

## WMX-WMG

## Water cooled chiller

Cooling capacity 280,1 ÷ 324,2 kW

- High efficiency also at partial loads  
ESEER 8,4
- Design compact
- Extremely reliable and flexible



Units for internal installation offering chilled water.

Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm. They are equipped with centrifugal compressors and heat exchangers, plant side and flooded the source, ensuring a reduction in the refrigerant charge by 50% compared to conventional flooded exchangers.

The base, the structure and the panels are made of steel treated with rustproof polyester paint.

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).**

Component layout designed to enable several units to be positioned side by side in restricted plant rooms. Ideal when standby is required or when cooling duty is to be increased at a later date

### VERSIONS

**WMX** Chiller with R134a

**WMG** Chiller with R1234ze

**Both versions can be silenced**

**HFO R1234ze** is a mixture featuring

**ODP=0 e GWP (Global Warming Potential) = 7,**

**R134a GWP = 1430,** with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

### NEW GENERATION TWO-STAGE OIL FREE CENTRIFUGAL COMPRESSOR

with magnetic levitation friction free bearings

#### Compressor features:

- Operates without oil as bearings are magnetic levitation type. Vibration free and very quiet
- Provided with inverter technology that permits capacity modulation down to 20% A version
- Integrated controller that **reduces starting current to 6 A only**

#### Unit 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
- Extraordinary efficiency at part load (**ESEER up to 8.4 among the highest in the market**)
- Electronic expansion valve
- Electronic controller for monitoring and proactive controls
- Microprocessor control system
- LCD user interface: colour touch-screen with simple and intuitive graphical menu
- **Acoustic enclosure (option):** heavy gauge galvanized sheet steel with internal acoustic insulation.

#### ACCESSORIES

**AER485P1:** RS-485 interface for supervision systems with MODBUS protocol.

**PTW:** Remote control of chiller operating functions.

**MULTICHILLER\_EVO:** Control system for multiple parallel installed constant flow chillers providing individual chiller on/off and control capability. (**When this accessory is present, the AER485P1 is factory fitted as standard.**)

**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.

## CONFIGURATOR

Field	Description
1,2	WM
3	Refrigerant
	X R134a
	G R1234ze
4,5,6	Size
	300

## TECHNICAL DATA

### High efficiency - A (400V 3 ~ 50Hz)

Sizes		WMX300	WMG300
<b>Cooling performance 12 °C/7 °C (1)</b>			
Cooling capacity	kW	324,2	312,4
Total input power	kW	60,3	57,6
Cooling total input current	A	94	85
EER	W/W	5,37	5,42
Water flow rate system side	l/h	55760	53730
Pressure drops	kPa	34	31
Water flow rate source side	l/h	65750	63784
Pressure drops	kPa	41	36

(1) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

Field	Description
7	Efficiency
	A High efficiency
	U Very high efficiency
8	Versions
	° Standard
	L Low noise

### Very high efficiency - U (400V 3 ~ 50Hz)

Sizes		WMX300	WMG300
<b>Cooling performance 12 °C/7 °C (1)</b>			
Cooling capacity	kW	280,1	282,3
Total input power	kW	48,9	49,1
Cooling total input current	A	78	74
EER	W/W	5,72	5,75
Water flow rate system side	l/h	48179	48548
Pressure drops	kPa	25	25
Water flow rate source side	l/h	56337	57150
Pressure drops	kPa	30	29

(1) Data 14511:2018; System side water heat exchanger 12 °C/7 °C; External air 35 °C

## ENERGY DATA

Sizes			WMX300	WMG300
<b>Cooling capacity with low leaving water temp (UE n° 2016/2281)</b>				
SEER	A	W/W	8,53	8,59
	U	W/W	8,55	8,53
η <sub>sc</sub>	A	%	333,1	335,5
	U	%	333,9	333,0

## GENERAL TECHNICAL DATA

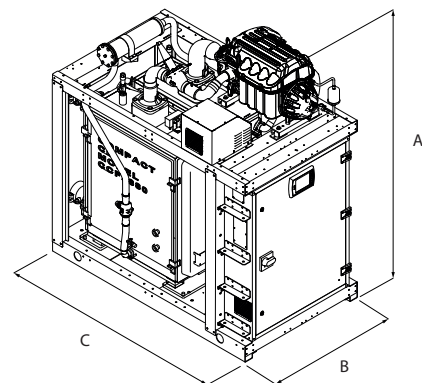
Sizes			WMX300	WMG300
<b>Electrical data</b>				
Maximum current (FLA)		A	135	150
Peak current (LRA)		A	6	6
<b>Two-stage oil free centrifugal compressor</b>				
Compressors / Circuit		n°/n°	1/1	1/1
Refrigerant		type	R134a	R1234ze
<b>Heat exchanger system side</b>				
Heat exchanger		type/n°	Floded Spray system /1	
<b>Heat exchanger source side</b>				
Heat exchanger		type/n°	Shell&tube compact /1	
<b>Sound data (1)</b>				
Sound power level	A	dB(A)	90	
	U	dB(A)	85	
	AL	dB(A)	84	
	UL	dB(A)	78	

(1) 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.

■ 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

Sizes			WMX300	WMG300
<b>Dimensions and weights</b>				
Height	A/U	A	mm	1905
	AL/UL	A	mm	1942
Width		B	mm	1041
		C	mm	1770
Length			mm	1770
	A/U		kg	2025
Weight	AL/UL		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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