



Series R™ Water-Cooled Chiller

An industrial chiller for professional ice

Model RTHD – Featuring Opteon™ XP10 (R-513A) refrigerant

All-around solid performance

Trane Series R™ water-cooled chiller model RTHD uses helical rotary (screw) technology that helps provide dependable, long-lasting performance in professional arenas. Designed for making ice for skating rinks, RTHD is an industrial refrigeration chiller that balances cost, performance and sustainability through reliable engineering and Opteon™ XP10 (R-513A), the official refrigerant solution of the NHL®. Opteon™ may be considered a more sustainable solution than other legacy alternatives for rink operators.

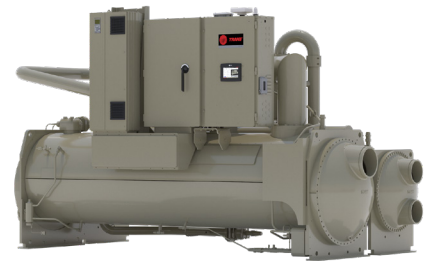


A modernized, sustainable alternative

Under the Montreal Protocol, R-22, an HCFC refrigerant that's widely used in ice rink chillers, has been phased out. Many of the refrigerants that are commonly used to replace R-22 will exit the market over the next decade. RTHD chillers use R-513A refrigerant with no ozone depletion potential (ODP) and low global warming potential (GWP).

Ideal for new and existing buildings

RTHD installs easily just about anywhere. If your arena is making the switch to a new chiller because of HCFC and HFC refrigerant phase-outs, RTHD is ready to move in. It separates into a few smaller components that pass easily through doorways, halls and freight elevators.



R-513A refrigerant is compliant with ASHRAE® Standard 34

- Non-ozone depleting potential (ODP)
- Low global warming potential (GWP)
- Lower acute toxicity*
- No flame propagation*

* As described by ASHRAE® Standard 34. 513A refrigerant is listed under ASHRAE Standard 15—Safety Standard for Refrigeration Systems and Designation and Safety Classification of Refrigerants (ANSI® Approved).



Engineered by Trane® for making ice

The RTHD industrial chiller with R-513A meets ASHRAE® Standard 90.1 for efficient operation by allowing higher lift and more capacity. RTHD offers a sustainable solution with efficiency that's comparable to most ammonia systems—without the price premium. Plus, it can be configured to produce leaving-temperatures down to 5°F (-15°C), making it ideal for quick-freezing, high quality ice.

A high performing refrigeration chiller

- Highly reliable semi-hermetic design, superior compressor lift with R-513A, and continuous unloading help offer precise setpoint control for excellent ice sheet quality.
- Helical rotary technology is well suited for hot, humid climates as well as colder locations where chiller loads seldom reach their peak.
- The combination of Trane controls, compressors, and expansion valve technology can deliver exceptionally precise chilled fluid temperature control, with variance as tight as +/- 0.5°F (0.3°C).
- Our proven evaporator design helps produce higher efficiency levels using less refrigerant charge.
- RTHD chillers can be configured to produce leaving-evaporator solution temperatures as low as 5°F (-15°C), making them ideal for the heavy-duty work of freezing an ice rink.
- Advanced compressor and refrigerant technology combine to help improve efficiency. RTHD chillers can achieve efficiencies comparable to “natural” refrigerant systems, without their higher life cycle cost, toxicity or flammability issues.
- Capacity and efficiency are AHRI certified for consistent performance and ASHRAE® 90.1 compliance.



Connected Building Advantages

Tracer® controls provide the expert approach to greater chiller efficiency and reliability, helping you save energy, money, and increase uptime.

- Intuitive user interfaces provide real-time status and trend information
- Chiller plant control strategically manages the rotation, staging and sequencing of multiple chillers. This helps deliver the right balance of proven sequences with job-specific customization

Built for long-term value.

Backed by Trane®.

Series R™ water-cooled chiller model RTHD helps provide many years of hassle free and cost-efficient use. Its long-term cost advantages are one reason why RTHD is one of the top-selling products in this category.



- Performance to ASHRAE® 90.1 standards
- Proven compressor design without periodical rebuild
 - Direct drive helps improve reliability by reducing the risk of gear and transmission failure
 - Slow full load design speed of 3,600 rpms reduces wear
 - Simple design with just three moving parts provides years of trouble-free operation

Simple Maintenance Checklist

- ✓ Clean tubing periodically
- ✓ Check and analyze oil annually

For more information visit trane.com/series-r



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.com or tranetechnologies.com.

All trademarks referenced in this document are the trademarks of their respective owners.

© 2025 Trane. All Rights Reserved.

RLC-SLB046-EN
01/13/2025