



TRANE®

CONQUEST

Air-Cooled Scroll Chillers and Heat Pumps CGAX/CXAX 40-165 kW

Conquering Customers' Hearts



IR Ingersoll Rand®

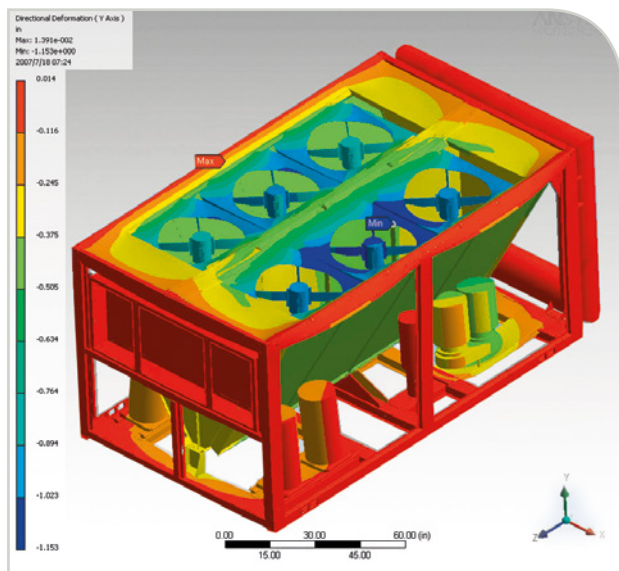
Trane Conquest

Conquering Customers' Hearts

Your primary concern when selecting HVAC equipment for your building should be comfort, efficiency and economy. Trane Conquest chillers and heat pumps uniquely combine the best in performance with the best in value.

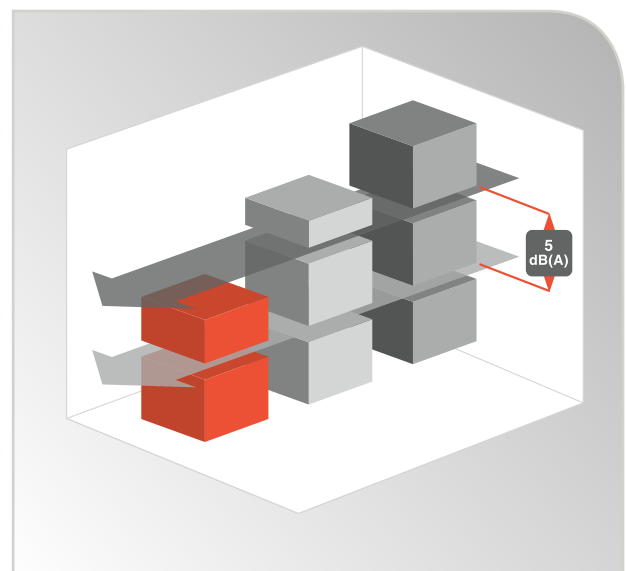
The smart and versatile Conquest range has been designed by Trane using over 100 years of experience to provide optimized efficiency with exceptionally low sound levels and high quality of materials and construction for total reliability.

Durability and high quality



Advanced FEA (Finished Element Analysis) and vibration testing guarantee robust design which is built-to-last.

Exceptionally low sound levels



- Industrial environment
- Urban environment
- Noise sensitive environment
- Standard units
- Low noise units

CONQUEST

Efficient, quiet, dependable and smart



Energy Efficient

The better the efficiency, the lower your energy costs. Trane has developed the Conquest range to optimize your Total Cost of Ownership (TCO). The design of the units has been optimized for part load operation since units always modulate throughout their real life utilization. The new High Efficiency models use EC fan dynamic modulation to reach part load efficiencies **ESEER up to a noteworthy 4.7, the highest value in the industry.**



Quiet

Operating noise can be a significant intrusion into a sensitive building environment. The Conquest range includes both standard and low sound level models, so you can choose what suits your particular application. No compromise in operational efficiency has been made in providing these levels of sound attenuation. The Low Noise (LN) model achieves an impressive 47 dB(A) sound pressure level (@10m in free field).



Reliable

With equipment as critical as an HVAC system, quality is non-negotiable. At Trane we manufacture and design the core components and put our systems through extremely demanding performance and reliability tests. As a result, you have peace of mind, and we have the confidence to offer exceptional warranty cover of up to ten years.



Smart

The Trane Conquest range is made smart to make your life easier. It has the capability to provide all-year cooling in ambients from -18°C up to 46°C and all-year heating down to -15°C. It is ideally suited to comfort applications and is fully Ecodesign 2015 and 2017 compliant in heating mode.

Units have a compact and low height design for quick and easy integration into jobsites. Footprint has been reduced by 30% versus the previous generation and unit height is between 1.5 and 1.75m depending on the model and options.

Operation could not be easier thanks to the new Trane light commercial controller, the LCD interface and the optional Deluxe Display featuring a user-friendly 7" touchscreen. Connectivity with Modbus, BACnet®, LonTalk® and Trane BMS is made simple with the Smart Com interface.



Trane proprietary technology*

provides the innovative solution your building needs

* Electronically Commuted (EC) fans

- Improved capacity modulation
- Enables low ambient operation
- Reduced power consumption
- Reduced energy costs

Adaptive Frequency™ Drive

- Optional on water pumps
- Improves user comfort and process accuracy
- Reduces pump consumption and energy bills



* New Trane light commercial controller

- LCD display with clear messages in 15 languages
- Easy use with navigation buttons
- Clear display of critical information
- Customer communication package



Optional deluxe 7" color touchscreen display:

- Monitor data trending, clear alarms logging
- TIS enable for remote monitoring



Optional hydraulic module

- Housed within the chiller frame to keep overall size to a minimum
- Single or dual pump
- Optional water buffer tank



* Connectivity



LONMARK
SPONSOR



- Smart Com interface integrates seamlessly with LonTalk®, BACnet®, Modbus and Trane BMS

* Micro-channel condenser coils

- Leading edge coil design for increased corrosion resistance
- Longer life expectancy
- Increased efficiency with 20% less refrigerant
- Reduced carbon footprint
- 4 times lower unit weight

Scroll compressors

- Trane designed and manufactured: direct drive, low speed, proven reliability

The Total Package

Quality, performance and reliability

The Trane advantage

Trane is recognized as a world leader with over 100 years of experience in creating and sustaining safe, comfortable and energy efficient environments while improving the performance of buildings around the world.

Trane solutions optimize indoor environments with a broad portfolio of energy efficient heating, ventilating and air conditioning systems, building services, parts support and advanced controls.

To ensure your equipment continues working at its optimum throughout the life of the building, Trane provides a full range of service solutions combined with in-house expertise and an extensive support network.

Smart controls

Choose from two unit controller options. Both offer total control over your system to optimize performance and reliability.

New Trane light commercial controller

- LCD display with 6 navigation buttons
- Easy to understand messages in a choice of 15 languages
- Electronic expansion valves (EXV) for superior control
- Customizable with customer communication package
 - Chilled water set-point
 - Demand limit
 - Analogue capacity output
 - Programmable relays

Optional Deluxe Display

- 7" color touchscreen
- Easy to use, intuitive menus
- Clear alarm log
- Full data trending
- TIS enable for remote monitoring



General Specifications

CGAX Standard and High Efficiency

Eurovent performances (1)		CGAX 015	CGAX 017	CGAX 020	CGAX 023	CGAX 026	CGAX 030	CGAX 036	CGAX 039	CGAX 045	CGAX 035	CGAX 040	CGAX 046	CGAX 052	CGAX 060
Net cooling capacity (kW)		43	49	59	65	74	82	99	111	127	97	116	129	147	164
EER - SE & HE versions		2.98	2.88	3.08	2.95	2.87	2.84	2.96	2.92	3.08	2.79	2.94	2.78	2.86	2.83
Eurovent efficiency class - cooling		B	C	B	B	C	C	B	B	C	C	B	B	C	C
ESEER		3.89	3.93	3.81	3.82	3.84	3.80	3.93	4.13	3.98	3.83	3.64	3.59	3.75	3.81
ESEER - HE version		3.97	3.98	3.96	4.03	3.93	3.86	4.04	4.22	4.14	3.87	3.82	3.76	3.84	3.88
Sound power level (Standard Noise) (dBA)		83	83	85	85	85	86	84	85	87	86	88	88	88	89
Sound power level (Low Noise) (dBA)		77	77	79	79	79	80	79	80	82	81	82	82	82	83
Refrigerant circuit															
Number of circuits		1	1	1	1	1	1	1	1	1	2	2	2	2	2
Number of compressors per circuit		2	2	2	2	2	2	3	3	3	2	2	2	2	2
Dimensions															
Unit length (mm)		2346	2346	2346	2346	2346	2346	2327	2327	2327	2327	2327	2327	2327	2327
Unit width (mm)		1285	1285	1285	1285	1285	1285	2250	2250	2250	2250	2250	2250	2250	2250
Unit height (Standard Noise) (mm)		1524	1524	1524	1524	1524	1524	1524	1524	1524	1524	1524	1524	1524	1524
Unit height (Low Noise) (mm)		1747	1747	1747	1747	1747	1747	1747	1747	1747	1747	1747	1747	1747	1747
Weights (2)															
Operating weight (kg)		497	509	552	557	587	599	819	824	879	887	973	983	1004	1029

CXAX Standard and High Efficiency

Eurovent performances (1)		CXAX 015	CXAX 017	CXAX 020	CXAX 023	CXAX 026	CXAX 030	CXAX 036	CXAX 039	CXAX 045	CXAX 035	CXAX 040	CXAX 046	CXAX 052	CXAX 060
Net heating capacity (kW)		43	51	57	63	69	78	96	110	120	101	114	127	139	162
COP - SE & HE versions		3.09	3.15	2.98	3.08	3.01	3.09	3.19	3.14	3.12	3.16	3.08	3.02	3.00	3.11
Eurovent efficiency class - heating		B	B	C	B	B	B	B	B	B	B	B	B	B	B
SCOP		3.21	3.21	2.95	3.17	3.19	3.18	3.29	3.20	3.21	3.23	3.06	3.08	3.22	3.26
SCOP - HE version		3.26	3.29	3.03	3.25	3.27	3.28	3.42	3.39	3.37	3.35	3.16	3.16	3.28	3.30
Net cooling capacity (kW)		42	48	56	65	72	79	94	108	118	94	114	127	146	162
EER		2.90	2.83	2.91	2.97	2.84	2.84	2.90	3.00	2.88	2.81	3.06	2.96	2.95	2.93
Eurovent efficiency class - cooling		B	C	B	B	C	C	B	B	C	C	B	B	B	B
ESEER		3.71	3.75	3.63	3.80	3.84	3.82	3.96	3.95	3.84	3.91	3.88	3.81	3.91	3.88
ESEER - HE version		3.77	3.80	3.84	4.03	3.96	3.98	4.09	4.20	4.02	3.98	4.10	4.00	4.03	3.95
Sound power level (Standard Noise) (dBA)		84	84	85	85	85	86	86	87	88	87	89	88	88	89
Sound power level (Low Noise) (dBA)		78	78	78	80	81	80	81	81	82	81	81	83	83	84
Refrigerant circuit															
Number of circuits		1	1	1	1	1	1	1	1	1	2	2	2	2	2
Number of compressors per circuit		2	2	2	2	2	2	3	3	3	2	2	2	2	2
Dimensions															
Unit length (mm)		2346	2346	2346	2346	2346	2346	2327	2327	2327	2327	2327	2327	2327	2327
Unit width (mm)		1285	1285	1285	1285	1285	1285	2250	2250	2250	2250	2250	2250	2250	2250
Unit height (Standard Noise) (mm)		1524	1524	1524	1524	1524	1724	1524	1524	1524	1524	1524	1524	1524	1724
Unit height (Low Noise) (mm)		1747	1747	1747	1747	1747	1947	1747	1747	1747	1747	1747	1747	1747	1947
Weights (2)															
Operating weight (kg)		539	545	596	624	630	665	881	925	942	974	1072	1072	1093	1163

(1) Cooling at evaporator water temperature: 12°C / 7°C, condenser air temperature 35°C according to EN14511:2013

Heating at evaporator water temperature: 40°C/45°C, condenser air DB/WB 7°C/6°C, according to EN14511:2013

(2) Rated condition without pump package

Range Description

a model for every application

The Trane Conquest range

- Thirteen unit sizes providing capacities from 40 kW to 165 kW
- Cooling only CGAX: ambient from -18°C to +46°C, leaving water temperature down to -12°C
- Heat pump CXAX: ambient down to -15°C, leaving water temperature up to 60°C
- CGAX and CXAX available in both Standard Efficiency (SE) and High Efficiency (HE) versions
- Two acoustic versions: Standard Noise (SN), Low Noise (LN)
- Single or dual circuit choice on 90-130 kW range

Standard options

- Hydraulic module
- Buffer tank
- Variable Primary Flow
- Low ambient down to -18°C
- Partial heat recovery
- Modbus, BACnet®, LonTalk® communication interfaces



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.



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