

# WMX WMG

Water cooled chiller, For indoor installation centrifugal compressor flooded evaporator Cooling capacity 280 - 324 kW







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



### HIGH EFFICIENCY ALSO AT PARTIAL LOADS ESEER 8,4

- DESIGN COMPACT
- EXTREMELY RELIABLE AND FLEXIBLE

#### **Features**

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**

- AER485P1TW: RS-485 interface for supervision systems with MODBUS protocol.
- PTW: Remote control of chiller operating

#### functions.

 MULTICHILLER: Control system for multiple parallel installed constant flow chillers providing individual chiller on/off and control capability. (When this accessory is present, the AER485P1TW is factory fitted as standard).

#### **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 demanding of system requirements.

Field Description
1,2 WM
3 Refrigerant
X R134a
G R1234ze

Size

300

7 Efficiency
A High efficiency
U Very high efficiency
Versions

° Standard **L** Low noise

#### **Technical data**

4,5,6

WMX/G - A		300X	300G	
	V/ph/Hz		400V/3/50Hz	
Cooling capacity	kW	323,6	311,8	
Total input power	kW	60,4	57,6	
EER		5,36	5,41	
ESEER		8,19	8,27	
		A	A	
Cooling Energy Class Eurovent Water flow rate system side	l/h	55900	53400	
Pressure drop	kPa	34	31	
Water flow rate geothermal side	l/h	67700	63600	
Pressure drop	kPa	41	36	
WMX/G - U		300X	300G	
	1// 1 // 1	100/10/5011		

W٨	WMX/G - U		300X	300G
	V/ph/Hz			400V/3/50Hz
	Cooling capacity	kW	279,7	281,8
	Total input power	kW	49,0	49,1
	EER		5,71	5,74
2	ESEER		8,44	8,31
<u>ن</u>	Cooling Energy Class Eurovent		A	A
	Water flow rate system side	l/h	48300	48400
	Pressure drop	kPa	25	25
	Water flow rate geothermal side	l/h	58300	57800
	Pressure drop	kPa	30	29

#### Date (14511:2013)

Water system side (in/out) 12°C/7°C; Water geothermal (in/out) 30°C/35°C

			300X	300G		
Electrical data						
Total input current (cooling)	Α	Α	94	85		
lotal input current (cooling)	U	Α	78	74		
Maximum current (FLA)		Α	135	150		
Starting current (LRA)		Α	6	6		
Two-stage oil free centrifugal compress	or					
Compressors / Circuit		n°/n°	1/1	1/1		
Refrigerant		Type	R134a	R1234ze		
Heat exchanger system side						
Heat exchanger		Type/n°	Floded Spray	Floded Spray system /1		
Heat exchanger source side						
Heat exchanger		Type/n°	Shell&tube o	Shell&tube compact /1		
Sound data						
	A	dB(A)	90	)		
Carried an arrival larvel	U	dB(A)	85	85		
Sound power level	Al	L dB(A)	84	1		
	Ul	L dB(A)	78	3		

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

#### **Dimensions (mm)**

WM				300X	300G
Height	A/U	Α	mm	1905	
	AL/UL	Α	mm	1942	
Width		В	mm	1041	
Length		C	mm	1770	
Woight	A/U		kg	2025	2205
Weight	AL/UL		kg	2390	2430

