

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 °C to +18 °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 and Modbus TCP/IP. The accessory is supplied with the unit and must be installed on an external electrical panel.

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.

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.

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.

■ For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

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
AERBAC-MODU	°A,P	*	*	*	*	*	*	*	*	*	*	*
	N									*	*	*
	Q					*	*	*	*	*	*	*
AERLINK	°A,P	*	*	*	*	*	*	*	*	*	*	*
	N									*	*	*
	Q					*	*	*	*	*	*	*
MODU-485BL	°A,P	*	*	*	*	*	*	*	*	*	*	*
	N									*	*	*
	Q					*	*	*	*	*	*	*
MULTICONTROL	°A,P	*	*	*	*	*	*	*	*	*	*	*
	N									*	*	*
	Q					*	*	*	*	*	*	*
PR3	°A,P	*	*	*	*	*	*	*	*	*	*	*
	N									*	*	*
	Q					*	*	*	*	*	*	*
SDHW (1)	°A,P	*	*	*	*	*	*	*	*	*	*	*
	N									*	*	*
	Q					*	*	*	*	*	*	*
SGD	°A,P	*	*	*	*	*	*	*	*	*	*	*
	N									*	*	*
	Q					*	*	*	*	*	*	*
SPLW (2)	°A,P	*	*	*	*	*	*	*	*	*	*	*
	N									*	*	*
	Q					*	*	*	*	*	*	*
VMF-CRP	°A,P	*	*	*	*	*	*	*	*	*	*	*
	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.

Remote panel

Model	Ver	021	026	031	041	051	071	081	091	103	153	203
PR4	°A,P	*	*	*	*	*	*	*	*	*	*	*
	N									*	*	*
	Q					*	*	*	*	*	*	*

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

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	VT15	VT15	VT15	VT15	VT15	VT15
N	-	-	-	-	-	-	-	-	VT15	VT15	VT15
Q	-	-	-	-	VT15	VT15	VT15	VT15	VT15	VT15	VT15

Condensate drip

Ver	021	026	031	041	051	071	081	091	103	153	203
°P	BDX5	BDX5	BDX5	BDX5	BDX5	BDX5	BDX5	BDX5	-	-	-
A	BDX5	BDX5	BDX5	BDX5	BDX6	BDX6	BDX6	BDX6	-	-	-
Q	-	-	-	-	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 ~ 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

KR: electric heater for the heat exchanger

Ver	021	026	031	041	051	071	081	091	103	153	203
°, P	KR2	KR2	KR2	KR2	KR2	KR2	KR2	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	RA	RA	RA	RA	RA	RA	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.

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	ANL
4,5,6	Size 021, 026, 031, 041, 051, 071, 081, 091, 103, 153, 203
7	Model
H	Heat pump
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
D	With desuperheater (3)
°	Without heat recovery
10	Coils
R	Copper pipes-copper fins
V	Copper pipes-Coated aluminium fins

Field	Description
°	Copper-aluminium
11	Operating field
W	Double mechanical thermostat for low temperature (4)
°	Standard mechanic thermostatic valve
12	Evaporator
°	Standard
13	Power supply
M	230V ~ 50Hz (5)
°	400V 3N ~ 50Hz (6)

(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 ÷ 041 sizes

(6) Only for ANL 021 ÷ 203 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	3,70	4,20	4,70	6,20	8,70	9,70	12,00	13,00	16,00	19,00	25,00
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	1.065	1.289	1.649	2.294	2.807	3.452	3.713	4.398	5.467	6.929
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	3,80	4,40	5,40	6,80	9,50	10,00	13,00	14,00	17,00	19,00	25,00
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	1.078	1.217	1.460	1.700	2.294	3.007	3.638	3.827	4.529	6.137	7.265
Pressure drop system side	kPa	36	40	41	37	38	39	53	72	70	70	78

(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 - (A) / 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	7,6	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	4,00	4,50	5,00	6,60	9,30	10,00	13,00	13,00	17,00	21,00	27,00
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	1.065	1.289	1.649	2.294	2.807	3.452	3.713	4.398	5.467	6.929
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	4,10	4,70	5,80	7,20	10,00	11,00	14,00	14,00	18,00	21,00	27,00
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	l/h	1.078	1.217	1.460	1.700	2.294	3.007	3.638	3.827	4.529	6.137	7.265
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.

ANL - (P) / 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	7,6	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	4,00	4,50	5,00	6,60	9,30	10,00	13,00	13,00	17,00	21,00	27,00
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	1.065	1.289	1.649	2.294	2.807	3.452	3.713	4.398	5.467	6.929
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	4,10	4,70	5,80	7,20	10,00	11,00	14,00	14,00	18,00	21,00	27,00
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	l/h	1.078	1.217	1.460	1.700	2.294	3.007	3.638	3.827	4.529	6.137	7.265
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.

ANL - (Q) / 12/7 °C - 40/45 °C (400V 3N ~ 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	A	-	-	-	-	9,70	11,00	13,00	14,00	18,00	21,00	27,00
EER	W/W	-	-	-	-	3,05	2,78	3,03	3,25	2,68	2,82	2,81
Water flow rate system side	l/h	-	-	-	-	2.294	2.807	3.452	3.713	4.398	5.467	6.929
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	-	-	-	-	10,00	11,00	14,00	15,00	19,00	21,00	28,00
COP	W/W	-	-	-	-	3,10	3,24	3,42	3,43	2,78	3,07	3,19
Water flow rate system side	l/h	-	-	-	-	2.294	3.007	3.638	3.827	4.529	6.137	7.265
Useful head system side	kPa	-	-	-	-	154	151	131	126	107	169	141

(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 - (N) / 12/7 °C - 40/45 °C (400V 3N ~ 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	-	-	-	-	-	-	-	-	18,00	21,00	27,00
EER	W/W	-	-	-	-	-	-	-	-	2,68	2,82	2,81
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4.398	5.467	6.929
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	-	-	-	-	-	-	-	-	19,00	21,00	28,00
COP	W/W	-	-	-	-	-	-	-	-	2,78	3,07	3,19
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4.529	6.137	7.265
Useful head system side	kPa	-	-	-	-	-	-	-	-	107	169	141

(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**ANL - (°) / 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	9,0	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	3,80	4,30	4,90	6,40	9,00	10,00	13,00	13,00	16,00	19,00	26,00
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	1.189	1.293	1.564	2.002	2.784	3.407	4.189	4.506	5.338	6.636	8.410
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	3,30	3,80	4,60	6,00	8,10	9,10	11,00	12,00	15,00	17,00	22,00
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	1.120	1.265	1.518	1.767	2.385	3.126	3.782	3.979	4.709	6.381	7.553
Pressure drop system side	kPa	39	43	44	40	41	42	57	78	76	76	84

(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 - (A) / 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	4,20	4,70	5,20	6,80	9,70	11,00	13,00	14,00	17,00	21,00	28,00
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	1.189	1.293	1.564	2.002	2.784	3.407	4.189	4.506	5.338	6.636	8.410
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	3,60	4,10	5,00	6,40	8,80	9,80	12,00	13,00	16,00	19,00	24,00
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	1.120	1.265	1.518	1.767	2.385	3.126	3.782	3.979	4.709	6.381	7.553
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 / 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	4,20	4,70	5,20	6,80	9,70	11,00	13,00	14,00	17,00	21,00	28,00
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	1.189	1.293	1.564	2.002	2.784	3.407	4.189	4.506	5.338	6.636	8.410
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	3,60	4,10	5,00	6,40	8,80	9,80	12,00	13,00	16,00	19,00	24,00
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	1.120	1.265	1.518	1.767	2.385	3.126	3.782	3.979	4.709	6.381	7.553
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 / 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 - (Q) / 23/18 °C - 30/35 °C (400V 3N ~ 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	-	-	-	-	10,00	11,00	14,00	14,00	18,00	22,00	28,00
EER	W/W	-	-	-	-	3,54	3,23	3,51	3,76	3,07	3,25	3,23
Water flow rate system side	l/h	-	-	-	-	2.784	3.407	4.189	4.506	5.338	6.636	8.410
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	-	-	-	-	9,10	10,00	13,00	13,00	17,00	19,00	25,00
COP	W/W	-	-	-	-	3,75	3,79	4,00	4,01	3,22	3,57	3,71
Water flow rate system side	l/h	-	-	-	-	2.385	3.126	3.782	3.979	4.709	6.381	7.553
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.

ANL - (N) / 23/18 °C - 30/35 °C (400V 3N ~ 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	-	-	-	-	-	-	-	-	18,00	22,00	28,00
EER	W/W	-	-	-	-	-	-	-	-	3,07	3,25	3,23
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	5.338	6.636	8.410
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	-	-	-	-	-	-	-	-	17,00	19,00	25,00
COP	W/W	-	-	-	-	-	-	-	-	3,22	3,57	3,71
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4.709	6.381	7.553
Useful head system side	kPa	-	-	-	-	-	-	-	-	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.

ENERGY DATA

Size			021	026	031	041	051	071	081	091	103	153	203
Power supply: °													
SEER - 12/7 (EN14825:2018)													
SEER	°	W/W	3,13	3,19	3,28	3,34	3,76	3,49	3,80	3,91	3,58	3,74	3,73
	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
	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
Seasonal efficiency	°	%	122,00	125,00	128,00	131,00	147,00	137,00	149,00	153,00	140,00	146,00	146,00
	A,P	%	129,00	131,00	135,00	137,00	153,00	145,00	157,00	163,00	139,00	138,00	139,00
	N	%	-	-	-	-	-	-	-	-	123,00	136,00	138,00
	Q	%	-	-	-	-	129,00	127,00	138,00	147,00	123,00	136,00	138,00
Water Regulation (1)	°A,P	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO
	N	type	-	-	-	-	-	-	-	-	FW/VO	FW/VO	FW/VO
	Q	type	-	-	-	-	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO
Performance in average ambient conditions (average) - 35 °C (2)													
Efficiency energy class	°		A+	A+	A+	A+	A+	A+	A+	A+	A+	A++	A++
	A,P		A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+
	N		-	-	-	-	-	-	-	-	A+	A+	A+
	Q		-	-	-	-	A+	A+	A+	A+	A+	A+	A+
Pdesignh	°	kW	5,89	6,65	7,97	9,27	12,50	16,38	19,84	20,90	24,73	33,50	39,68
	A	kW	5,76	6,52	7,83	9,12	12,30	16,16	19,00	20,69	24,31	32,89	38,99
	N	kW	-	-	-	-	-	-	-	-	24,18	32,85	38,95
	P	kW	5,76	6,52	7,83	9,12	12,30	16,16	19,60	20,69	24,31	32,89	38,99
	Q	kW	-	-	-	-	12,21	16,05	19,46	20,51	24,18	32,85	38,95
SCOP	°	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,P	W/W	3,40	3,48	3,41	3,34	3,48	3,48	3,61	3,52	3,45	3,45	3,61
	N	W/W	-	-	-	-	-	-	-	-	3,22	3,35	3,52
	Q	W/W	-	-	-	-	3,22	3,28	3,43	3,39	3,22	3,35	3,52
ηsh	°	%	129,47	132,68	130,12	127,57	134,49	134,10	139,54	137,05	138,02	139,67	144,75
	A,P	%	133,10	136,35	133,49	130,79	136,32	136,18	141,46	137,92	135,05	134,98	141,49
	N	%	-	-	-	-	-	-	-	-	125,60	131,07	137,69
	Q	%	-	-	-	-	125,80	128,03	134,25	132,80	125,60	131,07	137,69
Water Regulation (1)	°A,P	type	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO
	N	type	-	-	-	-	-	-	-	-	FW/VO	FW/VO	FW/VO
	Q	type	-	-	-	-	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO	FW/VO

(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.

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

ELECTRIC DATA

Size			021	026	031	041	051	071	081	091	103	153	203
Electric data													
Maximum current (FLA)	°	A	7,0	7,0	7,7	9,7	11,3	13,5	16,3	17,3	22,0	26,0	32,0
	A	A	7,7	7,7	8,4	10,4	12,6	14,8	17,6	18,6	23,9	29,1	35,1
	N	A	-	-	-	-	-	-	-	-	26,2	30,2	36,2
	P	A	69,0	67,0	65,0	63,0	12,6	14,8	17,6	18,6	83,0	194,0	182,0
	Q	A	-	-	-	-	12,8	15,1	17,8	18,8	26,2	30,2	36,2
Peak current (LRA)	°	A	27,5	33,5	36,7	49,7	65,3	75,3	102,3	96,3	76,0	87,0	117,0
	A,P	A	28,2	34,2	37,4	50,4	66,6	76,6	103,6	97,6	77,9	90,1	120,1
	N	A	-	-	-	-	-	-	-	-	80,2	91,2	121,2
	Q	A	-	-	-	-	66,8	76,8	103,8	97,8	80,2	91,2	121,2

GENERAL TECHNICAL DATA

Refrigerant circuit

Size			021	026	031	041	051	071	081	091	103	153	203
Power supply: °													
Compressor													
Type	type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor regulation	Type	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off
Number	no.	1	1	1	1	1	1	1	1	1	2	2	2
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Total refrigerant charge (1)	kg	1,80	1,80	2,00	2,00	2,90	2,85	3,10	3,90	3,90	4,60	5,40	5,70
Potential global heating (GWP)		2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088
Equivalent CO ₂	tCO ₂ eq	3,76	3,76	4,18	4,18	6,06	5,95	6,47	8,14	9,60	11,28	11,90	11,90

(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		021	026	031	041	051	071	081	091	103	153	203
System side heat exchanger												
Type	type	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate
Number	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	Type	Gas - F	Gas - F	Gas - F	Gas - F	Gas - F	Gas - F	Gas - F	Gas - F	Gas - F	Gas - F	Gas - F
Sizes (in/out)	Ø	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4

Fans

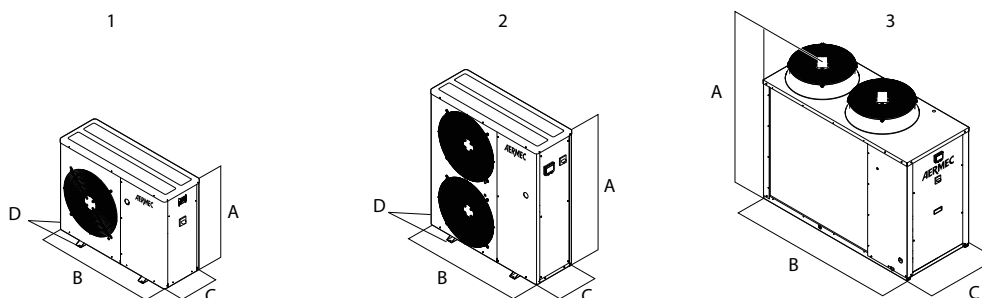
Size		021	026	031	041	051	071	081	091	103	153	203
Fan												
Type	type	Axial										
Fan motor	type	Asynchronous	Asynchronous	Asynchronous	Inverter	Inverter	Inverter	Inverter	Inverter	Asynchronous	Asynchronous	Asynchronous
Number	no.	1	1	1	1	1	2	2	2	2	2	2
Air flow rate	m³/h	2.500	2.500	3.500	3.500	7.200	7.200	7.300	7.200	14.000	13.500	13.500

Sound data

Size		021	026	031	041	051	071	081	091	103	153	203
Sound data calculated in cooling mode (1)												
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) 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 ANL 021 - 041
- 2 ANL 051 - 091
- 3 ANL 103 - 203

Size		021	026	031	041	051	071	081	091	103	153	203
Dimensions and weights												
A	°P	mm	1.000	1.000	1.000	1.000	1.252	1.252	1.252	1.252	1.450	1.450
	A	mm	1.015	1.015	1.015	1.015	1.281	1.281	1.281	1.281	1.450	1.450
	N	mm	-	-	-	-	-	-	-	-	1.450	1.450
	Q	mm	-	-	-	-	1.281	1.281	1.281	1.281	1.450	1.450
B	°P	mm	900	900	900	900	1.124	1.124	1.124	1.124	1.750	1.750
	A	mm	1.124	1.124	1.124	1.124	1.165	1.165	1.165	1.165	1.750	1.750
	N	mm	-	-	-	-	-	-	-	-	1.750	1.750
	Q	mm	-	-	-	-	1.165	1.165	1.165	1.165	1.750	1.750
C	°P	mm	310	310	310	310	384	384	384	384	750	750
	A	mm	384	384	384	384	550	550	550	550	750	750
	N	mm	-	-	-	-	-	-	-	-	750	750
	Q	mm	-	-	-	-	550	550	550	550	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	°	kg	86	86	86	86	120	120	120	156	270	329
	A	kg	103	103	103	103	147	147	183	183	338	400
	N	kg	-	-	-	-	-	-	-	-	338	400
	P	kg	91	91	91	91	127	127	163	163	288	350
	Q	kg	-	-	-	-	147	147	183	183	338	400

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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