

# Ascend<sup>®</sup> Air-Cooled Chillers



## An amazing combination of high-energy efficiency and quiet performance.

Trane model ACR air-cooled chillers deliver an industry leading combination of part-load and full-load efficiencies, while offering multiple sound reduction options for noise sensitive installations. No other air-cooled chiller delivers this level of efficiency and acoustic performance, making the ACR chiller the perfect solution for your building.

### Industry-leading efficiency with no need to compromise

Other air-cooled chillers can deliver good part-load efficiency, but often at the cost of full-load operation. ACR chillers use advanced technologies to deliver an unbeatable combination of efficiency under all operating conditions to lower utility bills and save money.

### Sound solutions for quiet cooling

HVAC system noise levels can vary widely. Excessive noise can impact the performance, productivity and overall satisfaction of building occupants as well as occupants of neighboring structures. That is why quiet operation is designed into every ACR air-cooled chiller, and different levels of InvisiSound<sup>®</sup> acoustic reduction treatments are available to give you the flexibility to meet specific application needs.

### Advanced features to serve advanced applications

ACR chillers are designed for easy integration with facilities that have specialized requirements.

- **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.
- **Rapid Restart™ capability**—After a power interruption, ACR chillers can quickly regain full operational capacity, so mission-critical applications can continue with minimal interruption.
- **Optional harmonic filtration system**—A matrix filter design provides the harmonic solution to meet the requirements of IEEE<sup>®</sup> 519, reducing harmonic distortion to 5% or less total demand distortion (TDD).



### Model ACR

150-550 tons

## Innovation at Work

Building on over 40 years of experience designing air-cooled chillers, Trane engineers brought innovation and knowledge to every component used in the ACR air-cooled chiller. The result: reduced energy consumption, improved system flexibility and performance, and the lowest sound levels—all while delivering improved reliability and lower maintenance requirements.

### Ultimate control under all conditions

Trane offers an industry leading combination of connectivity, flexibility and serviceability that enables optimum unit performance and delivers reliable and efficient operations. The Symbio<sup>®</sup> 800 controller, features factory programmed Adaptive Controls™ performance algorithms and integrates seamlessly and securely with your building automation system, leveraging secure remote IP connectivity (BACnet, Modbus<sup>®</sup>) and optional Air-Fi<sup>®</sup> wireless technology and LonTalk<sup>®</sup> communication protocols for simplified equipment monitoring and management.

# Easier, less frequent maintenance

ACR chillers have low maintenance requirements—and are designed to make those maintenance duties easier and less frequent.

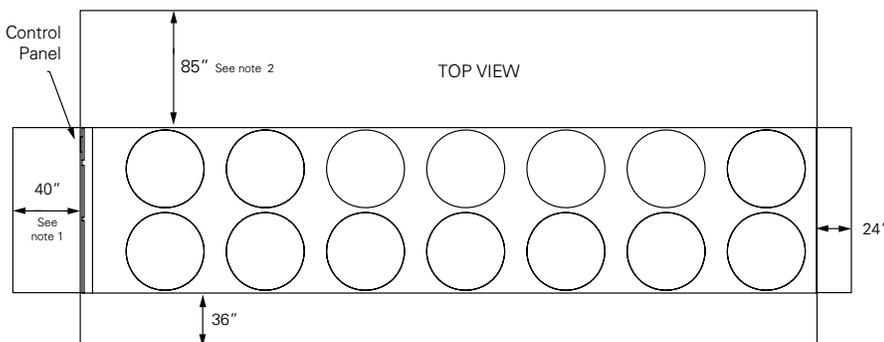
- **Maintenance-free, long-life motors**—ACR chillers' compressor and condenser fans are powered by variable speed, permanent magnet motors that require no periodic maintenance and are designed for exceptionally long operational life.
- **Transverse “open V” design condenser coils**—This design allows easier cleaning of the condenser coils from the inside out, to keep the coils and the chiller properly functioning.
- **Exclusive Adaptive Frequency drive**—The Trane® Adaptive Frequency drive is fluid-cooled and is engineered to last the life of the chiller.
- **Trane Intelligent Services enabled**—ACR chillers can be remotely monitored by Trane Intelligent Services (TIS) 24 hours a day.
- Post installation, the Symbio 800 controller can connect with Trane energy analysis and 24/7 system monitoring services to provide visibility that assure Trane chillers are continuously optimized for efficiency and uptime.

## General Data

Size	Full Load EER	IPLV EER	Length (in) without matrix filter	Length (in) with matrix filter	Width (in)	Height (in)	MCA	MOP
150 Ton 4V	Exceeds ASHRAE 90.1 - 2019 Path A by up to 20% and Path B by up to 25%	Exceeds ASHRAE 90.1 - 2019 Path A by up to 45% and Path B by up to 26%	229	282	88	98	275	350
165 Ton 4V			229	282	88	98	284	350
165 Ton 5V			282	329	88	98	294	400
180 Ton 4V			229	282	88	98	315	400
180 Ton 5V			282	329	88	98	327	450
200 Ton 5V			282	329	88	98	336	450
200 Ton 6V			335	382	88	98	330	450
225 Ton 5V			282	329	88	98	396	500
225 Ton 6V			335	382	88	98	396	500
250 Ton 5V			282	329	88	98	404	500
250 Ton 6V			335	382	88	98	414	500
275 Ton 6V			335	382	88	98	477	600
275 Ton 7V			388	435	88	98	496	600
300 Ton 7V			388	435	88	98	511	700
300 Ton 8V			441	488	88	98	496	600
375 Ton 9V			511	564	88	98	704	800
380 Ton 11V			617	617	88	98	716	800
440 Ton 9V			511	564	88	98	816	1000
450 Ton 11V			617	617	88	98	783	1000
500 Ton 11V			616	616	88	98	1011	1200
550 Ton 11V	616	616	88	98	1101	1200		

Weight and dimension can change depending on options selected.  
 Flow rate and water connection sizes can change depending on evaporator pass arrangement selected  
 Electrical based off of 460V.

## Service Clearances - NO OBSTRUCTIONS ABOVE UNIT



- Notes:**
1. A full 40 inches clearance is required in front of the control panel. Must be measured from front of panel, not end of unit base.
  2. Clearance of 85 inches on the side of the unit is required for coil replacement. Preferred side for coil replacement is shown (left side of the unit, facing control panel), however, either side is acceptable.



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