



# Ascend™ Air-Cooled Chillers - ACR

**Engineered to redefine what's possible in high-density, high-stakes environments.**

The Trane Ascend™ Air-Cooled Chiller model ACR is engineered to meet the escalating demands of modern data centers and commercial buildings, providing exceptional cooling performance even in extreme ambient temperatures. With integrated free cooling and advanced Symbio® 800 unit controller, this chiller delivers unparalleled efficiency, reliability, and sustainability, ensuring optimal operation and reduced energy costs throughout its lifespan.

The Trane Ascend™ Air-Cooled Chiller model ACR is the ultimate solution for high ambient temperature operations, designed to support the cooling needs of data centers and commercial buildings.



## Performs Reliably in Extreme Ambient Conditions

The Ascend™ Air-Cooled Chiller model ACR is capable of operating efficiently at high ambient temperatures, addressing the heat generated by modern GPUs and AI applications. This feature ensures continuous cooling performance even during short excursions to higher temperatures, maintaining uptime and reliability in mission-critical environments.



## Integrated Free Cooling

The integrated water side economizer provides free cooling, significantly reducing reliance on mechanical cooling. This feature lowers initial, installation, and energy costs throughout the chiller's lifespan, offering an unbeatable combination of part-load and full-load efficiencies. Customers benefit from reduced utility bills and a lower carbon footprint.



## Rapid Restart™ Capability

After a power interruption, the ACR chiller can quickly regain full operational capacity, ensuring minimal disruption to mission-critical applications. This rapid restart capability enhances reliability and uptime, making it an ideal choice for data centers and other environments where continuous operation is essential.

<b>Capacity range</b>	550T
<b>Operating Map</b>	Cooling 10 to 72°F, -20 to 131°F
<b>Compressor</b>	Helical Rotary Screw
<b>Refrigerant</b>	Next-gen, low-GWP R-1234ze
<b>Controls</b>	Symbio® 800

# Trane Ascend™ Air-Cooled Chiller Model ACR 550T

## 1 INTEGRATED FREE COOLING

A factory installed and integrated water side economizer to help save on first cost, installation cost and energy cost throughout the life of the asset

## 2 RAPID RESTART™ CAPABILITY

After a power interruption, ACR chillers can quickly regain full operational capacity, so mission-critical applications can continue with minimal interruption

## 3 OPTIONAL HARMONIC FILTRATION SYSTEM

A matrix filter design provides the harmonic solution to meet the requirements of IEEE® 519, reducing harmonic distortion to 5% or less total demand distortion (TDD)

## 4 MAINTENANCE-FREE, LONG-LIFE MOTORS

ACR chillers' compressor and condenser fans are powered by variable speed, permanent magnet motors that require no periodic maintenance and are designed for exceptionally long operational life

## 5 TRANSVERSE "OPEN V" DESIGN CONDENSER COILS

This design allows easier cleaning of the condenser coils from the inside out, to keep the coils and the chiller properly functioning

## 6 LONG LIFE ALUMINUM ALLOY

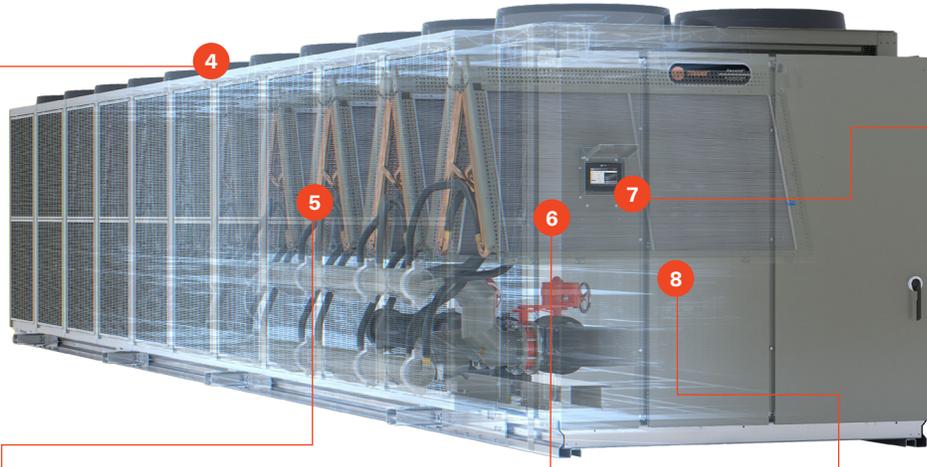
Light weight, anti-corrosive long life aluminum alloy lowers refrigerant charge

## 7 EXCLUSIVE ADAPTIVE FREQUENCY DRIVE

The Trane® Adaptive Frequency drive is fluid-cooled and is engineered to last the life of the chiller

## 8 SYMBIO 800® UNIT CONTROLLER

Remote connectivity for optimal performance and uptime



## Boost Your Cooling Capacity

Trane's Ascend model ACR Trim Cooler delivers enhanced supplementary cooling capacity, making it ideal for mission-critical environments. It is designed to provide additional free cooling performance allowing the primary cooling system to consume less energy, particularly in areas with significant ambient relief.

## Symbio® 800-Unit Controller

Symbio® Equipment Controls provide secure equipment connectivity and serviceability to support remote service and monitoring, offering the foundation of a reliable and continuous system.

## Comprehensive Performance and Maintenance Solutions

Ensure peak performance with local data-center focused Trane Technicians for installation, start-up, and commissioning. Benefit from secure remote monitoring, predictive maintenance, continuous commissioning, and intelligent energy usage reviews.



**Contact us today to discover the advantages of the Trane Ascend™ Air-Cooled Chiller Model ACR and how it can enhance your data center operations.**



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