



TRANE®

*Cooling and Heating
Systems and Services*

AquaStream²

CGWN - CCUN

*Water cooled and condenserless
indoor liquid chillers
180-500 kW*





The AquaStream²® indoor chillers range combines the latest technologies available to offer an optimum answer for today's air conditioning and process cooling applications, even if very demanding.

Its design follows the "Plug and Play" concept to offer easy installation, maintenance, and project management.

Far beyond effective cooling, the AquaStream²® chillers provide unparalleled benefits in terms of:

- **Versatility**
- **Reliability**
- **Substantial energy savings**



Reduced footprint

Trane builds the chillers to make the most efficient use of the available installation space. The compact Indoor AquaStream²® range chiller is smaller than most chillers it might replace, and easier to fit into existing buildings. All units fit through a standard single door.

An excellent solution for any retrofit or replacement job.



Everything is in the box

Only a main power supply and water connections are necessary, the rest is in the "box". The integrated hydraulic module features all necessary components:

- Evaporator pump and strainer
- Expansion tank on cooling loop
- Condenser pump and strainer
- Evaporator flow switch
- Water gauge
- Relief valve

Low installation costs through time and space saving.



880 mm





Smart controls

Trane's Adaptive Control™ CH.530 microprocessor is the most advanced chiller controller available in the air conditioning industry. It offers internal control logic that monitors the chiller's operation and keeps it running during extreme operating conditions. While controls on other chillers will shut down machine operation, the Trane AquaStream² will modulate system components to keep the chiller operating and producing chilled water, meanwhile continuing to optimize chiller performance. The Tracer™ CH530 chiller controller comes with a touch screen user interface. Thus, it provides the friendliness required to monitor operation of the machine quickly and easily.

Adaptive Control™ keeps the chiller on line



Building management

Tracking the operating cost is simplified thanks to the easy integration of Building Management Systems such as Zenith or Tracer. The Trane AquaStream² supports standard open LonTalk® protocol.

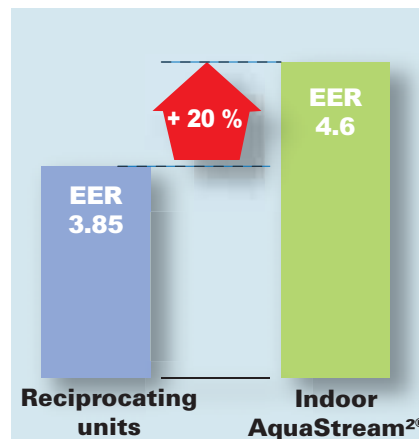
Building comfort under control



Energy Efficiency

The use of advanced heat-transfer technology in conjunction with the most advanced controls has allowed the AquaStream² chillers to achieve superior energy efficiency levels. Reducing energy consumptions thanks to increased efficiency contributes directly to greenhouse warming effect reduction.

Energy savings and environment care.



Reliability

Trane has designed the Indoor AquaStream² chiller range to be a leader in reliability for all applications :

- Scroll compressor with 64% fewer moving parts and lower torque variations than equal capacity reciprocating compressor.
- Advanced microelectronics protect both compressor and motor from typical electrical fault conditions.
- Years of laboratory testing have optimised compressor and chiller systems reliability.
- Systematic factory testing.

Years of loyal service

Service In Mind

In addition to product commissioning and warranty coverage, Trane's Service Department proposes maintenance contracts tailored to each client's individual needs as well as programmes for upgrading older equipment to the latest technologies.

Extended service for a constant optimization of equipment performance



Eurovent certification for the AquaStream² range guarantees accurate performance data and common comparison criteria.

Optimum building comfort in accordance with environmental standards

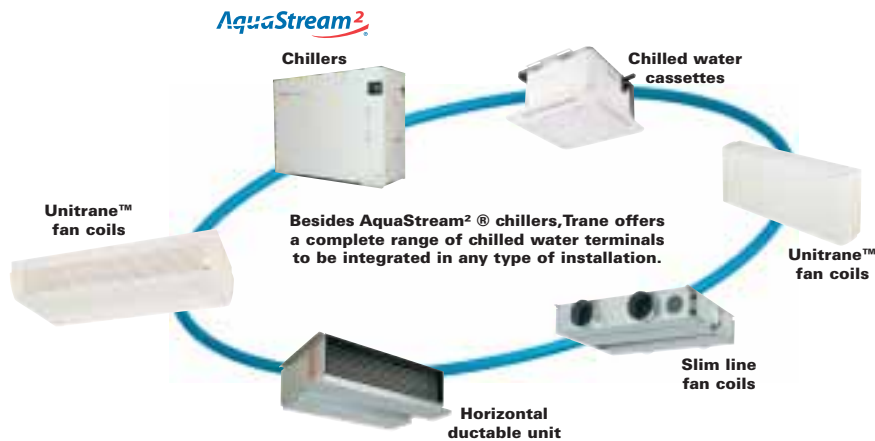
	205	206	207	208	209	210	211	212	213	214	215	205 HE	206 HE	207 HE	208 HE	209 HE	210 HE	211 HE		
Water cooled liquid chillers (CGWN)																				
Cooling capacity (1)	(kW)	182.9	212.8	239.3	265.3	294.1	326.4	351.4	398.6	431.3	466.0	506.4	191.1	220.9	248.3	273.2	301.6	332.7	358.7	
Power input (1)	(kW)	42.3	48.2	55.6	62.2	68.0	75.1	83.9	97.0	106.4	117.3	125.5	41.5	47.3	54.5	61.0	66.7	73.7	82.3	
Condenserless liquid chillers (CCUN)																				
Cooling capacity (2)	(kW)	167.0	205.4	230.7	256.1	283.6	314.6	338.2	385.6	417.3	450.4	486.9	174.0	213.0	238.6	263.3	290.3	320.0	345.1	
Power input (2)	(kW)	49.6	51.0	56.9	64.2	70.3	77.7	87.3	99.0	108.5	120.5	131.1	48.0	49.5	55.2	62.4	68.5	76.9	86.4	
Refrigerant		R 407C																		
Power supply (V/Ph/Hz)	(V/Ph/Hz)	400/3/50																		
Number of refrigerant circuits		2																		
Number of compressors / Type (Scroll)		4	4	4	4	4	4	4	5	6	6	6	4	4	4	4	4	4	4	
Evaporator available water pressure (3)	(kPa)	170	150	150	145	140	185	180	236	218	200	187	190	170	170	160	165	205	190	
Evaporator connections (Victaulic - Male)	(inches)	3	3	3	3	3	3	3	4	4	4	4	3	3	3	3	3	3	3	
Condenser available water pressure (CGWN) (4)	(kPa)	160	140	160	155	150	140	135	159	151	147	136	180	170	190	180	170	160	140	
Condenser connections (CGWN) (Victaulic - Male)	(inches)	3	3	3	3	3	3	3	5	5	5	5	3	3	3	3	3	3	3	
Discharge - Liquid line connections(CCUN)		1"5/8 - 1"1/8							2"1/8 - 1"3/8				1"5/8 - 1"1/8							
Sound Power Level	(dB(A))	85	84	86	85	87	87	87	88	88	90	85	84	86	85	87	87	87	87	
Sound Power Level with sound attenuation jacket	(dB(A))	80	79	81	80	81	81	81	84	85	85	87	80	79	81	80	81	81	81	
Length x Width x Height With Hydraulic Kit	(mm)	2545 x 880 x 1842							3498 x 878 x 1950				2545 x 880 x 1842							
Length x Width x Height Without Hydraulic Kit	(mm)	2545 x 880 x 1842							2808 x 878 x 1950				2545 x 880 x 1842							
Water cooled liquid chillers (CGWN) operating weight																				
Base Unit	(kg)	1240	1310	1460	1540	1610	1710	1820	2232	2442	2525	2640	1320	1470	1540	1630	1730	1800	1870	
Evap Hydraulic Kit	(kg)	1330	1400	1630	1710	1780	1880	1990	2618	2827	2910	2990	1410	1560	1710	1800	1900	1970	2040	
Evap + Cds Hydraulic Kit	(kg)	1400	1470	1730	1810	1880	1980	2090	2810	3019	3102	3182	1480	1630	1810	1900	2000	2070	2140	
Condenserless liquid chillers (CCUN) operating weight																				
Base Unit	(kg)	1120	1170	1300	1370	1420	1510	1590	1879	2070	2120	2180	1180	1240	1300	1390	1480	1550	1620	
Evap Hydraulic Kit	(kg)	1210	1260	1470	1540	1590	1680	1760	2370	2561	2612	2672	1270	1330	1470	1560	1650	1720	1790	

- (1) at Eurovent Conditions (Evap 12°C/7°C - Condenser. 30°C/35°C)
- (2) at Eurovent Conditions (Evap 12°C/7°C - Saturated condensing temperature 45°C)
- (3) High head pressure option - Dual Pump option
- (4) High head pressure option



	RTCA 208	RTCA 209	RTCA 211	RTCA 215	RTCA 208 LN	RTCA 209 LN	RTCA 211 LN	RTCA 215 LN	
Power supply	400 V / 3 Ph / 50 Hz								
Nominal heat rejected (1) (3)	(V/Ph/Hz)	169.1	191.2	227.7	387.4	128.7	150.8	179.8	300
Length	(mm)	2870							
Width	(mm)	2285							
Height	(mm)	1655							
Discharge line connection		1"5/8							
Liquid line connection		1"1/8							
Operating weight	(kg)	810	890	1090	890	810	890	1090	1770
Sound Power Level (2) (3)	(dB(A))	90	90	92	93	85	85	87	88

- (1) At Eurovent conditions : Air inlet temperature = 25°C; Temperature Difference (Air inlet/Saturated Condensing Temp.) = 15 K
- (2) In accordance with ISO 3747
- (3) Nominal fan speed.



Literature Order Number	CG-SLB013-E4
Date	0107
Supersedes	CG-SLB013-E4_0305
Literature stocking Location	Europe

Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.

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