

## ANL 290/650 cooling only

HFC  
Refrigerant  
R410A



Aermec participate in the EUROVENT program: LCP the products are present on the site [www.eurovent-certification.com](http://www.eurovent-certification.com)

Variable Multi Flow

VMF

Chillers  
Air/Water outdoor installation  
Axial fans and scroll compressor  
Cooling capacity 55÷133kW



## • STANDARD VERSION • VERSION WITH INTEGRATED HYDRONIC MODULE

### Features

Cooling versions and condensing unit

#### Versions

**ANL\_°** standard versions.

**ANL\_L** Low noise versions.

**ANL\_C** Condensing versions

**ANL\_CL** Condensing low noise versions

- High efficiency scroll compressors.
- Flow switch as standard supply.
- Water filter.

- Low and high pressure transducers as standard supply.
- High efficiency exchangers.
- Axial fans with low sound level.
- Possibility of integrated hydronic module user side:
  - Buffer tank and pumps, or pumps only
  - Expansion tank
  - Safety valve

- Pressure gauge
- Drain valve
- Electronic controller (Modu\_control).
- Microprocessor control system
- Metallic protective cabinet with anti-corrosion polyester paint.

### Accessories

- **MODU-485BL**: RS-485 interface for supervision systems with MODBUS protocol.
- **AERSET**: accessory allows the automatic compensation of the operating setpoint of the unit to which it is connected, based on a 0-10V MODBUS input signal.  
**Mandatory accessory:**  
- **AER485** or **MODU-485BL**
- **AERWEB300**: The AERWEB option allows remote control of a chiller through a standard PC and an ethernet connection with a standard browser; 4 versions available:  
**AERWEB300-6**: Web server to monitor and remote control maximum 6 units on RS485 network;  
**AERWEB300-18**: Web server to monitor and remote control maximum 18 units on RS485 network;  
**AERWEB300-6G**: Web server to monitor and remote control maximum 6 units on RS485 network with integrated GPRS modem;  
**AERWEB300-18G**: Web server to monitor and remote control maximum 18 units on RS485 network with integrated GPRS modem.

- **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.
  - **DCPX**: Low temperature device for correct cooling mode operation with ambient temperatures from less than 10 °C down to - 10 °C.
  - **PR3**: Simplified remote panel. Permits control of the basic unit functions (on/off and change of operating mode, diagnostics and alarm reset). Maximum distance permitted is 150 m with screened cable.
  - **GP**: Protects the external coil from blows.
  - **VT**: Anti-vibration mounts.

#### Accessories can only be applied in the factory

- **RIF**: Current rephaser. Connected in parallel to the motor, it allows a reduction of the absorbed current about 10%.
- **DRE**: Current soft starter device (about 26% for two-circuit-units). Available only with power supply 400V/3N.

#### COMPATIBILITY WITH THE VMF SYSTEM.

For further system information please refer to the specific documentation.

## Accessory compatibility

ANL		290	300	340	400	580	620	650
MODU-485BL	Alls	•	•	•	•	•	•	•
AERWEB300	Alls	•	•	•	•	•	•	•
MULTICONTROL	Alls	•	•	•	•	•	•	•
SPLW	Alls	•	•	•	•	•	•	•
AERSET	Alls	•	•	•	•	•	•	•
PR3	Alls	•	•	•	•	•	•	•
DCPX (version with standard fan "On" Standard)	(1)	°	-	-	-	83	83	83
	L		inverter fans			standard	standard	standard
DCPX (version with high static pressure fan "M")	°	-	-	-	-	83	83	83
	L	62	62	62	63	83	83	83
GP	Alls	GP3	GP3	GP3	GP3	GP2 (x2)	GP2 (x2)	GP2 (x2)
VT (00)	Alls	17	17	17	17	11	11	11
VT (P1-P2-P3-P4)	Alls	13	13	13	17	11	11	11
VT (01-02-03-04)	Alls	13	13	13	13	11	11	11
<b>Accessories can only be applied in the factory</b>								
RIF	Alls	32	32	42	42	50	72	51

(1) Standard for chillers with desuperheater

(1) standard for version "L" only for size 580÷650

(2) Only for power supply 400V/3N/50Hz

(x2) indicates the quantity to order

## 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 particular of system requirements.

<b>Field</b>	<b>Description</b>	<b>12</b>	<b>fans (4)</b>
<b>1,2,3</b>	<b>ANL</b>	°	Standard
<b>4,5,6</b>	<b>Size</b>	<b>M</b>	increased
	290-300-340-400-580-620-650	<b>J</b>	Inverter
<b>7</b>	<b>Field of use</b>	<b>13</b>	<b>Power supply</b>
	° Standard with produced water down to +4 °C	°	400V/3N/50Hz
<b>Y</b>	Low leaving water up to -6 °C (3)	<b>14</b>	<b>Soft-start</b>
<b>X</b>	Electronic thermostatic valve temperature of water produced up to +4°C (for different temperatures please contact us) (3)	°	Without Soft Start
<b>8</b>	<b>Model</b>	<b>S</b>	With Soft Start
	° Only cooling	<b>15-16</b>	<b>Integrated hydronic module user side</b>
<b>C</b>	Condensing unit	<b>00</b>	Without hydronic module
<b>9</b>	<b>Heat recovery</b>	<b>01</b>	n° 1 Low head pump and buffer tank
	° Without heat recovery	<b>02</b>	n° 2 Low head pumps and buffer tank
<b>D</b>	Desuperheater	<b>03</b>	n° 1 high head pump and buffer tank
<b>10</b>	<b>Version</b>	<b>04</b>	n° 2 high head pumps and buffer tank
	° Standard	<b>P1</b>	n° 1 Low head pump
<b>L</b>	Low noise versions	<b>P2</b>	n° 2 Low head pumps
<b>11</b>	<b>Coil</b>	<b>P3</b>	n° 1 high head pump
	° Aluminium	<b>P4</b>	n° 2 high head pumps
<b>R</b>	Copper		
<b>S</b>	Tinned copper		
<b>V</b>	Coated		

(2) Sizes up 290 to 400 are available only in the low noise mode "L"

(3) "D" option is not compatible with "Y" valve.

(4) **On / off fan Standard**, standard sizes up 580 to 650

**On / off fan increased, option available for all sizes**

**Fans Inverter, standard sizes from 290 to 400, with no static pressure**

**Fans Inverter, option for sizes from 580 to 650 with static pressure**

## Technical data

ANL - °		290	300	340	400	580	620	650	
	V/ph/Hz	400V	400V	400V	400V	400V	400V	400V	
12°C/7°C	Cooling capacity	(1) kW	/	/	/	/	110,79	124,06	132,91
	Total power input	(1) kW	/	/	/	/	40,36	47,13	54,4
	EER	(1)	/	/	/	/	2,75	2,63	2,44
	ESEER	(1)	/	/	/	/	4,03	3,99	3,72
	Cooling Energy Class Eurovent	(1)	/	/	/	/	C	D	E
	Water flow rate	(1) l/h	/	/	/	/	19176	21439	22978
	Pressure drop	(1) kPa	/	/	/	/	81	61	70

ANL - L		290	300	340	400	580	620	650	
	V/ph/Hz	400V	400V	400V	400V	400V	400V	400V	
12°C/7°C	Cooling capacity	(1) kW	54,52	59,80	65,84	76,05	104,05	114,3	120,97
	Total power input	(1) kW	20,96	22,99	25,19	29,88	43,69	51,23	59,44
	EER	(1)	2,60	2,60	2,61	2,55	2,38	2,23	2,04
	ESEER	(1)	3,83	3,83	3,93	3,83	3,71	3,68	3,52
	Cooling Energy Class Eurovent	(1)	D	D	D	D	E	F	G
	Water flow rate	(1) l/h	9408	10323	11371	13134	18001	19742	20901
	Pressure drop	(1) kPa	28	33	40	41	72	52	58

Date (14511:2013)

(1) Water evaporator 12°C/7°C, External air 35°C

ANL - C°		290	300	340	400	580	620	650	
	V/ph/Hz	400V	400V	400V	400V	400V	400V	400V	
	Cooling capacity	(2) kW	/	/	/	/	115,40	128,10	138,40
	Total power input	(2) kW	/	/	/	/	39,60	46,20	53,40
	EER	(2)	/	/	/	/	2,91	2,77	2,59

ANL - CL		290	300	340	400	580	620	650	
	V/ph/Hz	400V	400V	400V	400V	400V	400V	400V	
	Cooling capacity	(2) kW	54,90	60,50	69,90	77,10	108,00	117,30	126,30
	Total power input	(2) kW	20,70	22,50	24,80	29,40	39,50	47,30	54,90
	EER	(2)	2,65	2,69	2,82	2,62	2,73	2,48	2,30

(2) Evaporating temperature 5°C, External air 35°C

		290	300	340	400	580	620	650
<b>Electrical data</b>								
Total input current (cooling)	° (3) A	/	/	/	/	70	82	94
Maximum current (FLA)	° (3) A	/	/	/	/	85	99	112
Starting current (LRA)	° (3) A	/	/	/	/	262	308	320
Starting current with soft start	A	/	/	/	/	198	230	242
Total input current (cooling)	L (3) A	38	41	46	55	74	87	101
Maximum current (FLA)	L (3) A	49	53	58	69	85	99	112
Starting current (LRA)	L (3) A	130	131	162	183	262	308	320
Starting current with soft start	A	99	101	123	140	198	230	242
<b>Scroll Compressor</b>								
Compressors / Circuit	n°	2/1	2/1	2/1	2/1	2/1	2/1	2/1
Refrigerant	Type	R410A						
<b>Heat exchanger system side</b>								
Exchanger	Type/n°	Plate/1						
hydraulic connections (In/Out)	Ø	2"½						
<b>Connection of Condensing unit C</b>								
Gas line	Ø	28	35	35	42	42	42	54
Liquid line	Ø	22	22	22	28	28	28	35
<b>Axial fans</b>								
Fan	Type/n°	Inverter/4	Inverter/4	Inverter/4	Inverter/6	std/2	std/2	std/2
Air flow rate (cooling)		15600	15600	15600	20700	35900	35900	35900
<b>Sound data (cooling)</b>								
Sound power level	° dB(A)	/	/	/	/	82	82	83
Sound pressure level	° dB(A)	/	/	/	/	45	45	46
Sound power level	L dB(A)	72	72	74	75	77	77	78
Sound pressure level	L dB(A)	41	41	42	43	45	45	46

(3) Unit standar configuration without hydronic kit

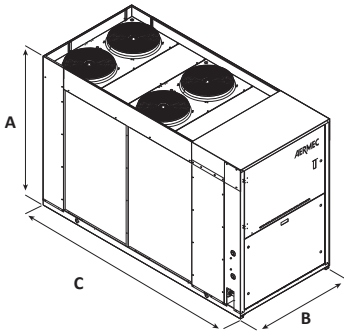
**Sound power** Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.

**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).

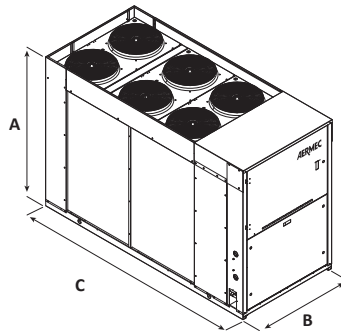
**Note:** For more information, refer to the selection program or the technical documentation available on the website [www.aermec.com](http://www.aermec.com)

## Dimensions (mm)

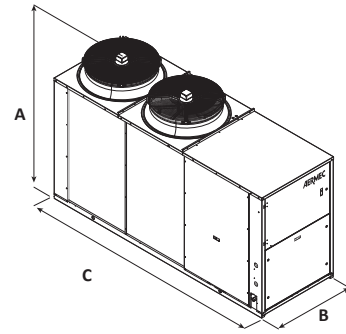
ANL°/L/C 290-300-340



ANL°/L/C 400



ANL°/L/C 580-620-650



				ANL 290	ANL 300	ANL 340	ANL 400	ANL 580	ANL 620	ANL 650
Height	A	mm	°/L/C	1605	1605	1605	1605	1875	1875	1875
Width	B	mm	°/L/C	1100	1100	1100	1100	1100	1100	1100
Depth	C	mm	°/L/C	2450	2450	2450	2450	3200	3200	3200
Empty weight		Kg	°/L	628	636	648	666	854	925	970