

TW110

Water cooled modular chiller with centrifugal compressor



Aermec participates in the EUROVENT Program: LCP The products of interest can be found on the website www.eurovent-certification.com









Characteristics

- · Cooling only version
- New generation two-stage oil free centrifugal compressor with magnetic levitation friction free bearings
- Plate heat exchangers optimised for use with refrigerant R134a
- Extremely compact: only 805 mm wide to allow access through a standard doorway
- 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
- High efficiency with generously sizes heat exchanger

- Extraordinary efficiency at part load (up to 30% higher IPLV when compared with standard chillers)
- Electronic expansion valve

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 25%
- Integrated controller that reduces starting current to 6 A only
- 5 times lighter than an equivalent screw compressor
- Electronic controller for monitoring and pro-

- active controls
- Microprocessor control system
- LCD user interface: colour touch-screen with simple and intuitive graphical menu
- Acoustic enclosure: 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)

Technical data

Mod.		TW 110
Cooling capacity	kW	284
Total input power	kW	58,47
Evaporator water flow rate (7 °C)	l/h	49020
Evaporator pressure drop	kPa	30
Condenser water flow rate (30 °C)	l/h	58236
Condenser pressure drop	kPa	43
ENERGY INDEX		
EER	W/W	4,86
ESEER	W/W	7,05
ELECTRICAL DATA		
Power supply	-	400V 3~ 50Hz
Input current	Α	88
Maximum current (FLA)	Α	134
Starting current (LRA)	Α	6
SOUND DATA		
Sound pressure	dB(A)	77
Sound power	dB(A)	49
HYDRAULIC CONNECTION		
Evaporator hydraulic connection (Victaulic)	Ø	3"
Condenser hydraulic connection (Victaulic)	Ø	3"

Cooling

- leaving water temperature 7°C;
- condenser entering water temperature 30 °C;
- $\Delta t = 5^{\circ} C;$

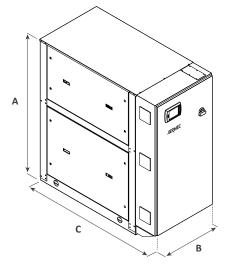
Sound power:

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

Sound pressure: Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744)

Data declared in accordance with UNI EN 14511:2013

Dimensions (mm)



Model		TW 110
Height	[mm] (A)	1727
Width	[mm] (B)	805
Depth	[mm] (C)	1653
Weight	kg	960

