WMX

Water-water chiller

Cooling capacity 280,1 ÷ 324,2 kW

- **High efficiency also at partial loads ESEER 8,4**
- **Compact design**
- **Extremely flexible and reliable**

DESCRIPTION

Indoor unit for the production of chilled water, equipped with magnetic levitation centrifugal compressors and system side, flooded source heat exchangers that guarantee a 50% reduction of the refrigerant load in comparison to conventional flooded heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
The technological choices made, always oriented to the highest quality and efficiency can reach 5.71 EER values (class A for the working conditions Eurovent).

EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

— 5 times lighter than an equivalent screw compressor.
— Extremely compact wide to allow access through a standard doorway.
— High efficiency with generously sizes heat exchanger.

Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.
Provided with inverter technology that permits capacity modulation down to 30% A version.
Built-in device to reduce starting current (only 6 Amps!)

Operating field

Water produced from 20 °C up to 45 °C on Condenser side and from 5 °C up to 20 °C on Evaporator side.

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBAC-ONE: Ethernet communication interface for Bacnet/IP and Modbus TCP/IP protocols, HTTPS protocol for web interface, encrypted communication protocols and access credential management in accordance with the latest standards. One accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP and Modbus TCP/IP protocols. 1 accessory is provided for each unit control board.
AERNET: The device remotely controls, manages and remotely monitors a chiller/heat pump using a PC, smartphone or table via a Cloud connection. AERNET acts as Master while each connected unit is configured as Slave up to a maximum of 6 control cards. The connection is made via cable and/or USB key. Wi-Fi connectivity is not available. It is also possible to save a log file with all the data from the connected units to your terminal with a simple click for possible post-analysis. With the purchase of the Router, the Customer benefits from a 24-month free period during which he can use the Aernet Service at no additional cost. At the end of this initial period, the Service may be renewed by subscribing to a 1, 2 or 3 year subscription. For further details on costs and renewal methods, please contact our office or consult the technical documentation available on our website. www.aermec.com.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

CONFIGURATOR

Field	Description
1,2,3	WMX

Field	Description
4,5,6	**Size** 300
7	**Efficiency**
A	High efficiency

Field	Description
U	Very high efficiency
8	**Version**
°	Standard
L	Silenced

PERFORMANCE SPECIFICATIONS

Size			300
Efficiency: A			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	324,2
Input power	°,L	kW	60,3
Cooling total input current	°,L	A	94,00
EER	°,L	W/W	5,37
Water flow rate system side	°,L	l/h	55.761
Pressure drop system side	°,L	kPa	34
Water flow rate source side	°,L	l/h	65.750
Pressure drop source side	°,L	kPa	41

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			300
Efficiency: U			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	280,1
Input power	°,L	kW	48,9
Cooling total input current	°,L	A	78,00
EER	°,L	W/W	5,72
Water flow rate system side	°,L	l/h	48.180
Pressure drop system side	°,L	kPa	25
Water flow rate source side	°,L	l/h	56.338
Pressure drop source side	°,L	kPa	30

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			300
Efficiency: A			
SEER - 12/7 (EN14825: 2018)			
SEER	°,L	W/W	8,99
Seasonal efficiency	°,L	%	356,60
Water Regulation (1)	°,L	type	FW/VO-FW
SEPR - (EN 14825: 2018)			
SEPR	°,L	W/W	9,70
Water Regulation (1)	°,L	type	FW/FO-FW

(1) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

Size			300
Efficiency: U			
SEER - 12/7 (EN14825: 2018)			
SEER	°,L	W/W	9,04
Seasonal efficiency	°,L	%	358,50
Water Regulation (1)	°,L	type	FW/VO-FW
SEPR - (EN 14825: 2018)			
SEPR	°,L	W/W	10,35
Water Regulation (1)	°,L	type	FW/FO-FW

(1) VW/VO - variable water flow rate/variable outlet temperature; FW/VO - fixed water flow rate/variable outlet temperature; VW/FO - variable water flow rate/fixed outlet temperature; FW/FO - fixed water flow rate/fixed outlet temperature.

ELECTRIC DATA

Size			300
Efficiency: A, U			
Electric data			
Maximum current (FLA)	°,L	A	135,0
Peak current (LRA)	°,L	A	6,0

GENERAL TECHNICAL DATA

Size			300
Efficiency: A, U			
Compressor			
Type	°,L	type	Centrifugal
Compressor regulation	°,L	type	Inverter
Number	°,L	no.	1
Circuits	°,L	no.	1
Refrigerant	°,L	type	R134a
Total refrigerant charge (1)	°,L	kg	75,00
Potential global heating (GWP)	°,L		1430
Equivalent CO_2	°,L	tCO_2eq	107,25
Source side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"
System side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact with Spray system
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

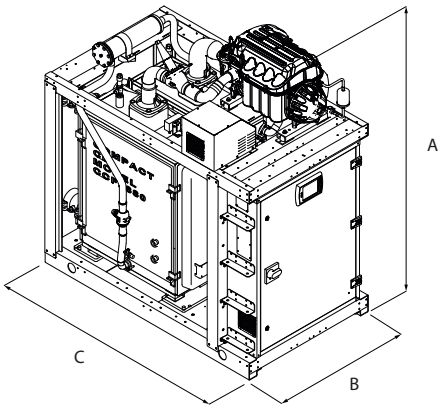
Size			300
Efficiency: A			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	90,0
	L	dB(A)	84,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			300
Efficiency: U			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	85,0
	L	dB(A)	78,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			300
Efficiency: A, U			
Dimensions and weights			
A	°	mm	1905
	L	mm	1942
B	°,L	mm	1041
C	°,L	mm	1770
Empty weight	°	kg	2.025
	L	kg	2.210

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