

**EWAT570B-SSB2+OP173**

- > Air cooled chiller
- > Scroll compressor
- > Standard efficiency version
- > Standard sound configuration
- > R-32 refrigerant

- **Unit description:** Daikin air-cooled chiller with hermetic scroll compressors and R32 refrigerant. Unit colour is ivory White (Munsell code 5Y7.5/1) (±RAL7044).
- **Compressors:** Are hermetic orbiting scroll complete with motor over-temperature and over-current protection devices. Each compressor is equipped with an oil heater that keeps the oil from being diluted by the refrigerant when the chiller is not running. The compressors are connected in Tandem or Trio configuration on each refrigerant circuit. Each compressor is mounted on rubber antivibration mounts for a quiet operation. Unit is delivered with complete oil charge.
- **Evaporator:** The unit is equipped with a direct expansion plate to plate evaporator. This heat exchanger is made of stainless steel brazed plates and covered with a 20mm closed cell insulation material. The exchanger is equipped with an electric heater for protection against freezing. Evaporator water connections are provided with Victaulic kit.
- **Condenser:** Full body Aluminium “Long Life Alloy” Microchannel coils providing superior resistance to corrosion compared to standard aluminium alloy. Coils’ layout is designed to guarantee optimized heat transfer allowing maximized performances and reduced turbulence to reduce sound emissions.
- **Condenser coil fans:** The condenser fans are propeller type with high efficiency design blades to maximize performances. Fan blades are made of glass reinforced resin and each fan is protected by a guard. Fan motors are internally protected from overtemperature and are IP54.
- **Refrigerant circuit:** Each unit has two independent refrigerant circuits and each one includes: Compressors, Refrigerant, Air Cooled Condenser, Electronic expansion valve, Liquid line shut off valve, Sight glass with moisture indicator, Filter drier, Charging valves, High pressure switch, High pressure transducers, Low pressure transducers and Suction temperature sensor.
- **Electrical panel:** Power and control are in the main panel that is manufactured to ensure protection against all weather conditions. It is IP54 and internally protected against possible accidental contact with live parts when the doors are open. The main panel is fitted with interlocked main switch door that interrupts power supply when opening.
- **Controller:** Latest generation MicroTech IV Type. Providing monitoring and control functions required for efficient operation and system integration of the unit. The software with predictive logic selects the most energy efficient combination of active compressors and electronic expansion valve position keeping stable operating conditions and maximizing chiller efficiency and reliability. The unit is compatible with Daikin on Site cloud platform for remote monitoring and standardly equipped with Master/Slave (sequencing and controlling up to 4 units) and ethernet connection to control it remotely through local network.



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**Cooling mode performances**

Cooling capacity	<b>552.3 kW</b>	Evaporator water IN/OUT	<b>10.00 °C / 5.00 °C</b>
Power input	<b>187.8 kW</b>	Evaporator water flow	<b>29.34 l/s</b>
EER Cooling Efficiency	<b>2.941 kW / kW</b>	Evaporator pressure drops	<b>91.2 kPa</b>
		Ambient temperature	<b>30.0 °C</b>
IPLV.IP	<b>4.930 kW / kW</b>	Lw / Lp @ 1m	<b>98 dB(A) / 78 dB(A)</b>
SEER / ηs	<b>4.56 / 179.4%</b>	Evaporator fluid	<b>Ethylene glycol 35%</b>
		Evaporator fouling factor	<b>0.000 m<sup>2</sup>C/W</b>

SEER declared according to EN14825, fan coil application 12/7°C (inlet/outlet) water temperatures. Sound power level according to ISO 9614-1. SEER and IPLV.IP refer to standard unit without options

**Cooling mode performances (free cooling)**

Cooling capacity	<b>124.02 kW</b>	Evaporator water IN/OUT	<b>6.12 °C / 5.00 °C</b>
Power input	<b>11.35 kW</b>	Evaporator water flow	<b>29.34 l/s</b>
EER Cooling Efficiency	<b>10.93 kW / kW</b>	Unit pressure drops	<b>128.2 kPa</b>
Operating mode	<b>Free Cooling Only</b>	Air ambient temperature	<b>0.0 °C</b>

FC\_notes

**Unit information**

Compressor type	<b>Scroll</b>	Refrigerant type	<b>R32</b>
Capacity control	<b>Step</b>	Condenser type	<b>Microchannel</b>
Compressor N°	<b>6</b>	Condenser fans N°	<b>8</b>
Circuit N°	<b>2</b>	Condenser fans control	<b>VFD</b>
Refrigerant charge	<b>81 kg</b>	Altitude	<b>0 MSL</b>
Nominal air flow	<b>40612 l/s</b>	Evaporator type	<b>Brazed plate + Shell &amp; tube</b>

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

**Electrical information**

Power supply	<b>400 V / 50.0 Hz / 3 Ph</b>	Max. inrush current	<b>762.69 A</b>
Running current	<b>321.38 A</b>	Compressor starting method	<b>Direct on line</b>
Max. Running current	<b>432.81 A</b>		
Max. current wires sizing	<b>476.09 A</b>		

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



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**Acoustic information**
**Sound pressure level at 1 m from the unit (rif. 2 x 10<sup>-5</sup> Pa)**

63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	db(A)
71.9	76.7	76.0	73.7	72.8	70.6	68.0	62.2	<b>77.9</b>

Values referred to Evap. IN/OUT 12/7°C and 35°C Amb., 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**

Evap. connections size	<b>114.3 mm</b>	Length	<b>4688 mm</b>
		Width	<b>2236 mm</b>
Weight shipping/operating	<b>3908 kg / 4125 kg</b>	Height	<b>2540 mm</b>

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



**EWAT570B-SSB2+OP173****Certification notes**

Outside the scope of AHRI Air-Cooled Water-Chilling Packages Certification Program or not optionally certified, but is rated in accordance with AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI).

**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. Specifications are subject to change without prior notice. Product images are indicative only and are intended for illustrative purposes only; pictures may be differed from the ordered product and are subject to change without prior notice. Daikin Applied Europe S.p.A. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this document. All content is copyrighted by Daikin Applied Europe S.p.A.

