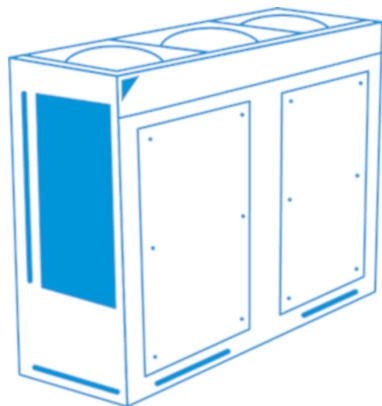


EWAT090CZP-A2

- > Air cooled chiller
- > > Daikin DC-Inverter Scroll Compressor
- > Premium efficiency version
- > High Efficiency
- > R-32 refrigerant

- ➔ **Unit description:** Daikin air cooled chiller with inverter driven hermetic scroll compressors and R32 refrigerant. Unit colour: Daikin White.
- ➔ **Compressor:** Inverter driven hermetic orbiting scroll are combined on each unit. Inverter compressors continuously adjust compressor speed to actual demand. Fewer power-consuming starts and stops result in decreased energy consumption and more stable temperatures. Compressors are equipped with oil heaters that keeps the oil from being diluted by the refrigerant when the chiller is not running.
- ➔ **Evaporator:** The unit is equipped with a direct expansion plate to plate type evaporator. This heat exchanger is made of stainless steel brazed plates and covered with nitrile rubber based elastomeric foam. Unit is equipped with the necessary devices for plant integration, such as: flow switch, treated water connections, air purge and drain valves, safety valve, shut off valve.
- ➔ **Condenser:** Fins and tubes air cooled coil. Fins are designed with non-symmetric waffle louvres to enhance the heat exchange and improve the efficiency and compactness of the unit. The presence of hydrophylic and anti-corrosion treatment on the coil fins enhances the resistance to the aggressive environments.
- ➔ **Condenser coil fans:** Unit fans are axial type equipped with Brushless DC motor to maximize performances. The material of the blades is glass reinforced resin and each fan is protected by a guard. Fans offer an available external static pressure equal to allow a ducted installation.
- ➔ **Refrigerant circuit:** Each refrigerant circuit includes: Compressors, Refrigerant, Air Cooled Condenser, Electronic expansion valve, Oil separator, High pressure switch, refrigerant stop valves (liquid and gas).



Unit Overview

Model Number	Capacity kW	IPLV.IP kW / kW	Voltage	Boost
EWAT090CZP-A2	84.13	5.610	400 V / 50 Hz / 3N~	No

Performances calculated according to EN14511-3

Cooling mode performances

Cooling capacity	84.13 kW	IPLV.IP	5.610 kW / kW
Power input	31.12 kW	SEER	5.18 kW / kW
Cooling Efficiency EER	2.703 kW / kW	$\eta_{s,c}$	204.2 %
Lw / Lp @ 1m	85 dB(A) / 67 dB(A)	SEPR	7.14 kW / kW
Ambient temperature	35 °C		
Evaporator			
Fluid IN/OUT	12 °C / 7 °C	Water Flow	4.470 l/s
Pressure Drops	22.4 kPa		
Fluid	Ethylene Glycol	Fouling Factor	1.00E-5 m ² °C/kW
Glycol quantity	35 %		

SEER declared according to EN14825, fan coil application 12/7°C (inlet/outlet) water temperatures. SEPR declared according to EN14825:2018, high temperature process cooling application. Sound power level according to ISO 9614-1. IPLV.IP and seasonal efficiency data generally refer to standard unit without options

Cooling performance at Standard Conditions - With Water

Cooling capacity	88.77 kW	IPLV.IP	5.610 kW / kW
Power input	31.13 kW	Cooling Efficiency EER	2.852 kW / kW
Ambient temperature	35 °C		
Evaporator			
Fluid IN/OUT	12 °C / 7 °C	Water Flow	4.230 l/s
Pressure Drops	20.3 kPa		
Fluid	Water	Fouling Factor	1.00E-5 m ² °C/kW

Unit information

Compressor type	Scroll	Refrigerant charge	14.4 kg
Capacity control	InverterControlled	Refrigerant type	R32
Compressor N°	2	Circuit N°	2
Condenser fans N°	4	Evaporator type	BrazedPlate
Condenser fans control	Variable Frequency Drive	Pump	Low lift pump
Nominal air flow	13400 l/s		

Actual refrigerant charge depends on the final unit construction, refer to unit nameplate.

Electrical information

Power supply	400 V / 50 Hz / 3N~	Compressor starting method	Variable Frequency Drive
Running current	57.6 A	Max. inrush current	0 A
Max. Running current	88.4 A		

Voltage tolerance $\pm 10\%$. Phase Voltage unbalance $\pm 3\%$. Electrical data referred to standard unit without options, refer to unit name plate data.

Acoustic information


Sound pressure level at 1 m from the unit (rif. 2 x 10 ⁻⁵ Pa)								db(A)
63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	67
75	71	66	63	61	61	53	46	
Sound pressure level from the distance (rif. 2 x 10 ⁻⁵ Pa)								
Distance [m]				5				10
Lp [db(A)]				40.16				35.1

Values referred to Evap. IN/OUT 12/7°C and Cond. IN/OUT 30/35°C, full load operation, standard unit configuration without options. Sound pressure level calculated from sound power level. Sound pressure in octave band is for information only and not considered binding.

Physical information

Connections size	50.8 mm	Length	814 mm
Height	1878 mm	Width	3506 mm
Weight shipping/operating	727 kg / 735 kg		

Information referred to standard unit configuration without options, refer to certified unit drawing.

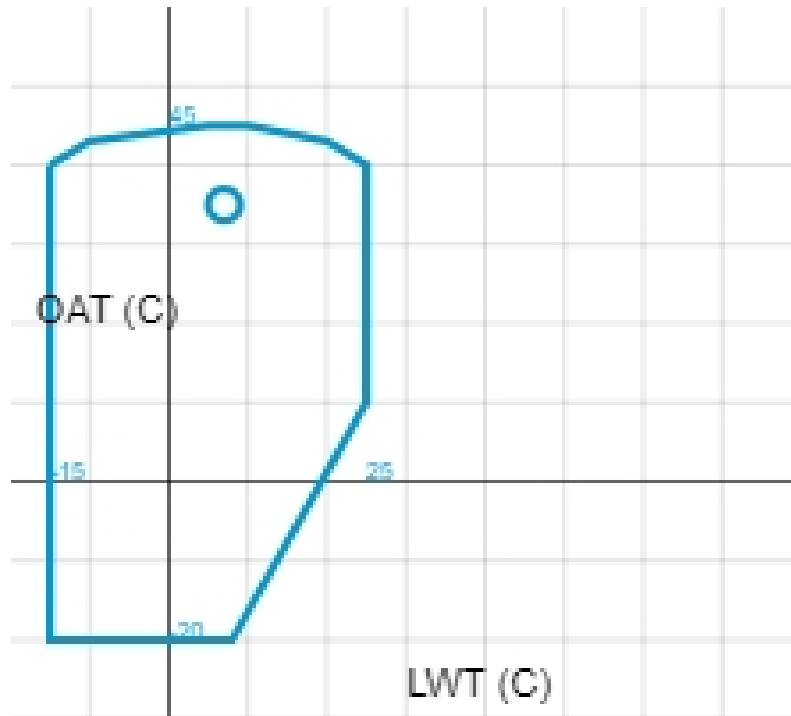
General notes

For more information about the above selected product, please go to <http://www.daikineurope.com/industrial/>. Unit performances are reproducible in laboratory test environment only in accordance to recognized industry standards. This technical data sheet is generated by Daikin Applied Tool software designed and distributed by Daikin Applied Europe S.p.A. The present software does not constitute an offer binding upon Daikin Applied Europe S.p.A who compiled the content of this software to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein.

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This product is manufactured in Italy.



Envelope chart

Certification notes

Within the scope of AHRI Air-Cooled Water-Chilling Packages Certification Program. AHRI Certified performance may be obtained from the manufacturer's representative.

Certified in accordance with Eurovent Certification Program: Liquid Chilling Packages and Heat Pumps (LCP-HP). Standard ratings are specified in the section "Rating requirements" of the Rating Standards. All standard ratings are verified by tests conducted in accordance with the following standards: EN 14511-3:2013 (performance testing) and ISO 9614 (acoustic testing).



