

Water-Cooled Screw Chillers



Model RTHF XSE (R134a) 2970 – 3635 kW SEER up to 10.1



Trane XStream[™] Water-Cooled Chillers

There is world-wide demand for increasingly efficient products to reduce energy and resource consumption. As part of our sustainable product policy, Trane has always been committed to respecting the environment by reducing energy consumption through the delivery of high performing and efficient products and systems.

Trane XStream[™] series provides reliable temperature control in the most demanding applications. Exceptional efficiency keeps your operating costs and environmental impact low. Smart and easy to use controls ensure you get the best out of your system day after day, year after year.

RTHF XSE goes one step further in part **load efficiency improvement** featuring the latest Trane screw compressor with **Variable Volume Index (Variable Vi)** that allows the equipment to operate at the most appropriate pressure ratio to reach remarkable efficiency levels.

Variable Vi increases part load efficiency (SEER) by 10% vs. the equivalent model at Fixed Vi. RTHF XSE can reach SEER's as high as 10.1.

XStream RTHF XSE chillers are ideal for

- Cooling and heating applications
- High and medium temperature industrial process applications



Office buildings



Pharmaceutical industry



Healthcare



Hospitality industry

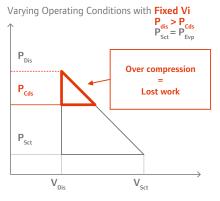


Automotive industry



District Cooling

Features Innovative solutions to your needs



Volume variation delivers more pressure increase than is needed



- Direct Drive, Twin Screw Helical Rotary design
- Variable Vi
- Infinite capacity control though Adaptive Frequency[™] Drive
- Semi-hermetic design eliminating shaft seals
- No surge risk
- Trane unequaled reliability



Varying Operating Conditions with Variable Vi

 $P_{Dis} = P_{Cds}$

 $\mathsf{P}_{\mathsf{Sct}}$

V_{Dis}

 $\mathbf{P}_{dis} = \mathbf{P}_{Cds}$ $\mathbf{P}_{Sct} = \mathbf{P}_{Evp}$

Saved Work

Efficiency increased

V_{Sct}

Volume variation is adapted to deliver the **required** pressure increase

2 Trane combined smart control and interface*

- Leading TD7 touch screen with 7" color display
- Clear presentation of critical information
- · Monitor settings, data trending, reports and alarms
- Simple, intuitive navigation
- · Effective operation, monitoring and management
- Durable construction for both indoor and outdoor use

Heat exchangers*

- Single pass
- Counter flow configuration



Connectivity

- Full interoperability via SmartCom interface Lontalk[®], BACnet[®] and Modbus
- Full remote control capability via Trane BMS or Chiller Plant Controls



* Trane Proprietary Technology

General specifications

General Data

		RTHF XSE
Refrigerant		R134a
Condenser leaving water temperature (Min/Max)	(°C)	+10 / +48 (1)
Evaporator leaving water temperature (Min/Max)	(°C)	-12 / +20
Power Supply	(V/Ph/Hz)	400/3/50 (2)

(1) Operation at Full load - Min Max for full range - May vary according to the size (2) Single Power Supply as standard - Dual Power suply as an option

RTHF XSE

Unit size		855 XSE	905 XSE	945 XSE	995 XSE	
Gross Cooling Capacity (1)	(kW)	2973	3189	3407	3633	
Gross EER (1)		5.72	5.45	5.25	4.98	
Gross ESEER (Not certified) (1)		9.06	8.76	8.46	8.15	
IPLV (2)		10.240	9.990	9.770	9.570	
Net cooling capacity (1)(3)	(kW/kW)	2972	3188	3407	3633	
Eurovent Energy class - Cooling		А	А	А	В	
Net EER (1)(3)		5.55	5.27	5.06	4.79	
Net ESEER (Not certified)		8.63	8.34	8.06	7.76	
SEER (4)		10.08	9.86	9.67	9.50	
Space cooling efficiency η s,c (4)	(%)	395	386	379	372	
Number of refrigerant circuits		2				
Number of compressors			2	2		
Sound Power Level	(dB(A))	103	109	110	111	
Weights and dimensions						
Length	(mm)	5521	5521	5521	5521	
Width	(mm)	2305	2305	2305	2305	
Height	(mm)	2457	2457	2457	2457	
Operating weight	(kg)	14360	14470	14590	14590	

Evaporator 12/7°C and 0.0 m²K/kW, and condenser at 30/35°C and 0.0 m²K/kW
According to AHRI Standard 551/591, based on TOPSS (Trane Official Product Selection Software)

(3) Net performances calculated as per EN 14511-2018.

(4) η_5 , c / SEER as defined in Directive 2009/125/EC of the European Parliament and of the Council with regard to Ecodesign requirements for Comfort Chillers with 2000 kW maximum capacity – COMMISSION REGULATION (EU) N° 2016/2281 of 20 December 2016





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