

**Unit Overview**

Range	Sintesis Advantage	
Chiller model	Air-Water Heat Pump Scroll	
Model	CXAF 165 HEat LN EC R454B	
Unit Application	Process (cool=-20C/50C \ heat=-18C/35C)	
Compressor type	Scroll	
Refrigerant Type	Full charge R454B	
Eta s,c / SEER	/	
Eta s,h / SCOP	146.50 % / 3.74	
SEPR HT	5.71	Compliant
SEPR MT	3.93	Compliant
Type of free cooling	No Free Cooling	
Type of pump	Pump signal On/Off	
Electrical supply	400V/50Hz/3Ph	



Note: Pictures are not binding, unit may be depicted with accessories upon request.

Project conditions

	Cooling	Heating
Outdoor air dry bulb temperature	35.0 C	-5.0 C
Relative humidity		99 %
Fluid entering temperature	12.0 C	25.0 C
Fluid leaving temperature	7.0 C	30.0 C
Evap fluid type	Water	Water
Fouling Factor	0.017615 m2-deg C/kW	0.017615 m2-deg C/kW
Elevation	0.0 m	0.0 m

Unit performance data

	Cooling	(1)	Heating	(1)
Gross capacity	514.12 kW		407.67 kW	
Net capacity	513.74 kW		407.98 kW	
Gross unit power	180.07 kW		119.02 kW	
Gross EER / COP	2.86 EER (kW/kW)		3.43	
Net EER / COP	2.83 EER (kW/kW)		3.41	
Design flow rate	24.50 L/s		19.64 L/s	
Evaporator Pressure drop (Design)	27.5 kPa		18.9 kPa	
Evaporator Min Flow	12.40 L/s		12.40 L/s	
Evaporator Max Flow	56.80 L/s		56.80 L/s	

Acoustic data

Outdoor sound power level				94 dBA				(4)
Outdoor sound pressure level				62 dBA				(3)
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
Sound power spectrum (Lwa)	95 dB	90 dB	91 dB	90 dB	84 dB	79 dB	72 dB	

General data - refrigerant circuit

Refrigerant Type	Full charge R454B		
Number of circuits	2		
Number of compressors (circuit 1 / 2)	3 / 3		
Compressor type	Scroll		
Compressor regulation type	Fixed Speed		
Oil charge per circuit	26 kg		
Refrigerant charge per circuit	54 kg		54 kg

**General data - fan section**

Number of outdoor fans	10
Fan type	EC fans
Total condenser air flow	56.88 m3/s

Electrical Information

Electrical supply	400V/50Hz/3Ph
Power factor capacitor	Without
Current	294.32 A
Compressor soft starter	Included
Start-up current	578.00 A
Max amps	422.00 A
Maximum power at maximum current	260.00 kW
Displacement power factor (cos-phi)	0.89

Dimensions and weight

Length	5645 mm
Width	2200 mm
Height	2530 mm
Unit shipping weight	4334 kg
Operating weight	4450 kg

Note: Dimensions and weight include sound attenuation, hydraulic module, heat recovery and/or free cooling.

Applicable standards

(1) According to EN14825:2018, considering average climate
(2) According to EN14511:2018
(3) Average sound pressure at 10 meter distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level
(4) Sound power measurements in accordance with ISO 9614:2009 (part 1)
(5) Performance rating out of scope of Eurovent certification program

More information

Ecodesign datasheet	https://www.trane.com/litweb/Litweb.aspx?#/category/bd13efa5-a5bf-4f0a-afb4-9eab178d9081/range/b74e96bd-4126-4223-8f8e-b32ceedbf233/model/dc7016f4-41b0-4fbb-91cc-06ced1b6c39f/section/6045999d-f30d-4f1d-b718-e44ad28e6a5c
Model Number	CXAF165DE**RCXL3WWNBNEXXXBXEBXF1XLXXXXXX1EXBAXX2X AXXBA2XX