ANLI

R410A

Heat pump, chiller, AIR/WATER
With axial fan

Heating capacity	**(FLOOR HEATING)**	**6,40 - 33,75 kW**
Heating capacity	**(FAN COILS)**	**6,18 - 31,70 kW**
Cooling capacity		**5,90 - 28,80 kW**

EUROVENT CERTIFIED PERFORMANCE

Aermec adheres to the EUROVENT Certification Programme.
The products concerned appear in the EUROVENT Certified Products Guide.

• INVERTER COMPRESSOR
• STANDARD VERSION
• VERSION WITH ON/OFF PUMP OR INVERTER

Characteristics

- R410A refrigerant gas
- Capacity adjustment 35-100%
- High efficiency with partial loads
- Possibility to use with a variable water flow rate on the primary (terminals with 2-way valves)
- Perfect water temperature control, even in systems with a low water content
- Suitable for summer operation in heat pump mode, to produce hot sanitary water (ACS) with the DCPX accessory to regulate fan speed
- Extended operating limits in heat pump mode
  - Maximum temperature of processed water 55°C
  - Maximum temperature of external air 42°C (with DCPX accessory to regulate fan speed)
  - Minimum temperature of external air -15°C
- Reduced starting currents
- Defrosting with combined hot gas injection / cycle inversion
- Electronic 2-way thermostatic valve with self-adaptive algorithm for overheating regulation, suitable for processed water temperatures down to -6°C
- High efficiency scroll compressor with DC motor with permanent magnets ("high side" type, with high pressure casing), designed for variable speed operation
- Built-in circulator:
  - ANLI: standard, without circulator
  - ANLI P: on/off circulator
  - ANLI X: variable speed circulator with built-in pressure transducer on water side and microprocessor able to manage various adjustment modes:
    ΔP constant: the differential pressure between pump input and output is kept constant; the number of rotations diminishes with the gradual closing of the terminals
    ΔP variable: the differential pressure diminishes with the reduction in the flow rate, to take into account the lesser pressure drops along the adduction piping to the terminals (recommended when there is a notable development of such piping)
- Water filter and differential pressure switch fitted on all versions
- Expansion tank and safety valve (only on the version with a circulator)
- Only available in heat pump version
- Complete with EMC filters
- Adjustment
  - Aermec electronic Modu_Control card
  - User interface with 6 soft-touch keys, 4 digits, 6 LEDs
  - Control of output water temperature with PID algorithm
  - Compensation of set point with external temperature
  - Visualisation of the operation frequency
  - Management of the compressor speed ramps
  - Intelligent, self-adaptive defrosting
  - Control of cooling condensation with modulating signal 0-10V according to the pressure, compensated on the basis of the external temperature (with DCPX accessory)
  - Safety capacity control with a reduction in the number of rotations of the compressor
  - High and low pressure transducers
  - Automatic reset of the alarms before total block
  - Alarms log

Accessories

- **BDX**: condensate drip tray for outdoor unit.
- **DCPX**: allows correct operation in cooling mode with external temperatures lower than 10°C and down to -15°C, and in heating mode from 20°C to 42°C.
  Compulsory accessory for producing hot sanitary water (ACS) in summer mode (for ANLI 020H)
- **KR**: electrical anti-freeze heater for the plate heat exchanger.
  Can only be applied in the factory.
- **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 150m.
- **VT**: shock absorbers.

Accessories available			
All versions	**020**	**070**	**100**
PR3	✔	✔	✔
DCPX	51	51	53
BDX	5	5	-
VT	9	9	15
KR	2	2	2

Choice of unit

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.

Field configurer:

1 2 3 4	5 6 7	8	9	10	11	12	13	14
Code	Size	Model	Version	Heat recovery	Coils	Field of use	Evaporator	Power supply

Code:
ANLI

Size:
020 - 070 - 100

Model:
H - Heat pump

Version:
° - Standard
P - With ON/OFF pump
X - With INVERTER pump

Heat recovery:
° - Without recovery units

Coils:
° - Aluminium
R - Copper
S - Tinned copper
V - In painted aluminium

Field of use:
° - Standard for low processed water temperatures down to -6°C

Evaporator:
° - Standard PED regulations

Power supply:
M - 230V ~ 50Hz (020 - 070)
T - 400V-3N-50 Hz (100)

Technical data

Mod. ANLI		Version	020H	070H	100H [F3]	100H [F2]	100H [F1]
Heating mode: water 40/45°C - air 7°C d.b./6°C w.b. (FLOOR HEATING) (FAN COILS)							
Heating capacity	kW	H	6.18	14.04	31.70	24.95	20.08
		HP - HX	6.10	13.81	31.00	24.30	19.54
Total power input	kW	H	2.08	4.44	11.40	8.34	6.36
		HP - HX	2.10	4.48	11.45	8.35	6.38
Water flow rate	l/h	H	1063	2415	5452	4291	3454
		HP - HX	1049	2376	5332	4179	3362
Total pressure drops	kPa	H - HP - HX	25	17	59	36	23
Heating mode: water 30/35°C - air 7°C d.b./6°C w.b. (FLOOR HEATING)							
Heating capacity	kW	H	6.48	14.54	33.75	25.34	20.87
		HP - HX	6,42	14,31	33,01	24,65	20,32
Total power input	kW	H	1,72	3,74	9,85	7,05	5,44
		HP -HX	1,73	3,78	9,86	7,06	5,46
Water flow rate	l/h	H	1114	2502	5805	4359	3590
		HP - HX	1100	2462	5678	4239	3494
Total pressure drops	kPa	H - HP - HX	28	19	66	37	28
Cooling mode: water 12/7°C - air 35°C							
Cooling capacity	kW	H	5.88	14.56	28.77	23.95	20.03
		HP - HX	5.95	14.79	29.43	24.53	20.23
Total power input	kW	H	2.12	4.44	11.73	8.14	6.00
		HP - HX	2.14	4.48	11.82	8.31	5.80
Water flow rate	l/h	H	1011	2504	4948	4120	3445
		HP - HX	1023	2544	5061	4219	3480
Total pressure drops	kPa	H - HP - HX	23	19	50	30	24
Energy indicators							
COP (40/45 °C - 7/6 °C)		H	2,97	3.16	2.78	2.99	3.16
		HP - HX	2,90	3.08	2.71	2.91	3.06
COP (30/35 °C - 7/6 °C)		H	3,77	3.88	3.43	3.59	3.84
		HP - HX	3,71	3.79	3.35	3.49	3.72
EER (12/7 °C - 35 °C)		H	2,77	3.28	2.45	2.94	3.34
		HP - HX	2,78	3.30	2.49	2.95	3.49
ESEER			3,82	4.60	4.33	4.33	4.33
Electrical data							
Power supply			230V ~ 50 Hz	230V ~ 50 Hz		400V - 3N - 50 Hz	
Input current	A	H	10.1	19.1	15.7	11.5	8.8
	A	HP - HX	10.6-10.6	20.5-19.8	17.1	12.9	10.2
Input current	A	H	8.4	16.0	13.4	9.6	7.4
	A	HP - HX	8.9-8.9	17.4-16.7	14.8	11.0	8.8
Input current	A	H	10.3	18.9	16.3	11.3	8.3
	A	HP - HX	10.8-10.8	20.3-19.6	17.7	12.7	9.7
maximum current (FLA)	A	H	14.0	24.5	21.0	21.0	21.0
	A	HP - HX	14.5-14.5	25.9-25.2	22.4	22.4	22.4
Peack current (LRA)	A	H	20.0	25.0	30.0	30.0	30.0
	A	HP - HX	20.5-20.5	26.4-25.7	31.4-30.7	31.4-30.7	31.4-30.7

Compressor	type		**Scroll**	**Rotary**	**Scroll**
Number/circuit		no./no. H-HP-HX	1/1	1/1	1/1
Fan				**Axial**	
Quantity		no. H-HP-HX	1	2	2
Evaporator				**Plates**	
Quantity		no. H-HP-HX	1	1	1
Plumbing connections	(in-out)	ø H-HP-HX	1"¼	1"¼	1"¼
Sound data					
Sound power	dBA		61.0	69.0	76.0
Sound pressure	dBA		29.0	37.0	44.0
Hydronic kit					
Circulator					
Pump input power		kW HP - HX	0.1-0.1	0.27-0.13	0.75
Pump input current		A HP - HX	0.5-0.5	1.4-0.7	1.4
Effective pressure *		kPa HP - HX	57-57	82-72	92

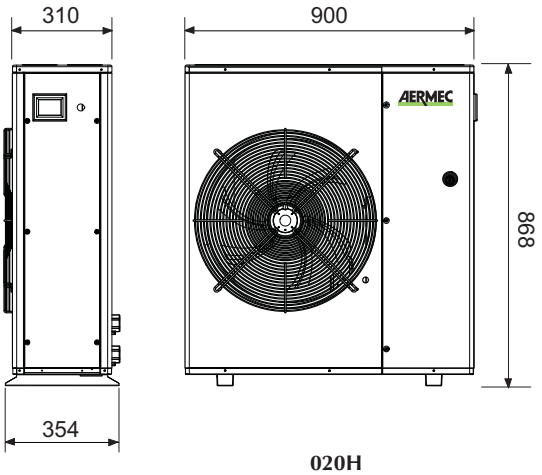
* The effective pressure is calculated when cold

Data stated according to EN14511:2004

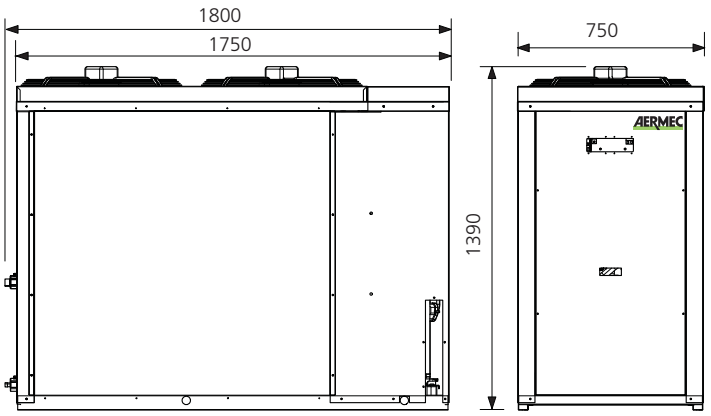
Sound power: Aermec determines the value on the basis of the measurements taken in accordance with Standard ISO 9614 - 2, respecting the Eurovent requisites.

Sound pressure: measured in a free field, with a distance of 10m and a direction factor of 2. In accordance with the Standard (ISO 3744)

Dimensions (mm)



020H **070H**



100H

ANLI			020H	070H	100H
Empty weight	H	kg	70	134	293
	HP - HX	kg	72	141	308

Code: SANLIUY.01 / 0909

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italy
Tel. 0442633111 - Telefax 044293730
www.aermec.com