

### LET'S GO BEYOND"

# Trane RTAG air-cooled chillers

Efficient. Quiet. Smart. Reliable.



With minimum running and lifetime costs, plus unfailing dependability at Trane, the new and improved RTAG air-cooled chillers aim to deliver optimum cooling to match your building's requirements.

Operating noise is a significant intrusion into a sensitive building environment such as a hospital.



## Energy efficiency at its best

### THE BETTER THE EFFICIENCY, THE LOWER YOUR ENERGY COSTS

Environmental responsibility and compliance is playing an increasingly important role in everyday decision-making. Ways to reduce waste streams, minimize natural resource use and cut transportation distances are more important, and more readily available, than ever before. RTAG chillers come with Trane's unparalleled experience and expertise in every aspect of HVAC design, and are made to the highest specifications by employing advanced proven technology. That's why we are the best in energy efficiency.

- RTAG system allows you to choose your efficiency level.
- Variable speed compressor for the P Series, and EC motor options for all 3 series are available.
- Self-optimizing controls built in RTAG's condenser fans, sub-cooling control and compressors significantly improve energy efficiency and reduce life cycle cost.

Series	Efficiency Level	COP / IPLV
н	High efficiency	up to 3.1 / 4.6
x	Extra high efficiency	up to 3.3 / 4.8
Ρ	Premium seasonal efficiency + variable speed	up to 3.2 / 5.7



B Self-optimizing sub-cooling control helps maintain proper refrigerant liquid level of evaporator in various conditions.

C Self-optimizing on compressors.



### Quiet operation to shout about

### TOTAL COMFORT WITHOUT DISRUPTION

Our RTAG air-cooled chillers are able to maintain your quiet and comfortable environment for the reason that Trane professional acoustic design ensures low vibration throughout the unit and minimal sound propagation.

Three levels of sound attenuation are available in
the RTAG system to meet the sensitivity needs
of your building and your occupants:

Standard noise level	Standard components
Low noise level	Added: - Compressor enclosure - Refrigeration line insulation
Super low noise level	Added: - Compressor enclosure - Refrigeration line insulation - EC fan with night setback

Sound power test confirmed RTAG complies with the requirements of ISO 3744 standard.

### Smart controls so you work smarter, not harder

### Reliability known and proven



### INTELLIGENT BUT EASY-TO-USE CONTROLS

Smart controls installed in RTAG chillers safeguard an all-year cooling in ambient from 0°F to 125°F (-18°C to 52°C). Operation could not be easier thanks to a user-friendly touch screen interface and connectivity with the most widely used interoperability protocols today - Modbus and BACnet®.

#### Ambient range options

- Standard ambient 32~114.8°F / 0~46°C
- Low ambient 0~114.8°F / -18~46°C
- High ambient 32~125°F / 0~52°C
- Wide ambient 0~125°F / -18~52°C

#### Trane smart control and interface

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

#### Tracer<sup>™</sup> UC800 controller

- New generation of Trane control platform for chillers.
- Advanced algorithms for the most challenging conditions.
- Perfect balance of performance and economy.





#### **TESTED TO EXTREMES**

At Trane, we don't just build our products; we own patents on them. And we don't just test our products; we push them to the extreme, because if it can't make it through our torturous testing, you'll never see it in your building. Some of the elements attributing to reliability in RTAG chillers include:

- manufactured in Trane factories.
- process needs.
- higher energy efficiency overall.



Trane helical rotary compressors give you very high reliability over a wide operating range, thanks to their low-speed, direct drive, and the use of only three moving parts.

Robust **"built-to-last"** unit design ensures an efficient and long-life operation.

Trane's superior production quality control for evaporator, condenser and compressor

Advanced Adaptive Control<sup>™</sup> that intelligently modulates chiller operation to keep the chiller online, even in extreme conditions where other chillers would shut down.

Variable frequency drive operation allows close matching to building or industrial

CHIL evaporator uses significantly less refrigerant, offering better heat transfer and

### In-depth HVAC know-how

With Trane RTAG air-cooled chillers, your building and its unique needs come first. The focus is on making the most of what's available in your environment and what it needs to become. Here are some noteworthy features of RTAG:



- Optimized control logic.
- Improved part load efficiency.
- Reduced power consumption.

### **2** OIL SEPARATOR

 Delivers better performance with Trane proprietary design.

### **3** CONDENSER

- Good reliability from copper tube/ Al fin heat exchanger.
- Improved performance with unique design configuration.





 Tracer<sup>™</sup> UC800 controller, the new generation of Trane control platform for chillers, offers advanced algorithms for the most challenging conditions.

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- Clear display of critical information such as monitor settings, data trending, reports and alarms.
- Advanced algorithms for a dynamic performance and greater reliabilities.
- Durable construction suitable for both indoor and outdoor use.
- Simple yet intuitive navigation for effective operation, monitoring and management.
- The leading TD7 touch screen with 7" color display.



### 5 TRANE COMPRESSOR

3

TRANE

- High-reliability design as a result of direct drive, two screws helical rotary design, etc.
- Improved performance with Trane's new technology.
- Improved part load performance with variable speed technology (VFD for the P Series).



### 8 SELF-OPTIMIZING CONTROLS

- Built in condenser fans, subcooling control and compressors.
- Improved energy efficiency.
- Reduced life cycle cost.

### LOW CHARGE (CHIL) EVAPORATOR

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- Delivers high performance with small footprint.
- Trane proprietary design that obtained U.S. patent.



### ELECTRONICALLY COMMUTED FAN

- Reduce power consumption.
- Operate with high part load efficiency with variable fan speed control.
- Achieve low-noise acoustical level.



## Supporting you in all ways

With hundreds of possible system designs and configurations impacting system efficiency levels, there's lots to choose from. How do you possibly narrow the choices and definitively determine the right HVAC system design for your needs? Amazingly, it's quite easy... with Trane's help.

#### **TRANE BMS EXPERTS**

Our BMS experts are there to help you choose effective controls, and put together a complete system equipment including air side systems, like fan coils and air handling units. By integrating a Trane system in your building, you can be confident your entire system is optimized thanks to our expertise in equipment, control and services.

### TRANE ANALYZING SYSTEM

Our System Analyzer<sup>™</sup> helps estimate building loads and performs preliminary energy and cost analyses of virtually any building, system, and equipment combination.

#### **TRANE ENERGY SUPPORT**

For LEED certification, TRACE<sup>™</sup> 700 (Trane Air Conditioning Economics) software helps analyze the energy and economic effects of virtually any system configuration. It allows you to manipulate a wide range of variables to create a detailed energy usage profile for your specific building.

#### TRANE SOFTWARE SPECIALISTS

TRACE 700 software accurately compares the impact of building alternatives. You can test the effects and consequences of different architectural features, HVAC systems, building utilization or scheduling scenarios to see the different economic options for each scenario. This enables you to make genuine life-cycle, cost-based system decisions with absolute confidence.



#### **ELITE START™**

just like our equipment.

Trane equipment is commissioned by technically competent factory trained technicians. **Trane commissioning** confirms that the system has been not only accurately installed, but also configured and fine-tuned to operate according to your requirements.

#### **OPERATE AND MAINTAIN**

At Trane we are committed to providing full service solutions that are efficient and reliable,

Trane offers technical expertise to maintain or repair your system with a full range of HVAC spare parts - both Trane-specific and generic, coupled with our advanced logistics network, ensures a quick and reliable service.

#### **UPGRADE AND IMPROVE**

Trane offers Trane Select Contracts that can be tailored to your needs, your business and your application. They are comprised of several levels of services, ranging from a 24/7 duty to a full 'all parts and labour' coverage which includes life cycle management and maintenance.



Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands — including Club Car<sup>®</sup>, Ingersoll Rand<sup>®</sup>, Thermo King<sup>®</sup> and Trane<sup>®</sup> — 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.

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