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**

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

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 supervision systems with MODBUS protocol.
AERBACP: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER_EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

CONFIGURATOR

Field	Description
1,2,3	**WMX**
4,5,6	**Size** 300
7	**Efficiency**
A	High efficiency
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	94,0
EER	°,L	W/W	5,37
Water flow rate system side	°,L	l/h	55761
Pressure drop system side	°,L	kPa	34
Water flow rate source side	°,L	l/h	65750
Pressure drop source side	°,L	kPa	41
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	78,0
EER	°,L	W/W	5,72
Water flow rate system side	°,L	l/h	48180
Pressure drop system side	°,L	kPa	25
Water flow rate source side	°,L	l/h	56338
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
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	8,99
	U	W/W	9,04
Seasonal efficiency	A	%	356,6%
	U	%	358,5%
SEPR - (EN 14825: 2018) High temperature (2)			
SEPR	A	W/W	9,70
	U	W/W	10,35

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

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

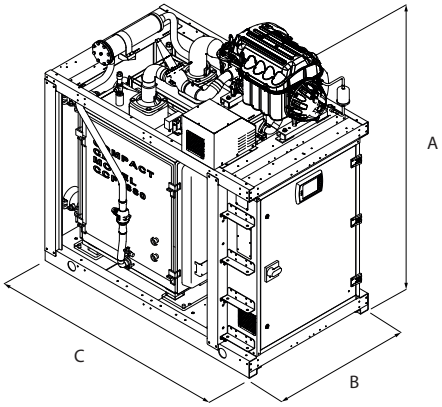
GENERAL TECHNICAL DATA

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
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"

Size			300
Efficiency: A			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	90,0
	L	dB(A)	84,0
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	2025
	L	kg	2210

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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