



Unit Overview

Chiller model	Sintesis Prime	
Model	RTAF 105 XE SN EC	
Unit application	- Comfort cooling (above 4.5C) - Low ambient (-20C to 46C)	
Compressor type	Screw	
Refrigerant Type	Pre-charge Factory R134a	
Seasonal space energy efficiency (s,c) / SEER (1)	180. % / 4.57	Compliant
SEPRHT	6.22	Compliant
SEPRMT	3.57	Compliant
Free cooling	No Free Cooling	
Hydraulic module	Pump signal On/Off	
Electrical supply	400V/50Hz/3Ph	

SINTECIS™
PRIME

Project conditions

	Cooling
Outdoor air dry bulb temperature	35.0 C
Fluid entering temperature	12.0 C
Fluid leaving temperature	7.0 C
Evap fluid type	Water
Fluid Freezing Point	0.0 C
Fouling Factor	0.017615 m2-deg C/kW
Elevation	0.0 m

Unit performance data

	Cooling	(1)
Gross capacity	381.50 kW	
Net capacity	381.10 kW	
Total absorbed power	112.83 kW	
Gross EER	3.38 EER (kW/kW)	
Net EER	3.34 EER (kW/kW)	
Design flow rate	18.17 L/s	
Evaporator Pressure drop (Design)	36.9 kPa	
Evaporator Min Flow	9.40 L/s	
Evaporator Max Flow	34.70 L/s	

Acoustic data

Outdoor sound power level				94 dBA				(4)
Outdoor sound pressure level				61 dBA				(3)
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Sound power spectrum (Lw)	91 dB	91 dB	91 dB	91 dB	84 dB	76 dB	70. dB	

**General data - refrigerant circuit**

Refrigerant Type	Pre-charge Factory R134a	
Refrigerant GWP (AR4)	1430	
Number of circuits	2	
Number of compressors (circuit 1 / 2... n)	2	
Compressor type	Screw	
Compressor regulation type	Fixed Speed	
Unit minimum load	30.00 %	
Refrigerant charge per circuit	42 kg	40. kg
Oil charge per circuit	6 kg	6 kg

General data - fan section

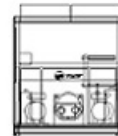
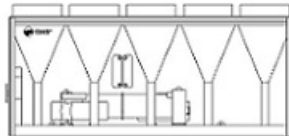
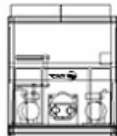
Condenser coil options	All Aluminium	
Number of outdoor fans	10	
Fan type	EC Fan	
Total condenser air flow	49.18 m3/s	

Electrical data

Electrical supply	400V/50Hz/3Ph	
Compressor soft starter	Not Included	
Start-up current	323.00 A	
Maximum running current	259.00 A	
Displacement power factor (cos-phi)	0.88	

Shipping dimensions and weight

Length	5645 mm	
Width	2200. mm	
Height	2554 mm	
Shipping weight including packaging	4115 kg	
Operating weight	4195 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 EN14825:2022, considering average climate
- (2) According to EN14511:2022
- (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)

Eurovent certification does not apply to SEPR HT / MT values

More information

Ecodesign datasheet	https://www.trane.com/litweb/Litweb.aspx?
Model Number	RTAF105D***ACXXLLXN2NNXXF1EBXF1XLXXXXXXXX4EA0XXX