

PRG-0282H-0654H

Reversible air/water heat pump

Cooling capacity 49 ÷ 143 kW

Heating capacity 51 ÷ 143 kW

- R290 natural refrigerant gas
- Low refrigerant charge
- Production of hot water up to 75 °C
- High efficiency also at partial loads
- 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

A High efficiency

E Silenced 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 75°C.

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Two scroll compressors are installed in each circuit in a tandem configuration.

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.

Refrigerant HC R290

Using the natural R290 refrigerant, classified A3 to ISO 817 (non-toxic, odourless and flammable refrigerant), the unit's environmental impact drops significantly.

Combining low refrigerant load (less than 5 kg per circuit) with ultra-low Global Warming Potential (GWP), these units boast practically negligible direct equivalent CO₂ emissions.

- *The refrigerant gas detector, the double pressure relief valve (with exchange isolation valve) and the battery protection grilles are 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 use of the electronic expansion valve offers significant benefits (especially when the unit is working with partial loads), increasing the seasonal 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.*

CONTROL PCO⁵

Microprocessor control, with keyboard and LCD display, for easy access on the unit with 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:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.
- **"Noise Demand Limit" function:** only in non-quiet versions, this function limits the compressors within a time band to set a quiet operation profile, useful for example at night for greater acoustic comfort.

- Possibility to control two units in Master - Slave parallel mode. In this case, it is possible to use only one accessory PGD1 for both units.

ACCESSORIES

■ *The units PRG-0282H-0654H must be controlled remotely through an appropriate accessory (remote control panel PGD1, AERNET MULTICHILLER-EVO, AERLINK or PR4) to be obligatorily and separately. Only in this way is it possible to modify some basic operating parameters or view the presence of any alarms, which avoids accessing risk and restricted access areas.*

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.

AERBAC-ONE: Ethernet communication interface for Bacnet/IP and Modbus TCP/IP protocols, HTTPS protocol for web interface, encrypted communication protocols and access credential management in accordance with the latest standards. One accessory is provided for each unit control board.

AERBACP: Ethernet communication interface for Bacnet/IP and Modbus TCP/IP protocols. 1 accessory is provided for each unit control board.

AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.

AERNET: The device remotely controls, manages and remotely monitors a chiller/heat pump using a PC, smartphone or tablet via a Cloud connection. AERNET acts as Master while each connected unit is configured as Slave up to a maximum of 6 control cards. The connection is made via cable and/or USB key. Wi-Fi connectivity is not available. It is also possible to save a log

file with all the data from the connected units to your terminal with a simple click for possible post-analysis. With the purchase of the Router, the Customer benefits from a 24-month free period during which he can use the Aernet Service at no additional cost. At the end of this initial period, the Service may be renewed by subscribing to a 1, 2 or 3 year subscription. For further details on costs and renewal methods, please contact our office or consult the technical documentation available on our website. www.aermec.com.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic board designed to receive external signals from the electricity grid or energy suppliers, converting them into Modbus commands for our units. This system allows you to vary the operation of our generators to optimise consumption based on electricity prices, grid load or the availability of renewable sources. The key principle of the standard is demand response: shifting consumption from peak demand times to times when energy is cheaper and more environmentally sustainable.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

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.

RXBAS: Electric heating element mounted on the perforated base near the battery.

COMPATIBILITY WITH VMF SYSTEM

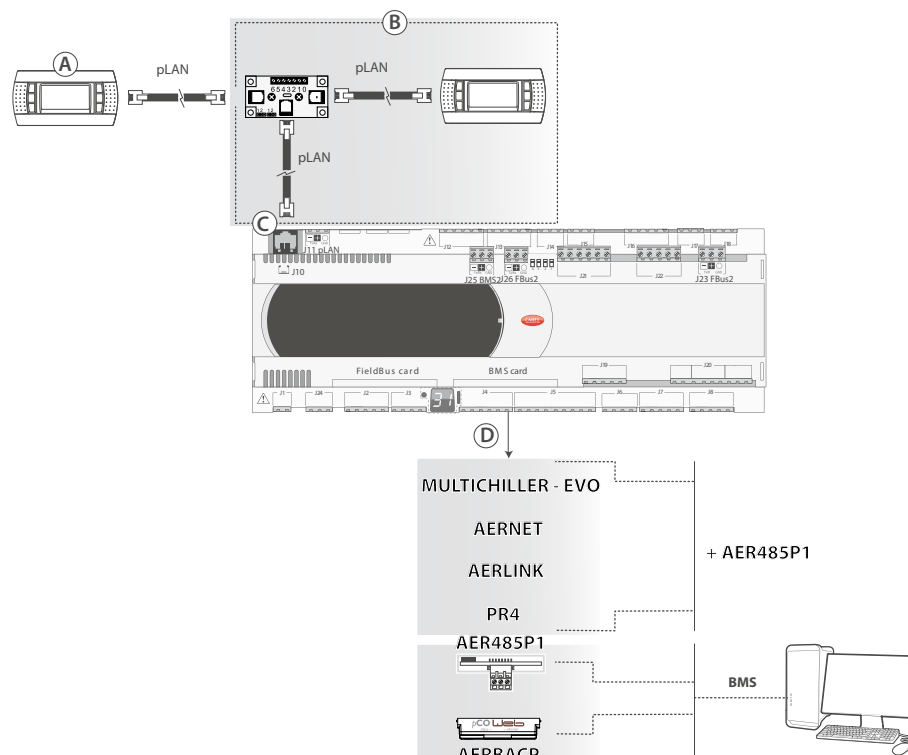
For more information about VMF system, refer to the dedicated documentation.

COMPATIBILITY BETWEEN CONTROL ACCESSORIES

Model	Ver	0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
AER485P1	A,E	*	*	*	*	*	*	*	*	*	*
AERBAC-ONE	A,E	*	*	*	*	*	*	*	*	*	*
AERBACP	A,E	*	*	*	*	*	*	*	*	*	*
AERLINK	A,E	*	*	*	*	*	*	*	*	*	*
AERNET	A,E	*	*	*	*	*	*	*	*	*	*
MULTICHILLER-EVO	A,E	*	*	*	*	*	*	*	*	*	*
PGD1	A,E	*	*	*	*	*	*	*	*	*	*
SGD	A,E	*	*	*	*	*	*	*	*	*	*

Remote panel

Model	Ver	0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
PR4	A,E	*	*	*	*	*	*	*	*	*	*



Key:

- A Display on the unit.
- B Control panel accessory "PGD1".
- C Control panel connection port "PGD1".
- D **BMS Card serial port:** where to connect 1 among the accessories "MULTICHILLER-EVO AERNET, AERLINK, PR4 but to be connected also must also have "AER485P1"; in the case of BMS communication with the accessories "AER485P1 or AERBACP" the only mandatory compatible accessory is the control panel "PGD1".

ACCESSORIES COMPATIBILITY

Antivibration

Ver	0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4										
A, E	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11
Integrated hydronic kit: 01, 02, 03, 04, 09, K1, K2, K3, K4										
A, E	VT10	VT10	VT10	VT10	VT10	VT11	VT11	VT11	VT11	VT11

Device for peak current reduction

Ver	0282	0292	0302	0322	0332
A, E	DREPRG282	DREPRG292	DREPRG302	DREPRG322	DREPRG332

A grey background indicates the accessory must be assembled in the factory

Ver	0504	0554	0604	0634	0654
A, E	DREPRG504	DREPRG554	DREPRG604	DREPRG634	DREPRG654

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0292	0302	0322	0332
A, E	RIFPRG282	RIFPRG292	RIFPRG302	RIFPRG322	RIFPRG332

A grey background indicates the accessory must be assembled in the factory

Ver	0504	0554	0604	0634	0654
A, E	RIFPRG504	RIFPRG554	RIFPRG604	RIFPRG634	RIFPRG654

A grey background indicates the accessory must be assembled in the factory

Heating electrical resistance

Ver	0282	0292	0302	0322	0332
A, E	RXBAS10	RXBAS10	RXBAS10	RXBAS10	RXBAS10

A grey background indicates the accessory must be assembled in the factory

Ver	0504	0554	0604	0634	0654
A, E	RXBAS11	RXBAS11	RXBAS12	RXBAS12	RXBAS12

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	PRG
4,5,6,7	Size 0282, 0292, 0302, 0322, 0332, 0504, 0554, 0604, 0634, 0654
8	Operating field
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	Model
H	Heat pump
10	Heat recovery
D	With desuperheater (3)
°	Without heat recovery
11	Version
A	High efficiency
E	Silenced high efficiency (4)
12	Coils
R	Copper pipes-copper fins
V	Copper - coated aluminium
°	Copper - aluminium
13	Fans
J	Inverter
°	Standard with DCPX (5)
14	Power supply
°	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
	Double loop
09	Storage tank with double loop and intermediate heat exchanger
	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
I2	Single low head pump with fixed speed inverter + stand-by pump
I3	Single high head pump + fixed speed inverter
I4	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

(1) Water produced from 4 °C ÷ 20 °C

(2) Processed water temperature 10 °C ÷ -10 °C. Not compatible with a 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) Sizes 0282-0292-0302-0322-0332 are only available in low noise version (E).

(5) Option not available only for size 0504-0554-0604-0634-0654 version E

PERFORMANCE SPECIFICATIONS 12 °C / 7 °C - 40 °C / 45 °C

PRG - A

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
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Fans: J, °

Cooling performance 12 °C / 7 °C (1)

Cooling capacity	kW	-	-	-	-	-	94,5	103,9	123,7	133,6	143,1
Input power	kW	-	-	-	-	-	35,8	40,5	40,8	45,1	49,5
Cooling total input current	A	-	-	-	-	-	66,05	72,73	73,99	81,85	89,85
EER	W/W	-	-	-	-	-	2,64	2,56	3,04	2,96	2,89
Water flow rate system side	l/h	-	-	-	-	-	16.267	17.888	21.319	23.015	24.641
Pressure drop system side	kPa	-	-	-	-	-	30	36	47	54	62

Heating performance 40 °C / 45 °C (2)

Heating capacity	kW	-	-	-	-	-	102,3	113,2	124,7	134,1	143,1
Input power	kW	-	-	-	-	-	32,0	35,5	39,6	43,4	47,0
Heating total input current	A	-	-	-	-	-	62,16	66,91	72,69	79,89	86,72
COP	W/W	-	-	-	-	-	3,20	3,19	3,15	3,09	3,04
Water flow rate system side	l/h	-	-	-	-	-	17.738	19.623	21.615	23.253	24.809
Pressure drop system side	kPa	-	-	-	-	-	31	37	48	55	63

(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.

PRG - E

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
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Fans: J

Cooling performance 12 °C / 7 °C (1)

Cooling capacity	kW	49,3	54,3	60,5	65,2	70,3	91,8	101,6	119,1	128,3	137,0
Input power	kW	16,5	18,6	20,3	22,6	25,0	35,7	40,6	40,1	44,8	49,6
Cooling total input current	A	34,39	37,39	41,20	45,29	49,47	66,14	73,21	73,40	81,85	90,53
EER	W/W	2,99	2,92	2,98	2,88	2,81	2,57	2,50	2,97	2,87	2,76
Water flow rate system side	l/h	8.486	9.361	10.417	11.227	12.117	15.797	17.489	20.523	22.099	23.601
Pressure drop system side	kPa	30	37	37	42	49	28	35	43	50	56

Heating performance 40 °C / 45 °C (2)

Heating capacity	kW	51,2	55,9	61,9	66,3	70,7	102,3	113,2	124,7	134,1	143,1
Input power	kW	15,4	17,1	18,8	20,4	22,2	32,1	35,6	39,6	43,4	47,0
Heating total input current	A	33,73	36,07	39,79	42,93	46,23	62,42	67,12	72,92	80,14	86,98
COP	W/W	3,33	3,27	3,28	3,25	3,19	3,19	3,18	3,15	3,09	3,04
Water flow rate system side	l/h	8.872	9.688	10.728	11.490	12.242	17.738	19.623	21.616	23.254	24.810
Pressure drop system side	kPa	33	39	39	44	50	36	44	48	55	62

(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

PRG - A

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
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Fans: J, °

Cooling performance 23 °C / 18 °C (1)

Cooling capacity	kW	-	-	-	-	-	130,8	144,0	173,7	185,8	197,2
Input power	kW	-	-	-	-	-	39,8	45,0	44,4	49,4	54,5
Cooling total input current	A	-	-	-	-	-	72,68	80,03	79,42	88,22	97,24
EER	W/W	-	-	-	-	-	3,29	3,20	3,91	3,76	3,62
Water flow rate system side	l/h	-	-	-	-	-	22.619	24.890	30.031	32.116	34.090
Pressure drop system side	kPa	-	-	-	-	-	58	70	93	105	118

Heating performance 30 °C / 35 °C (2)

Heating capacity	kW	-	-	-	-	-	104,9	115,3	127,0	135,5	144,1
Input power	kW	-	-	-	-	-	27,3	30,0	33,7	37,0	40,1
Heating total input current	A	-	-	-	-	-	52,79	56,45	61,49	67,88	73,70
COP	W/W	-	-	-	-	-	3,85	3,84	3,77	3,66	3,60
Water flow rate system side	l/h	-	-	-	-	-	18.135	19.911	21.938	23.418	24.903
Pressure drop system side	kPa	-	-	-	-	-	32	38	49	56	63

(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.

PRG - E

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
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Fans: J**Cooling performance 23 °C / 18 °C (1)**

Cooling capacity	kW	68,5	75,4	84,3	90,1	97,0	126,2	139,9	166,0	176,9	187,2
Input power	kW	18,3	20,8	22,5	25,1	27,6	40,3	45,7	44,3	49,7	55,3
Cooling total input current	A	37,60	41,09	44,73	49,39	53,66	74,00	81,67	79,99	89,60	99,53
EER	W/W	3,75	3,62	3,75	3,59	3,51	3,13	3,06	3,75	3,56	3,38
Water flow rate system side	l/h	11.856	13.054	14.611	15.584	16.779	21.823	24.180	28.702	30.587	32.356
Pressure drop system side	kPa	59	72	72	81	94	54	66	85	95	106

Heating performance 30 °C / 35 °C (2)

Heating capacity	kW	52,5	56,8	63,0	66,9	72,0	104,8	115,1	126,9	135,5	144,0
Input power	kW	13,0	14,4	15,9	17,2	18,7	27,2	30,3	33,5	36,7	39,7
Heating total input current	A	28,35	30,27	33,43	36,06	38,87	52,76	56,90	61,29	67,48	73,24
COP	W/W	4,04	3,94	3,97	3,88	3,85	3,86	3,80	3,79	3,69	3,63
Water flow rate system side	l/h	9.062	9.817	10.889	11.546	12.426	18.110	19.882	21.926	23.404	24.884
Pressure drop system side	kPa	34	40	40	45	52	37	45	50	56	63

(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 - STANDARD/INVERTER FANS

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
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Fans: J**SEER - 12/7 (EN14825: 2018)**

SEER	A	W/W	-	-	-	-	4,11	4,01	4,61	4,55	4,43
	E	W/W	4,36	4,38	4,37	4,34	4,35	4,06	3,97	4,54	4,37
Seasonal efficiency	A	%	-	-	-	-	161,47	157,50	181,28	179,15	174,34
	E	%	171,34	172,19	171,98	170,59	171,01	159,56	155,60	178,73	176,80
Water Regulation (1)	A,E	type	VW/VO	VW/VO	VW/VO	VW/VO	VW/VO	VW/VO	VW/VO	VW/VO	VW/VO

SEER - 23/18 (EN14825: 2018)

SEER	A	W/W	-	-	-	-	5,06	4,93	5,62	5,52	5,31
	E	W/W	5,45	5,45	5,31	5,26	5,24	4,97	4,83	5,52	5,43
Seasonal efficiency	A	%	-	-	-	-	199,20	194,05	221,77	217,92	209,47
	E	%	214,82	215,18	209,56	207,44	206,67	195,68	190,37	217,95	214,24
Water Regulation (1)	A,E	type	VW/FO	VW/FO	VW/FO	VW/FO	VW/FO	VW/FO	VW/FO	VW/FO	VW/FO

(1) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

Size		0504	0554	0604	0634	0654
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Fans: °**SEER - 12/7 (EN14825: 2018)**

SEER	A	W/W	3,96	3,86	4,49	4,43	4,32
	E	W/W	-	-	-	-	-
Seasonal efficiency	A	%	155,35	151,49	176,41	174,29	169,62
	E	%	-	-	-	-	-
Water Regulation (1)	A,E	type	VW/VO	VW/VO	VW/VO	VW/VO	VW/VO

SEER - 23/18 (EN14825: 2018)

SEER	A	W/W	4,85	4,73	5,49	5,40	5,21
	E	W/W	-	-	-	-	-
Seasonal efficiency	A	%	191,06	186,20	216,59	212,83	205,36
	E	%	-	-	-	-	-
Water Regulation (1)	A,E	type	VW/FO	VW/FO	VW/FO	VW/FO	VW/FO

(1) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J											
Performance in average ambient conditions (average) - 35 °C (1)											
Efficiency energy class	A	-	-	-	-	-	-	-	-	-	-
	E	A++	A++	A++	A++	A++	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	81,43	87,59	97,03	103,17	111,52
	E	kW	40,85	43,36	50,06	52,18	53,99	81,60	87,81	97,02	103,18
SCOP	A	W/W	-	-	-	-	4,08	3,87	4,04	3,95	4,02
	E	W/W	3,99	3,97	3,96	3,97	4,00	4,08	3,87	4,04	3,95
ηsh	A	%	-	-	-	-	160,04	151,64	158,46	154,90	157,62
	E	%	156,55	155,98	155,53	155,63	157,12	160,04	151,64	158,46	154,90
Water Regulation (2)	A,E	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO
Performance in average ambient conditions (average) - 55 °C (3)											
Efficiency energy class	A	-	-	-	-	-	-	-	-	-	-
	E	A+	A+	A+	A+	A++	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	79,70	85,10	94,00	102,70	111,00
	E	kW	39,90	42,10	49,10	51,20	52,90	80,00	85,40	94,10	102,80
SCOP	A	W/W	-	-	-	-	3,30	3,14	3,31	3,30	3,34
	E	W/W	3,15	3,14	3,17	3,17	3,22	3,30	3,14	3,31	3,30
ηsh	A	%	-	-	-	-	79,70	85,10	94,00	102,70	111,00
	E	%	123,14	122,78	123,70	123,84	125,66	129,04	122,74	129,26	128,91
Water Regulation (2)	A,E	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO

(1) Efficiencies for low temperature applications (35 °C)

(2) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

(3) Efficiencies for average temperature applications (55 °C)

Size		0504	0554	0604	0634	0654
Fans: °						
Performance in average ambient conditions (average) - 35 °C (1)						
Pdesignh	A	kW	81,43	87,59	97,03	111,52
	E	kW	-	-	-	-
SCOP	A	W/W	155,15	147,00	153,61	152,80
	E	W/W	-	-	-	-
ηsh	A	%	3,95	3,75	3,92	3,90
	E	%	-	-	-	-
Water Regulation (2)	A,E	type	FW/VO	FW/VO	FW/VO	FW/VO
Performance in average ambient conditions (average) - 55 °C (3)						
Pdesignh	A	kW	79,70	85,10	94,00	111,00
	E	kW	-	-	-	-
SCOP	A	W/W	125,67	119,30	126,09	125,15
	E	W/W	-	-	-	-
ηsh	A	%	3,22	3,06	3,23	3,30
	E	%	-	-	-	-
Water Regulation (2)	A,E	type	FW/VO	FW/VO	FW/VO	FW/VO

(1) Efficiencies for low temperature applications (35 °C)

(2) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

(3) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Electric data												
Maximum current (FLA)	A	A	-	-	-	-	-	115,8	123,8	135,7	147,7	159,7
	E	A	57,3	61,3	66,4	72,4	78,4	115,8	123,8	135,7	147,7	159,7
Peak current (LRA)	A	A	-	-	-	-	-	235,8	250,8	262,7	307,7	319,7
	E	A	177,3	188,3	193,4	232,4	238,4	235,8	250,8	262,7	307,7	319,7

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Refrigerant circuit

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
Compressor												
Type	A,E	type	Scroll									
Compressor regulation	A,E	type	On-Off									
Number	A	no.	-	-	-	-	-	4	4	4	4	4
	E	no.	2	2	2	2	2	4	4	4	4	4
Circuits	A	no.	-	-	-	-	-	2	2	2	2	2
	E	no.	1	1	1	1	1	2	2	2	2	2
Refrigerant	A,E	type	R290									
Total refrigerant charge (1)	A	kg	-	-	-	-	-	8,40	8,40	9,70	9,70	9,70
	E	kg	3,90	4,00	4,00	4,00	4,00	8,40	8,40	9,70	9,70	9,70
Potential global heating (GWP)	A,E		0,02									
Equivalent CO ₂	A	kgCO ₂ eq	-	-	-	-	-	0,168	0,168	0,194	0,194	0,194
	E	kgCO ₂ eq	0,078	0,080	0,080	0,080	0,080	0,168	0,168	0,194	0,194	0,194

(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			0504	0554	0604	0634	0654
Fans: °							
Compressor							
Type	A,E	type	Scroll				
Compressor regulation	A,E	type	On-Off				
Number	A	no.	4	4	4	4	4
	E	no.	-	-	-	-	-
Circuits	A	no.	2	2	2	2	2
	E	no.	-	-	-	-	-
Refrigerant	A,E	type	R290				
Total refrigerant charge (1)	A	kg	8,40	8,40	9,70	9,70	9,70
	E	kg	-	-	-	-	-
Potential global heating (GWP)	A,E		0,02				
Equivalent CO ₂	A	kgCO ₂ eq	0,168	0,168	0,194	0,194	0,194
	E	kgCO 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			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
System side heat exchanger												
Type	A,E	type	Braze plate									
Number	A	no.	-	-	-	-	-	1	1	1	1	1
	E	no.	1	1	1	1	1	1	1	1	1	1
Integrated hydronic kit: 00												
System side hydraulic connections												
Connections (in/out)	A,E	Type	Grooved joints									
Sizes (in/out)	A	Ø	-	-	-	-	-	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	E	Ø	2 1/2"									

Fans

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
Fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Inverter									
Number	A	no.	-	-	-	-	-	2	2	3	3	3
	E	no.	6	6	8	8	8	2	2	3	3	3
Air flow rate	A	m ³ /h	-	-	-	-	-	38211	38211	58970	58970	58970
	E	m ³ /h	22937	22937	28830	28830	28830	31935	31935	42553	42553	42553

Size			0504	0554	0604	0634	0654
Fans: °							
Fan							
Type	A,E	type	Axial				
Fan motor	A,E	type	Asynchronous + DCPX				
Number	A	no.	2	2	3	3	3
	E	no.	-	-	-	-	-
Air flow rate	A	m³/h	38211	38211	58970	58970	58970
	E	m³/h	-	-	-	-	-

Sound data

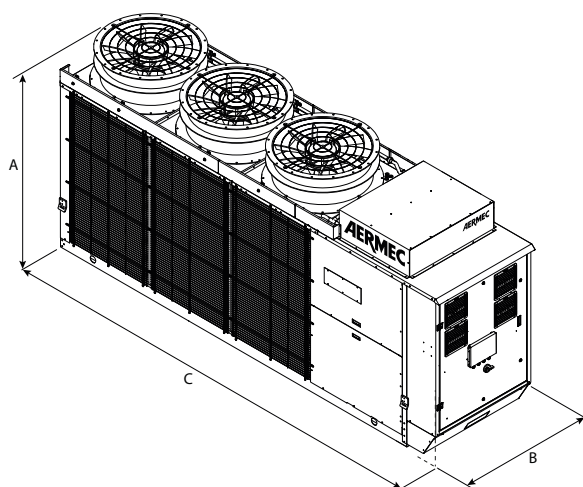
Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	84,6	84,6	84,7	85,3	85,3
Sound data calculated in heating mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	86,0	86,0	86,6	87,2	87,2

(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).

Size			0504	0554	0604	0634	0654
Fans: °							
Sound data calculated in cooling mode (1)							
Sound power level	A	dB(A)	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	-	-	-	-	-
Sound data calculated in heating mode (1)							
Sound power level	A	dB(A)	86,6	86,6	87,2	87,2	87,2
	E	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



Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Integrated hydronic kit: 00												
Dimensions and weights												
A	A	mm	-	-	-	-	-	1980	1980	1980	1980	1980
	E	mm	1920	1920	1920	1920	1920	1980	1980	1980	1980	1980
B	A	mm	-	-	-	-	-	1108	1108	1108	1108	1108
	E	mm	1108	1108	1108	1108	1108	1108	1108	1108	1108	1108
C	A	mm	-	-	-	-	-	3635	3635	4423	4423	4423
	E	mm	3375	3375	3375	3375	3375	3635	3635	4423	4423	4423

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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