

# SMARTD

Innovation Engineered,  
Energy Optimized

## ACTIVE COOLING



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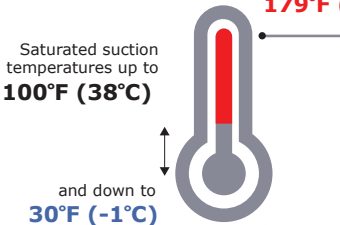


# Introducing a new era of cooling performance

**Active Cooling technology** redefines what's possible for high-efficiency applications. It is engineered to deliver maximized capacity while expanding the operating temperature range for both data center cooling and high-efficiency heating application.

Active Cooling's advanced design maintains optimal performance by regulating power electronics temperature, enabling:

- **Chilled water temperatures up to 104°F (40°C)** for data center applications
- **Increased capacity**, even at extreme ambient temperatures
- **Heating capability** with hot water temperatures up to 176°F (80°C)
- **Operational flexibility**, supporting both standard and elevated chilled temperatures with the same equipment

| Unleash increased capacity                                                                                                                                                                                                                                           | Maximum temperature flexibility                                                                                                                                                                                                                        | Water heat pump & Heat recovery                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>More Capacity</b> at higher temperature from the same compressor:</p> <ul style="list-style-type: none"> <li>- More Capacity = <b>Faster ROI</b></li> </ul> <p>Specialized for <b>demanding high-temp</b> data center at <b>extreme ambient conditions</b></p> | <p>Increased maximum SST enables even <b>higher chiller water temperatures</b> for datacenter applications</p> <p>Active Cooling compressors <b>combine Standard and High SST</b> configurations, providing maximum application flexibility</p>        | <p>Electrify heating with <b>industry-leading Turbocor efficiency</b></p> <p>Elevated condensing temperatures for water-to-water <b>heat pumps</b> and <b>heat recovery</b> chillers</p> <ul style="list-style-type: none"> <li>- Sanitary Hot Water</li> <li>- Industrial and Process Heating</li> </ul> |
|  <p>Up to 45% more capacity in high temp applications</p>                                                                                                                         |  <p>Saturated suction temperatures up to <b>100°F (38°C)</b> and down to <b>30°F (-1°C)</b></p> <p>Saturated discharge temperatures up to <b>179°F (81.5°C)</b></p> |  <p>Hot water up to <b>176°F (80°C)</b></p>                                                                                                                                                                          |

# Active cooling options

| Model         | Refrigerants       | Cooling capacity @Comfort Condition* | Heating Capacity*  | Application Highlight                                               | Min SST        | Max SST         | Max SDT           |
|---------------|--------------------|--------------------------------------|--------------------|---------------------------------------------------------------------|----------------|-----------------|-------------------|
| <b>TGS310</b> | R-1234ze<br>R-515B | 101 TR<br>(356 kW)                   | 174 TR<br>(612 kW) | Extremely high ambient and leaving water temps                      | 30°F<br>(-1°C) | 95°F<br>(35°C)  | 171°F<br>(77°C)   |
| <b>TTS350</b> | R-134a<br>R-513A   | 136 TR<br>(478 kW)                   | 208 TR<br>(733 kW) | Faster ROI: Significant capacity recovery at high temps             | 30°F<br>(-1°C) | 95°F<br>(35°C)  | 145°F<br>(63°C)   |
| <b>TGH285</b> | R-1234ze<br>R-515B | 85 TR<br>(299 kW)                    | 155 TR<br>(546 kW) | Process Heating: Hot water up to 176°F (80°C)                       | 30°F<br>(-1°C) | 100°F<br>(38°C) | 179°F<br>(81.5°C) |
| <b>TTH375</b> | R-134a<br>R-513A   | 119 TR<br>(420 kW)                   | 178 TR<br>(626 kW) | Extreme versatility due to wide condensing temp range and high lift | 30°F<br>(-1°C) | 95°F<br>(35°C)  | 158°F<br>(70°C)   |

**\*Cooling Capacity: SST 41.9°F (5.5°C) SDT 123.8°F (51°C)**

**\*Heating Capacity: Source 68 °F (20°C) Sink 131°F (55°C)**





# Global innovation in oil-free technology, products built for high-performance environments.

Smardt is a global leader in oil-free centrifugal chillers, delivering energy-efficient solutions with ultra-low lifecycle costs. With over 12,000 units installed worldwide, we support some of the most demanding environments from hospitals and commercial buildings to manufacturing and mission-critical facilities. Our chillers are powered by magnetic bearing technology and a Global Controls Platform, offering reliability, low maintenance, and future-ready performance.

As buildings evolve, we continue to reduce energy usage, support global compliance requirements, and help customers move towards more sustainable operations.

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