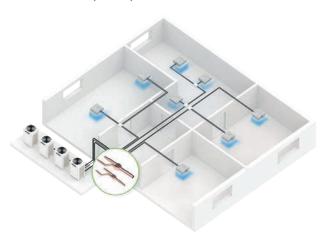
VRF systems - 2-pipe heat pump

Customise your VRF system

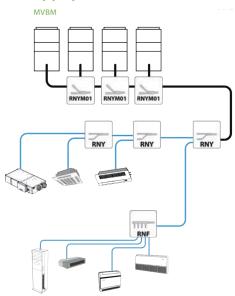
To guarantee greater seasonal efficiency and maximum comfort with the variable refrigerant function.

Continuous comfort

Continuous heating or cooling of the rooms is what makes the VRF system a valid alternative to hydronic systems.



Example of a 2-pipe system



When dimensioning the cooling lines, exclusively refer to the technical manual.

A modular system made up of n base modules requires n-1 Y-joints.

MVAS - MVBM

- 2-pipe system.
- Cooling or heating mode. (The image shows an example of a system in cooling mode)
- Total maximum length of the refrigerant lines: MVAS: 300 m, MVBM: 1000 m

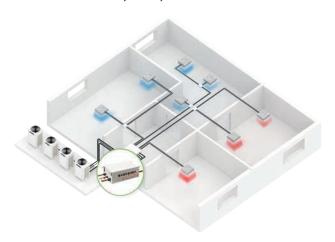
VRF systems - 3-pipe heat pump

The VRF MVBHR heat recovery system heats and cools at the same time with one single circuit.

MVBHR recovers the heat produced during cooling and uses it to heat certain rooms cost-free, maximising energy efficiency and reducing energy costs.

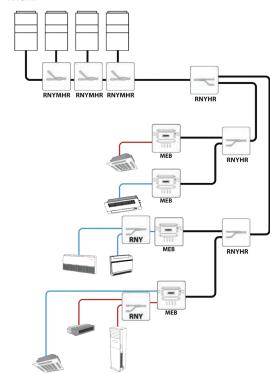
Continuous comfort

Simultaneous heating and cooling of the rooms is what makes the VRF system a valid alternative to hydronic systems.



Example of a 3-pipe system

MVBHR



When dimensioning the cooling lines, exclusively refer to the technical manual.

A modular system made up of n base modules requires n-1 Y-joints.

MVBHR

- 3-pipe system.
- Simultaneous cold and hot operation.
- Total maximum length of the refrigerant lines: MVBHR: 1000 m

CONFIGURATIONS

MVAS combinations MVAS connectable units

MVAS	Nominal cooling capacity (kW)	Min. no. of indoor units	Max. no. of indoor units
12015	12,10	2	7
14015	14,00	2	8
16015	16,00	2	9
1201T	12,10	2	7
1401T	14,00	2	8
1601T	16,00	2	9
2242T	22,40	1	13
2803T	28,00	1	17
3352T	33,50	2	20

$\ensuremath{\mathsf{MVAS}}$ outdoor unit with single duct type indoor unit

MVAS	Nominal cooling capacity (kW)	No. indoor units	Compatible indoor unit
2242T	22,40	1	MVA2240DH
2803T	28,00	1	MVA2800DH

MVBM recommended configurations

	Nominal cooling capacity			mbination			indoor units	
				dule		Number		
	(kW)	(A)	(B)	(C)	(D)	MINIMUM (1)	MAXIMUM (2)	
	22,40	2240T	-	-	-	1	13	
	28,00	2800T	-	-	-	1	16	
	33,50	3350T	-	-	_	1	19	
Base Module	40,00	4000T	-	-	-	1	23	
Dasc Module	45,00	4500T	-	-	_	1	26	
	50,40	5040T	-	-	_	1	29	
	56,00	5600T	-	-	-	1	33	
	61,50	6150T	-	_	-	2	36	
	68,00	2800T	4000T	-	-	2	39	
	73,00	2800T	4500T	-	-	2	43	
	78,40	2800T	5040T	-	-	2	46	
	84,00	2800T	5600T	-	-	2	50	
	89,50	2800T	6150T	-	-	2	53	
	95,00	3350T	6150T		-	2	56	
	101,50	4000T	6150T	-	-	2	59	
	106,50	4500T	6150T	-	-	2	63	
	111,90	5040T	6150T	-	-	3	64	
	117,50	5600T	6150T	-	-	3	64	
	123,00	6150T	6150T	-	-	3	64	
	129,00	2800T	4500T	5600T	-	3	64	
	134,50	2800T	4500T	6150T	-	3	64	
	140,00	3350T	4500T	6150T	-	3	66	
	145,50	2800T	5600T	6150T	-	3	69	
	151,00	2800T	6150T	6150T	-	3	71	
Combinations	156,50	3350T	6150T	6150T	-	3	74	
	163,00	4000T	6150T	6150T	-	3	77	
	168,00	4500T	6150T	6150T	-	4	80	
	173,40	5040T	6150T	6150T	-	4	80	
	179,00	5600T	6150T	6150T	-	4	80	
	184,50	6150T	6150T	6150T	-	4	80	
	190,50	2800T	4500T	5600T	6150T	4	80	
	195,90	2800T	5040T	5600T	6150T	4	80	
	201,50	2800T	5600T	5600T	6150T	4	80	
	207,00	2800T	5600T	6150T	6150T	4	80	
	212,50	2800T	6150T	6150T	6150T	4	80	
	218,00	3350T	6150T	6150T	6150T	4	80	
	224,50	4000T	6150T	6150T	6150T	5	80	
	229,50	4500T	6150T	6150T	6150T	5	80	
	234,90	5040T	6150T	6150T	6150T	5	80	
	240,50	5600T	6150T	6150T	6150T	5	80	
	246,00	6150T	6150T	6150T	6150T	5	80	

MVBHR recommended configurations

	Nominal cooling capacity—			mbination		Connectible	
				dule		Nun	
	(kW)	(A)	(B)	(C)	(D)	MINIMUM (1)	MAXIMUM (2)
	22,40	2240T	-	-	-	1	13
Base Module	28,00	2800T	-	<u>-</u>	-	1	16
	33,50	3350T	-	-	-	1	19
	40,00	4000T	-	-	-	1	23
Dase Module	45,00	4500T	-	-	_	1	26
	50,40	5040T	-	-	-	1	29
	56,00	5600T	-	-	-	1	33
	61,50	6150T	-	-	-	2	36
	68,00	2800T	4000T	-	-	2	39
	73,00	2800T	4500T	-	-	2	43
	78,40	2800T	5040T	-	-	2	46
	84,00	2800T	5600T	-	-	2	50
	89,50	2800T	6150T	-	-	2	53
	95,00	3350T	6150T	-	-	2	56
	101,50	4000T	6150T	-	-	2	59
	106,50	4500T	6150T	-	_	2	63
	111,90	5040T	6150T	-	-	3	64
	117,50	5600T	6150T	-	-	3	64
	123,00	6150T	6150T	-	-	3	64
	129,00	2800T	4500T	5600T	-	3	64
	134,50	2800T	4500T	6150T	-	3	64
	140,00	3350T	4500T	6150T	-	3	66
	145,50	2800T	5600T	6150T	-	3	69
	151,00	2800T	6150T	6150T	-	3	71
Combinations	156,50	3350T	6150T	6150T	-	3	74
	163,00	4000T	6150T	6150T	-	3	77
	168,00	4500T	6150T	6150T	-	4	80
	173,40	5040T	6150T	6150T	-	4	80
	179,00	5600T	6150T	6150T	-	4	80
	184,50	6150T	6150T	6150T	-	4	80
	190,50	2800T	4500T	5600T	6150T	4	80
	195,90	2800T	5040T	5600T	6150T	4	80
	201,50	2800T	5600T	5600T	6150T	4	80
	207,00	2800T	5600T	6150T	6150T	4	80
	212,50	2800T	6150T	6150T	6150T	4	80
	218,00	3350T	6150T	6150T	6150T	4	80
	224,50	4000T	6150T	6150T	6150T	5	80
	229,50	4500T	6150T	6150T	6150T	5	80
	234,90	5040T	6150T	6150T	6150T	5	80
	240,50	5600T	6150T	6150T	6150T	5	80
	246,00	6150T	6150T	6150T	6150T	5	80

INDOOR UNIT PERFORMANCE DATA

MVA_WL

		MVA220WL	MVA280WL	MVA360WL	MVA450WL	MVA500WL	MVA560WL	MVA630WL	MVA710WL
Nominal cooling performances									
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,00	5,60	6,30	7,10
Nominal heating performances									
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	5,60	6,30	7,10	7,50
Electric data									
Rated power input (3)	W	20	20	25	35	35	50	50	65
Fan									
Туре	type	Inverter tangentia	l Inverter tangential	Inverter tangentia	l Inverter tangential	Inverter tangentia	l Inverter tangential	Inverter tangential	Inverter tangential
Air flow rate									
Minimum	m³/h	300	300	320	500	501	650	650	650
Average	m³/h	440	440	460	580	580	850	850	850
Maximum	m³/h	500	500	630	850	850	1100	1100	1200
Sound power (4)									
Minimum	dB(A)	40,0	41,0	41,0	47,0	47,0	47,0	48,0	47,0
Average	dB(A)	43,0	43,0	45,0	50,0	50,0	51,0	51,0	51,0
Maximum	dB(A)	45,0	45,0	48,0	53,0	53,0	53,0	53,0	54,0
Sound pressure (5)									
Minimum	dB(A)	30,0	30,0	31,0	37,0	37,0	37,0	37,0	37,0
Average	dB(A)	33,0	33,0	35,0	40,0	40,0	41,0	41,0	41,0
Maximum	dB(A)	35,0	35,0	38,0	43,0	43,0	43,0	43,0	44,0
Refrigeration pipework									
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power supply									
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit									
Condensate discharge diameter	mm	20,0	20,0	20,0	20,0	20,0	20,0	20,0	20,0

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 (5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA D

MVA_D								,		
		MVA221D	MVA251D	MVA281D	MVA321D	MVA361D	MVA401D	MVA451D	MVA501D	MVA561D
Nominal cooling performances										
Cooling capacity (1)	kW	2,20	2,50	2,80	3,20	3,60	4,00	4,50	5,00	5,60
Nominal heating performances										
Heating capacity (2)	kW	2,50	2,80	3,20	3,60	4,00	4,50	5,00	5,60	6,30
Electric data										
Rated power input (3)	W	78	78	78	78	78	78	78	117	117
Fan										
Туре	type	Inverter centrifugal								
Air flow rate										
Minimum	m³/h	200	200	200	300	300	400	400	550	550
Average	m³/h	350	350	350	400	400	550	550	700	700
Maximum	m³/h	450	450	450	550	550	750	750	850	850
High static pressure										
Nominal	Pa	15	15	15	15	15	15	15	15	15
Minimum	Pa	0	0	0	0	0	0	0	0	0
Maximum	Pa	30	30	30	30	30	30	30	30	30
Sound power (4)										
Minimum	dB(A)	32,0	32,0	32,0	35,0	35,0	37,0	37,0	39,0	39,0
Average	dB(A)	35,0	35,0	35,0	37,0	37,0	39,0	39,0	41,0	41,0
Maximum	dB(A)	40,0	40,0	40,0	41,0	41,0	43,0	43,0	45,0	45,0
Sound pressure (5)										
Minimum	dB(A)	22,0	22,0	22,0	25,0	25,0	27,0	27,0	29,0	29,0
Average	dB(A)	25,0	25,0	25,0	27,0	27,0	29,0	29,0	31,0	31,0
Maximum	dB(A)	30,0	30,0	30,0	31,0	31,0	33,0	33,0	35,0	35,0
Refrigeration pipework										
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")
Power supply										
Indoor unit power supply		220-240V ~ 50Hz								
Indoor unit										
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0
			_5/0					_5/0	_3/0	

		MVA631D	MVA711D	MVA801D	MVA901D	MVA1001D	MVA1121D	MVA1251D	MVA1401D
Nominal cooling performances									
Cooling capacity (1)	kW	6,30	7,10	8,00	9,00	10,00	11,20	12,50	14,00
Nominal heating performances									
Heating capacity (2)	kW	7,10	8,00	9,00	10,00	11,20	12,50	14,00	16,00
Electric data									
Rated power input (3)	W	117	154	110	130	130	130	170	170
Fan									
Туре	type	Inverter centrifugal							
Air flow rate									
Minimum	m³/h	550	650	900	900	1000	1100	1400	1400
Average	m³/h	700	850	1100	1250	1350	1500	1700	1700
Maximum	m³/h	850	1100	1250	1500	1500	1700	2000	2000
High static pressure						-			
Nominal	Pa	15	15	50	50	50	50	50	50
Minimum	Pa	0	0	0	0	0	0	0	0
Maximum	Pa	30	50	80	80	80	80	80	80
Sound power (4)									
Minimum	dB(A)	39,0	40,0	46,0	47,0	47,0	47,0	52,0	52,0
Average	dB(A)	41,0	42,0	49,0	51,0	51,0	51,0	55,0	55,0
Maximum	dB(A)	45,0	47,0	52,0	55,0	55,0	55,0	57,0	57,0
Sound pressure (5)									
Minimum	dB(A)	29,0	30,0	31,0	32,0	32,0	32,0	37,0	37,0
Average	dB(A)	31,0	32,0	34,0	36,0	36,0	36,0	40,0	40,0
Maximum	dB(A)	35,0	37,0	37,0	40,0	40,0	40,0	42,0	42,0
Refrigeration pipework									
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power supply									
Indoor unit power supply		220-240V ~ 50Hz							
Indoor unit									
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0

MVA_DH

		MVA221DH	MVA251DH	MVA281DH	MVA321DH	MVA361DH	MVA401DH
Nominal cooling performances							
Cooling capacity (1)	kW	2,20	2,50	2,80	3,20	3,60	4,00
Nominal heating performances							
Heating capacity (2)	kW	2,50	2,80	3,20	3,60	4,00	4,50
Electric data							
Rated power input (3)	W	55	55	55	65	65	85
Fan							
Туре	type	Inverter centrifugal					
Air flow rate							
Minimum	m³/h	400	400	400	420	420	600
Average	m³/h	480	480	480	500	500	700
Maximum	m³/h	550	550	550	600	600	850
High static pressure							
Nominal	Pa	60	60	60	60	60	60
Minimum	Pa	0	0	0	0	0	0
Maximum	Pa	150	150	150	150	150	150
Sound power (4)							
Minimum	dB(A)	41,0	41,0	41,0	42,0	42,0	44,0
Average	dB(A)	43,0	43,0	43,0	44,0	44,0	47,0
Maximum	dB(A)	45,0	45,0	45,0	46,0	46,0	50,0
Sound pressure (5)							
Minimum	dB(A)	31,0	31,0	31,0	32,0	32,0	34,0
Average	dB(A)	33,0	33,0	33,0	34,0	34,0	37,0
Maximum	dB(A)	35,0	35,0	35,0	36,0	36,0	40,0
Refrigeration pipework							
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
Power supply							
Indoor unit power supply		220-240V ~ 50Hz					
Indoor unit							
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0

⁽¹⁾ Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.

(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

		MVA451DH	MVA501DH	MVA561DH	MVA631DH	MVA711DH	MVA801DH
lominal cooling performances						7.0	
Cooling capacity (1)	kW	4,50	5,00	5,60	6,30	7,10	8,00
Nominal heating performances	kW	5,00	5,60	6,30	7,10	9.00	9,00
leating capacity (2)	KVV	3,00	3,00	0,30	7,10	8,00	9,00
Rated power input (3)	W	85	85	90	90	100	100
an		05	03	70		100	100
Гуре	type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate		er cenanaga	rerter tentinggi	aya.	e. centinagai	cr cca.ga.	erter tentinagar
Minimum	m³/h	600	600	700	700	950	950
Average	m³/h	700	700	800	800	1050	1050
Maximum	m³/h	850	850	1000	1000	1250	1250
High static pressure							
Vominal	Pa	60	60	90	90	90	90
Minimum	Pa	0	0	0	0	0	0
Maximum	Pa	150	150	200	200	200	200
ound power (4)							
Minimum	dB(A)	44,0	44,0	45,0	45,0	45,0	45,0
verage	dB(A)	47,0	47,0	48,0	48,0	49,0	49,0
Maximum	dB(A)	50,0	50,0	52,0	52,0	53,0	53,0
ound pressure (5)							
Minimum	dB(A)	34,0	34,0	35,0	35,0	35,0	35,0
Average	dB(A)	37,0	37,0	38,0	38,0	39,0	39,0
Maximum	dB(A)	40,0	40,0	42,0	42,0	43,0	43,0
Refrigeration pipework	/· 1)	C 25 (4 (411)	6.25 (4.141)	0.52 /2 /0//)	0.53 /3 /0//	0.53 (3.1011)	0.52 (2.00)
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power supply		220 240V 50U-	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz	220 2401/ 5011-
ndoor unit power supply ndoor unit		220-240V ~ 50Hz	220-2407 ~ 3002	220-240V ~ 30HZ	220-240V ~ 30HZ	220-240V ~ 30HZ	220-240V ~ 50Hz
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0
condensate discharge diameter							
		MVA901DH	MVA1001DH	MVA1121DH	MVA1251DH	MVA1401DH	MVA1601DH
Naminal scaling naufagger							
* '	LW						
Cooling capacity (1)	kW	9,00	10,00	11,20	12,50	14,00	16,00
Cooling capacity (1) Nominal heating performances		9,00	10,00	11,20	12,50	14,00	16,00
Cooling capacity (1) Nominal heating performances Heating capacity (2)	kW						
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data	kW	9,00	10,00	11,20 12,50	12,50 14,00	14,00 16,00	16,00 18,00
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3)		9,00	10,00	11,20	12,50	14,00	16,00
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3)	kW W	9,00 10,00 140	10,00 11,20 140	11,20 12,50 160	12,50 14,00 160	14,00 16,00 220	16,00 18,00 230
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Ean	kW	9,00	10,00	11,20 12,50	12,50 14,00	14,00 16,00	16,00 18,00
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan	kW W	9,00 10,00 140	10,00 11,20 140	11,20 12,50 160	12,50 14,00 160	14,00 16,00 220	16,00 18,00 230
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum	kW W type m³/h	9,00 10,00 140 Inverter centrifugal	10,00 11,20 140 Inverter centrifugal	11,20 12,50 160 Inverter centrifugal	12,50 14,00 160 Inverter centrifugal 1400	14,00 16,00 220 Inverter centrifugal	16,00 18,00 230 Inverter centrifugal
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum	kW W type	9,00 10,00 140 Inverter centrifugal	10,00 11,20 140 Inverter centrifugal	11,20 12,50 160 Inverter centrifugal	12,50 14,00 160 Inverter centrifugal	14,00 16,00 220 Inverter centrifugal	16,00 18,00 230 Inverter centrifugal
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum	kW W type m³/h m³/h	9,00 10,00 140 Inverter centrifugal 1250 1450	10,00 11,20 140 Inverter centrifugal 1250 1450	11,20 12,50 160 Inverter centrifugal 1400 1600	12,50 14,00 160 Inverter centrifugal 1400 1600	14,00 16,00 220 Inverter centrifugal 1650 1900	16,00 18,00 230 Inverter centrifugal 1750 2000
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Ean Type Air flow rate Minimum Average Maximum High static pressure	kW W type m³/h m³/h	9,00 10,00 140 Inverter centrifugal 1250 1450	10,00 11,20 140 Inverter centrifugal 1250 1450	11,20 12,50 160 Inverter centrifugal 1400 1600	12,50 14,00 160 Inverter centrifugal 1400 1600	14,00 16,00 220 Inverter centrifugal 1650 1900	16,00 18,00 230 Inverter centrifugal 1750 2000
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum High static pressure	kW W type m³/h m³/h m³/h	9,00 10,00 140 Inverter centrifugal 1250 1450 1800	10,00 11,20 140 Inverter centrifugal 1250 1450 1800	11,20 12,50 160 Inverter centrifugal 1400 1600 2000	12,50 14,00 160 Inverter centrifugal 1400 1600 2000	14,00 16,00 220 Inverter centrifugal 1650 1900 2350	16,00 18,00 230 Inverter centrifugal 1750 2000 2500
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum High static pressure Nominal Minimum Maximum Maximum Maximum	type m³/h m³/h m³/h Pa	9,00 10,00 140 Inverter centrifugal 1250 1450 1800	10,00 11,20 140 Inverter centrifugal 1250 1450 1800	11,20 12,50 160 Inverter centrifugal 1400 1600 2000	12,50 14,00 160 Inverter centrifugal 1400 1600 2000	14,00 16,00 220 Inverter centrifugal 1650 1900 2350	16,00 18,00 230 Inverter centrifugal 1750 2000 2500
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum High static pressure Nominal Minimum Maximum	type m³/h m³/h m³/h Pa Pa Pa	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 2000	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 2000	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200
cooling capacity (1) Idominal heating performances Ideating capacity (2) Ideating capacity (2) Ideating capacity (3) Ideating capacity (4) Ideating capacity (2) Ideating capacity (2) Ideating capacity (2) Ideating capacity (1) Ideating capacity (1) Ideating capacity (1) Ideating capacity (2) Ideating capacity (1) Ideating capacity (2) Ideating capaci	type m³/h m³/h m³/h Pa Pa Pa Pa dB(A)	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200
Jooling capacity (1) Jominal heating performances Jeating capacity (2) Jeating capacity (2) Jeating capacity (3) Jeated power input (3) Jean Joype Jur flow rate Jur flow	type m³/h m³/h m³/h pa Pa Pa Pa dB(A) dB(A)	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0
cooling capacity (1) Idominal heating performances Ideating capacity (2) Ideating capacity (2) Ideating capacity (2) Ideating capacity (3) Ideating capacity (4) Ideating capacity (2) Ideating capacity (2) Ideating capacity (2) Ideating capacity (3) Ideating capacity (2) Ideating capacity (2) Ideating capacity (1) Ideating capacity (2) Ideating capaci	type m³/h m³/h m³/h Pa Pa Pa Pa dB(A)	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200
cooling capacity (1) Ilominal heating performances leating capacity (2) Ilectric data Lated power input (3) In pype Lir flow rate Ininimum Lir flow rate Ilinimum Lir flow rate Lir flow rate Ilinimum Lir flow rate Lir flow	type m³/h m³/h m³/h pa Pa Pa Pa dB(A) dB(A)	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0 56,0	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0 57,0
cooling capacity (1) clouding heating performances cleating capacity (2) cleating capacity (2) cleating capacity (2) cleating capacity (3) cleating capacity (4) cleating capacity (4) cleating capacity (5) cleating capacity (2) cleating capacity (1) cleating capacity (2) cleating capaci	type m³/h m³/h m³/h m³/h Pa Pa Pa AB(A) AB(A) AB(A) AB(A)	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0 56,0	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0 57,0
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum High static pressure Hominal Minimum Maximum Hominal Minimum Maximum Hominal Minimum Hominal Minimum Hominal Minimum Hominal Minimum Hominal	type m³/h m³/h m³/h m³/h Pa Pa Pa Ba Pa Ba	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0 56,0 41,0 43,0	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0 57,0 42,0 44,0
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum High static pressure Hominal Minimum Mourand Minimum Mourand Mount power (4) Minimum Mourand Mouran	type m³/h m³/h m³/h m³/h Pa Pa Pa AB(A) AB(A) AB(A) AB(A)	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0 56,0	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0 57,0
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum High static pressure Hominal Minimum Maximum Maximum Maximum Maximum Maximum Sound power (4) Minimum Average Maximum Sound pressure (5) Minimum Average Maximum Maxi	type m³/h m³/h m³/h m³/h Pa Pa Pa Ba Pa Ba Pa Ba	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0 56,0 41,0 43,0 46,0	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0 57,0 42,0 44,0 47,0
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum High static pressure Hominal Minimum Maximum Maximum Maximum Maximum Maximum Sound power (4) Minimum Average Maximum Average Maximum Sound power (5) Minimum Average Maximum Sound pressure (5) Minimum Average Maximum Average	type m³/h m³/h m³/h m³/h Pa Pa Pa Pa dB(A) dB(A) dB(A) dB(A) dB(A) mm (inch)	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0 9,52 (3/8")	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0 9,52 (3/8")	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0 9,52 (3/8")	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0 9,52 (3/8")	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0 56,0 41,0 43,0 46,0 9,52 (3/8")	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0 57,0 42,0 44,0 47,0
Nominal cooling performances Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum High static pressure Nominal Minimum Maximum Sound power (4) Minimum Average Maximum Average Maximum Found power (5) Minimum Average Maximum Sound power (5) Minimum Average Maximum Sound pressure (5) Minimum Average Maximum Refrigeration pipework Diameter of liquid refrigerant connections Diameter of refrigerant gas connections	type m³/h m³/h m³/h m³/h Pa Pa Pa Ba Pa Ba Pa Ba	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0 56,0 41,0 43,0 46,0	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0 57,0 42,0 44,0 47,0
Cooling capacity (1) Nominal heating performances Heating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum High static pressure Nominal Minimum Maximum Sound power (4) Minimum Average Maximum Average Maximum Sound power (5) Minimum Average Maximum Refrigeration pipework Diameter of liquid refrigerant connections Power supply	type m³/h m³/h m³/h m³/h Pa Pa Pa Pa dB(A) dB(A) dB(A) dB(A) dB(A) mm (inch)	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0 9,52 (3/8") 15,9 (5/8")	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0 9,52 (3/8") 15,9 (5/8")	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0 9,52 (3/8") 15,9 (5/8")	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0 9,52 (3/8") 15,9 (5/8")	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0 56,0 41,0 43,0 46,0 9,52 (3/8") 15,9 (5/8")	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0 57,0 42,0 44,0 47,0 9,52 (3/8") 19,05 (3/4")
Cooling capacity (1) Nominal heating performances Leating capacity (2) Electric data Rated power input (3) Fan Type Air flow rate Minimum Average Maximum Aigh static pressure Hominal Minimum Maximum Jound power (4) Minimum Moverage Asximum Jound power (5) Minimum Moverage Asximum Jound power (5) Minimum Moverage Maximum Jound pressure (5) Minimum Moverage Maximum Jound pressure (7) Minimum Moverage Maximum Jound pressure (8) Minimum Moverage Maximum Moverage Moverag	type m³/h m³/h m³/h m³/h Pa Pa Pa Pa dB(A) dB(A) dB(A) dB(A) dB(A) mm (inch)	9,00 10,00 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0 9,52 (3/8")	10,00 11,20 140 Inverter centrifugal 1250 1450 1800 90 0 200 48,0 51,0 54,0 38,0 41,0 44,0 9,52 (3/8")	11,20 12,50 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0 9,52 (3/8")	12,50 14,00 160 Inverter centrifugal 1400 1600 2000 90 0 200 50,0 52,0 55,0 40,0 42,0 45,0 9,52 (3/8")	14,00 16,00 220 Inverter centrifugal 1650 1900 2350 90 0 200 51,0 53,0 56,0 41,0 43,0 46,0 9,52 (3/8")	16,00 18,00 230 Inverter centrifugal 1750 2000 2500 90 0 200 52,0 54,0 57,0 42,0 44,0 47,0 9,52 (3/8")

		MVA 2240 DH	MVA 2800 DH
Nominal cooling performances			
Cooling capacity (1)	kW	22,40	28,00
Nominal heating performances			
Heating capacity (2)	kW	24,00	30,00
Electric data			
Rated power input (3)	W	960	1250
Fan			
Туре	type	-	-
Air flow rate			
Minimum	m³/h	-	-
Average	m³/h	-	-
Maximum	m³/h	4000	4400
High static pressure			
Nominal	Pa	150	150
Minimum	Pa	-	-
Maximum	Pa	-	-
Sound power (4)			
Minimum	dB(A)	59,0	60,0
Average	dB(A)	62,0	62,0
Maximum	dB(A)	64,0	65,0
Sound pressure (5)			
Minimum	dB(A)	49,0	50,0
Average	dB(A)	52,0	52,0
Maximum	dB(A)	54,0	55,0
Refrigeration pipework			
Diameter of liquid refrigerant connections	mm (inch)	19,05 (3/4")	22,2 (7/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")
Power supply			
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit			
Condensate discharge diameter	mm	30,0	30,0

⁽¹⁾ Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.

(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

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MVA DV

		MVA220DV	MVA280DV	MVA360DV	MVA450DV	MVA560DV	MVA630DV	MVA710DV
Nominal cooling performances								
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,60	6,30	7,10
Nominal heating performances								
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	6,30	7,10	8,00
Electric data								
Rated power input (3)	W	35	35	43	45	80	80	90
Fan								
Туре	type	Inverter centrifugal						
Air flow rate								
Minimum	m³/h	250	250	350	400	600	600	700
Average	m³/h	350	350	450	500	750	750	900
Maximum	m³/h	450	450	550	650	900	900	1100
High static pressure								
Nominal	Pa	10	10	10	15	15	15	15
Minimum	Pa	0	0	0	0	0	0	0
Maximum	Pa	40	40	40	60	60	60	60
Sound power (4)								
Minimum	dB(A)	35,0	35,0	38,0	38,0	40,0	40,0	43,0
Average	dB(A)	38,0	38,0	41,0	41,0	43,0	43,0	45,0
Maximum	dB(A)	40,0	40,0	43,0	43,0	45,0	45,0	47,0
Sound pressure (5)								
Minimum	dB(A)	25,0	25,0	28,0	28,0	30,0	30,0	33,0
Average	dB(A)	28,0	28,0	31,0	31,0	33,0	33,0	35,0
Maximum	dB(A)	30,0	30,0	33,0	33,0	35,0	35,0	37,0
Refrigeration pipework								
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power supply								
Indoor unit power supply		220-240V ~ 50Hz						
Indoor unit								
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 (5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_CS

MVA_C3		MVA151CS	MVA181CS	MVA221CS	MVA281CS	MVA361CS	MVA451CS	MVA501CS	MVA561CS
Nominal cooling performances		minio	miniolo	minzz ICJ	mtn201CJ	III TAJO ICJ	mintolico	III TAJO ICJ	minjuici
Cooling capacity (1)	kW	1,50	1,80	2,20	2,80	3,60	4,50	5,00	5,60
Nominal heating performances		.,	.,				.,		2,51
Heating capacity (2)	kW	1,80	2,20	2,50	3,20	4,00	5,00	5,60	6,30
Electric data			,	,	,	,	,	,	•
Rated power input (3)	W	30	30	30	30	30	45	45	45
Fan									
Туре	type	Inverter centrifugal							
Air flow rate	•								
Minimum	m³/h	370	370	370	420	480	560	560	560
Average	m³/h	420	420	460	480	550	650	650	650
Maximum	m³/h	460	460	500	570	620	730	730	730
Sound power (4)									
Minimum	dB(A)	39,0	39,0	39,0	42,0	45,0	53,0	43,0	53,0
Average	dB(A)	44,0	44,0	45,0	47,0	49,0	55,0	55,0	55,0
Maximum	dB(A)	47,0	47,0	50,0	50,0	52,0	57,0	57,0	57,0
Sound pressure (5)									
Minimum	dB(A)	25,0	25,0	25,0	28,0	31,0	39,0	39,0	39,0
Average	dB(A)	30,0	30,0	31,0	33,0	35,0	41,0	41,0	41,0
Maximum	dB(A)	33,0	33,0	36,0	36,0	38,0	43,0	43,0	43,0
Refrigeration pipework									
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")
Power supply									
Indoor unit power supply		220-240V ~ 50Hz							
Indoor unit									
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0	25,0

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 (5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_C

		MVA221C	MVA281C	MVA361C	MVA451C	MVA501C	MVA561C	MVA631C
Nominal cooling performances								
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,00	5,60	6,30
Nominal heating performances								
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	5,60	6,30	7,10
Electric data								
Rated power input (3)	W	26	26	26	26	28	35	60
Fan								
Туре	type	Inverter centrifugal						
Air flow rate								
Minimum	m³/h	600	600	600	600	700	750	850
Average	m³/h	700	700	700	700	800	850	950
Maximum	m³/h	800	800	800	800	900	950	1150
Sound power (4)								
Minimum	dB(A)	42,0	42,0	42,0	42,0	43,0	44,0	45,0
Average	dB(A)	44,0	44,0	44,0	44,0	46,0	47,0	48,0
Maximum	dB(A)	47,0	47,0	47,0	48,0	49,0	51,0	51,0
Sound pressure (5)								
Minimum	dB(A)	28,0	28,0	28,0	28,0	29,0	30,0	31,0
Average	dB(A)	30,0	30,0	30,0	30,0	32,0	33,0	34,0
Maximum	dB(A)	33,0	33,0	33,0	34,0	35,0	37,0	37,0
Refrigeration pipework								
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")
Power supply								
Indoor unit power supply		220-240V ~ 50Hz						
Indoor unit								
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

	•	MVA711C	MVA801C	MVA901C	MVA1001C	MVA1121C	MVA1251C	MVA1401C
Nominal cooling performances								
Cooling capacity (1)	kW	7,10	8,00	9,00	10,00	11,20	12,50	14,00
Nominal heating performances								
Heating capacity (2)	kW	8,00	9,00	10,00	11,20	12,50	14,00	16,00
Electric data								
Rated power input (3)	W	60	85	85	85	115	115	115
Fan								
Туре	type	Inverter centrifugal						
Air flow rate								
Minimum	m³/h	850	900	900	900	1100	1100	1100
Average	m³/h	950	1000	1000	1000	1300	1300	1300
Maximum	m³/h	1150	1250	1250	1250	1650	1650	1650
Sound power (4)								
Minimum	dB(A)	45,0	48,0	48,0	48,0	53,0	53,0	53,0
Average	dB(A)	48,0	51,0	51,0	51,0	55,0	55,0	55,0
Maximum	dB(A)	51,0	53,0	53,0	53,0	57,0	57,0	57,0
Sound pressure (5)								
Minimum	dB(A)	31,0	34,0	34,0	34,0	39,0	39,0	39,0
Average	dB(A)	34,0	37,0	37,0	37,0	41,0	41,0	41,0
Maximum	dB(A)	37,0	39,0	39,0	39,0	43,0	43,0	43,0
Refrigeration pipework								
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Power supply								
Indoor unit power supply		220-240V ~ 50Hz						
Indoor unit								
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0	25,0	25,0
		·				·	·	

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
(5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_CB

		MVA1600CB
Nominal cooling performances		
Cooling capacity (1)	kW	16,00
Nominal heating performances		
Heating capacity (2)	kW	17,50
Electric data		
Rated power input (3)	W	130
Fan		
Туре	type	Inverter centrifugal
Air flow rate		
Minimum	m³/h	1400
Average	m³/h	1700
Maximum	m³/h	2100
Sound power (4)		
Minimum	dB(A)	52,0
Average	dB(A)	54,0
Maximum	dB(A)	57,0
Sound pressure (5)		
Minimum	dB(A)	42,0
Average	dB(A)	44,0
Maximum	dB(A)	47,0
Refrigeration pipework		
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	19,05 (3/4")
Power supply		
Indoor unit power supply		220-240V ~ 50Hz
Indoor unit		
Condensate discharge diameter	mm	25,0

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 (5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_C1

		MVA220C1	MVA280C1	MVA360C1	MVA450C1	MVA500C1
Nominal cooling performances						
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,00
Nominal heating performances						
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	5,60
Electric data						
Rated power input (3)	W	30	30	30	30	30
Fan						
Туре	type	Inverter tangential				
Air flow rate						
Minimum	m³/h	450	450	450	500	500
Average	m³/h	500	500	500	600	600
Maximum	m³/h	600	600	600	830	830
Sound power (4)						
Minimum	dB(A)	38,0	38,0	38,0	40,0	40,0
Average	dB(A)	42,0	42,0	42,0	45,0	45,0
Maximum	dB(A)	46,0	46,0	46,0	50,0	50,0
Sound pressure (5)						
Minimum	dB(A)	28,0	28,0	28,0	30,0	30,0
Average	dB(A)	32,0	32,0	32,0	35,0	35,0
Maximum	dB(A)	36,0	36,0	36,0	40,0	40,0
Refrigeration pipework						
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
Power supply						
ndoor unit power supply		220-240V ~ 50Hz				
ndoor unit						
Condensate discharge diameter	mm	25,0	25,0	25,0	25,0	25,0

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 (5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_F

		MVA281F	MVA361F	MVA501F	MVA561F	MVA631F	MVA711F	MVA901F	MVA1121F	MVA1251F	MVA1401F	MVA1601F
Nominal cooling performances												
Cooling capacity (1)	kW	2,80	3,60	5,00	5,60	6,30	7,10	9,00	11,20	12,50	14,00	16,00
Nominal heating performances					-							-
Heating capacity (2)	kW	3,20	4,00	5,60	6,30	7,10	8,00	10,00	12,50	14,00	16,00	18,00
Electric data												
Rated power input (3)	W	35	35	55	55	80	80	120	120	120	150	175
Fan												
Туре	type	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal	Inverter centrifugal
Air flow rate												
Minimum	m³/h	450	450	600	600	1050	1050	1250	1400	1400	1600	1650
Average	m³/h	500	500	650	650	1200	1200	1400	1600	1600	1750	1850
Maximum	m³/h	600	600	750	750	1350	1350	1550	1800	1800	2000	2150
Sound power (4)												
Minimum	dB(A)	45,0	45,0	48,0	48,0	54,0	54,0	54,0	54,0	54,0	55,0	57,0
Average	dB(A)	48,0	48,0	51,0	51,0	57,0	57,0	56,0	56,0	56,0	57,0	60,0
Maximum	dB(A)	52,0	52,0	54,0	54,0	60,0	60,0	59,0	59,0	59,0	61,0	64,0
Sound pressure (5)												
Minimum	dB(A)	29,0	29,0	36,0	36,0	38,0	38,0	41,0	42,0	42,0	43,0	45,0
Average	dB(A)	32,0	32,0	39,0	39,0	41,0	41,0	44,0	44,0	44,0	45,0	48,0
Maximum	dB(A)	36,0	36,0	42,0	42,0	44,0	44,0	47,0	47,0	47,0	49,0	52,0
Refrigeration pipework												
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	19,05 (3/4")
Power supply												
Indoor unit power supply		220-240V ~	220-240V ~	220-240V ~	220-240V ~	220-240V ~	220-240V ~					
indoor drift power suppry		50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz
Indoor unit												
Condensate discharge diameter	mm	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0	17,0

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

 (3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.

 (5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_FS

		MVA220FS	MVA280FS	MVA360FS	MVA450FS	MVA500FS
Nominal cooling performances						
Cooling capacity (1)	kW	2,20	2,80	3,60	4,50	5,00
Nominal heating performances						
Heating capacity (2)	kW	2,50	3,20	4,00	5,00	5,50
Electric data						
Rated power input (3)	W	15	15	20	40	40
Fan						
Туре	type	Inverter centrifugal				
Air flow rate						
Minimum	m³/h	270	270	310	500	500
Average	m³/h	320	320	400	600	600
Maximum	m³/h	400	400	480	680	680
Sound power (4)						
Minimum	dB(A)	37,0	37,0	42,0	49,0	49,0
Average	dB(A)	43,0	43,0	47,0	53,0	53,0
Maximum	dB(A)	48,0	48,0	50,0	56,0	56,0
Sound pressure (5)						
Minimum	dB(A)	27,0	27,0	32,0	39,0	39,0
Average	dB(A)	33,0	33,0	37,0	43,0	43,0
Maximum	dB(A)	38,0	38,0	40,0	46,0	46,0
Refrigeration pipework						
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Diameter of refrigerant gas connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
Power supply						
Indoor unit power supply		220-240V ~ 50Hz				
Indoor unit		<u> </u>				
Condensate discharge diameter	mm	17,2	17,2	17,2	17,2	17,2

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 (5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_V

		MVA1000V	MVA1400V
Nominal cooling performances			_
Cooling capacity (1)	kW	10,00	14,00
Nominal heating performances			
Heating capacity (2)	kW	11,00	15,00
Electric data			
Rated power input (3)	W	200	200
Fan			
Туре	type	Inverter centrifugal	Inverter centrifugal
Air flow rate			
Minimum	m³/h	1400	1400
Average	m³/h	1600	1600
Maximum	m³/h	1850	1850
Sound power (4)			
Minimum	dB(A)	56,0	56,0
Average	dB(A)	58,0	58,0
Maximum	dB(A)	60,0	60,0
Sound pressure (5)			
Minimum	dB(A)	46,0	46,0
Average	dB(A)	48,0	48,0
Maximum	dB(A)	50,0	50,0
Refrigeration pipework			
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	15,9 (5/8")	15,9 (5/8")
Power supply			
Indoor unit power supply		220-240V ~ 50Hz	220-240V ~ 50Hz
Indoor unit			
Condensate discharge diameter	mm	31,0	31,0

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
 (4) Sound power calculated in free field, in accordance with UNI EN ISO 3744.
 (5) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

MVA_ERV

		MVA500ERV	MVA800ERV	MVA1000ERV
Nominal cooling performances				
Cooling capacity (1)	kW	8,50	12,00	14,50
Cooling capacity of finned pack heat exchanger (2)	kW	3,60	6,30	8,00
Nominal heating performances				
Heating capacity (3)	kW	4,00	10,60	12,00
Heating capacity of finned pack heat exchanger	kW	2,00	8,04	8,40
Heat recovery unit				
Unit type		UVNR	UVNR	UVNR
Thermal efficiency (4)	%	73	74	73
Fans				
Commissioning	type	Speed variator	Speed variator	Speed variator
SFP int	W/(m³/s)	1099,57	1118,00	1059,20
Nominal external pressure Δp (5)	Pa	150	150	150
Type of fan	Туре	Centrifugal	Centrifugal	Centrifugal
Nominal air flow rate	m³/h	500	800	1000
Sound data				
Sound power level	dB(A)	55,0	59,0	62,0
General data				
Rated power input	W	270	440	640
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")
Diameter of refrigerant gas connections	mm (inch)	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")
Condensate discharge diameter	mm	26,0	26,0	26,0
Heat recovery unit				
Power supply	<u> </u>	220-240V ~ 50Hz	220-240V ~ 50Hz	220-240V ~ 50Hz

- (1) Cooling: room air temperature 27 °C d.b. / 19.5 °C w.b.; outside air temperature 35 °C; turbo speed; cooling line length 5 m; indoor and outdoor units at the same height.
 (2) Use the finned pack heat exchanger power (cooling) to make the calculation and select the unit.
 (3) Heating: room air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; cooling line length 5 m; indoor and outdoor units at the same height.
 (4) Thermal efficiency complying with European regulation EU 1253/2014.
 (5) Performances referring to clean filters.
 The air flow rate is calculated on the basis of the nominal high static pressure at high fan speed. It may vary according to the real installation conditions.
 The nominal static pressure is the effective pressure value declared for a standard unit when it leaves the factory. The use of other filters may alter the unit performance values.

2-PIPE SYSTEM OUTDOOR UNIT PERFORMANCE DATA

		MVAS 1201S	MVAS 1201T	MVAS 1401S	MVAS 1401T	MVAS 1601S	MVAS 1601T
Nominal cooling performances							
Cooling capacity (1)	kW	12,10	12,10	14,00	14,00	16,00	16,00
Cooling input power (1)	kW	3,03	3,03	3,59	3,59	4,75	4,75
EER (2)	W/W	3,99	3,99	3,90	3,90	3,37	3,37
Nominal heating performances							
Heating capacity (3)	kW	14,00	14,00	16,50	16,50	18,00	18,00
Heating input power (3)	kW	3,27	3,27	3,95	3,95	4,65	4,65
COP (2)	W/W	4,28	4,28	4,18	4,18	3,87	3,87
Fan							
Туре	type	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial	Inverter axial
Number	no.	2	2	2	2	2	2
Air flow rate							
Nominal	m³/h	6000	6000	6300	6300	6600	6600
Sound pressure (4)							
Nominal	dB(A)	57,0	57,0	58,0	58,0	58,0	58,0
Compressor							
Туре	type	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter	Scroll inverter
Number	no.	1	1	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant charge	kg	3,3	3,3	3,3	3,3	3,3	3,3
Electric data							
Rated current input (5)	Α	30,4	11,1	33,7	12,0	36,3	12,5
Refrigeration pipework							
Maximum refrigerant tube length	m	300	300	300	300	300	300
Power supply							
Outdoor unit power supply		220-245V ~ 50Hz	380-415V ~ 3N 50Hz	220-245V ~ 50Hz	380-415V ~ 3N 50Hz	220-245V ~ 50Hz	380-415V ~ 3N 50Hz

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

- (1) Cooling (EN 1451 1 and EN 14825) animent air temperature 27 °C.d. 7 9 °C. w.b.; outside air temperature 35 °C turbo speed; length of reingerant lines 5 m.

 (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.

 (3) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C.d.b.; outside air temperature 7 °C.d.b. / 6 °C.w.b.; turbo speed; length of refrigerant lines 5 m.

 (4) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

 (5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		MVAS 2242T	MVAS 2803T	MVAS 3352T
Nominal cooling performances				
Cooling capacity (1)	kW	22,40	28,00	33,50
Cooling input power (1)	kW	6,12	13,02	12,88
EER (2)	W/W	3,66	2,15	2,60
Nominal heating performances				
Heating capacity (3)	kW	22,40	28,00	33,50
Heating input power (3)	kW	4,90	8,00	10,47
COP (2)	W/W	4,90	3,50	3,20
Fan				
Туре	type	Inverter axial	Inverter axial	Inverter axial
Number	no.	2	2	2
Air flow rate				
Nominal	m³/h	8000	11000	11000
Sound data calculated in cooling	g mode (4)			
Maximum sound pressure level	dB(A)	58,0	62,0	62,0
Maximum sound power level	dB(A)	78,0	80,0	80,0
Sound data calculated in heatin	g mode (4)			
Maximum sound pressure level	dB(A)	58,0	64,0	64,0
Maximum sound power level	dB(A)	79,0	82,0	82,0
Compressor				
Туре	type	Rotary	Rotary	Rotary
Number	no.	1	1	1
Refrigerant	type	R410A	R410A	R410A
Refrigerant charge	kg	5,5	7,1	8,5
Electric data				
Rated current input (5)	A	17,2	22,5	24,5
Refrigeration pipework				_
Maximum refrigerant tube length	m	300	300	300
Power supply				
Outdoor unit power supply		380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz	380-415V ~ 3N 50Hz

- (1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
 (2) EER/COP in accordance with the Standard (EN 14511), only declared for the purposes of the tax deductions in force at the time of this publication.
 (3) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
 (4) Sound Pressure and Sound Power measured in Semi-Anechoic Chamber at 1 m from the source, according to EN 12102-1:2022
 (5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		MVBM 2240T	MVBM 2800T	MVBM 3350T	MVBM 4000T	MVBM 4500T	MVBM 5040T	MVBM 5600T	MVBM 6150T
Nominal cooling performances									
Cooling capacity (1)	kW	22,40 (2)	28,00 (2)	33,50 (2)	40,00 (2)	45,00 (2)	50,40 (2)	52,00 (2)	52,00 (2)
Maximum cooling performances									
Cooling capacity	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00	61,50
Nominal heating performances									
Heating capacity (3)	kW	22,40 (2)	28,00 (2)	33,50 (2)	40,00 (2)	45,00 (2)	50,40 (2)	56,00 (2)	56,00 (2)
Maximum heating performances									
Heating capacity	kW	25,00	31,50	37,50	45,00	50,00	56,50	63,00	69,00
Fan									
Туре	type	Inverter axial							
Number	no.	1	1	1	2	2	2	2	2
Air flow rate									
Nominal	m³/h	9750	10500	11100	13500	15400	16000	16500	16500
Sound pressure (4)									
Nominal	dB(A)	56,0	57,0	59,0	59,0	60,0	61,0	62,0	63,0
Compressor									
Туре	type	Scroll inverter							
Number	no.	1	1	1	1	1	2	2	2
Refrigerant	type	R410A							
Refrigerant charge	kg	5,5	5,5	7,5	7,5	7,5	8,3	8,3	8,3
Electric data									
Rated current input (5)	Α	23,0	23,5	24,1	37,5	39,3	47,0	48,0	49,0
Refrigeration pipework									
Type refrigerant connections	Туре	To be soldered							
Diameter of liquid refrigerant	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15 0 (5 (9")	15,9 (5/8")	15 0 (5 /0")
connections	mm (inch)	9,32 (3/6)	9,32 (3/0)	12,7 (1/2)	12,7 (1/2)	12,7 (1/2)	15,9 (5/8")	13,9 (3/6)	15,9 (5/8")
Diameter of refrigerant gas connections	mm (inch)	19,05 (3/4")	22,2 (7/8")	25,4 (1")	25,4 (1")	28,6 (1" 1/8)	28,6 (1" 1/8)	28,6 (1" 1/8)	28,6 (1"1/8)
Maximum refrigerant tube length	m	1000	1000	1000	1000	1000	1000	1000	1000
Power supply									
Outdoor unit power supply		380-415V~3N 50Hz	380-415V~3N 50H						

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.

(2) the cooling capacity of the system actually selected may be different from the value shown in the table; to determine the cooling performance data of each MVBM system refer to the selection software

(3) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.

(4) Sound pressure measured in semi anechoic chamber at a distance of 1,5 m from the source.

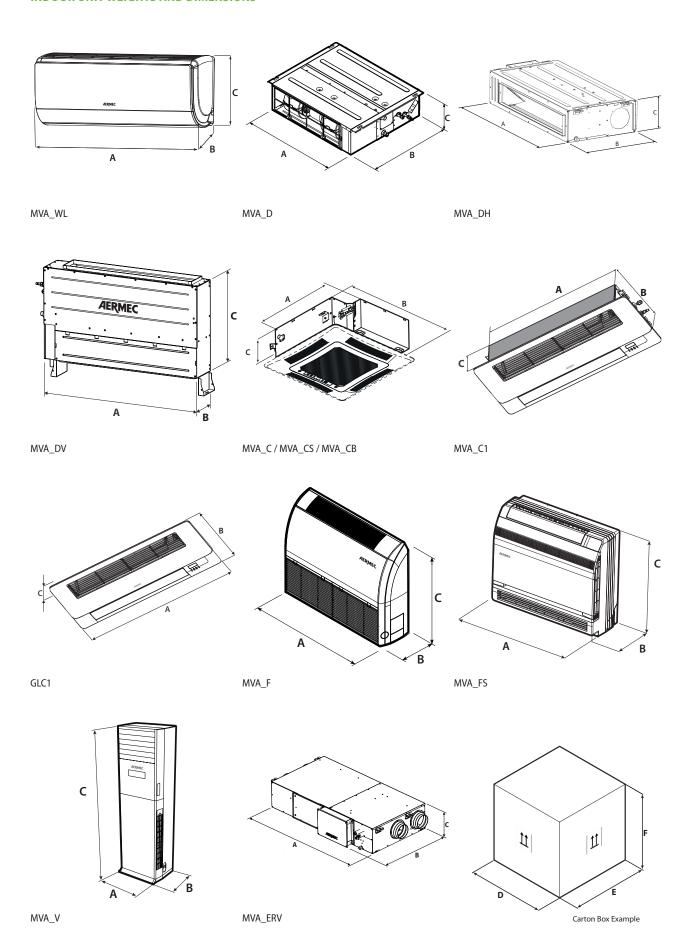
(5) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

3-PIPE SYSTEM OUTDOOR UNIT PERFORMANCE DATA

		MVBHR2240T	MVBHR2800T	MVBHR3350T	MVBHR4000T	MVBHR4500T	MVBHR5040T	MVBHR5600T	MVBHR6150T
Nominal cooling performances									
Cooling capacity (1)	kW	22,40	28,00	33,50	40,00	45,00	50,40	52,00	52,00
Maximum cooling performances									
Cooling capacity	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00	61,50
Nominal heating performances									
Heating capacity (2)	kW	22,40	28,00	33,50	40,00	45,00	50,40	56,00	56,00
Maximum heating performances									
Heating capacity	kW	25,00	31,50	37,50	45,00	50,00	56,50	63,00	69,00
Fan									
Туре	type	Inverter axial							
Number	no.	1	1	1	2	2	2	2	2
Air flow rate									
Maximum	m³/h	9750	10500	11100	13500	15400	16000	16500	16500
Compressor									
Туре	type	Scroll inverter							
Number	no.	1	1	1	1	1	2	2	2
Refrigerant charge	kg	8,2	8,5	9,6	11,1	11,6	12,8	12,8	13,3
Electric data									
Rated current input (3)	Α	23,0	23,5	24,1	37,5	39,3	47,0	48,0	49,0
Refrigeration pipework									
Type refrigerant connections	Туре	To be soldered							
Diameter of liquid refrigerant connections	mm (inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
Diameter of low pressure refrigerant gas connections	mm (inch)	19,05 (3/4")	22,2 (7/8")	25,4 (1")	25,4 (1")	28,6 (1 1/8")	28,6 (1 1/8")	28,6 (1 1/8")	28,6 (1 1/8")
Diameter of high pressure refrigerant gas connections	mm (inch)	15,9 (5/8")	19,05 (3/4")	19,05 (3/4")	22,2 (7/8")	22,2 (7/8")	25,4 (1")	25,4 (1")	25,4 (1")
Maximum refrigerant tube length	m	1000	1000	1000	1000	1000	1000	1000	1000
Power supply									
Outdoor unit nouver cumply		380-415V ~ 3N							
Outdoor unit power supply		50Hz							

(1) Cooling (EN 14511 and EN 14825) ambient air temperature 27 °C d.b. / 19 °C w.b.; outside air temperature 35 °C; turbo speed; length of refrigerant lines 5 m.
(2) Heating (EN 14511 and EN 14825) ambient air temperature 20 °C d.b.; outside air temperature 7 °C d.b. / 6 °C w.b.; turbo speed; length of refrigerant lines 5 m.
(3) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

INDOOR UNIT WEIGHTS AND DIMENSIONS



MVA_WL

		MVA220WL	MVA280WL	MVA360WL	MVA450WL	MVA500WL	MVA560WL	MVA630WL	MVA710WL
Indoor unit	,								
A	mm	845	845	845	970	970	1078	1078	1078
В	mm	209	209	209	224	224	246	246	246
С	mm	289	289	289	300	300	325	325	325
D	mm	976	976	976	1096	1096	1203	1203	1203
E	mm	281	281	281	320	320	350	350	350
F	mm	379	379	379	383	383	413	413	413
Net weight	kg	11,0	11,0	11,0	13,0	13,0	16,0	16,0	16,0
Weight for transport	kg	13,0	13,0	13,0	16,0	16,0	19,0	19,0	19,0

MVA_D

		MVA221D	MVA251D	MVA281D	MVA321D	MVA361D	MVA401D	MVA451D	MVA501D	MVA561D
Indoor unit	·									
A	mm	710	710	710	710	710	1010	1010	1010	1010
В	mm	462	462	462	462	462	462	462	462	462
С	mm	200	200	200	200	200	200	200	200	200
D	mm	1008	1008	1008	1008	1008	1308	1308	1308	1308
E	mm	568	568	568	568	568	568	568	568	568
F	mm	275	275	275	275	275	275	275	275	275
Net weight	kg	19,0	19,0	19,0	19,0	19,0	25,0	25,0	25,0	25,0
Weight for transport	kg	24,0	24,0	24,0	24,0	24,0	31,0	31,0	31,0	31,0

		MVA631D	MVA711D	MVA801D	MVA901D	MVA1001D	MVA1121D	MVA1251D	MVA1401D
Indoor unit									
A	mm	1010	1310	1200	1340	1340	1340	1340	1340
В	mm	462	462	655	655	655	655	655	655
C	mm	200	200	260	260	260	260	260	260
D	mm	1308	1608	1448	1588	1588	1588	1588	1588
E	mm	568	568	858	858	858	858	858	858
F	mm	275	275	315	315	315	315	315	315
Net weight	kg	25,0	31,0	39,0	46,0	46,0	46,0	47,0	47,0
Weight for transport	kg	31,0	38,0	48,0	55,0	55,0	55,0	56,0	56,0

MVA_DH

		MVA221DH	MVA251DH	MVA281DH	MVA321DH	MVA361DH	MVA401DH
Indoor unit	,						
A	mm	700	700	700	700	700	700
В	mm	700	700	700	700	700	700
C	mm	300	300	300	300	300	300
D	mm	897	897	897	897	897	897
E	mm	808	808	808	808	808	808
F	mm	362	362	362	362	362	362
Net weight	kg	32,0	32,0	32,0	32,0	32,0	34,0
Weight for transport	kg	38,0	38,0	38,0	38,0	38,0	40,0
							·

		MVA451DH	MVA501DH	MVA561DH	MVA631DH	MVA711DH	MVA801DH
Indoor unit							
A	mm	700	700	1000	1000	1000	1000
В	mm	700	700	700	700	700	700
C	mm	300	300	300	300	300	300
D	mm	897	897	1205	1205	1205	1205
E	mm	808	808	813	813	813	813
F	mm	362	362	360	360	360	360
Net weight	kg	34,0	34,0	43,0	43,0	43,0	43,0
Weight for transport	kg	40,0	40,0	49,0	49,0	49,0	49,0

		MVA901DH	MVA1001DH	MVA1121DH	MVA1251DH	MVA1401DH	MVA1601DH
Indoor unit							
A	mm	1400	1400	1400	1400	1400	1400
В	mm	700	700	700	700	700	700
C	mm	300	300	300	300	300	300
D	mm	1601	1601	1601	1601	1678	1678
E	mm	813	813	813	813	808	808
F	mm	365	365	365	365	365	365
Net weight	kg	57,0	57,0	57,0	57,0	57,0	57,0
Weight for transport	kg	64,0	64,0	64,0	64,0	67,0	67,0

		MVA2240DH	MVA2800DH
Indoor unit			
A	mm	1483	1686
В	mm	791	870
C	mm	385	450
D	mm	1758	1788
E	mm	883	988
F	mm	470	580
Net weight	kg	82,0	105,0
Weight for transport	kg	104,0	140,0

MVA_DV

	'	MVA220DV	MVA280DV	MVA360DV	MVA450DV	MVA560DV	MVA630DV	MVA710DV
Indoor unit	'							
A	mm	700	700	700	900	1100	1100	1100
В	mm	200	200	200	200	200	200	200
(mm	615	615	615	615	615	615	615
D	mm	893	893	893	1123	1323	1323	1323
E	mm	305	305	305	305	305	305	305
F	mm	743	743	743	743	743	743	743
Net weight	kg	23,0	23,0	23,0	27,0	32,0	32,0	32,0
Weight for transport	ka	30.0	30,0	30,0	36.0	41.0	41.0	41,0

MVA_CS

		MVA151CS	MVA181CS	MVA221CS	MVA281CS	MVA361CS	MVA451CS	MVA501CS	MVA561CS
Indoor unit									
A	mm	570	570	570	570	570	570	570	570
В	mm	570	570	570	570	570	570	570	570
C	mm	265	265	265	265	265	265	265	265
D	mm	698	698	698	698	698	698	698	698
E	mm	653	653	653	653	653	653	653	653
F	mm	295	295	295	295	295	295	295	295
Net weight	kg	18,0	18,0	18,0	18,0	18,0	18,0	18,0	18,0
Weight for transport	kg	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0

MVA_C

		MVA221C	MVA281C	MVA361C	MVA451C	MVA501C	MVA561C	MVA631C	MVA711C
Indoor unit	'	•							
A	mm	840	840	840	840	840	840	840	840
В	mm	840	840	840	840	840	840	840	840
С	mm	240	240	240	240	240	240	240	240
D	mm	963	963	963	963	963	963	963	963
E	mm	963	963	963	963	963	963	963	963
F	mm	325	325	325	325	325	325	325	325
Net weight	kg	27,0	27,0	27,0	27,0	28,0	28,0	28,0	28,0
Weight for transport	kg	35,0	35,0	35,0	35,0	36,0	36,0	36,0	36,0

		MVA801C	MVA901C	MVA1001C	MVA1121C	MVA1251C	MVA1401C
Indoor unit							
A	mm	840	840	840	840	840	840
В	mm	840	840	840	840	840	840
C	mm	240	240	240	290	290	290
D	mm	963	963	963	963	963	963
E	mm	963	963	963	963	963	963
F	mm	325	325	325	375	375	375
Net weight	kg	29,0	29,0	29,0	33,0	33,0	33,0
Weight for transport	kg	37,0	37,0	37,0	42,0	42,0	42,0

MVA_CB

		MVA1600CB	
Indoor unit	'		
A	mm	910	
В	mm	910	
(mm	290	
D	mm	1023	
E	mm	993	
F	mm	375	
Net weight	kg	47,0	
Weight for transport	kg	57,0	

MVA_C1

		MVA220C1	MVA280C1	MVA360C1	MVA450C1	MVA500C1
Indoor unit						
A	mm	987	987	987	987	987
В	mm	385	385	385	385	385
С	mm	178	178	178	178	178
D	mm	1307	1307	1307	1307	1307
E	mm	501	501	501	501	501
F	mm	310	310	310	310	310
Net weight	kg	20,0	20,0	20,0	21,0	21,0
Weight for transport	kg	27,0	27,0	27,0	29,0	29,0

MVA_F

		MVA280F	MVA281F	MVA360F	MVA361F	MVA500F	MVA501F	MVA561F	MVA630F	MVA631F	MVA710F
Indoor unit											
A	mm	1220	870	1220	870	1220	870	870	1420	1200	1420
В	mm	225	235	225	235	225	235	235	245	235	245
C	mm	700	665	700	665	700	665	665	700	665	700
D	mm	1343	973	1343	973	1343	973	973	1548	1303	1548
E	mm	315	300	315	300	315	300	300	345	300	345
F	mm	823	770	823	770	823	770	770	828	770	828
Net weight	kg	40,0	24,0	40,0	24,0	40,0	25,0	25,0	50,0	32,0	50,0
Weight for transport	kg	49,0	29,0	49,0	29,0	49,0	30,0	30,0	58,0	38,0	58,0

		MVA711F	MVA900F	MVA901F	MVA1120F	MVA1121F	MVA1250F	MVA1251F	MVA1400F	MVA1401F	MVA1601F
Indoor unit											
A	mm	1200	1420	1200	1700	1570	1700	1570	1700	1570	1570
В	mm	235	245	235	245	235	245	235	245	235	235
(mm	665	700	665	700	665	700	665	700	665	665
D	mm	1303	1548	1303	1828	1669	1828	1669	1828	1669	1669
E	mm	300	345	300	345	300	345	300	345	300	300
F	mm	770	828	770	828	770	828	770	828	770	770
Net weight	kg	32,0	50,0	33,0	60,0	41,0	60,0	41,0	60,0	43,0	43,0
Weight for transport	kg	38,0	58,0	39,0	68,0	48,0	68,0	48,0	68,0	50,0	50,0

MVA_FS

		MVA220FS	MVA280FS	MVA360FS	MVA450FS	MVA500FS
Indoor unit						
A	mm	700	700	700	700	700
В	mm	215	215	215	215	215
C	mm	600	600	600	600	600
D	mm	780	780	780	780	780
E	mm	285	285	285	285	285
F	mm	682	682	682	682	682
Net weight	kg	16,0	16,0	16,0	16,0	16,0
Weight for transport	kg	19,0	19,0	19,0	19,0	19,0

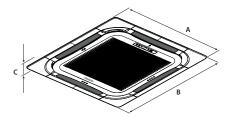
MVA_V

		MVA1000V	MVA1400V
Indoor unit			
A	mm	580	580
В	mm	400	400
C	mm	1870	1870
D	mm	738	738
E	mm	545	545
F	mm	2083	2083
Net weight	kg	54,0	57,0
Weight for transport	kg	74,0	77,0

MVA_ERV

		MVA500ERV	MVA800ERV	MVA1000ERV
Dimensions and weights				
A	mm	1700	1800	1800
В	mm	880	1185	1185
C	mm	340	390	390
D	mm	1988	2110	2110
E	mm	1138	1440	1440
F	mm	535	567	567
Net weight	kg	120,0	158,0	158,0
Weight for transport	kg	175,0	225,0	225,0

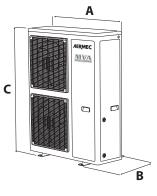
GLC1 / GL40B / GLG40S / GLG40



GLG40S / GLG40 / GL40B

		GLC1	GL40B	GLG40S	GLG40
Indoor unit					
A	mm	1200	1040	620	950
В	mm	460	1040	620	950
C	mm	55	65	48	52
D	mm	1265	1137	701	1033
E	mm	536	1137	701	1038
F	mm	118	140	125	112
Net weight	kg	4,0	8,0	3,0	6,0
Weight for transport	kg	6,0	12,0	5,0	10,0

OUTDOOR UNIT WEIGHTS AND DIMENSIONS



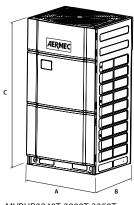
MVAS



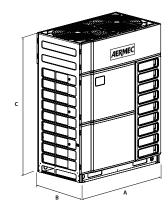
MVBM2240T-2800T-3350T



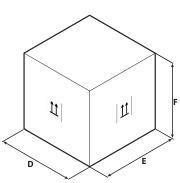
MVBM4000T-4500T 5040T-5600T-6150T



MVBHR2240T-2800T-3350T



MVBHR4000T-4500T-5040T-5600T-6150T



Carton Box Example

MVAS

		MVAS 1201S	MVAS 1201T	MVAS 1401S	MVAS 1401T	MVAS 1601S	MVAS 1601T	MVAS 2242T	MVAS 2803T	MVAS 3352T
Outdoor unit										
A	mm	900	900	900	900	900	900	940	940	940
В	mm	340	340	340	340	340	340	320	460	460
С	mm	1345	1345	1345	1345	1345	1345	1430	1615	1615
D	mm	1408	1048	1408	1048	1408	1048	1038	1038	1038
E	mm	458	458	458	458	458	458	438	578	578
F	mm	1507	1507	1507	1507	1507	1507	1580	1765	1765
Net weight	kg	110,0	120,0	110,0	120,0	110,0	120,0	133,0	163,0	174,0
Weight for transport	kg	123,0	133,0	123,0	133,0	123,0	133,0	144,0	175,0	187,0

MVBM

		MVBM 2240T	MVBM 2800T	MVBM 3350T	MVBM 4000T	MVBM 4500T	MVBM 5040T	MVBM 5600T	MVBM 6150T
Outdoor unit									
A	mm	930	930	930	1340	1340	1340	1340	1340
В	mm	775	775	775	775	775	775	775	775
C	mm	1690	1690	1690	1690	1690	1690	1690	1690
D	mm	1000	1000	1000	1400	1400	1400	1400	1400
E	mm	830	830	830	830	830	830	830	830
F	mm	1855	1855	1855	1855	1855	1855	1855	1855
Net weight	kg	220,0	220,0	240,0	300,0	300,0	350,0	350,0	355,0
Weight for transport	kg	230,0	230,0	250,0	315,0	315,0	365,0	365,0	370,0

MVBHR

		MVBHR2240T	MVBHR2800T	MVBHR3350T	MVBHR4000T	MVBHR4500T	MVBHR5040T	MVBHR5600T	MVBHR6150T
Outdoor unit									
A	mm	930	930	930	1340	1340	1340	1340	1340
В	mm	775	775	775	775	775	775	775	775
C	mm	1690	1690	1690	1690	1690	1690	1690	1690
D	mm	1000	1000	1000	1400	1400	1400	1400	1400
E	mm	830	830	830	830	830	830	830	830
F	mm	1855	1855	1855	1855	1855	1855	1855	1855
Net weight	kg	243,0	243,0	256,0	325,0	325,0	385,0	385,0	385,0
Weight for transport	kg	253,0	253,0	266,0	340,0	340,0	400,0	400,0	400,0

ermec also offer	rs a range of specifi	TARY P c solutions that mee	t a whole host of	CTS air conditioning requi	rements, as well as

A th

COMPLEMENT	TARY PRODUCTS	Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
DHW Systems and solar	kits				
GSA - KSA - CXS	DHW systems, solar kits with high efficiency panels and vacuum solar manifolds				966
Thermal Buffers tank					
SAF	Thermal Buffer tank kit with instantaneous Domestic Hot Water production				970
SAP	Buffer tank with capacity from 75 to 3500 litres				972
Plug&Play hydronic kit					
WST evo	Hydronic kit plug & play		80-1500		975
Cooling towers					
TRA	Cooling towers				978
Remote condensers - Dr	y coolers				
CSE	Remote condensers		3-650		980
CVR	Remote condensers		44-500		982
CDR	Remote condensers		150-590		984
CGA	Remote condensers		240-1500		986
CMV	Remote condensers		140-1200		988
WTE	Dry cooler		3-500		990
WTR	Dry cooler		56-350		992
WDR	Dry cooler		90-430		994
WGA	Dry cooler		180-1100		996
WMV	Dry cooler		100-950		998
Water cooled condensin	g unit				
FW-R	Water-cooled air conditioner		2,9-4,0	4,3-5,2	1000
CWX-CWXM	Water motocondensing unit		2,7-7,1		1002
Dehumidifier					
DMT	Dehumidifier				1005
DMH-DMV	Dehumidifier				1008

new









DHW SYSTEMS AND SOLAR KITS

- Solar systems complete with storage tank for combination with a heat pump
- Solar kits without storage tank for combination with third-party storage tanks
- Ultra-high efficiency vacuum solar manifolds
- Optional anti-stagnation shading device





DESCRIPTION

The Aermec GSA °-E series solar systems for domestic hot water are designed for easy interaction with heat pump systems and contain vacuum solar manifolds, a solar station equipped with a high efficiency electronic circulator, solar control unit and double coil storage tank.

The additional coil for the supplementary source is dimensioned with a larger exchange surface and is suitable for combination with heat pumps.

The Aermec GSA °-E series solar systems include ultra-high efficiency vacuum manifolds, which can be equipped with an optional anti-stagnation shading system. The solar manifolds are dimensioned based on the capacities of the storage tanks (300 litres or 500 litres) in order to guarantee a high share of renewable energy for the production of DHW and to optimise the system from an economic point of view.

Solar kits with the same dimensions of the complete systems but in a version without a storage tank are also available in order to combine them with third-party storage tanks (the suitability of the storage tanks must be checked by the designer in this case).

The complete systems and the kits without a storage tank must be completed with the necessary roof manifold clampings, which are available as accessories for the various types of roofs (pitched roof with shingles, with tiles, universal with screw connection and flat roof).

VERSIONS

The vacuum solar manifolds are also available individually, in two sizes with 15 pipes and 21 pipes. Each size is available in the standard $^\circ$ version and in the E version with the anti-stagnation shading device.

GSA complete solar system

The GSA °-E complete solar systems are available in two sizes - 300 litres combined with a 21-pipe solar manifold and 500 litres combined with two solar manifolds, each with 15 pipes. Each size is available in the ° version (standard) and in the E version (with the anti-stagnation shading system).

Field	Description
1,2,3	GSA
	Size
4,5,6	300, 500
7	Version
0	Vacuum solar manifolds

Field	Description
E	Complete solar system with vacuum collector with anti-stagnation

Solar kits without storage tank

The KSA solar kits are available in two sizes (size with a single 21-pipe manifold and size with two manifolds, each with 15 pipes). Each size is available in the standard ° version and in the E version with the anti-stagnation shading device.

Field	Description
1,2,3	KSA
4,5	Size 21, 30
6	Version
0	Solar kit with vacuum collector
Е	Complete solar kit with vacuum collector with anti-stagnation darkening device

Vacuum solar manifolds

The vacuum solar manifolds are also available individually, in two sizes with 15 pipes and 21 pipes. Each size is available in the standard $^{\circ}$ version and in the E version with the anti-stagnation shading device.

Field	Description
1,2,3	CXS
4.5	Size
4,5	15, 21
6	Version
0	Vacuum solar manifolds
E	Complete vacuum solar collector with anti-stagnation shading device

ACCESSORIES

CSB: Basic set + cover.

CSP: Basic set + cover.

KSB: Basic set (for panel string termination; already included in the systems and kits).

KSP: Plus set (for panel connection; already included in the systems and kirs).

MIX10: 10 liter tank of pre-mixed antifreeze solution for topping up and/or filling solar systems with vacuum collectors

MIX20: 20 liter tank of pre-mixed antifreeze solution for topping up and/or filling solar systems with vacuum collectors

STC21: Clamping for 1 vacuum manifold with 21 pipes (with or without Eclypse) on a pitched roof with tiles.

STC30: Clamping for 2 vacuum manifold with 15 pipes each (with or without Eclypse) on a pitched roof with tiles.

STC (x1): Clamping for vacuum manifold (with or without Eclypse) on a pitched roof with tiles.

STP21: Clamping for 1 vacuum manifold with 21 pipes (with or without Eclypse) on a flat roof.

STP30: Clamping for 2 vacuum manifold with 15 pipes (with or without Eclypse) on a flat roof.

STP (x1): Clamping for vacuum manifold (with or without Eclypse) on a flat roof.

STT21: Clamping for 1 vacuum manifold with 21 pipes (with or without Eclypse) on a pitched roof with shingles.

STT30: Clamping for 12 vacuum manifolds with 15 pipes each (with or without Eclypse) on a pitched roof with shingles.

STT (x1): Clamping for vacuum manifold (with or without Eclypse) on a pitched roof with shingles.

STV15: Clamping for 1 vacuum manifold with 15 pipes (with or without Eclypse) on a pitched roof with screw connection.

STV21: Clamping for 1 vacuum manifold with 21 pipes (with or without Eclypse) on a pitched roof with screw connection.

STV30: Clamping for vacuum manifold (with or without Eclypse) on a pitched roof with screw connection.

ACCESSORIES COMPATIBILITY

Clamping for a manifold on a pitched roof with shingles

Accessory	GSA300°	GSA300E	GSA500°	GSA500E
STT (x1)	•	•		
STT (x2)			•	•
Accessory	KSA21°	KSA21E	KSA30°	KSA30E
STT (x1)	•	•		

Clamping for a manifold on a pitched roof with tiles

Accessory	GSA300°	GSA300E	GSA500°	GSA500E
STC (x1)	•	•		
STC (x2)			•	•
Accessory	KSA21°	KSA21E	KSA30°	KSA30E
STC (x1)	•	•		
STC (x2)			•	•

Clamping for a manifold on a pitched roof with screw connection

Accessory	GSA300°	GSA300E	GSA500°	GSA500E
STV (x1)	•	•		
STV (x2)			•	•
Accessory	KSA21°	KSA21E	KSA30°	KSA30E
STV (x1)	•	•		
STV (x2)				

Clamping for a manifold on a flat roof

Accessory	GSA300°	GSA300E	GSA500°	GSA500E
STP (x1)	•	•		
STP (x2)			•	•
Accessory	KSA21°	KSA21E	KSA30°	KSA30E
STP (x1)		•		
311 (A1)				

Basic set (for panel string termination) and plus set (for the connection of two solar panels)

		•	· · · · · · · · · · · · · · · · · · ·	
Accessory	CXS15°	CXS15E	CXS21°	CXS21E
CSB	•	•	•	•
CSP	•	•	•	•
KSB	•	•	•	•
KSP	•	•	•	•

The accessories are compatible with the solar manifolds, but are not compatible with the GSA solar systems or with the KSA solar kits because they are already included.

PERFORMANCE SPECIFICATIONS

GSA complete solar system

		GSA300°	GSA300E	GSA500°	GSA500E
Technical features					
Solar manifolds	no./type	1 x CXS21°	1 x CXS21E	2 x CXS15°	2 x CXS15E
Gross surface	m ²	4,45	4,45	6,36	6,36
Opening surface	m²	4,02	4,02	5,74	5,74
Input current surface	m ²	5,39	5,39	7,70	7,70
Hydraulic components					
Storage tank (DHW)	I	300	300	500	500
Expansion vessel number	no.	1	1	1	1
Expansion vessel capacity	I	24	24	40	40
Recommended dimension based on the number of people	no.	3-5	3-5	5-7	5-7

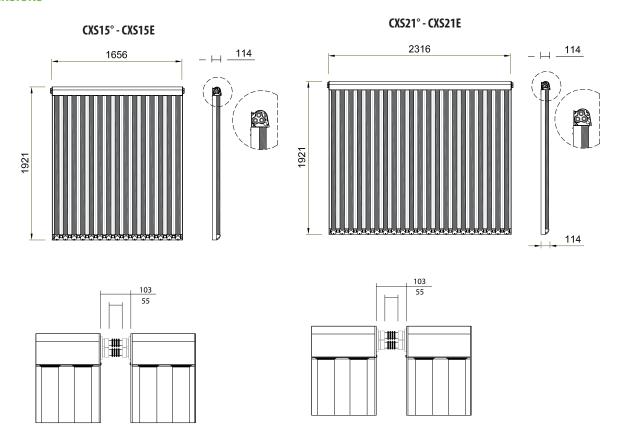
KSA solar system

		KSA21°	KSA21E	KSA30°	KSA30E
Technical features	'				
Solar manifolds	no./type	1 x CXS21°	1 x CXS21E	2 x CXS15°	2 x CXS15E
Gross surface	m²	4,45	4,45	6,36	6,36
Opening surface	m²	4,02	4,02	5,74	5,74
Input current surface	m²	5,39	5,39	7,70	7,70
Hydraulic components					
Expansion vessel number	no.	1	1	1	1
Expansion vessel capacity		24	24	40	40

Only the solar panel

		CXS15°	CXS15E	CXS21°	CXS21E
Technical features					
Vacuum pipes	no.	15	15	21	21
Maximum number of coil manifolds	no.	6	6	6	6
Connections	no.	6	6	6	6
Connection dimensions	Ø inch	3/4"M	3/4"M	3/4"M	3/4"M
Opening surface	m ²	2,87	2,87	4,02	4,02
Input current surface	m²	3,85	3,85	5,39	5,39
Gross surface	m ²	3,18	3,18	4,45	4,45
Head insulation thickness, aluminised glass wool covering	mm	47	47	30	30
Diameter - Vacuum pipe length	mm	58/47 - 1800	58/47 - 1800	58/47 - 1800	58/47 - 1800
Recommended tilt	0	15 - 75°	15 - 75°	15 - 75°	15 - 75°
Conductor radiator fluid content	I	3,28	3,28	3,75	3,75
Performances					
η0 rendimento ottico (riferimento area lorda)		0,615	0,615	0,609	0,609
K1 transmission coefficient (gross area reference)	W/m²K	0,850	0,850	0,690	0,690
K2 transmission coefficient (gross area reference)	W/m²K	0,009	0,009	0,005	0,005
Nominal Power	W	1956	1956	2710	2710
Angle of incidence correction factor	K50°	1.14T/0.9L	1.14T/0.9L	1.14T/0.9L	1.14T/0.9L
Heating capacity (opening ref.)	kJ/m²K	50,9	50,9	34,0	34,0
Energy produced annually ISO 9806:2013 – Wurzburg – Temperature 50°C	kWh	2371	2371	2884	2884
Energy produced annually ISO 9806:2013 – Wurzburg – Temperature 75°C	kWh	1929	1929	2499	2499
Test Report ISO 9806:2013		Kiwa	Kiwa	Kiwa	Kiwa
DIN CERTCO Registration number		16083 Rev.0	16083 Rev.0	16082 Rev.0	16082 Rev.0
Flow Rate	l/h	127	127	200	200
Stagnation temperature	°C	279	279	176	176
Maximum pressure	bar	10	10	10	10

DIMENSIONS



		CXS15°	CXS15E	CXS21°	CXS21E
Dimensions and weights					
A	mm	1656	1656	2316	2316
В	mm	1921	1921	1921	1921
С	mm	114	114	114	114
Empty weight	kg	72	72	80	80







SAF



- Various versions that make optimum use of the different energy sources
- Ease of installation, even in confined
- · Installing the indoor unit





DESCRIPTION

SAF are the new thermo-buffer for the instantaneous production of domestic hot water (DHW). They integrate both the energy storage element and the heat exchanger, along with the control functions, into a single unit.

The hot water is taken from the water main and heated instantaneously by means of a plate heat exchanger in stainless steel: the separation between the drinking water circuit and the water contained in the accumulator ensures maximum hygiene.

In this way, the benefits of instant production are combined with those associated with buffer production.

These devices are specifically designed and manufactured to be combined with heat pumps but also with traditional or biomass boilers, solar thermal systems and other renewable sources.

VERSIONS

° Standard

S With supplementary energy source management

T Set up for use with supplementary energy source In addition to these versions, an supplementary heater (accessory) is also provided to respond to increased heating requirements.

FEATURES

- The SAF system is available with a range of thermo-accumulators with different capacities, (200-300-500l), in order to meet a whole host of different DHW requirements;
- The high-efficiency insulation prevents energy losses, to the advantage of the heat exchanger, allowing for significant reductions in running costs:
- The compactness and the new elegant and attractive design mean that it can be installed in restricted spaces, in indoor environments.

ACCESSORIES

KRX-SAF: Supplementary electric heater with thermostat control from 1200W 230V/1/50Hz with connexion of 1" 1/2.

VT: Anti-vibration supports.

Accessories compatibility

Heat pump	Sizes	Version		Accessories mandatory				Recomm	Recommended	
				SAF	MOD485K	MODU485-BL*	VMF-E5	VTV160	KRX-SAF	
ANL	021-203	H°-HP		•	•	•	•	•	•	
ANLI	101	H°-HP-HX	(1)	•	-	-		•	•	
ANK	020-150	H°-HP		•	•	•	•	•	•	
NRK	090-0150	00-P1-P3		•	•	•	•	•	•	
CL	025-200	H°-HP		•	•	•	•	•	•	
ANKI	020-080	H°-HX	(1)	•	-	-	-	•	•	
WRL	026-161	Н°	(1)	•		-	-	•	•	

*To be installed on board of the heat pump.
(1) Units designed for the management domestic hot water: MOD485K and VMF-E5 accessories not required. It is recommended not to combine the SAF with units with storage tank.

CONFIGURATOR

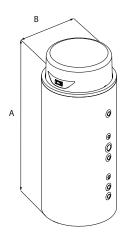
Field	Description
1,2,3	SAF
4,5,6	Size 200, 300, 500
7	Version
0	Standard
S	With supplementary energy source management (1)
T	Set up for use with supplementary energy source (1)
8	Field for future development
0	

⁽¹⁾ Version "S-T" not available for size 200

PERFORMANCE SPECIFICATIONS

		SAF200	SAF300	SAF300T	SAF300S	SAF500	SAF500T	SAF500S
Power supply								
Power supply					230V~50Hz			
Accumulation inertial								
Storage tank capacity	I	199	290	27	79	480	40	55
Drinking water content	I	0,85	0,85	0,85	0,85	0,85	0,85	0,85
Coil water content	I	-	-	10	10	-	13	13
Maximum operating pressure	bar	6	6	6	6	6	6	6
Losses through dispersion	W	59		68			80	
Energy efficiency class (1)	type				В			
DHW minimum flow rate	l/min	2	2	2	2	2	2	2
DHW maximum flow rate	l/min	35	35	35	35	35	35	35
Maximum operating temperature	°C	95	95	95	95	95	95	95
Electric data								
Minimum input power	W	25	25	25	27	25	25	27
Maximum input power	W	75	75	75	127	75	75	127
Minimum input current (2)	A	0,14	0,14	0,14	0,18	0,14	0,14	0,18
Maximum input current	A	0,53	0,53	0,53	1,05	0,53	0,53	1,05

DIMENSIONS



		SAF200	SAF300	SAF300T	SAF300S	SAF500	SAF500T	SAF500S
Dimensions and	weights							
A	mm	1315	1690	1690	1690	1740	1740	1740
В	mm	710	710	710	710	850	850	850
Empty weight	kg	75	89	96	101	116	131	136
Weight functioning	kg	275	389	396	401	616	631	636

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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⁽¹⁾ In accordance with Standard UNI EN 16147:2011 and in accordance with Delegated Regulation 812/2013 and 814/2013
(2) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.







SAP Storage tank



Accumulation unit from 75 to 3500 litres





DESCRIPTION

Accumulation unit - completely assembled pump to be used with a refrigerating unit with hydraulic connections to be made on site by the installer.

FEATURES

- The base the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
- Pumps
- Pressure relief valve
- Completely insulated hydraulic circuit
- Pump magnet circuit-breaker protection

Pumps

SAP 0075 - 0150:

5 pump models with water capacity up to 18000 l/h and with prevalence up to 140 kPa are available (max. 2 internally installed pumps).

SAP 0300 - 0500 - 0501 - 0750 - 1000:

8 pump models with water capacity up to 60000 l/h and with prevalence up to 200 kPa are available.

Pumping units with a reserve pump can also be included in these units.

SAP 1500 - 2000 - 3000:

10 pump models with water capacity up to 200000 l/h and with prevalence up to 300 kPa are available.

Pumping units with a reserve pump can also be included in these units.

ACCESSORIES

VT: Anti-vibration supports.

AVX: Spring anti-vibration supports.

RX: 500 W armoured resistance, with thermostat and inserted in a dedicated fitting, it can be installed only at the factory.

RXV: 3kW armoured resistance, with thermostat and inserted in a dedicated fitting, it can be installed only at the factory.

Accessories compatibility

Antivibration

Accessory	SAP0075	SAP0150	SAP0300	SAP0500	SAP0501	SAP0750	SAP1000
VT2			•	•	•	•	•
VT8							

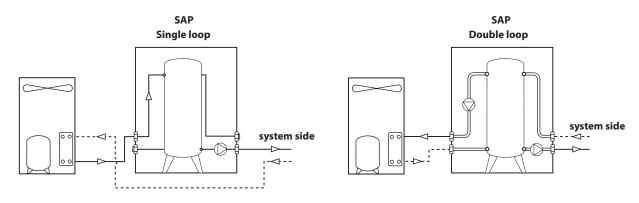
Antivibration

Ver	1500	2500	3500
IS,JS,KS	AVX206	AVX210	AVX214
IZ,JZ,KZ	AVX203	AVX208	AVX212
RS,WZ	AVX202	AVX208	AVX212
RZ,TZ	AVX201	AVX207	AVX211
TS	AVX204	AVX208	AVX212
US	AVX204	AVX208	AVX213
UZ,VZ,ZZ	AVX201	AVX207	AVX212
VS	AVX204	AVX209	AVX213
WS,XS,YS	AVX205	AVX209	AVX213
XZ,YZ	AVX202	AVX207	AVX212

Resistance

Accessory	SAP0075	SAP0150	SAP0300	SAP0500	SAP0501	SAP0750	SAP1000	SAP1500	SAP2500	SAP3500
RX	•		•	•	•	•	•			
RXV										

EXAMPLE OF A HYDRAULIC CONNECTION



TECHNICAL DATA

		SAP0075	SAP0150	SAP0300	SAP0500	SAP0501	SAP0750	SAP1000	SAP1500	SAP2500	SAP3500
Accumulation inertial											
Storage tank capacity	I	75	150	300	500	500	750	1000	1500	2500	3500
Pressure relief valve	n°/bar	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Expansion vessel											
Expansion vessel capacity	I	8	12	18	24	24	18	18	24	24	24
Expansion vessel number	no.	1	1	1	1	1	2	2	2	3	3
Hydraulic connections											
Connections (in/out)	Туре	F	F	F	F	F	F	F	-	-	-
Sizes (in/out)	Ø	1" 1/4	1"1/2	2"	2"1/2	2"1/2	3"	3"	-	-	-

SAP pumps flanges diameter 1500 - 2500 - 3500

			Pump													
SAP	Flange		R	T	U	V	X	γ	W	K	J	I				
1500	PN16UNI2278	Ø	125	125	150	150	150	150	200	200	200	200				
2500	PN16UNI2279	Ø	125	125	150	150	150	150	200	200	200	200				
3500	PN16UNI2280	Ø	125	125	150	150	150	150	200	200	200	200				

PUMP ELECTRIC DATA

	Pump													
		A	В	(E	F	G	Н	I	J	K	L		
Max absorbed power	W	275	330	614	895	1070	1550	2050	22000	17500	14500	3100		
Max absorbed current	A	0,5	0,7	1,1	1,6	1,9	2,8	3,6	43,0	36,4	30,0	5,6		
		M	N	P	Q	R	T	U	٧	W	Х	Υ		
Max absorbed power	W	4100	1470	2600	5200	4000	5200	5800	8000	11500	9000	11000		
Max absorbed current	A	7,2	2,6	4,4	8,8	8,5	11,5	15,5	15,5	22,5	22,5	22,5		

PUMP COMBINATIONS

						Pump con	nbinations					
SAP0075	AZ	AE	AF	AZ	BC	BE	BF	BZ	ZC	ZE	ZF	ZZ
CAROLEO	AC	AE	AF	AZ	ВС	BE	BF	BZ	CC	EC	CF	CZ
SAP0150	AE	EE	EF	EZ	BF	FE	FF	FZ	ZC	ZE	ZF	ZZ
SAP0300						CS	CZ	ES	EZ	FS	FZ	ZZ
SAP0500				FS	FZ	GS	GZ	HS	HZ	PS	PZ	ZZ
SAP0501				FS	FZ	GS	GZ	HS	HZ	PS	PZ	ZZ
CAROZEO				FS	FZ	GS	GZ	HS	HZ	LS	LZ	MS
SAP0750					MZ	NS	NZ	PS	PZ	QS	QZ	ZZ
SAP1000				LS	LZ	MS	MZ	NS	NZ	QS	QZ	ZZ
CARAGOO		IS	IZ	JS	JZ	KS	KZ	RS	RZ	TS	TZ	US
SAP1500			UZ	VS	VZ	WS	WZ	XS	XZ	YS	YZ	ZZ
CARDITOR		IS	ΙZ	JS	JZ	KS	KZ	RS	RZ	TS	TZ	US
SAP2500			UZ	VS	VZ	WS	WZ	XS	XZ	YS	YZ	ZZ
CARREDO		IS	IZ	JS	JZ	KS	KZ	RS	RZ	TS	TZ	US
SAP3500			UZ	VS	VZ	WS	WZ	XS	XZ	YS	YZ	ZZ

The indicated combinations are the only ones foreseen, many capacity/prevalence combinations are available, we invite you to refer to the technical documentation.

A - B: Multi-speed circulators.

L - M - Q: Twin pumping unit.

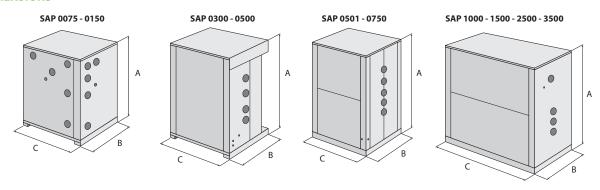
S: Pumping unit with reserve pump.

Z: Pump not present.

The first letter of the combination indicates the pump on the primary circuit.

The second letter of the combination indicates the pump on the secondary circuit.

DIMENSIONS



		SAP0075	SAP0150	SAP0300	SAP0500	SAP0501	SAP0750	SAP1000	SAP1500	SAP2500	SAP3500
Dimensions and	weights										
A	mm	1000	1000	1650	1650	1968	1968	2049	2049	2049	2049
В	mm	1000	1000	1100	1100	1000	1000	1000	1750	2000	2300
C	mm	700	700	1100	1100	1550	1550	2200	2200	2200	2200
Empty weight	kg	120	135	190	230	310	400	445	510	655	730

The weight of the unit without ZZ pumps.













WST evo

Plug & play hydronic kit

Cooling capacity 80 ÷ 1500 kW Water flow rate 17000 ÷ 260000 l/h



- Hydronic kit containing the main hydraulic components
- Easy installation
- ideal for industrial systems or data centres, where chilled water is required even during the winter
- Partial and total free cooling operation



DESCRIPTION

Plug & play hydronic kit that includes the main hydronic and regulation components of a hydraulic system.

The WST are designed to facilitate installation in systems where chilled water production is required throughout the year, in combination with a water/water chiller and a dry cooler.

Thanks to Aermec's 20-year experience in critical processes and the special software purposely developed, these units can manage all the components that make up the system:

- The water-cooled chiller;
- The pumps (including the reserve ones, if installed) for both the system side and the source side;
- The speed of the dry cooler fans (in both mechanical operation and free cooling mode);
- The modulating valve for controlling the chiller condensation.

OPERATION

Air-water chiller

When the outside air temperature is higher than the temperature of the system return water, the cooling capacity is provided by the chiller. The WST manages the dry cooler by modulating its fans on the basis of the chiller condensation pressure.

Free-cooling

When the outside air temperature is lower on the other hand, the WST commands free cooling mode which can be mixed (chiller + free cooling) or free cooling only (switching off the chiller) to exploit the water from the dry cooler to cool the system water in the dedicated heat exchanger.

HYDRAULIC COMPONENTS OF THE DRY COOLER SIDE

- Water filter;
- Flow switches;
- Shut-off valve;
- Mixer valves;
- Bypass valve;
- Pumps;
- Butterfly valves (free cooling enabling);
- High-efficiency plate heat exchanger (free cooling);
- Water temperature probes.

HYDRAULIC COMPONENTS OF THE CHILLER SIDE

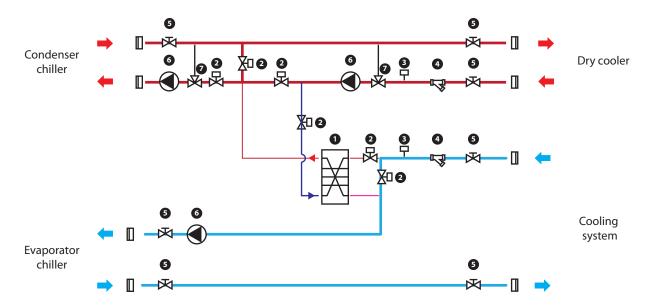
- Water filter;
- Flow switches;
- Shut-off valve;
- Pumps;
- Water temperature probes.

REGULATION

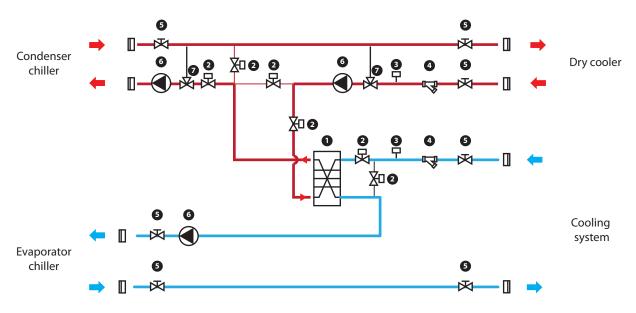
- Electronic microprocessor regulation with MODBUS protocol communication:
- The AER485P1 accessory is supplied as standard with the WST. This
 accessory must necessarily be fitted in the chiller, so the units can
 communicate with each other;
- Advanced electronics characterised by the continuous monitoring of various working and environmental parameters, so the operating mode (chiller/free cooling) can be switched as and when necessary. This limits the operating costs and ensures greater energy efficiency;
- Dry cooler fan management, to control the condensation pressure (chiller mode) or the recovered output (free cooling mode);
- Management of cold start-up via dry cooler fan modulation and the mixer valve;
- Structure and base in hot-dip galvanised sheet metal coated in epoxy powders RAL 9003.

OPERATING MODE

Mechanical operation (chiller)



Mixed operation (chiller + free cooling)

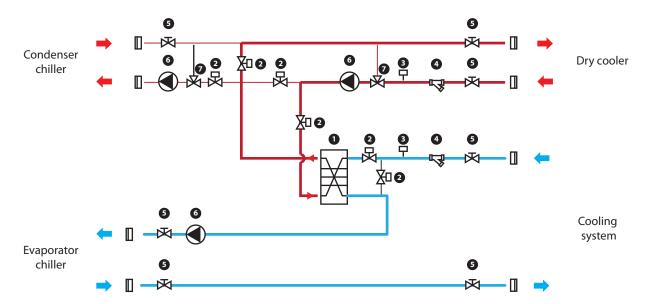


Key:

- 1 Plate heat exchanger
- 2 2-way butterfly valve
- 3 Flow switch

- 4 Water filter
- 5 Shut-off valve
- 6 Pump
- 7 Mixing valve

Operation in free-cooling only



Key:

- Plate heat exchanger 1
- 2-way butterfly valve Flow switch 2
- 3

- 4
- Water filter Shut-off valve 5
- 6 Pump
- Mixing valve



TRA

Cooling towers

Capacities from 49.53 up to 1084.88 kW





FEATURES

- Available in 17 different sizes
- Entirely built of fibre-glass reinforced resin to avoid corrosion problems with surface treatment to withstand ultraviolet rays, heat changes and scuffing caused by bad weather
- Limited to the three largest sizes (TRA 850, 950 and 1100) the bearing structure is made of hot galvanised steel with 22mm thick fibreglass reinforced resin sandwich panels, with support foam material inside. In this way, as well achieving good mechanical strength the sound of the water flowing is muffled. Surface treatment to withstand ultraviolet rays, heat changes and scuffing caused by bad weather.
- Self-bearing structure
- Exchange pack and drip separator made of self-extinguishing PVC
- PVC water distribution pipes with polypropylene nozzles
- Hydrometer (when there is not water flow rate measuring device, this

instrument makes possible to have an approximate indication of the flow rate of the water in circulation based on the nozzle load drop)

- Plastic bleed cock
- Axial high efficiency fan with several blades
- Water drip pan, waterproof and water resistant made of fibreglass reinforced polyester resin with multi layer glass material
- Personal protection grill made of AISI 304 on the fan outlet

- TRA from 50 up to 750 silenced and Inspection window standard
- TRA from 850 up to 1100 standard, TRA from 850 up to 1100 silenced (L) All with inspection door to a crawl Series

TRA_Y_UN50_01

ACCESSORIES

RT: Heater element with regulating thermostat.

						(Compatik	ility of a	ccessorie	s							
TRA	50	70	90	110	130	170	200	240	300	400	500	550	600	750	850	950	1100
RT 11 (1 kW)	•				•												
RT 12 (2 kW)						•		•	•								
RT 13 (3 kW)										•							
RT 15 (5 kW)														•	•		
RT 17 (7.5 kW)																	•

N.B. = In the case of RT accessories, the number between brackets indicates the capacity of the heater element. * = All the accessories and/or variants must in all cases be specified when the order is placed.

TECHNICAL DATA

Mod. TRA		50	70	90	110	130	170	200	240	300
Capacity	kW	49,53	69,06	88,60	107,44	125,58	168,14	197,67	242,09	302,33
Air flow rate	m ³ /h	4500	4500	8100	8100	8100	12600	12600	18100	18100
Water flow rate	l/h	7100	9900	12700	15400	18000	24100	28330	34700	43300
Pressure drops	kPa	42	32	52	32	42	28	35	23	40
Motor power	kW	0,55	0,75	0,75	0,75	1,1	1,1	1,5	1,5	2,2
Motor poles	n.	4	4	4	4	6	6	6	6	6
Motor poles (double polarity)	n.	4/8	4/8	4/8	4/8	6/12	6/12	6/8	6/8	6/8
Fans	n.	1	1	1	1	1	1	1	1	1
Nozzles	n.	1	1	1	1	1	1	1	4	4
Sound pressure	dB (A)	52	52	54	54	54	54	54	55	55

Mod. TRA		400	500	550	600	750	850	950	1100
Capacity	kW	405,35	488,37	574,19	604,88	767,44	856,74	941,86	1084,88
Air flow rate	m ³ /h	28350	28350	36000	45350	45350	58000	58000	67000
Water flow rate	l/h	58100	70000	82300	86700	110000	122800	135000	155500
Pressure drops	kPa	28	40	55	30	48	49	25	32
Motor power	kW	2,2	4	5,5	4	5,5	5,5	5,5	7,5
Motor poles	n.	6	6	6	6	6	8	8	8
Motor poles (double polarity)	n.	6/8	6/12	6/12	6/12	8/16	8/16	8/16	8/16
Fans	n.	1	1	1	1	1	1	1	1
Nozzles	n.	4	4	4	9	9	16	16	16
Sound pressure	dB (A)	57	57	58	61	61	62	62	64
Sound pressure (silenced version)	dB (A)						56	56	57

^{*=} Sizes from 50 to 750 are only muted. Power supply = $3 \sim 230V$ 50Hz; $3N \sim 400V$ 50Hz.

Performance values refer to the following conditions:

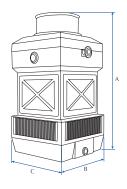
Sound pressure measured in free field conditions at distance of 10 m with direction factor = 2.

air inlet temperature 23.5 °C W.B.;

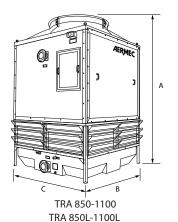
water inlet temperature 35 °C;

water outlet temperature 29 °C

DIMENSIONS (MM)



TRA 50-750



Mod. TRA		50	70	90	110	130	170	200	240	300	400
Height	Α	2110	2110	2595	2595	2595	2800	2800	2860	2860	3140
Width	В	800	800	1000	1000	1000	1200	1200	1400	1400	1740
Depth	С	800	800	1000	1000	1000	1200	1200	1400	1400	1740
Weight	kg	75	75	85	95	95	170	170	210	210	410
Mod. TRA		500	550	600	750	850	850L	950	950L	1100	1100L

Mod. TRA		500	550	600	750	850	850L	950	950L	1100	1100L
Height	Α	3140	3380	3450	3450	3650	3900	3650	3900	3650	3900
Width	В	1740	1900	2100	2100	2030	2030	2030	2030	2360	2360
Depth	С	1740	2100	2300	2300	2360	2360	2360	2360	2360	2360
Weight	kg	410	500	555	580	850	850	815	815	915	915

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979













CSE

Remote condenser

Cooling capacity 3 ÷ 650 kW



- Simple to use and install
- Wide range of powers
- Easy to handle and transport
- Can be installed both horizontally and vertically



GENERAL FEATURES

- Simple to use and install;
- Excellent value for money;
- Easy to handle and transport;
- Up to 3 units can be stacked depending on the model (to be requested at time of order);

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- The version with polyurethane resin pre-painted louvers is also available for greater resistance to corrosion in aggressive environments;
- All coils are tested with Helium (He₂) which ensures the absence of leaks;
- The shoulders of the coils are integrated into the structure and designed to avoid any pipe breakage due to vibrations related to transport or functioning;
- Copper collectors with welded connections closed to prevent impurities and moisture from getting into the circuits.

Fans

Latest generation axial fans all compliant with ErP regulation and IP54.

All the machines are supplied with wired and tested fans, the following diameters of fans are available:

- Ø350 Single phase (EC);
- Ø500 single-phase or three-phase (AC with "Y" STAR or "D" TRIANGLE EC electrical connection);
- Ø800 three-phase (AC with "Y" STAR or "D" TRIANGLE EC electrical connection):
- Ø1000 three-phase (AC with "Y" STAR or "D" TRIANGLE EC electrical connection).

There are different noise levels, depending on the fan diameter:

- Standard (B);
- Silenced (S);
- Super silent (E).

CONTROL

The electrical panel with terminal board or with adjustment is always present

For space reasons, the models with 350 mm diameter fans feature a junction box.

The regulators used are of high efficiency and low consumption, the types of adjustments available are:

- Phase cut for AC fans
- With electronic processor for EC versions

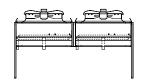
ACCESSORIES

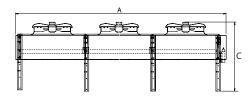
Several accessories are available:

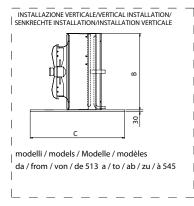
- 1. Anti-vibration supports;
- 2. Coil connection kit;
- 3. Additional disconnectors for each motor;
- 4. Remote switch-on/switch-off management kit;
- **5.** Resistance kit (if temperature \leq 20°C);
- 6. MODBUS kit (only on units with three-phase connection);
- **7.** Axitop (only for 800 mm diameter fans).

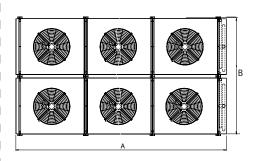
PERFORMANCE SPECIFICATIONS

For combinations with the evaporating units contact the headquarters.









CSE fans diameter Ø 350

		CSE 3023	CSE 3024	CSE 3033	CSE 3034
Dimensions and	weights		,	,	
A	mm	1310	1310	1860	1860
В	mm	620	620	620	620
С	mm	840	840	840	840
Weights					
Empty weight	kg	35	39	48	54

CSE fans diameter Ø 500

		CSE 5013	CSE 5014	CSE 5022	CSE 5023	CSE 5033	CSE 5034	CSE 5043	CSE 5044	CSE 5063	CSE 5064	CSE 5083	CSE 5084
Dimensions and	weights												
A	mm	1400	1400	2345	2345	3290	3290	4230	4230	3290	3290	4230	4230
В	mm	833	833	833	833	833	833	833	833	1666	1666	1666	1666
C	mm	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
Weights													
Empty weight	kg	70	74	107	116	162	175	206	224	324	350	412	448

CSE fans diameter Ø 800

		CSE 8013	CSE 8014	CSE 8023	CSE 8024	CSE 8033	CSE 8034	CSE 8043	CSE 8044	CSE 8063	CSE 8064
Dimensions and	d weights										
A	mm	1920	1920	3600	3600	5260	5260	3600	3600	5260	5260
В	mm	1240	1240	1240	1240	1240	1240	2390	2390	2390	2390
C	mm	1385	1385	1385	1385	1385	1385	1385	1385	1385	1385
Weights											
Empty weight	kg	169	179	331	356	487	525	642	692	954	1030

CSE fans diameter Ø 1000

		CSE 1013	CSE 1014	CSE 1023	CSE 1024	CSE 1033	CSE 1034	CSE 1043	CSE 1044	CSE 1063	CSE 1064	CSE 1083	CSE 1084
Dimensions and	weights												
A	mm	2560	2560	4860	4860	7170	7170	9460	9460	7170	7170	9460	9460
В	mm	1260	1260	1260	1260	1260	1260	1260	1260	2430	2430	2430	2430
C	mm	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Weights													
Empty weight	kg	229	247	429	467	725	772	925	990	1508	1602	1930	2060

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CVR

Remote condenser

Cooling capacity 44 ÷ 500 kW



- V-Shape model with single row of fans
- · Wide range of powers
- · Maximum height clearance 1.6 mt



GENERAL FEATURES

- V-Shape model with single row of fans;
- Very compact and lowered structure;
- Maximum height clearance 1.6 mt;
- can be transported via container;
- Easy to handle and transport;

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- Coils with compact staggered geometry, copper pipes and corrugated or mechanically expanded aluminium louvers;
- The version with polyurethane resin pre-painted louvers is also available for greater resistance to corrosion in aggressive environments;
- All coils are tested with Helium (He₂) which ensures the absence of leaks;
- The shoulders of the coils are integrated into the structure and designed to avoid any pipe breakage due to vibrations related to transport or functioning;
- Copper collectors with welded connections closed to prevent impurities and moisture from getting into the circuits.
- The electrical panel with terminal board or adjustment is always supplied:
- The regulators used are of high efficiency and low consumption;
- The types of available adjustments are: phase cut for AC fans and with electronic processor for EC fans;
- Adiabatic "Spray System" systems with running water nozzles (cheaper but less efficient);
- Aluminium "Adiabatic Panels" system with closed water management and control system (very efficient system with a 10% maximum amount of evaporated water).

Fans

- Latest generation axial fans all compliant with ErP regulation and IP54;
- All machines are supplied with wired and tested fans;
- Fans diameter ø: 800 mm;
- Fans with a diameter of ø 800 mm are all three-phase (T) and there can be from 2 to 7 per machine;

- Different sound levels: standard (B), silenced (S) or extra-silenced (E);
- The motors can have AC or EC technology;
- For three-phase AC motors it is possible to choose the electrical type of connection: star (Y) or delta (D).

CONTROL

The electrical panel with terminal board or adjustment is always present and can be installed on the collector side (standard) or on the opposite side. The regulators used are of high efficiency and low consumption.

The types of available adjustments are: phase cut for AC fans and with electronic processor for EC fans.

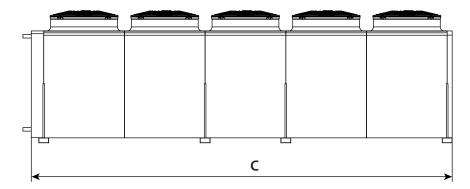
ACCESSORIES

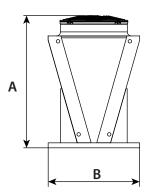
Several accessories are available:

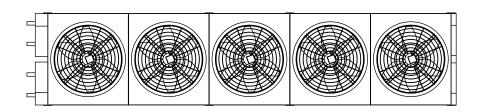
- 1. Anti-vibration supports;
- 2. Coil connection kit;
- 3. Additional disconnectors for each motor;
- 4. Remote switch-on/switch-off management kit;
- **5.** Resistance kit (if temperature $\leq -20^{\circ}$ C);
- 6. UV lamp kit (only for adiabatic "Spray System" system);
- 7. Modbus kit.
- 8. Axitop

PERFORMANCE SPECIFICATIONS

For combinations with the evaporating units contact the headquarters.







		CVRX8023	CVRX8024	CVRX8033	CVRX8034	CVRX8043	CVRX8044	CVRX8053	CVRX8054	CVRX8063	CVRX8064	CVRX8073	CVRX8074
Dimensions and	weights												
A	mm	1590	1590	1590	1590	1590	1590	1590	1590	1590	1590	1590	1590
В	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	mm	2150	2150	3120	3120	4090	4090	5060	5060	6030	6030	7000	7000
Empty weight	kg	356	396	523	583	690	770	856	956	1112	1261	1219	1369













CDR

Remote condenser

Cooling capacity 150 ÷ 590 kW



- V-Shape model with double row of fans
- Ideal machine to manage two-circuit systems completely independently and precisely
- · Very solid and reliable structure
- · Maximum height clearance 2.2 mt



GENERAL FEATURES

- V-Shape model with double row of fans;
- Very solid and reliable structure;
- Maximum height clearance 2.2 mt;
- can be transported via container;

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- Coils with compact staggered geometry, copper pipes and corrugated or mechanically expanded aluminium louvers;
- The version with polyurethane resin pre-painted louvers is also available for greater resistance to corrosion in aggressive environments;
- or greater resistance to corrosion in aggressive environments;

 All coils are tested with Helium (He₂) which ensures the absence of leaks;
- The shoulders of the coils are integrated into the structure and designed to avoid any pipe breakage due to vibrations related to transport or functioning:
- Copper collectors with welded connections closed to prevent impurities and moisture from getting into the circuits.
- Adiabatic "Spray System" systems with running water nozzles (cheaper but less efficient);
- Aluminium "Adiabatic Panels" system with closed water management and control system (very efficient system with a 10% maximum amount of evaporated water).

Fans

- Latest generation axial fans all compliant with ErP regulation and IP54;
- All machines are supplied with wired and tested fans;
- Fans diameter ø: 800 mm;
- Fans with a diameter of ø 800 mm are all three-phase (T) and there can be from 2 to 7 per machine;
- Different sound levels: standard (B), silenced (S) or extra-silenced (E);
- The motors can have AC or EC technology;
- For three-phase AC motors it is possible to choose the electrical type of connection: star (Y) or delta (D).

CONTROL

- The electrical panel with terminal board or adjustment is always present and can be installed on the collector side (standard) or on the opposite side:
- The regulators used are of high efficiency and low consumption;
- The types of available adjustments are: phase cut for AC fans and with electronic processor for EC fans;
- The two banks can be managed separately with independent electric control board and adjustment (ideal solution for two-circuit systems)

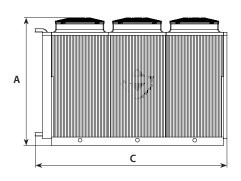
ACCESSORIES

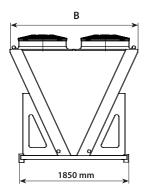
Several accessories are available:

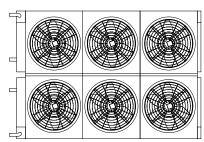
- 1. Anti-vibration supports;
- 2. Coil connection kit;
- 3. Additional disconnectors for each motor;
- 4. Remote switch-on/switch-off management kit;
- **5.** Resistance kit (if temperature ≤ 20°C);
- 6. Modbus kit.
- 7. Axitop

PERFORMANCE SPECIFICATIONS

For combinations with the evaporating units contact the headquarters.







		CDRX8043	CDRX8044	CDRX8063	CDRX8064	CDRX8083	CDRX8084	CDRX8103	CDRX8104
Dimensions and	weights								
A	mm	2150	2150	2150	2150	2150	2150	2150	2150
В	mm	2160	2160	2160	2160	2160	2160	2160	2160
C	mm	2150	2150	3120	3120	4090	4090	5060	5060
Empty weight	kg	708	750	1064	1130	1394	1476	1736	1839















Remote condenser

Cooling capacity 240 ÷ 1500 kW



- V-Shape model with double row of fans
- Ideal machine to manage two-circuit systems completely independently and precisely
- · Very solid and reliable structure



GENERAL FEATURES

- V-Shape model with double row of fans;
- Very solid and reliable structure;
- Can be transported in specific containers;

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- Coils with compact staggered geometry, copper pipes and corrugated or mechanically expanded aluminium louvers;
- The version with polyurethane resin pre-painted louvers is also available for greater resistance to corrosion in aggressive environments;
- All coils are tested with Helium (He₂) which ensures the absence of leaks;
- The shoulders of the coils are integrated into the structure and designed to avoid any pipe breakage due to vibrations related to transport or functioning;
- Copper collectors with welded connections closed to prevent impurities and moisture from getting into the circuits.
- Adiabatic "Spray System" systems with running water nozzles (cheaper but less efficient);
- Aluminium "Adiabatic Panels" system with closed water management and control system (very efficient system with a 10% maximum amount of evaporated water).

Fans

- Latest generation axial fans all compliant with ErP regulation and IP54;
- All machines are supplied with wired and tested fans;
- Fans diameter ø: 800 e 1000 (990) mm;
- All fans with three-phase motors (T) there can be from 6 to 16 per machine;
- Different sound levels: standard (B), silenced (S) or extra-silenced (E);
- The motors can have AC or EC technology;
- For three-phase AC motors it is possible to choose the electrical type of connection: star (Y) or delta (D).

CONTROL

- The electrical panel with terminal board or adjustment is always present and can be installed on the collector side (standard) or on the opposite side:
- The regulators used are of high efficiency and low consumption;
- The types of available adjustments are: phase cut for AC fans and with electronic processor for EC fans;
- The two banks can be managed separately with independent electric control board and adjustment (ideal solution for two-circuit systems)

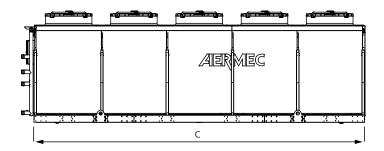
ACCESSORIES

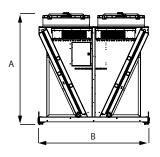
Several accessories are available:

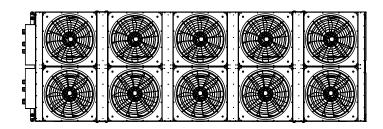
- 1. Anti-vibration supports;
- 2. Coil connection kit;
- 3. Additional disconnectors for each motor;
- 4. Remote switch-on/switch-off management kit;
- **5.** Resistance kit (if temperature ≤ 20°C);
- 6. Modbus kit.
- 7. Axitop

PERFORMANCE SPECIFICATIONS

■ For combinations with the evaporating units contact the head-quarters.







		CGAX8063	CGAX8064	CGAX8083	CGAX8084	CGAX8103	CGAX8104	CGAX8123	CGAX8124	CGAX8143	CGAX8144	CGAX8163	CGAX8164
Dimensions and	weights												
A	mm	2410	2410	2410	2410	2410	2410	2410	2410	2410	2410	2410	2410
В	mm	2448	2448	2448	2448	2448	2448	2448	2448	2448	2448	2448	2448
C	mm	4320	4320	5730	5730	7140	7140	8550	8550	9960	9960	11370	11370
Empty weight	kg	1600	1700	2000	2150	2500	2700	2850	3100	3650	4000	4200	4550













CMV

Remote condenser

Cooling capacity 140 ÷ 1200 kW



- Modular machine with base unit composed by 2 "V" modules in series
- The power range can be extended by installing more than 5 base units in parallel
- · Very solid and reliable structure



GENERAL FEATURES

- Modular machine with base unit composed by 2 "V" modules in series;
- Very solid, compact and reliable structure;
- Maximum height clearance 2.0 mt;
- Can be transported via container (optimisation of transport costs);
- The power range can be extended by installing more than 5 base units in parallel.

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- High efficiency microchannel coil with low refrigerant content;
- All coils are tested with Helium (He₂) which ensures the absence of leaks;
- Copper collectors with welded connections closed to prevent impurities and moisture from getting into the circuits;
- Different collector configurations are available in order to manage mono and two-circuit systems (include the "Double circuit kit" for machines with up to 8 motors)
- Each "V" module is composed by two coils and two identical fans which repeat from 2 to a maximum of 10 times.
- Each "V" module can be electrically and hydraulically disconnected from the rest of the machine for maintenance without having to stop the whole system;
- Adiabatic "Spray System" systems with running water nozzles (cheaper but less efficient);
- Aluminium "Adiabatic Panels" system with closed water management and control system (very efficient system with a 10% maximum amount of evaporated water).

Fans

- Latest generation axial fans all compliant with ErP regulation and IP54;
- All machines are supplied with wired and tested fans;
- Available fan diameters ø: 800 mm;
- All fans with three-phase motors (T) there can be from 4 to 20 per individual machine;
- Different sound levels: standard (B), silenced (S) or extra-silenced (E);
- The motors can have AC or EC technology;

 For three-phase AC motors it is possible to choose the electrical type of connection: star (Y) or delta (D).

CONTROL

- The electric control board or with complete adjustment is always supplied and can be installed on both short sides of the machine;
- The regulators used are of high efficiency and low consumption;
- The types of available adjustments are: phase cut for AC fans and with electronic processor for EC fans;
- Possibility to manage two-circuit systems with independent electrical board and adjustment (select the "Double circuit kit" for models up to 8 motors)

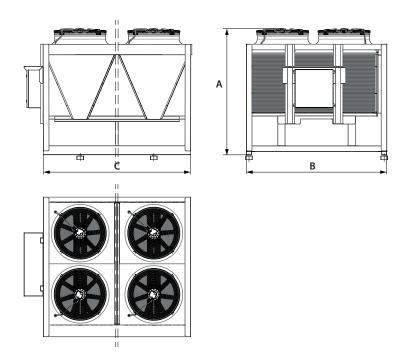
ACCESSORIES

Several accessories are available:

- 1. Anti-vibration supports;
- 2. Double circuit kit;
- 3. Additional disconnectors for each motor;
- 4. Remote switch-on/switch-off management kit;
- **5.** Resistance kit (if temperature ≤ 20°C);
- 6. Modbus kit.
- 7. Axitop

PERFORMANCE SPECIFICATIONS

For combinations with the evaporating units contact the headquarters.



		CMV 8041	CMV 8081	CMV 8121	CMV 8161	CMV 8201
Dimensions and	l weights					
A	mm	2010	2010	2010	2010	2010
В	mm	2220	2220	2220	2220	2220
С	mm	2385	4765	7145	9525	11905
Empty weight	kg	900	1800	2700	3600	4500









WTE

Dry Cooler

Cooling capacity 3 ÷ 500 kW



- Simple to use and install
- Wide range of powers
- Easy to handle and transport
- · Can be installed both horizontally and vertically



GENERAL FEATURES

- Simple to use and install;
- Excellent value for money;
- Easy to handle and transport;
- Up to 3 units can be stacked depending on the model (to be requested at time of order);
- Can be installed both horizontally and vertically (models with ø 500 mm and ø 630 mm fans - available on request).

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- Coils with compact staggered geometry, copper pipes and corrugated or mechanically expanded aluminium louvers;
- The version with polyurethane resin pre-painted louvers is also available for greater resistance to corrosion in aggressive environments;
- All coils are tested at a maximum pressure of 16 bar;
- The shoulders of the coils are integrated into the structure and designed to avoid any pipe breakage due to vibrations related to transport or
- Copper collectors with welded connections closed to prevent impurities and moisture from getting into the circuits.

Latest generation axial fans all compliant with ErP regulation and IP54. All the machines are supplied with wired and tested fans, the following diameters of fans are available ø: 350, 500, 630 (three-phase AC motors only), 800, 1000 (990) mm.

Different sound levels can be had for each fan diameter:

- Standard (B):
- Silenced (S);
- Super silent (E).

The motors can have AC or EC technology, for three-phase AC motors it is possible to choose the electrical type of connection: star (Y) or delta (D)

CONTROL

The electrical panel with terminal board or with adjustment is always pres-

For space reasons, the models with 350 mm diameter fans feature a

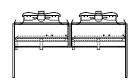
The regulators used are of high efficiency and low consumption, the types of adjustments available are:

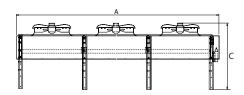
- Phase cut for AC fans
- With electronic processor for EC versions

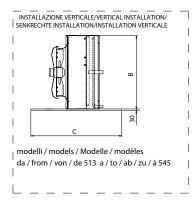
ACCESSORIES

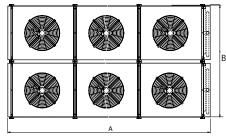
Several accessories are available:

- 1. Anti-vibration supports;
- Coil connection kit;
- Double circuit kit (only for single row machines)
- Additional disconnectors for each motor;
- Remote switch-on/switch-off management kit;
- Resistance kit (if temperature ≤ 20°C);
- Modbus kit:
- 8. Axitop (only for 800 mm diameter fans).









WTE fans diameter Ø 500

		•					
		WTE°5013	WTE°5023	WTE°5033	WTE°5043	WTE°5063	WTE°5083
Horizontal instal	lation						
A	mm	1400	2345	3290	4230	3290	4230
В	mm	833	833	833	833	1666	1666
C	mm	1080	1080	1080	1080	1080	1080
Empty weight	kg	72	128	185	289	354	467
Vertical installat	ion						
A	mm	1400	2345	3290	4230	-	-
В	mm	839	839	839	839	-	-
C	mm	870	870	870	870	-	-
Fmpty weight	ka	72	128	185	789	-	_

WTE fans diameter Ø 800

		WTE°8013	WTE°8023	WTE°8033	WTE°8043	WTE°8063
Horizontal instal	lation					
A	mm	1920	3600	5260	3600	5260
В	mm	1240	1240	1240	2390	2390
C	mm	1385	1385	1385	1385	1385
Empty weight	kg	169	331	487	642	954
Vertical installat	on					
A	mm	1320	3590	5250	3600	5260
В	mm	1232	1232	1232	2390	2390
C	mm	1061	1061	1061	1560	1560
Empty weight	kg	169	331	487	642	954

WTE fans diameter Ø 1000

		WTE°1014	WTE°1024	WTE°1034	WTE°1044	WTE°1064	WTE°1084
Horizontal instal	llation						
A	mm	2560	4860	7170	9460	7170	9460
В	mm	1260	1260	1260	1260	2430	2430
	mm	1750	1750	1750	1750	1750	1750
Empty weight	kg	247	467	772	990	1602	2060
Vertical installat	tion						
A	mm	2560	4860	7170	9460	7170	9460
В	mm	1260	1260	1260	1260	2505	2505
(mm	1075	1750	1750	1750	1560	1560
Empty weight	kg	247	467	772	990	1602	2060

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WTR

Dry Cooler

Cooling capacity 56 ÷ 350 kW



- V-Shape model with single row of fans
- Wide range of powers
- · Maximum height clearance 1.6 mt



GENERAL FEATURES

- V-Shape model with single row of fans;
- Very compact and lowered structure;
- Maximum height clearance 1.6 mt;
- can be transported via container;
- Easy to handle and transport;

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- Coils with compact staggered geometry, copper pipes and corrugated or mechanically expanded aluminium louvers;
- The version with polyurethane resin pre-painted louvers is also available for greater resistance to corrosion in aggressive environments;
- All coils are tested at a maximum pressure of 16 bar;
- The shoulders of the coils are integrated into the structure and designed to avoid any pipe breakage due to vibrations related to transport or functioning;
- Copper collectors with threaded brass connections or flanged on request, adequately protected for transport.
- Adiabatic "Spray System" systems with running water nozzles (cheaper but less efficient);
- Aluminium "Adiabatic Panels" system with closed water management and control system (very efficient system with a 10% maximum amount of evaporated water).

Fans

- Latest generation axial fans all compliant with ErP regulation and IP54;
- All machines are supplied with wired and tested fans;
- Fans diameter ø: 800 mm;
- Fans with a diameter of ø 800 mm are all three-phase (T) and there can be from 2 to 7 per machine;
- Different sound levels: standard (B), silenced (S) or extra-silenced (E);
- The motors can have AC or EC technology;
- For three-phase AC motors it is possible to choose the electrical type of connection: star (Y) or delta (D).

CONTROL

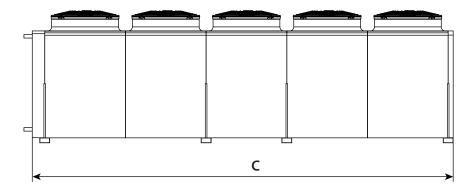
The electrical panel with terminal board or adjustment is always present and can be installed on the collector side (standard) or on the opposite side. The regulators used are of high efficiency and low consumption.

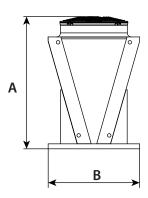
The types of available adjustments are: phase cut for AC fans and with electronic processor for EC fans.

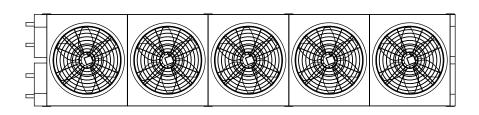
ACCESSORIES

Several accessories are available:

- 1. Anti-vibration supports;
- 2. Coil connection kit;
- 3. Additional disconnectors for each motor;
- 4. Remote switch-on/switch-off management kit;
- **5.** Resistance kit (if temperature \leq 20°C);
- **6.** UV lamp kit (only for adiabatic "Spray System" system);
- 7. Modbus kit.
- 8. Axitop







		WTR°8023	WTR°8024	WTR°8033	WTR°8034	WTR°8043	WTR°8044	WTR°8053	WTR°8054	WTR°8063	WTR°8064	WTR°8073	WTR°8074
Dimensions and	weights												
A	mm	1590	1590	1590	1590	1590	1590	1590	1590	1590	1590	1590	1590
В	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	mm	2150	2150	3120	3120	4090	4090	5060	5060	6030	6030	7000	7000
Empty weight	kg	383	432	563	637	743	841	923	1046	1171	1341	1278	1448













WDR

Dry Cooler

Cooling capacity 90 ÷ 430 kW



- V-Shape model with double row of fans
- Ideal machine to manage two-circuit systems completely independently and precisely
- · Very solid and reliable structure
- · Maximum height clearance 2.2 mt



GENERAL FEATURES

- V-Shape model with double row of fans;
- Very solid and reliable structure;
- Maximum height clearance 2.2 mt;
- can be transported via container;

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- Coils with compact staggered geometry, copper pipes and corrugated or mechanically expanded aluminium louvers;
- The version with polyurethane resin pre-painted louvers is also available for greater resistance to corrosion in aggressive environments;
- All coils are tested at a maximum pressure of 16 bar;
- The shoulders of the coils are integrated into the structure and designed to avoid any pipe breakage due to vibrations related to transport or functioning:
- Copper collectors with threaded brass connections or flanged on request, adequately protected for transport;
- Adiabatic "Spray System" systems with running water nozzles (cheaper but less efficient);
- Aluminium "Adiabatic Panels" system with closed water management and control system (very efficient system with a 10% maximum amount of evaporated water).

Fans

- Latest generation axial fans all compliant with ErP regulation and IP54;
- All machines are supplied with wired and tested fans;
- Fans diameter ø: 800 mm;
- All fans with three-phase motors (T) there can be from 4 to 10 per machine:
- Different sound levels: standard (B), silenced (S) or extra-silenced (E);
- The motors can have AC or EC technology;
- For three-phase AC motors it is possible to choose the electrical type of connection: star (Y) or delta (D).

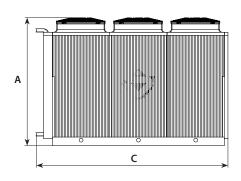
CONTROL

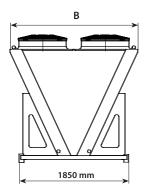
- The electrical panel with terminal board or adjustment is always present and can be installed on the collector side (standard) or on the opposite side:
- The regulators used are of high efficiency and low consumption;
- The types of available adjustments are: phase cut for AC fans and with electronic processor for EC fans;
- The two banks can be managed separately with independent electric control board and adjustment (ideal solution for two-circuit systems)

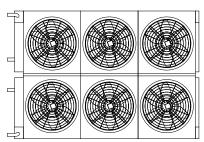
ACCESSORIES

Several accessories are available:

- 1. Anti-vibration supports;
- 2. Coil connection kit;
- 3. Additional disconnectors for each motor;
- 4. Remote switch-on/switch-off management kit;
- **5.** Resistance kit (if temperature \leq 20°C);
- 6. UV lamp kit (only for adiabatic "Spray System" system).







		WDR°8043	WDR°8044	WDR°8063	WDR°8064	WDR°8083	WDR°8084	WDR°8103	WDR°8104		
Dimensions and weights											
A	mm	2150	2150	2150	2150	2150	2150	2150	2150		
В	mm	2160	2160	2160	2160	2160	2160	2160	2160		
C	mm	2150	2150	3120	3120	4090	4090	5060	5060		
Empty weight	kg	725	798	1098	1216	1425	1571	1776	1958		











WGA

Dry Cooler

Cooling capacity 180 ÷ 1100 kW



- · V-Shape model with double row of fans
- Ideal machine to manage two-circuit systems completely independently and precisely
- · Very solid and reliable structure



GENERAL FEATURES

- V-Shape model with double row of fans;
- Very solid and reliable structure;
- Maximum height clearance 2.5 mt;
- Can be transported in specific containers.

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- Coils with compact staggered geometry, copper pipes and corrugated or mechanically expanded aluminium louvers;
- The version with polyurethane resin pre-painted louvers is also available for greater resistance to corrosion in aggressive environments;
- All coils are tested at a maximum pressure of 16 bar;
- The shoulders of the coils are integrated into the structure and designed to avoid any pipe breakage due to vibrations related to transport or functioning:
- Copper collectors with threaded brass connections or flanged on request, adequately protected for transport;
- Adiabatic "Spray System" systems with running water nozzles (cheaper but less efficient);
- Aluminium "Adiabatic Panels" system with closed water management and control system (very efficient system with a 10% maximum amount of evaporated water).

Fans

- Latest generation axial fans all compliant with ErP regulation and IP54;
- All machines are supplied with wired and tested fans;
- Fans diameter ø: 800 e 1000 (990) mm;
- All fans with three-phase motors (T) there can be from 4 to 10 per machine:
- Different sound levels: standard (B), silenced (S) or extra-silenced (E);
- The motors can have AC or EC technology;
- For three-phase AC motors it is possible to choose the electrical type of connection: star (Y) or delta (D).

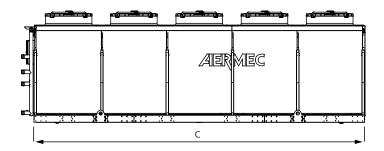
CONTROL

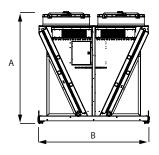
- The electrical panel with terminal board or adjustment is always present and can be installed on the collector side (standard) or on the opposite side:
- The regulators used are of high efficiency and low consumption;
- The types of available adjustments are: phase cut for AC fans and with electronic processor for EC fans;
- The two banks can be managed separately with independent electric control board and adjustment (ideal solution for two-circuit systems)

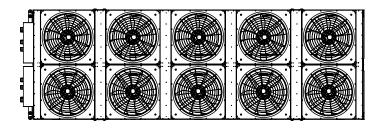
ACCESSORIES

Several accessories are available:

- 1. Anti-vibration supports;
- 2. Coil connection kit;
- 3. Additional disconnectors for each motor;
- 4. Remote switch-on/switch-off management kit;
- **5.** Resistance kit (if temperature \leq 20°C);







		WGA°8063	WGA°8064	WGA°8083	WGA°8084	WGA°8103	WGA°8104	WGA°8123	WGA°8124	WGA°8143	WGA°8144	WGA°8163	WGA°8164
Dimensions and	weights												
A	mm	2410	2410	2410	2410	2410	2410	2410	2410	2410	2410	2410	2410
В	mm	2448	2448	2448	2448	2448	2448	2448	2448	2448	2448	2448	2448
C	mm	4320	4320	5730	5730	7140	7140	8550	8550	9960	9960	11370	11370
Empty weight	kg	1600	1700	2000	2150	2500	2700	2850	3100	3650	4000	4200	4550









WMV

Dry Cooler

Cooling capacity 100 ÷ 950 kW



- Modular machine with base unit composed by 2 "V" modules in series
- The power range can be extended by installing more than 5 base units in parallel
- Very solid and reliable structure



GENERAL FEATURES

- Modular machine with base unit composed by 2 "V" modules in series;
- Very solid, compact and reliable structure;
- Maximum height clearance 2.0 mt;
- Can be transported via container (optimisation of transport costs);
- The power range can be extended by installing more than 5 base units in parallel.

FEATURES

Structure

- They are designed for outdoor installation and therefore manufactured with technologies and materials that guarantee resistance to atmospheric agents;
- The version with polyurethane resin pre-painted louvers is also available for greater resistance to corrosion in aggressive environments;
- All coils are tested at a maximum pressure of 16 bar;
- Copper collectors with grooved joint connections (Victaulic);
- Different collector configurations are available in order to manage mono and two-circuit systems (include the "Double circuit kit" for machines with up to 8 motors);
- Each "V" module is composed by two coils and two identical fans which repeat from 2 to a maximum of 10 times.
- Each "V" module can be electrically and hydraulically disconnected from the rest of the machine for maintenance without having to stop the whole system;

Fans

- Latest generation axial fans all compliant with ErP regulation and IP54;
- All machines are supplied with wired and tested fans;
- Available fan diameters ø: 800 mm;
- All fans with three-phase motors (T) there can be from 4 to 20 per individual machine;
- Different sound levels: standard (B), silenced (S) or extra-silenced (E);
- The motors can have AC or EC technology;
- For three-phase AC motors it is possible to choose the electrical type of connection: star (Y) or delta (D).

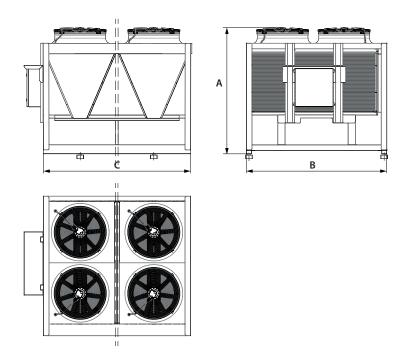
CONTROL

- The electric control board or with complete adjustment is always supplied and can be installed on both short sides of the machine;
- The regulators used are of high efficiency and low consumption;
- The types of available adjustments are: phase cut for AC fans and with electronic processor for EC fans;
- Possibility to manage two-circuit systems with independent electrical board and adjustment (select the "Double circuit kit" for models up to 8 motors).

ACCESSORIES

Several accessories are available:

- 1. Anti-vibration supports;
- 2. Double circuit kit;
- 3. Additional disconnectors for each motor;
- 4. Remote switch-on/switch-off management kit;
- **5.** Resistance kit (if temperature \leq 20°C);
- 6. Modbus kit.
- 7. Axitop



		WMV°8043	WMV°8044	WMV°8083	WMV°8084	WMV°8123	WMV°8124	WMV°8163	WMV°8164	WMV°8203	WMV°8204
Dimensions and weights											
A	mm	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
В	mm	2220	2220	2220	2220	2220	2220	2220	2220	2220	2220
C	mm	2385	2385	4765	4765	7145	7145	9525	9525	11905	11905
Empty weight	kg	1080	1190	2160	2380	3240	3570	4320	4760	5400	5950





FW-R

Water-cooled air conditioners

Capacities from 2.9 up to 4.0 kW





TL3 Receiver board

TL3 wall-mounted receiver

DESCRIPTION

FW-R series integrated system air conditioners are independent appliances designed and built to create and maintain optimum room comfort conditions.

Discreetly and elegantly styled, these remarkably quiet units are ideal for installation in the home or commercial premises.

Equipped with a water-cooled condenser, FW-R appliances perform all typical cooling, dehumidification, ventilation and air filtration functions while offering particular benefits in terms of ease of application and installation.

Suitable also for winter operation when equipped with an electric heater or hot water coil; console air conditioners are able to provide different microclimates within the same room because each appliance can be adjusted independently; low running costs are assured by fast arrival at the required room temperature because of the low thermal inertia of the system; quiet operation and thermal efficiency are also promoted by the heat and sound insulation of the compressor bay.

All appliances are factory assembled and individually tested.

FEATURES

- High efficiency rotary compressor
- Compact size
- Quiet operation
- Automatic temperature adjustment
- Reduced water consumption
- Low electrical power consumption

ACCESSORIES

- TL3 : Mandatory accessory, remote controller, required for the operation of the unit
- BR: Armoured heating element with safety thermostat.
- BVR: Single row hot water coil.

	Compatibility of access	sories
	FW130R	FW160R
TL 3	•	•
BR 26	•	•
BVR 1	•	•

TECHNICAL DATA

Mod.	FW	130R	160R
Cooling capacity	W (max.)	2900	4000
Energy Efficiency Class		A	A
EER		4.08	4.65
Humidity removed	l/h	1.78	1.78
Input power	W	710	860
Input current	A	3.55	4.02
Heating capacity with water coil (BVR1)	W	4350	5200
Water flow rate (BVR1)	l/h	600	600
Pressure drops (BVR1)	kPa	12,6	12,6
Heating capacity electric coil (BR26)	W	1200	1200
Fans	n.	2	2
	m ³ /h (max.)	470	690
Air flow rate	m ³ /h (med.)	390	525
	m ³ /h (min.)	270	375
	g/m (max.)	800	1140
Fans speed	g/m (med.)	660	885
	g/m (min.)	500	665
Sound pressure	dB (A)	44	47,5
Water consumption at 30-35°C	l/h	586	804
Condenser pressure drops	kPa	22	40
Refrigerant	Tipo / GWP	R410A / 20	088kgCO₂eq
Refrigerant charge	g	750	830
Input nominal power consumption *	W	1120	1500
Nominal imput current *	A	4.97	6.65
Input current	A	18	32
Water connections	Ø	1/2″F	1/2″F

Power supply $=230V\sim50$ Hz. Sound pressure measured in an 85 m3 semi-reverberant test chamber with reverberation time Tr =0.5s * In accordance with UNI EN-60335 Data declared in accordance with EN-14511

Cooling

Room air temperature 27°C B.S.; 19°C B.U.

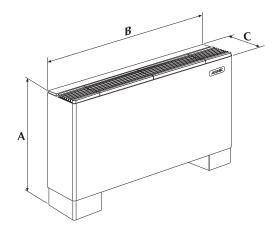
Entering water temperature 30°C

Leaving water temperature 35°C

Max speed

Heating (BVR1):
- Room air temperature 20°C
- Entering water temperature 70°C
- Max speed

DIMENSIONS (MM)



		FW 130 R	FW 160 R
Height	A	723	723
Width	В	1121	1121
Depth	С	242	242
Weight	kg	63	67

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CWX-CWXM

Water motocondensing unit

Cooling capacity 2,7 ÷ 7,1 kW



- Functioning only in cooling mode
- Internal installation



VERSIONS

CWX: condensing unit for cooling only MONOSPLIT **CWXM**: condensing unit cold only DUALSPLIT

DESCRIPTION

CWX power module

- Available in 4 versions with different potentiality
- The versions are realised using R410A refrigerant gas
- Only cold operation with water condensation
- Outdoor unit with rotary compressor
- Refrigerant lines with flared connections
- Refrigerant lines up to 15m

CWXM power module

- Available in 2 versions with different potentiality
- The versions are realised using R410A refrigerant gas
- Only cold operation with water condensation
- Outdoor unit with rotary compressor
- Refrigerant lines with flared connections

— Refrigerant lines up to 10m

Indoor unit CWX_W

- Wall indoor unit for wall installation with infrared ray remote control supplied;
- Air flow louvers adjustable horizontally and motorised deflecting louvers, which can be activated by remote control to direct the outlet air flow vertically, with fixed (LV) or floating (SW) positions
- Particularly quiet operation
- Microprocessor control
- Programmable switch-on/off timer
- $\ensuremath{\mathbf{--}}$ Air filter that can be easily removed and regenerated
- $-\!\!\!-$ Night time well-being (SLEEP) function
- Operating mode: cooling, dehumidification and fan only
- Autorestart function after interruption of electricity
- Tangential fan with 3 directly selectable speeds
- Energy saving (ECONO) and fast cooling (TURBO) mode
- Display on front panel showing the functioning modes and the temperature

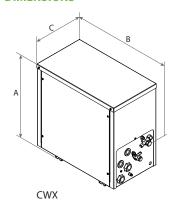
PERFORMANCE SPECIFICATIONS

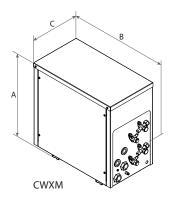
Indoor units			CWX250W	CWX350W	CWX500W	CWX700W	CWX350W+ CWX350W	CWX500W+ CWX500W
Power module			CWX250	CWX350	CWX500	CWX700	CWXM520	CWXM720
Cooling capacity		W	2750	3400	5200	6700	4826	7100
Total input power		W	637	778	1330	1860	1279	1780
Total input current		А	2,86	3,56	6,02	9,28	5,80	9,00
EER		W/W	4,32	4,37	3,91	3,60	3,77	3,99
Water flow rate at (in/out) $30^{\circ}\text{C}/35^{\circ}\text{C}$		l/h	572	705	1091	1446	1066	1510
Water pressure drop		kPa	21	32	74	125	68	127
Water flow rate at (in) 15°C		l/h	102	122	225	308	190	255
Refrigerant gas		Type/GWP			R410A / 208			
Refrigerant gas charge		kg	0,65	0,75	0,85	0,97	0,90	1,10
Rated power input	(1)	W	1500	1500	2300	2650	2300	2650
Moisture removed		l/h	1,08	1,18	1,96	2,38	1,00	1,30
	max	m3/h	445,00	537	882	1010	537	882
Air flow rate	average	m3/h	428,00	501	828	935	501	828
All flow rate _	min	m3/h	404,00	467	776	842	467	776
	max	dB(A)	51,0	51,0	56,0	58,0	51,0	56,0
Sound power (indoor unit)	average	dB(A)	50,0	50,0	55,0	56,0	50,0	55,0
	min	dB(A)	49,0	48,0	53,0	54,0	48,0	53,0
Power module			CWX250	CWX350	CWX500	CWX700	CWXM520	CWXM720
Sound power		dB(A)	52,0	56,0	59,0	59,0	59,0	59,0
Compressor		type	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
Defriessent sommesticus	Φ liquid	inch	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
Refrigerant connections	Φ gas	inch	3/8"	1/2"	1/2"	5/8"	1/2"	1/2"
	Φ liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Refrigerant lines	Φ gas	mm (inch)	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	12,7 (1/2")	12,7 (1/2")
nemyerani iines	Max pipe length	m	15	15	15	15	10 + 10	10 + 10
	Max level difference	m	7	7	7	7	5	5
Hydraulic connections		F	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Power supply		V ∼ Hz			220-240	V ~ 50Hz		

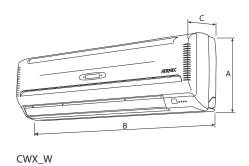
 $(1) The \ rated \ power \ input, is \ the \ maximum \ input \ electrical \ power \ from \ the \ system, in \ accordance \ with \ the$ Standards EN-60335-1 and EN-60335-2-40.

Rated conditions (Cooling EN-14511):

- room air temperature 27 °C D.B.; 19 °C W.B. water temperature (in/out) 30 °C / 35 °C
- maximum speed
- pipe length 5m







cwx

· · · · ·					
Dimensions and weights		CWX250	CWX350	CWX500	CWX700
A	mm	450	450	450	570
В	mm	470	470	470	470
(mm	260	260	260	260
Weight	kg	32	35	38	49

CWXM

Dimensions and weights		CWXM520	CWXM720
A	mm	585	585
В	mm	470	470
С	mm	260	260
Weight	kg	41	52

CWX_W

Dimensions and weights		CWX250W	CWX350W	CWX500W	CWX700W
A	mm	298	305	360	360
В	mm	880	990	1172	1172
(mm	205	210	220	220
Weight	ka	11	12	18	20















DMT

Dehumidifier portable

Dehumidifying capacity 0,40 l/h ÷ 1,00 l/h



- New R290 natural refrigerant gas.
- · Compact, manoeuvrable and silent.
- Modern design to blend with all furnishing styles.
- Removes up to 24 litres of humidity in 24 hours.



DESCRIPTION

The portable dehumidifiers of the DMT range are ideal for dehumidifying domestic rooms, cellars, and places where clothes are hung out to dry, reducing the humidity to optimum levels to avoid any risk of physical discomfort and damage to the building due to the formation of mould.

They fit in with any type of furnishings thanks to their compact, elegant design, and even have wheels so they can easily be moved from one room to another and installed where needed (plug & play).

Equipped with a specific tray for collecting the humidity removed from the room during operation.

The on-board control panel with led display and indicator lights, allows you to set the required temperature set-point easily and accurately.

FEATURES

Operation

The dehumidifier takes in the excess humidity via the recovery grille and releases humidity-free air, thereby ensuring a healthier, more comfortable environment.

In addition, its functions enable easy control of the humidity level, keeping it constant over time.

Special blue fin coil

Unlike normal batteries, this special blue epoxy coating is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



- Particularly quiet operation.
- Regenerable air filter easy to remove and clean.
- Alarm signal for filter cleaning.
- Alarm signal for condensate discharge tray full or badly positioned.
- Possibility to continuously drain off the condensate without using the tray supplied.
- Auto switch-off function: the unit stops operating when the condensate discharge tray is full or badly positioned, or when it has reached the defined work set-point.
- Auto-restart function.
- Timer for programming switch-off and switch-on.
- WiFi function

DMT240

- New R290 natural refrigerant gas.
- On-board control panel with led display and indicator lights.
- Visual display of the humidity setting and that read in the room.
- Particularly quiet operation.
- Regenerable air filter easy to remove and clean.
- Alarm signal for filter cleaning.
- Alarm signal for condensate discharge tray full or badly positioned.
- Possibility to continuously drain off the condensate without using the tray supplied.
- Auto switch-off function: the unit stops operating when the condensate discharge tray is full or badly positioned, or when it has reached the defined work set-point.
- Auto-restart function.
- Timer for programming switch-off and switch-on.
- Auto function: automatic drying mode. The unit automatically sets the most comfortable humidity.

DMT160

- New R290 natural refrigerant gas.
- On-board control panel with led display and indicator lights.
- Visual display of the humidity setting and that read in the room.

ACCESSORIES AS STANDARD

DMT160-240

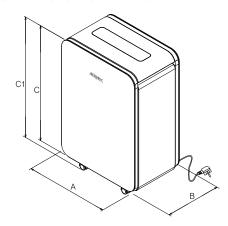
- Swivel wheels
- Power supply + Schuko plugCondensate discharge coupling

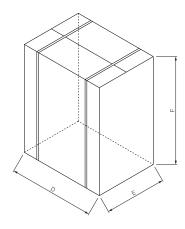
PERFORMANCE SPECIFICATIONS

		DMT160	DMT240	
Nominal performance (1)				
Dehumidifying capacity	l/h	0,66	1,00	
Input power	W	370	390	
Nominal performance (Standard EN 810) (2)				
Dehumidifying capacity	l/h	0,40	0,48	
Input power	W	315	325	
Input current	A	1,7	1,8	
Electric data				
Rated power input (3)	W	510	460	
Rated current input (3)	A	3,0	3,0	
Compressor				
Туре	type		Reciprocating	
Refrigerant	type		R290	
Refrigerant charge	g	65	65	
Potential global heating	GWP		3	
Equivalent CO ₂	t	0,20	0,20	
Fan				
Туре	type		Centrifugal	
Air flow rate				
Maximum	m³/h	170	220	
Minimum	m³/h	145	155	
Sound power				
Maximum	dB(A)	53,0	56,0	
Minimum	dB(A)	51,0	54,0	
Sound pressure (4)				
Maximum	dB(A)	39,0	44,0	
Minimum	dB(A)	37,0	42,0	
Condensate drainage basin				
Capacity	1	2,6/3,0	2,6/3,0	
Performances				
Application area	m ²	22~28	36~42	
Power supply cable				
Type of power supply cable	Туре		Schuko	
Power supply				
Power supply			220-240V ~ 50Hz	

⁽¹⁾ Indoor air temperature 30°C D.B. / 27°C W.B.
(2) Indoor air temperature 27°C b.s./21°C b.u. (Tested according to EN 810)
(3) Tested according to EN 60335.
(4) Sound pressure measured according to EN 12102 standard, in semi anechoic chamber at a distance of 1 m from the source.

DIMENSIONS AND WEIGHTS





Dimensions and weights

		DMT160	DMT240
Dimensions and weights			
A	mm	351	351
В	mm	240	240
C	mm	489	489
C1	mm	522	522
D	mm	392	392
E	mm	286	286
F	mm	525	525
Net weight	kg	15,5	15,5
Weight for transport	kg	16,5	16,5







DMH-DMV

- Better performance compared to traditional dehumidifiers
- Reduced consumption
- Prevents the formation of condensate on the surface of the pavement
- · Unit only for indoor installation

Dehumidifier for radiant airconditioning systems

Dehumidifying capacity 22 l/24h ÷ 36 l/24h



DESCRIPTION

Dehumidifiers are refrigerant cycle machines combined with radiant air-conditioning systems, from which they draw a certain water flow rate to increase the dehumidification efficiency and reduce electricity consumption.

The cooling systems employ chilled water at temperatures between 15°C and 20°C, which is enough to take the rooms to the desired temperature, but not suitable for dehumidification. To lower the latter, you would need water at 7°C, resulting in a reduction in the performance of the water chiller compared to when the water is produced at 15-20°C.

Water-cooled refrigerant cycle dehumidifiers are used to keep the air humidity at optimal values (55-65%) in rooms, with the following benefits compared to other systems:

- They employ the chilled water available in the radiant panel system;
- They are used to process the air without modifying its temperature and, therefore, without affecting the operation of the radiant panels and their adjustment system.
- They prevent the formation of condensation on the floor surface in radiant air conditioning systems.

FEATURES

 $\textbf{Structure}: \ \text{galvanised sheet metal panels, lined on the inside with a sound-proofing polyethylene covering.}$

Filter section: 12 mm thick synthetic filtering baffle made with a galvanised sheet metal frame, efficiency class ISO 16890 COARSE 50% (G3 EN 779), can be removed from the front.

Cooling circuit: consisting of a R134a alternative refrigerant compressor, freon filter, expansion capillary, evaporator and condenser with copper pipes and continuous louvered fin louvers, with hydrophilic treatment and aluminium frame (for "-C" cooling versions, with "I" integration, water-freon condenser).

Hydraulic circuit: with pre-treatment and post-cooling coils featuring with copper pipes and continuous louvered fin louvers, with hydrophilic treatment and aluminium frame; for "-C" cooling versions, plate water condenser (no post-cooling); stainless steel condensate drip tray extended to the whole treatment.

Fan: double intake centrifugal fan with blades facing forwards, with multi-speed motor directly coupled; 3 different electrical connections available (H/M/L) for the functioning speed; the manufacturer's default setting is medium (M) speed.

ACCESSORIES

DMUM: Wall mounted environment humidistat.

DMWB: Outer casing for vertical model. Vertical installation. **DMFP**: Front panel for outer casing. Vertical installation.

PERFORMANCE SPECIFICATIONS

		DMV220	DMV220I	DMH220	DMH220C	DMH220I	DMH360C	DMH360I	DMH360
Performances (1)									
Condensed humidity	I/24h	22	22	22	22	22	36	36	36
Power at the evaporator	W	1020	1020	1050	1050	1050	1480	1480	1480
Power dissipated with water	W	870	1820	870	1820	1820	2680	2680	1540
Nominal water flow rate	m³/h	240	240	240	240	240	390	390	390
Water pressure drop	kPa	3	3	3	3	3	10	10	10
Available sensitive power	W	-	840	-	840	840	1340	1340	-
Total input power	W	350	350	350	350	350	580	580	580
Input current	A	2,0	2,0	2,0	2,0	2,0	3,2	3,2	3,2
Fan									
Туре	type				Centrifugo dop	pia aspirazione			
Available fan speeds					H/I	M/L			
Nominal fan setting				М				L	
Air flow rate	m³/h	220	220	220	220	220	360	360	360
High static pressure	Pa	0	0	20	20	20	20	20	20
Compressor									
Туре	type				Ermetico a	alternativo			
Refrigerant	type				R1.	34a			
Refrigerant charge	g	340	270	340	340	270	460	410	460
Operating limits									
Intake air temperature	°C				15 -	~ 32			
Water inlet temperature (dehumidifying mode)	°C				10 -	~ 21			
Sound data									
Sound pressure level (1 m)	dB(A)	39,0	39,0	42,0	42,0	42,0	47,0	47,0	47,0

⁽¹⁾ At nominal air flow rate at the following conditions: ambient air 26°C BS, RH 65%; incoming water temperature 15° C

Condensed humidity with ambient temperature of 26°C

	DMV220	DMV220I	DMH220	DMH220C	DMH220I	DMH360C	DMH360I	DMH360
Hydraulic circuit water temperature 21°C - Relative humidity 55	5%							
Condensed humidity 1/24h	12	12	12	12	12	20	20	20
Hydraulic circuit water temperature 18°C - Relative humidity 55	5%							
Condensed humidity 1/24h	14	14	14	14	14	22	22	22
Hydraulic circuit water temperature 15°C - Relative humidity 55	5%							
Condensed humidity 1/24h	15	15	15	15	15	25	25	25
Hydraulic circuit water temperature 21°C - Relative humidity 65	5%							
Condensed humidity 1/24h	17	17	17	17	17	28	28	28
Hydraulic circuit water temperature 18°C - Relative humidity 65	i%							
Condensed humidity 1/24h	19	19	19	19	19	31	31	31
Hydraulic circuit water temperature 15°C - Relative humidity 65	i%							
Condensed humidity 1/24h	22	22	22	22	22	36	36	36

Condensed humidity with ambient temperature of 24°C

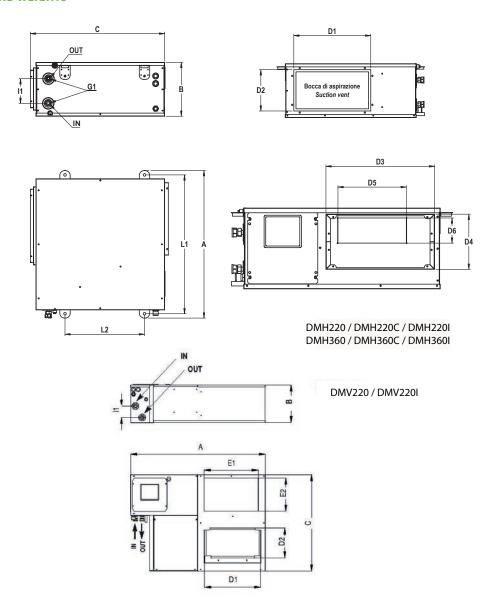
	DMV22	0 DMV220	DMH220	DMH220C	DMH220I	DMH360C	DMH360I	DMH360
Hydraulic circuit water temperature 21°C - Relative humi	idity 55%							
Condensed humidity	l/24h 10	10	10	10	10	17	17	17
Hydraulic circuit water temperature 18°C - Relative humi	idity 55%							
Condensed humidity	l/24h 12	12	12	12	12	19	19	19
Hydraulic circuit water temperature 15°C - Relative humi	idity 55%							
Condensed humidity	l/24h 13	13	13	13	13	21	21	21
Hydraulic circuit water temperature 21°C - Relative humi	idity 65%							
Condensed humidity	l/24h 14	14	14	14	14	23	23	23
Hydraulic circuit water temperature 18°C - Relative humi	idity 65%							
Condensed humidity	l/24h 17	17	17	17	17	27	27	27
Hydraulic circuit water temperature 15°C - Relative humi	dity 65%							
Condensed humidity	l/24h 18	18	18	18	18	30	30	30

- Operating limits

 Intake air temperature 15 ~ 30°C

 Hydraulic circuit water temperature 12 ~ 20°C

DIMENSIONS AND WEIGHTS



		DMH220	DMH220C	DMH220I	DMV220	DMV2201	DMH360	DMH360C	DMH360I
Dimensions and weights									
A	mm	680	680	680	850	850	775	775	775
В	mm	250	250	250	240	240	270	270	270
C	mm	623	623	623	615	615	623	623	623
D1	mm	337	337	337	337	337	437	437	437
D2	mm	172	172	172	172	172	192	192	192
D3	mm	335	335	335	-	-	435	435	435
D4	mm	170	170	170	-	-	195	195	195
D5	mm	210	210	210	-	-	250	250	250
D6	mm	77	77	77	-	-	95	95	95
E1	mm	-	-	-	350	350	-	-	-
E2	mm	-	-	-	215	215	-	-	-
l1	mm	115	115	115	75 (1)	75 (1)	125	125	125
L1	mm	640	640	640	-	-	745	745	745
L2	mm	370	370	370	-	-	370	370	370
G1	Ø	1/2"F	1/2"F	1/2"F	1/2" F	1/2"F	1/2"F	1/2"F	1/2"F
Net weight	kg	35,0	35,0	35,0	40,0	40,0	40,0	40,0	40,0

⁽¹⁾ Pre-shearing for hydraulic and electrical connections on the side, rear and bottom panel

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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