

Unit Overview

Range	CONQUEST
Model	CXAX 40 SE LN
Unit application	Heat pump
Compressor type	Scroll
Refrigerant type	Full charge R454B
SEER	4.41
SCOP	3.41
SEPR MT	3.43
Heat recovery	Without
Type of pump	No pumps and no contactor
Electrical supply	400V-50Hz-3Ph

CONQUEST


Project conditions

	Cooling	Heating
Outdoor air dry bulb temperature	30.0 C	-3.0 C
Relative humidity		98 %
Fluid entering temperature	12.0 C	30.0 C
Fluid leaving temperature	6.0 C	38.0 C
Fluid type	Water	Water
Fluid Freezing Point	0.0 C	0.0 C
Fouling Factor	0.017620 m2-deg K/kW	0.017620 m2-deg K/kW
Elevation	0.0 m	0.0 m

Unit performance data

	Cooling	(1)	Heating	(1)
Gross capacity	109.06 kW		98.87 kW	
Net capacity	108.90 kW		98.94 kW	
Total absorbed power	33.78 kW		31.62 kW	
Gross EER / COP	3.2 EER		3.13 COP (kW/kW)	
Net EER / COP	3.2 EER		3.12 COP (kW/kW)	
Design flow rate	4.20 L/s		2.90 L/s	
Waterside Heat Exchanger Pressure drop	26.0 kPa		11.6 kPa	
Evaporator Min Flow	2.7 L/s		2.7 L/s	
Evaporator Max Flow	8.0 L/s		8.0 L/s	

Acoustic data

Outdoor sound power level	84 dBA	(4)
Outdoor sound pressure level	50 dBA	(3)

General data - refrigerant circuit

Refrigerant type	Full charge R454B
GWP	466
Number of circuits	2
Number of compressors per circuit	2
Unit minimum load	25.00 %
Refrigerant charge per circuit	11 kg
Oil charge per circuit	6.30

General data - fan section

Number of fans	4
Fan type	EC Axial
Total nominal airflow	50006.40 m3/hr

Electrical data

Electrical supply	400V-50Hz-3Ph
Compressor soft starter	Across the line
Start-up current	213.00 A
Maximum running current	91.00 A
Maximum power at maximum current	53.00 kW
Displacement power factor (cos-phi)	0.851

Dimensions and weight

Length	2327 mm
Width	2250 mm
Height	1747 mm
Operating weight	1072 kg



Note: Dimensions and weight include sound attenuation, hydraulic module, heat recovery and/or free cooling - if selected. Image is for illustration purposes only, options may not be shown.

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 9613
- (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/fbf546b8-23dd-4f18-bfbe-f3041ad1268f
Model Number	CXAX040E1**1B4CXX2XBA3EXXAXX2A4AXXXXXX4X4XXDXXXXX*