

Technical Data Sheet



Cooling mode performances

Cooling capacity	84.91 kW	Evaporator water IN/OUT	12.00 °C / 7.00 °C
Power input	28.79 kW	Evaporator water flow	4.530 l/s
Cooling Efficiency EER	2.949 kW / kW	Evaporator pressure drops	38.4 kPa
		Ambient temperature	35.0 °C
IPLV.IP	4.830 kW / kW	Lw / Lp @ 1m	86 dB(A) / 68 dB(A)
SEER / ηs	4.25 / 167.0%	Evaporator fluid	Ethylene glycol 35%
SEPR	5.43	Evaporator fouling factor	0.000 m ² °C/W

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

Heat recovery mode performances (total heat recovery)

Cooling capacity	76.06 kW	Evaporator water IN/OUT	12.00 °C / 7.00 °C
Heat recovery capacity	83.31 kW	Evaporator water flow	4.060 l/s
Power input	30.74 kW	Evaporator pressure drops	31.5 kPa
TEER (C.C. + H.C.) / P.I.	5.180	HR water IN/OUT	40.00 °C / 45.00 °C
Ambient temperature	35.0 °C	HR water flow	4.000 l/s
		HR pressure drops	8.20 kPa

V3_notes

Unit information

Compressor type	Scroll	Refrigerant type	R32
Capacity control	Step	Condenser type	Microchannel
Compressor N°	2	Condenser fans N°	6
Circuit N°	1	Condenser fans control	Phase cut
Refrigerant charge	8.6 kg	Altitude	0 MSL
Nominal air flow	9036 l/s	Evaporator type	Brazed plate

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

Electrical information

Power supply	400 V / 50.0 Hz / 3 Ph	Max. inrush current	215 A
Running current	55.58 A	Compressor starting method	Direct on line
Max. Running current	75 A		
Max. current wires sizing	82.5 A		

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 10-5 Pa)								
63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	db(A)
62.3	67.2	66.5	64.1	63.3	61.0	58.4	52.7	68.3

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	76.1 mm	Length	2660 mm
		Width	1204 mm
Weight shipping/operating	737 kg / 742 kg	Height	1801 mm

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

Unit Overview

Model Number	Boost	Pump	Power supply
	No	None	400 V/ 50 Hz / 3~

Performances calculated according to EN14511-3

Cooling mode performances

Cooling capacity	88.26 kW	IPLV,IP	5.610 kW / kW
Power input	31.08 kW	SEER	5.030 kW / kW
Cooling Efficiency EER	2.840 kW / kW	$\eta_{s,c}$	198.2 %
Lw / Lp @ 1m	85.0 dB(A) / 67.0 dB(A)	SEPR	7.030 kW / kW
Ambient temperature	35.0 °C		

Evaporator

Fluid IN/OUT	12.00 °C / 7.00 °C	Fluid Flow	4.210 l/s
Pressure Drops	20.1 kPa		
Fluid	Water	Fouling Factor	0.00e+0°C m²/W

SEER declared according to EN14825, fan coil application 12/7°C (inlet/outlet) water temperatures. SEPR declared according to EN14825, high temperature process cooling application (not Eurovent certified). Sound power level according to ISO 9614-1. IPLV,IP and seasonal efficiency data generally refer to standard unit without option.

Heating mode performances

Heating capacity	85.70 kW	SCOP LT	4.00 kW / kW
Power input	29.13 kW	$\eta_{s,h^{LT}}$	157.0 %
COP Heating Efficiency	2.942 kW / kW	SCOP MT	2.89 kW / kW
Ambient temp dry/wet bulb	7.0°C/6.0°C	$\eta_{s,h^{MT}}$	112.6 %

Condenser

Fluid IN/OUT	44.00 °C / 49.00 °C	Fluid Flow	4.150 l/s
Pressure Drops	20.0 kPa	Fluid	@eth_glycol (35 %)
Fouling Factor	0.00e+0°C m²/W		

SCOPLT declared according to EN14825, average climate, low temperature application; seasonal efficiency data refers to standard unit.

SCOPMT declared according to EN14825, average climate, medium temperature application

Unit information

Capacity control	InverterControlled	Refrigerant type	R32
Compressor type	Scroll	Refrigerant charge	14.4 kg
Circuit N°	2	Condenser type	CuAl
Compressor N°	2	Evaporator type	BrazedPlate

Condenser fans control **Variable Frequency Drive**

Condenser fans N° **4**

Nominal air flow **13400 l/s**

Refrigerant charge data is intended as guideline only, refer to unit nameplate for specific value.

Electrical information

Power supply **400 V/ 50 Hz / 3~**

Compressor starting method **Variable Frequency Drive**

Running current **58.3 A**

Max. current wires sizing **91.4 A**

Max. Running current **83.1 A**

Max. inrush current **0.00 A**

Voltage tolerance $\pm 10\%$. Phase Voltage unbalance $\pm 3\%$. Electrical data are referred to base unit without additional options, refer to unit nameplate for specific value.

Acoustic information

Sound pressure level at 1 m from the unit (rif. 2×10^{-5} Pa)								
63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	db(A)
75.2	71.3	65.7	62.6	60.7	61.3	52.7	46.2	67.0

Values referred to Evap. IN/OUT $12/7^{\circ}\text{C}$ and Cond. IN/OUT $30/35^{\circ}\text{C}$, 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
		Width	3506 mm
Weight shipping/operating	693 kg / 701 kg	Height	1878 mm

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

Envelope

