

## ANLI

Reversible heat pumps inverter  
Air/water outdoor installation.  
Axial fans and scroll compressor  
Cooling capacity 5,70÷29,43kW  
Heating capacity 6,10÷31,7kW

## R410A



Aermec

participates at EUROVENT program: LCP  
The involved products can be found in the website  
[www.eurovent-certification.com](http://www.eurovent-certification.com)

Variable Multi Flow®

VMF



- **STANDARD VERSION**
- **VERSION WITH BUILT-IN HYDRONIC KIT INVERTER**
- **HIGH EFFICIENCY EVEN AT PART LOAD**
- **PRODUCTION OF HOT DOMESTIC WATER (D.H.W.)**

### Features

Reversible Heat pumps units

#### Version

**ANLI\_H** Heat pumps, without hydronic kit

#### Versions with hydronic kit

**ANLI\_HX** with standard pump inverter

#### Operational limits (1)

- max. external air temperature 42°C
- max. Leaving water temperature 60°C heating mode
- 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)
- 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
- Inverter pumps variable speed pump with water

side pressure transducer installed and unit mounted microprocessor, capable of controlling various operating modes:

Constant ΔP: maintains constant pressure differential between pump inlet and outlet; pump speed reduces as terminal valves close  
Variable ΔP: reduces pressure differential with flow reduction, in consideration of the pressure reduction in the pipe-work system to the terminals (recommended for larger pipe-work systems)

- Water filter, differential pressure switch, depending on the model, fitted on all units.
- High efficiency heat exchangers with trace heating as standard
- Axial flow fan units for extremely quiet operation
- Inverter axial fan (for size up 040H to 080H)
- Fitted with EMC filters
- The built-in hydraulic kit includes the main water circuit components
- Controller:
  - Aermec Modu\_Control circuit board

- User interface with 6 soft-touch keys, 4 digit display, 6 LEDs
- Control of the leaving water temperature with PID algorithm
- Set-point compensation based on the external air temperature
- Display of operating frequency
- Control of compressor ramp speed
- Auto-adaptive intelligent defrosting
- Condensing control in summer with a 0-10 V modulating signal based on pressure and compensated for external air temperature (with DCPX accessory (when provided)
- Load limiting safety control by reducing compressor speed
- High and low pressure transducers
- Automatic reset of alarms before tripping
- Alarms history

(1) For more details on operating limits, refer to the technical documentation available on the website [www.aermec.com](http://www.aermec.com)

### Accessories

- **MODU-485BL**: RS-485 interface for supervising systems with MODBUS protocol.
- **AERWEB300**: Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:

**AERWEB300-6**: Web server to monitor and remote control max. 6 units in RS485 network;

**AERWEB300-18**: Web server to monitor and remote control max. 18 units in RS485 network;

**AERWEB300-6G**: Web server to monitor and remote control max. 6 units in RS485 network

with integrated GPRS modem;

**AERWEB300-18G**: Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

- **AERSET**: accessory allows the automatic compensation of the operating set point of the unit to which it is connected, based on a 0-10V

MODBUS input signal.

- **MULTICONTROL:** Allows the simultaneous control of several chillers or heat pumps (up to 4) fitted with our MODUCONTROL controller and installed in the same hydraulic system. For complete control the following accessories are available:  
**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.  
**SDHW: Domestic hot water temperature sensor.** Used with the storage tank to control the temperature of water produced.
- **VMF-CRP to predict accessory for the manage-**

**ment of the probes SPLW / SDHW if provided with the MULTICONTROL**

- **PR3:** Simplified remote panel. Allows to perform the basic controls of the unit with alarm signals. It can be controlled with a shielded cable at a distance up to 150 m.
- **DCPX:** Allows correct operation, in cooling mode, with outside temperatures lower than 20 °C and as low as - 10 °C, in heating mode up to 42 °C.
- **BSKW:** Electric heater kit with IP44 panel for remote mounting in a sheltered area. Available in single and three phase power supply:  
 - BS4KW230M (4 kW, 230V/1/50Hz)  
 - BS6KW230M (6 kW, 230V/1/50Hz)  
 - BS6KW400T (6 kW, 400V/3/50Hz)  
 - BS9KW400T (9 kW, 400V/3/50Hz)
- **VT:** Anti-vibration mounts.

- **BDX5:** Condensate drip tray

**Accessories factory fitted only**

- **BDX8/9:** Condensate drip tray with integrated electric heater controlled by the external air temperature sensor.
- **KR:** Electric anti-freeze resistance for plate heat exchanger.
- **KRB:** Electric anti-freeze resistance kit for base; prevents the formation of ice on the base.

**COMPATIBILITY with VMF SYSTEM**

For further information on system, refer to specific documentation.

ANLI_H	vers	021	026	040	045	071	075	080	101
MODU-485BL	All	•	•	•	•	•	•	•	•
AERWEB300	All	•	•	•	•	•	•	•	•
AERSET	All	•	•	•	•	•	•	•	•
MULTICONTROL	All	•	•	•	•	•	•	•	•
SPLW	All	•	•	•	•	•	•	•	•
SDHW	All	•	•	•	•	•	•	•	•
VMF-CRP	All	•	•	•	•	•	•	•	•
PR3	All	•	•	•	•	•	•	•	•
DCPX	(1) All	51	51	-	-	-	-	-	53
VT	All	9	9	9	9	9	9	9	15
BS4KW230M	230V/1	•	•	•	•	-	-	-	-
BS6KW230M	230V/1	•	•	•	•	-	-	-	-
BS6KW400T	400V/3N	-	-	-	-	•	•	•	•
BS9KW400T	400V/3N	-	-	-	-	•	•	•	•
BDX	All	-	-	-	-	-	-	-	-
<b>Accessories factory fitted only</b>									
BDX	All	8	8	9	9	9	9	9	-
KR	All	-	-	-	-	-	-	-	2
KRB	All	1	1	2	2	2	2	2	3

(1) The size ANLI040H÷ANLI080H Inverter fans are fitted as standard

## Unit Configurator

By suitably combining the numerous options available it is possible to configure each model in such a way as to meet the most demanding of system requirements.

- |                |   |
|----------------|---|
| <b>Field</b>   | <b>Code</b>   |
| <b>1,2,3,4</b> | ANLI  |
| <b>5,6,7</b>   | <b>Size</b><br>021-026-040-045-071-075-080-101  |
| <b>8</b>       | <b>Model</b><br>H Heat pump   |
| <b>9</b>       | <b>Versions</b><br>° Standard<br>X With inverter pump   |
| <b>10</b>      | <b>Heat recovery</b><br>° Without heat recovery   |
| <b>11</b>      | <b>Coil</b><br>° Aluminium<br>R Copper<br>S Tinned copper<br>V In painted aluminium-copper (epoxy paint)                                  |
| <b>12</b>      | <b>Field of use</b><br>° Electronic expansion valve (leaving water temperature down to 4°C)<br>contact head office for lower temperatures |
| <b>13</b>      | <b>Evaporator</b><br>° Standard   |
| <b>14</b>      | <b>Power supply</b><br>M 230V/1/50Hz (021-026-040-045)<br>T 400V/3N/50Hz  |

## Technical Data

ANLI			021	026	040	045	071	075	080	101				
												F1	F2	F3
Cooling capacity	H	kW	5,71	7,26	9,39	12,25	13,66	16,35	18,51	28,77	23,95	20,03		
	HX	kW	5,79	7,37	9,52	12,42	13,88	16,58	18,73	29,43	24,53	20,23		
Input power	H	kW	1,94	2,58	3,17	4,37	4,80	6,16	7,63	11,73	8,14	6		
	HX	kW	1,91	2,53	3,10	4,27	4,66	6,00	7,47	11,82	8,31	5,8		
EER	H	W/W	2,95	2,82	2,97	2,80	2,84	2,66	2,43	2,45	2,94	3,34		
	HX	W/W	3,03	2,92	3,07	2,91	2,98	2,76	2,51	2,49	2,95	3,49		
ESEER	H		4,15	4,10	4,06	4,10	4,20	4,17	4,12	4,11	4,11	4,11		
	HX		4,38	4,54	4,36	4,47	4,65	4,65	4,59	4,40	4,40	4,40		
EER Eurovent class	H		B	C	B	C	C	D	E		E			
Water flow rate	H	l/h	987	1256	1619	2116	2360	2827	3201	5061	4219	3480		
	HX	l/h	987	1256	1619	2116	2360	2827	3201	5061	4219	3480		
Pressure drops	H	kPa	11	17	12	20	18	25	32	50	30	24		
Available head	HX	kPa	74	68	72	61	82	61	42		174			
Heating capacity	H	kW	6,23	7,79	9,92	12,75	15,16	17,60	20,12	31,7	24,95	20,08		
	HX	kW	6,14	7,68	9,78	12,57	14,94	17,38	19,91	31,0	24,3	19,54		
Input power	H	kW	1,93	2,45	3,17	4,23	4,85	6,07	7,27	11,4	8,34	6,36		
	HX	kW	1,90	2,40	3,09	4,12	4,70	5,92	7,13	11,45	8,35	6,38		
COP	H	W/W	3,23	3,18	3,13	3,02	3,13	2,90	2,77	2,78	2,99	3,16		
	HX	W/W	3,23	3,20	3,16	3,05	3,18	2,94	2,79	2,71	2,91	3,06		
COP Eurovent class	H		A	B	B	B	B	C	D		D			
Class Energy Efficiency	(1) H		A+	A+	A+	A+	A+	A+	A+		A+			
	(1) HX		A+	A+	A+	A+	A+	A+	A+		A+			
Water flow rate	H	l/h	1078	1345	1716	2202	2621	3040	3473	5459	4291	3454		
	HX	l/h	1078	1345	1716	2202	2621	3040	3473	5459	4179	3362		
Pressure drops	H	kPa	11	18	12	20	18	24	32	59	36	23		
Available head	HX	kPa	72	65	71	58	71	51	28		158			

(1) In accordance with the Regulation n ° 811/2013

### Cooling: (14511:2013)

Evaporator water temperature (in/out) 12°C/7°C; Evaporator water temperature 35°C

### Heating: (14511:2013)

Condenser water temperature (in/out) 40°C/45°C; External air temperature 7°C b.s./6°C b.u.

(F1) maximum performance

(F2) performance compliant with french standard NF

(F3) Intermediate performance

ANLI			021	026	040	045	071	075	080H	101				
												F1	F2	F3
Heating capacity	H	kW	6,58	8,16	10,51	12,94	16,17	18,57	21,03	33,75	25,34	20,87		
	HX	kW	6,48	8,03	10,37	12,76	15,95	18,35	20,82	33,01	24,65	20,32		
Input power	H	kW	1,63	2,07	2,68	3,55	4,08	5,09	6,13	9,85	7,05	5,44		
	HX	kW	1,59	2,00	2,60	3,44	3,92	4,94	5,99	9,86	7,06	5,46		
COP	H	W/W	4,03	3,94	3,92	3,64	3,97	3,64	3,43	3,43	3,59	3,84		
	HX	W/W	4,07	4,00	3,99	3,71	4,07	3,71	3,48	3,35	3,49	3,72		

### Heating: (14511:2013)

Condenser water temperature (in/out) 30°C/35°C; External air temperature 7°C b.s./6°C b.u.

(F1) maximum performance

(F2) performance compliant with french standard NF

(F3) Intermediate performance

## Technical Data

GENERAL DATA				021	026	040	045	071	075	080	101				
													F1	F2	F3
<b>Electrical data</b>															
Total input current	(1)	<b>H</b>	A	8,40	11,20	13,70	19,10	7,30	9,40	11,40	16,30	11,30	8,30		
cooling mode	(1)	<b>HX</b>	A	9,40	12,26	14,81	20,26	8,29	10,44	12,46	17,98	12,70	9,70		
Total input current	(2)	<b>H</b>	A	8,00	10,20	13,60	18,10	7,30	9,10	10,80	15,70	11,50	8,80		
heating mode	(2)	<b>HX</b>	A	9,02	11,26	14,72	19,26	8,32	10,15	11,86	17,45	12,9	10,2		
Total input current	(3)	<b>H</b>	A	6,70	8,60	11,40	15,10	6,10	7,60	9,00	13,57	9,72	7,53		
heating mode	(3)	<b>HX</b>	A	7,76	9,63	12,72	16,30	7,16	8,68	10,15	15,21	10,91	8,73		
Maximum current (FLA)	(4)	<b>H</b>	A	12,10	14,10	20,00	23,60	12,50	13,50	15,00	21,00	21,00	21,00		
Starting current (LRA)	(4)	<b>H</b>	A	8,00	8,00	10,00	10,00	15,00	15,00	15,00	30,00	30,00	30,00		
<b>Compressors</b>															
Compressors	type			rotary	rotary	rotary	scroll	scroll	scroll	scroll	scroll				
	n°			1	1	1	1	1	1	1	1				
Circuits	n°			1	1	1	1	1	1	1	1				
Capacity control	%			0-100											
Refrigerant	type			R410A											
<b>System side exchanger</b>															
Exchanger	type			plate											
	n°			1	1	1	1	1	1	1	1				
hydraulic connections	(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				
<b>Fans standard</b>															
fans	type			axial											
	n°			1	1	2	2	2	2	2	2				
Air flow rate cooling mode	m³/h			3500	3500	8000	8000	7500	7500	7500	13200				
<b>Sound data</b>															
Sound pressure	dB(A)			31,0	32,5	35,7	36,7	36,7	38,0	38,0	44,0				
Sound power	dB(A)			62,0	63,5	66,7	67,7	67,7	69,0	69,0	76,0				
Power supply	V/ph/Hz			230V/1	230V/1	230V/1	230V/1	400V/3	400V/3	400V/3	400V/3				

### Sound power

Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.

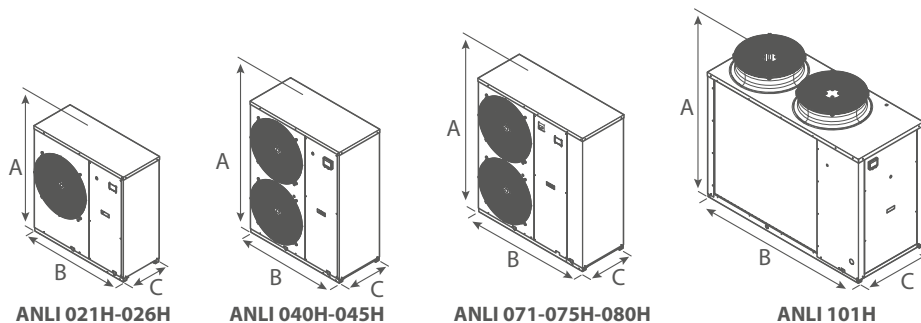
### Sound pressure

Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).

- (1) Evaporator water temperature (in/out) 12°C/7°C; Evaporator water temperature 35°C  
 (2) Condenser water temperature (in/out) 40°C/45°C; External air temperature 7°C b.s./6°C b.u.  
 (3) Condenser water temperature (in/out) 30°C/35°C; External air temperature 7°C b.s./6°C b.u.  
 (4) The electrical data of the versions without hydronic module integrated

**Note: For more information, refer to the selection program or the technical documentation available on the website [www.aermec.com](http://www.aermec.com)**

## Dimensions and weight



ANLI				021	026	040	045	071	075	080	101	
Height	(A)	mm	All	1028	1028	1281	1281	1281	1281	1281	1281	1450
Width	(B)	mm	All	1000	1000	1000	1000	1150	1150	1150	1150	1750
Depth	(C)	mm	All	400	400	450	450	450	450	450	450	750
Weight	<b>H</b>	kg		118	118	138	138	174	174	174	174	293
	<b>HX</b>	kg		123	123	143	143	184	184	184	184	308