



Water-Cooled Chillers with Leading Control Technology

High Efficiency Chillers for High Performance Buildings



RTI ID *evo*

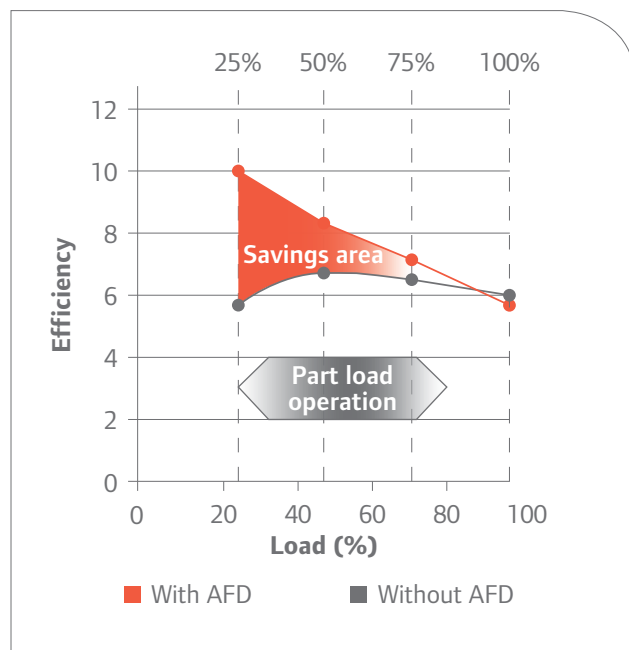


Raising Your HVAC Experience to Unmatched Levels of Performance, Comfort and Economy

High performance buildings need high performance HVAC systems. Your buildings need to be one of the best so it is very important that they are supremely energy efficient, today, tomorrow and long into the future. A Trane RTHD^{evo} chiller provides reliable and dependable performance to ensure continuous delivery of precise temperature control across the full spectrum of demanding comfort and industrial applications.

Industry leading efficiency

To reach the highest standards of efficiency, Trane has 100 years of engineering expertise, world leading research and the most rigorous testing. As a result, Trane chillers, including the RTHD^{evo}, deliver superior full- and part-load performance, the key to exceptional energy efficiency. Performance achieves market-leading EER (Energy Efficiency Ratio) and ESEER (European Seasonal Energy Efficiency Ratio).



A model for every application

Whether your building, for example a hospital or a hotel, requires comfort cooling or precision temperature control as part of a sensitive industrial process, Trane offers suitable RTHD^{evo} models.

Minimized total cost of ownership

Energy costs are minimized by optimizing efficiency. Maintenance costs are reduced as a result of effective performance and alarm monitoring linked to equipment with proven dependability. Installation costs are lower thanks to design improvements which reduce the time required for new plants or upgrades. An Adaptive Frequency Drive, available with the top of the range RTHD^{evo} High Seasonal Efficiency model, reduces energy consumption even further by improving your chiller's efficiency under reduced load conditions.

Legendary Trane reliability

Your facility depends on an efficient, reliable HVAC system for employee comfort and well-being as well as for critical process applications. Trane reliability is legendary, based on over 75 years of designing, testing, installing and maintaining chillers around the world. Every Trane product guarantees that unique heritage and the pride we have in being the best at what we do.

Leading Control Technology

Trane Tracer™ UC800 + TD7 interface



Driving Reduced Energy Consumption

Developing our own control algorithm and software is one of our unique strengths. Trane does not just use a controller from a vendor and adapt it to its units. We take the matter a step further and develop the unit from the beginning.

Control

- The Tracer™ UC800 provides the intelligence behind the RTHD^{evo} chiller and features Adaptive Control algorithms: proprietary control strategies that respond to a variety of conditions to maintain efficient operation
- Total chiller control through continuous monitoring

Visibility

- Full system status at a glance
- Clear display of key operating parameters

Ease of use

- The TD7 touch-screen 7" color display shows key operating parameters and allows quick access to critical data
- Intuitive navigation allows quick access to critical data
- Main processor in the control panel

Flexibility

- Thanks to open protocols such as BACnet®, LonTalk™ and Modbus

Operational effectiveness

- Data trending
- Clear alarm log enables fast response and rapid resolution
- TIS (Trane Intelligent Services) for remote data collection, analysis and recommendation
- Adaptive Control algorithms preempt chiller disruption



A world leading combination: the proven Tracer UC800 Controller and the all-new TD7 Interface.

Easier to use

New generation UC800 Trane Controller

Combined with market leading

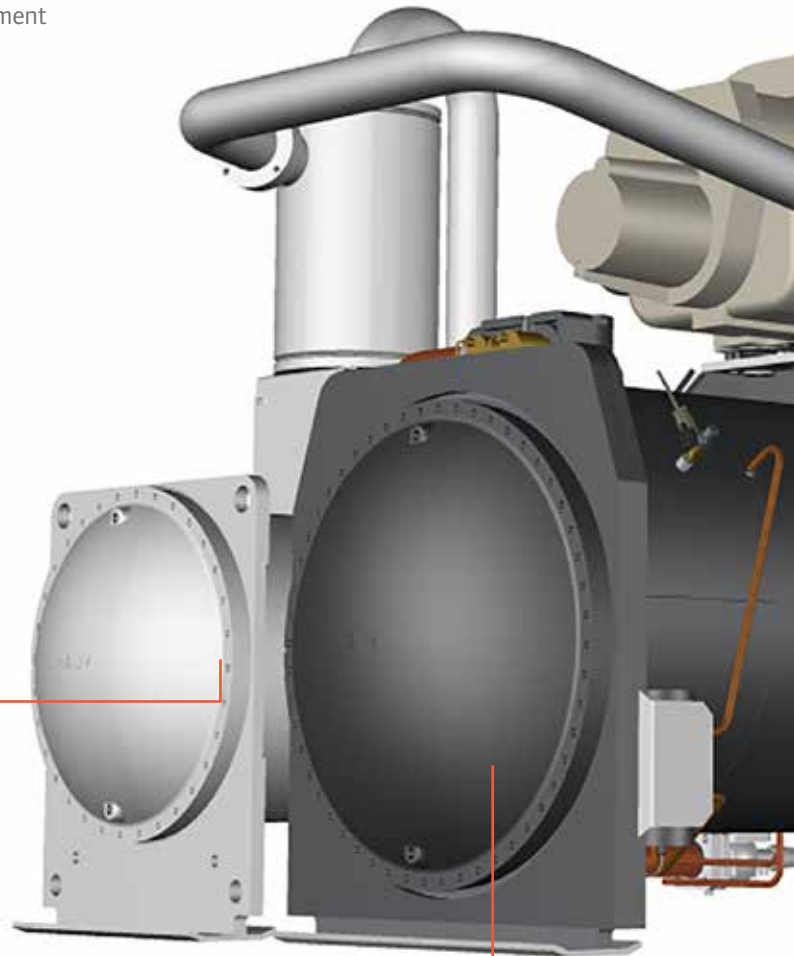
TD7 Human Interface

- Touch-screen 7" color display
- Intuitive navigation through menus
- Effective operation, monitoring and management



Proven Trane reliability

- Trane design simplicity
- Trane direct drive, low speed, semi-hermetic compressor with only 3 moving parts
- Infinite unloading for exact load matching
- RTHD^{evo} uses system differential to move oil, not an oil pump, meaning no extra moving parts to wear out or break down



Environmentally responsible

- HFC 134a refrigerant
- High performance, low environmental impact
- Low energy consumption for minimal environmental footprint

Easier to install

- All versions and sizes fit through standard 2m wide doors
- Only one water connection on the condenser (inlet/outlet)
- Only one electrical connection (single point) as standard
- Saves time, saves costs



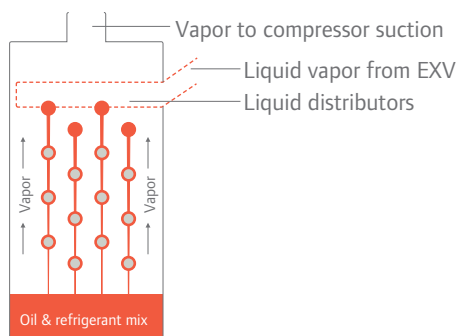
Increased savings with HSE (High Seasonal Efficiency) version

- AFD (Adaptive Frequency Drive) as standard
- Fewer start-stop cycles
- Increased compressor life
- Reduced start-up current draw
- Optional harmonic filter to eliminate harmonic pollution



Maximum efficiency

- Patented Trane Falling Film Evaporator
- Industry leading efficiency
- Reduces energy bills



General Data

Condenser leaving water temperature (min/max)	(°C)	20 / 50
Evaporator leaving water temperature (min/max)	(°C)	-12 / +18
Power supply	(V/Ph/Hz)	400/3/50

Standard Efficiency (SE)

Unit size		225 SE	250 SE	300 SE	325 SE	350 SE	375 SE
Gross cooling capacity (1)	(kW)	773	892	1055	1160	1237	1349
Gross power input (1)	(kW)	142	166	196	209	226	263
Gross EER (1)		5.46	5.38	5.38	5.54	5.47	5.12
Gross ESEER (1)		6.40	6.50	6.10	6.40	6.40	5.80
Net cooling capacity (1) (2)	(kW)	770	888	1050	1155	1231	1343
Net power input (1) (2)	(kW)	149	176	209	222	241	280
Net EER (1) (2)		5.16	5.03	5.02	5.21	5.12	4.80
Net ESEER (1) (2)		5.56	5.52	5.20	5.57	5.53	5.06
Number of refrigerant circuits					1		
Number of compressors / capacity steps					1		
Sound power level (3)	(dB(A))	98	98	97	97	97	101
Weights and dimensions (4)							
Length	(mm)	3290	3290	3290	3290	3290	3290
Width	(mm)	1600	1600	1600	1600	1600	1600
Height	(mm)	1940	1940	1940	1940	1940	1940
Operating weight	(kg)	5891	6833	6335	6522	6553	6655
Electrical data							
Unit-rated amps	(A)	349	349	455	455	455	488
Start-up amps (5)	(A)	480	480	748	748	748	748

High Efficiency (HE)

Unit size		150 HE	175 HE	225 HE	250 HE	300 HE	350 HE	375 HE	400 HE
Gross cooling capacity (1)	(kW)	547	597	782	901	1077	1215	1300	1417
Gross power input (1)	(kW)	95	105	139	162	190	201	217	252
Gross EER (1)		5.73	5.70	5.62	5.56	5.66	6.03	6.00	5.62
Gross ESEER (1)		6.60	6.90	6.50	6.70	6.40	6.90	6.90	6.20
Net cooling capacity (1) (2)	(kW)	545	595	779	897	1074	1211	1295	1412
Net power input (1) (2)	(kW)	99	110	145	171	199	212	229	266
Net EER (1) (2)		5.49	5.43	5.36	5.26	5.41	5.71	5.66	5.30
Net ESEER		5.94	6.08	5.84	5.83	5.78	6.11	6.03	5.51
Number of refrigerant circuits (1) (2)						1			
Number of compressors / capacity steps						1			
Sound power level (3)	(dB(A))	98	98	98	98	97	97	97	101
Weights and dimensions (4)									
Length	(mm)	3170	3170	3290	3290	3290	3690	3690	3690
Width	(mm)	1600	1600	1600	1600	1600	1600	1600	1600
Height	(mm)	1850	1850	1940	1940	1940	1940	1940	1940
Operating weight	(kg)	4361	4361	6030	6030	6612	7558	7589	7767
Electrical data									
Unit-rated amps	(A)	233	233	349	349	455	455	455	488
Start-up amps (5)	(A)	412	412	480	480	748	748	748	748

Extra-high Efficiency (XE)

Unit size		150 XE	175 XE	225 XE	275 XE	325 XE	350 XE	375 HE	425 XE
Gross cooling capacity (1)	(kW)	564	616	800	941	1135	1239	1333	1457
Gross power input (1)	(kW)	94	103	136	154	183	198	211	246
Gross EER (1)		5.98	5.98	5.86	6.12	6.22	6.26	6.32	5.93
Gross ESEER (1)		6.80	7.10	6.70	7.20	6.90	7.10	7.10	6.50
Net cooling capacity (1) (2)	(kW)	563	615	798	938	1133	1236	1330	1454
Net power input (1) (2)	(kW)	98	108	141	160	189	205	218	254
Net EER (1) (2)		5.72	5.69	5.68	5.86	6.01	6.03	6.09	5.73
Net ESEER (1) (2)		6.14	6.30	6.27	6.49	6.39	6.54	6.55	6.05
Number of refrigerant circuits						1			
Number of compressors / capacity steps						1			
Sound power level (3)	(dB(A))	98	98	98	98	97	97	97	101
Weights and dimensions (4)									
Length	(mm)	3640	3640	3290	3670	3850	3850	3850	3850
Width	(mm)	1600	1600	1600	1600	1800	1800	1800	1800
Height	(mm)	1850	1850	1940	1940	2035	2040	2040	2040
Operating weight	(kg)	4756	4756	6355	6833	8951	9196	9384	9741
Electrical data									
Unit-rated amps	(A)	233	233	349	349	455	455	455	488
Start-up amps (5)	(A)	412	412	480	480	748	748	748	748

High Seasonal Efficiency (HSE)



Unit size		150 HSE	175 HSE	225 HSE	275 HSE	325 HSE	350 HSE	375 HSE	425 HSE
Gross cooling capacity (1)	(kW)	564	616	800	941	1135	1239	1333	1457
Gross power input (1)	(kW)	102	111	145	165	198	219	233	263
Gross EER (1)		5.54	5.54	5.51	5.69	5.73	5.67	5.72	5.53
Gross ESEER (1)		9.79	9.79	7.58	7.83	9.42	9.32	9.40	8.48
Net cooling capacity (1) (2)	(kW)	563	615	798	938	1133	1236	1330	1454
Net power input (1) (2)	(kW)	106	116	150	171	204	226	240	271
Net EER (1) (2)		5.30	5.29	5.33	5.47	5.57	5.48	5.53	5.36
Net ESEER (1) (2)		7.19	7.31	7.24	7.51	7.57	7.52	7.79	7.26
Number of refrigerant circuits						1			
Number of compressors / capacity steps						1			
Sound power level (3)	(dB(A))	98	98	98	98	97	97	97	101
Weights and dimensions (4)									
Length	(mm)	3640	3640	3290	3670	3850	3850	3850	3850
Width	(mm)	1690	1690	1810	1810	2000	2000	2000	2000
Height	(mm)	1850	1850	1970	1970	2040	2040	2040	2040
Operating weight	(kg)	4860	4860	6534	7012	9139	9384	9572	9929
Electrical data									
Unit-rated amps	(A)	218	218	314	314	421	421	421	452
Start-up amps	(A)	< I Max.	< I Max.	< I Max.	< I Max.	< I Max.	< I Max.	< I Max.	< I Max.

(1) Evaporator 12/7°C, condenser water temperature 30/35°C according to EN14511:2013

(2) Net performances calculated as per EN14511-2011

(3) At full load and in accordance with ISO9614

(4) With option fuse and disconnect switch, without harmonic filter on HSE version

(5) Inrush current in star connection



Trane® is a brand of Ingersoll Rand®. Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Ingersoll Rand®, Trane®, Thermo King® and Club Car® — work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a global business committed to a world of sustainable progress and enduring results.



Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.
Trane bvba, Lenneke Marelaan 6, 1932 Sint-Stevens-Woluwe, Belgium, ON 0888.048.262 - RPR Brussels

We are committed to using environmentally conscious print practices that reduce waste.

© 2014 Trane – All rights reserved
RTHD-SLB004 April 2014