ANL 290/650 cooling only

R410A

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

Aermec
participate in the EUROVENT program: LCP
the products are present on the site www.eurovent-certification.com

Variable Multi Flow
VMF

• STANDARD VERSION
• VERSION WITH INTEGRATED HYDRONIC MODULE

Features

Cooling versions and condensing unit
Versioni
ANL_° standard versions (ANL580/650).
ANL_L Low noise versions (ANL290/650).
ANL_C Condensing versions (ANL580/650)
ANL_CL Condensing low noise versions (ANL290/650)
- 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-485A**: 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-485A
- **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-485A		Alls	•	•	•	•	•	•	•
AERWEB300		Alls	•	•	•	•	•	•	•
MULTICONTROL		Alls	•	•	•	•	•	•	•
SPLW		Alls	•	•	•	•	•	•	•
AERSET		Alls	•	•	•	•	•	•	•
PR3		Alls	•	•	•	•	•	•	•
DCPX (version with standard fan "°" Standard)	(1)	°	-	-	-	-	83	83	83
		L	58	58	58	58	standard	standard	standard
DCPX (version with high static pressure fan "M")		°	62	62	62	63	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
Accessories can only be applied in the factory									
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.

Field **Description**

1,2,3 **ANL**

4,5,6 **Size**
290-300-340-400-580-620-650

7 **Field of use**
- **°** Standard with produced water down to +4 °C
- **Y** Low leaving water up to -6 °C
- **X** Electronic thermostatic valve temperature of water produced up to +4°C (for different temperatures please contact us)

8 **Model**
- **°** Only cooling
- **C** Condensing unit

9 **Heat recovery**
- **°** Without heat recovery
- **D** Desuperheater (3)

10 **Version**
- **°** Standard
- **L** Low noise versions (4)

11 **Coil**
- **°** Aluminium
- **R** Copper
- **S** Tinned copper
- **V** Coated

12 **fans**
- **°** Standard
- **M** High static pressure
- **J** Inverter (5)

13 **Power supply**
- **°** 400V/3N/50Hz

14 **Soft-start**
- **°** Without Soft Start
- **S** With Soft Start

15-16 **Integrated hydronic module user side**
- **00** Without hydronic module
- **01** n° 1 Low head pump and buffer tank
- **02** n° 2 Low head pumps and buffer tank
- **03** n° 1 high head pump and buffer tank
- **04** n° 2 high head pumps and buffer tank
- **P1** n° 1 Low head pump
- **P2** n° 2 Low head pumps
- **P3** n° 1 high head pump
- **P4** n° 2 high head pumps

(3) "D" option is not compatible with "Y" valve.
(4) Sizes up 290 to 400 are available only in the silenced mode "L".
(5) The fan inverter is only available in sizes from 580 to 650

Technical data

Model				290	300	340	400	580	620	650
Cooling capacity		°	kW	-	-	-	-	111	124	133
		L	kW	55	60	66	76	104	114	121
Total power input		°	kW	-	-	-	-	40,36	47,13	54,40
		L	kW	20,96	22,99	25,19	29,88	43,69	51,23	59,44
EER		°	W/W	-	-	-	-	2,74	2,63	2,44
		L	W/W	2,60	2,60	2,61	2,54	2,38	2,23	2,03
ESEER		°		-	-	-	-	4,03	3,99	3,72
		L		3,83	3,83	3,93	3,83	3,71	3,68	3,52
Water flow rate		°	l/h	-	-	-	-	19205	21472	23013
		L	l/h	9422	10339	11388	13154	18029	19772	20933
Total pressure drop		°	kPa	-	-	-	-	81	61	70
		L	kPa	28	33	40	41	72	52	58
Usefoul head	**01-02**	°	kPa	-	-	-	-	74	80	61
	P1-P2	**L**	kPa	123	114	103	93	91	100	87
Usefoul head	**03-04**	°	kPa	-	-	-	-	167	174	155
	P3-P4	**L**	kPa	162	153	179	170	183	193	180

Cooling (14511:2011)
Evaporator water temperature (in/out) 12°C/7°C; External air temperature 35°C

Model				290C	300C	340C	400C	580C	620C	650C
Cooling capacity		°	kW	-	-	-	-	115	128	138
		L	kW	55	61	67	77	108	117	126
Total power input		°	kW	-	-	-	-	39,6	46,2	53,4
		L	kW	20,7	22,5	24,8	29,4	39,5	47,3	54,9
EER		°	W/W	-	-	-	-	2,91	2,77	2,59
		L	W/W	2,66	2,69	2,69	2,62	2,73	2,48	2,30
Connections										
gas line			Ø	28	35	35	42	42	42	54
liquid line			Ø	22	22	22	28	28	28	35

Cooling:
Evaporating temperature 5°C; External air temperature 35°C

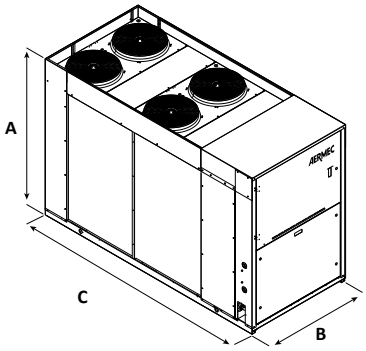
GENERAL DATA				290	300	340	400	580	620	650
Electrical data										
Total input current	(1)	°	A	-	-	-	-	70	82	94
	(1)	L	A	38	41	46	55	74	87	101
Maximum current (FLA)	(1)		A	49	53	58	69	85	99	112
Starting current (LRA)	(1)		A	130	131	162	183	262	308	320
Starting current with Soft Start				99	101	123	140	198	230	242
Compressor										
Compressor			type	scroll	scroll	scroll	scroll	scroll	scroll	scroll
			n°	2	2	2	2	2	2	2
Circuit			n°	1	1	1	1	1	1	1
capacity Control			%	0-50-100	0-50-100	0-50-100	0-50-100	0-50-100	0-50-100	0-50-100
Refrigerant			type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Exchanger user side										
Exchanger			type	plate	plate	plate	plate	plate	plate	plate
			n°	1	1	1	1	1	1	1
Water connections		(in/out)	Ø	2"½	2"½	2"½	2"½	2"½	2"½	2"½
Fans standard										
Fans			type	Axial	Axial	Axial	Axial	Axial	Axial	Axial
			n°	4	4	4	6	2	2	2
Air flow			m^3/h	15600	15600	15600	20700	35900	35900	35900
Sound data										
Sound pressure level		°	dB(A)	-	-	-	-	50	50	51
		L	dB(A)	41	41	42	43	45	45	46
Sound power level		°	dB(A)	-	-	-	-	82	82	83
		L	dB(A)	73	73	74	75	77	77	78
Power supply			V/ph/Hz	400V/3N	400V/3N	400V/3N	400V/3N	400V/3N	400V/3N	400V/3N

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)

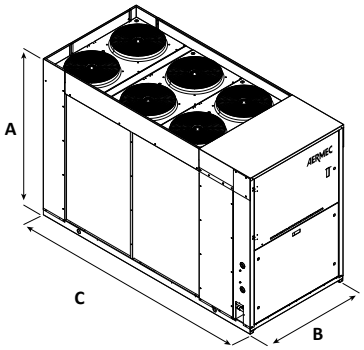
(1) The electrical data of the versions without hydronic module integrated

Dimensions (mm)

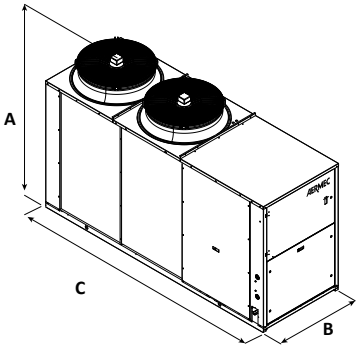
ANL°/L/C 290-300-340



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

Cod.: SANL290_650UY.06/1410

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