

ANL 290/650

Air cooled chillers
With axial fans
Cooling capacity from 54,5 to 132,9 kW

Variable Multi Flow®

VMF

R410A



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



• COOLING ONLY VERSION • VERSION WITH PUMP

• VERSION WITH PUMP AND STORAGE TANK

Features

- Available in 7 sizes.
- Cooling only.
- Monocircuit.
- R410A Gas.
- Available in 2 version:
 - (*) Standard version ANL 580/650.
 - (L) Low noise version ANL 290/650.
- High efficiency scroll compressors
- Flow switch as standard supply.
- Low and high pressure transducers as standard supply.
- **Cooling mode:**
 - Up to 43°C (ANL 290/400).
 - Up to 44°C (ANL 580/650).
- High efficiency exchangers.
- Axial fans with low sound level.
- Versions with hydronic kit (pump/pump-storage tank) options complete with water filter, flow switch, expansion tank and anti-freeze electric heater).
- Pump+Pump standby option controlled by manual switch.
- Electronic controller (Modu_control).
- Metallic protective cabinet with anti-corrosion polyester paint.
- Microprocessor control system
 - Control from the entering water temperature, with the possibility of selecting control of the leaving water temperature
 - Summer condensation control with 0-10V

modulating signal depending on pressure, compensated according to the outside air temperature (with DCPX accessory)

- Intelligent defrosting to decay of pressure.
- Automatic rotation of compressors and pumps based on operating hours.
- Load limiting safety control.
- Automatic reset of alarms before total block.
- Alarm history.

Accessories

- **DCPX:** Low temperature device for correct cooling mode operation with ambient temperatures from less than 20 °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.
- **MODU-485A:** RS-485 interface for supervision systems with MODBUS protocol.
- **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.

- **VT:** Anti-vibration mounts.
- COMPATIBILITY WITH THE VMF SYSTEM.**
For further system information please refer to the specific documentation.

Accessory compatibility

ANL	vers	290	300	340	400	580	620	650
DCPX (version with standard fan "ion")	°/L	58	58	58	58	66	66	66
DCPX (version with high static pressure fan "M")	°/L	58 (x2)	58 (x2)	58 (x2)	58 (x2)	66	66	66
PR3	°/L	•	•	•	•	•	•	•
MODU-485A	°/L	•	•	•	•	•	•	•
AERWEB-300	°/L	•	•	•	•	•	•	•
MULTICONTROL	°/L	•	•	•	•	•	•	•
SPLW	°/L	•	•	•	•	•	•	•
VT (00-P1-P2-P3-P4)	°/L	•	•	•	•	•	•	•
VT (01-02-03-04)	°/L	•	•	•	•	•	•	•

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.

Code	DESCRIPTION	13	POWER SUPPLY
1,2,3	ANL		° 400V-3N -50 Hz
4,5,6	SIZE 290-300-340-400-580-620-650	14	SOFT START ° Without Soft Start S With Soft Start
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)	15-16	SORAGE TANK/PUMP 00 Without pump or storage tank 01 Low head pump and buffer tank 02 Single and standby low head pump and buffer tank 03 Single high head pump and buffer tank 04 Single and standby high head pump and buffer tank P1 Low head pump P2 Single and standby low head pump P3 Single high head pump P4 Single and standby high head pump
8	MODEL ° Cooling only		ATTENTION: • Sizes up 290 to 400 are available only in the silenced mode "L". • The configuration (02-04-P2-P4) option controlled by manual switch. • "D" option is not compatible with "Y" valve.
9	HEAT RECOVERY ° Without heat recovery D With partial heat recovery (desuperheater)		
10	VERSION ° Standard L Low noise		
11	COIL ° Aluminium R Copper S Tinned copper V Coated		
12	FAN ° Standard M High static pressure J Inverter (ANL-° 580-620-650)		

Technical data

ANL° COOLING ONLY MODEL			290	300	340	400	580	620	650
Cooling capacity	kW	°	-	-	-	-	110,8	124,0	132,9
	kW	L	54,5	59,8	65,8	76,0	104,0	114,3	120,9
Total power input	kW	°	-	-	-	-	40,3	47,1	54,3
	kW	L	20,9	23,0	25,2	29,9	43,6	51,2	59,4
Evaporator water flow rate	l/h	°	-	-	-	-	19050	21330	22860
	l/h	L	9380	10280	11320	13080	17890	19660	20800
Total pressure drop	kPa	°	-	-	-	-	81	61	70
	kPa	L	28	33	40	41	72	52	58
EER	W/W	°	-	-	-	-	2,75	2,63	2,45
	W/W	L	2,60	2,60	2,62	2,55	2,38	2,23	2,04
ESEER	W/W	°	-	-	-	-	4,03	3,99	3,72
	W/W	L	3,83	3,83	3,93	3,83	3,71	3,68	3,52
POWER SUPPLY									
Power supply	V	°/L	400-3N-50 (with thermomagnetic switches)						
Total input current	A	°	-	-	-	-	69,5	81,7	94,2
	A	L	37,7	40,5	46,2	54,5	73,9	87,1	101,1
Maximum current (FLA)	A	°/L	49	53	58	69	85	99	112
Starting current (LRA)	A	°/L	130	131	162	183	262	308	320
Starting current with Soft Start	A	°/L	99	101	123	140	198	230	242
IP Protection									
IP	-	°/L	24	24	24	24	24	24	24
GAS									
Type	-	°/L	R410A						
SCROLL COMPRESSOR									
Compressor/Circuit	n°/n°	°/L	2/1	2/1	2/1	2/1	2/1	2/1	2/1
Crank case	n°/W	°/L	2/44	2/44	4/44	4/44	2/75	2/75	2/75
FAN (Axial)									
Quantity	n°	°/L	4	4	4	6	2	2	2
EVAPORATORS (Plates)									
Quantity	n°	°/L	1	1	1	1	1	1	1
Hydraulic connection (VICTAULIC)	Ø	°/L	2"	2"	2"	2"	2-1/2"	2-1/2"	2-1/2"
SOUND DATA									
Sound power	dB(A)	°	-	-	-	-	82	82	83
	dB(A)	L	73	73	74	75	77	77	78
Sound pressure	dB(A)	°	-	-	-	-	50	50	51
	dB(A)	L	41	41	42	43	45	45	46

DATA DECLARED IN ACCORDANCE WITH UNI EN 14511-2: 2011

COOLING

Evaporator water inlet	12°C
Evaporator water outlet	7°C
External air temperature	35 °C

SOUND POWER

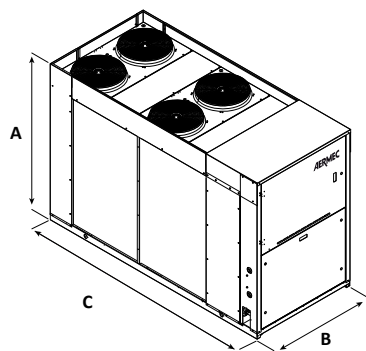
Aermec determines sound power values on the basis of measurements made in accordance with ISO 9614-2, as required for Eurovent certification.

SOUND PRESSURE

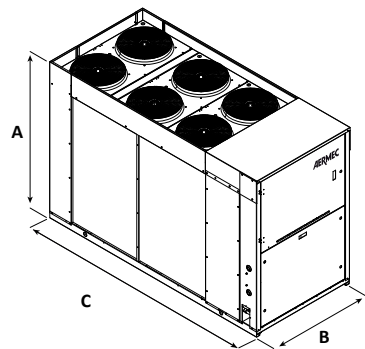
Sound pressure in free field conditions over a reflective plane (directivity factor Q=2) at 10 m distance from the external surface of unit, in accordance with ISO 3744.

Dimensions (mm)

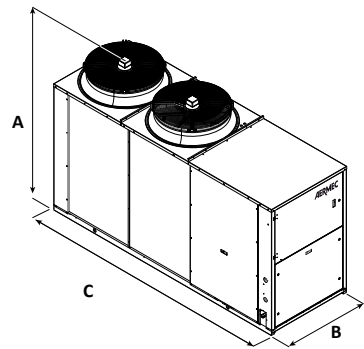
ANL°/L 290-300-340



ANL°/L 400



ANL°/L 580-620-650



DIMENSIONS/WEIGHT				ANL 290	ANL 300	ANL 340	ANL 400	ANL 580	ANL 620	ANL 650
Height	A	mm	°/L	1605	1605	1605	1605	1875	1875	1875
Width	B	mm	°/L	1100	1100	1100	1100	1100	1100	1100
Depth	C	mm	°/L	2450	2450	2450	2450	3200	3200	3200
Empty weight		Kg	°/L	628	636	648	666	854	925	970
Functioning weight		Kg	°/L	646	654	666	685	876	949	994

The technical data given in this documentation are not binding. Aermec S.p.A. reserves the right to apply at any time all the modifications deemed necessary for improving the product.

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