

Copeland YAW variable speed scroll compressors for A2L residential and commercial applications

Superior efficiency, control and reliability

Superior efficiency, control and reliability. Introducing the latest innovation of Copeland variable speed scroll technology – for maximum commercial HVAC system performance.

Breakthrough efficiency

The Copeland YAW variable-speed scroll compressor is designed to support HVAC decarbonization by addressing the heating capacity challenges found in commercial cold climate heat pump (CCHP) and water heating applications. Combining overspeed capabilities and vapor injection, this innovative platform delivers the next generation of performance, comfort and sustainability.

The Copeland YAW variable-speed compressor platform is engineered to deliver the heating capacities and efficiencies required to meet the DOE's strict CCHP standard. Available in tonnage ranges for residential and commercial applications, YAW represents state-of-the-art sustainable compression technology—leveraging the low-global warming potential (GWP) A2L refrigerant R-454B, a variable-speed compressor and drive, and vapor injection technologies.

Copeland's YAW variable-speed platform with vapor injection is designed to boost capacity in cold climates, delivering up to a 25 percent increase that meets the DOE's 100 percent capacity requirement in 5°F ambient conditions. This breakthrough will enable OEMs to accelerate the electrification and decarbonization of space and water heating in North America by developing best-in-class residential and commercial heat pumps and water heaters.



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***Proven Copeland scroll platform
enhanced and optimized
for variable speed***

- Optimized scroll elements for variable speed performance
- BPM motor technology for highest efficiency
- Technology to boost efficiency across a range of conditions
- 2–25 ton
- Both compressor and drive are agency approved for reduced design time, cost, and speed to market.
- Cold weather drive function enables operation down to -22°F

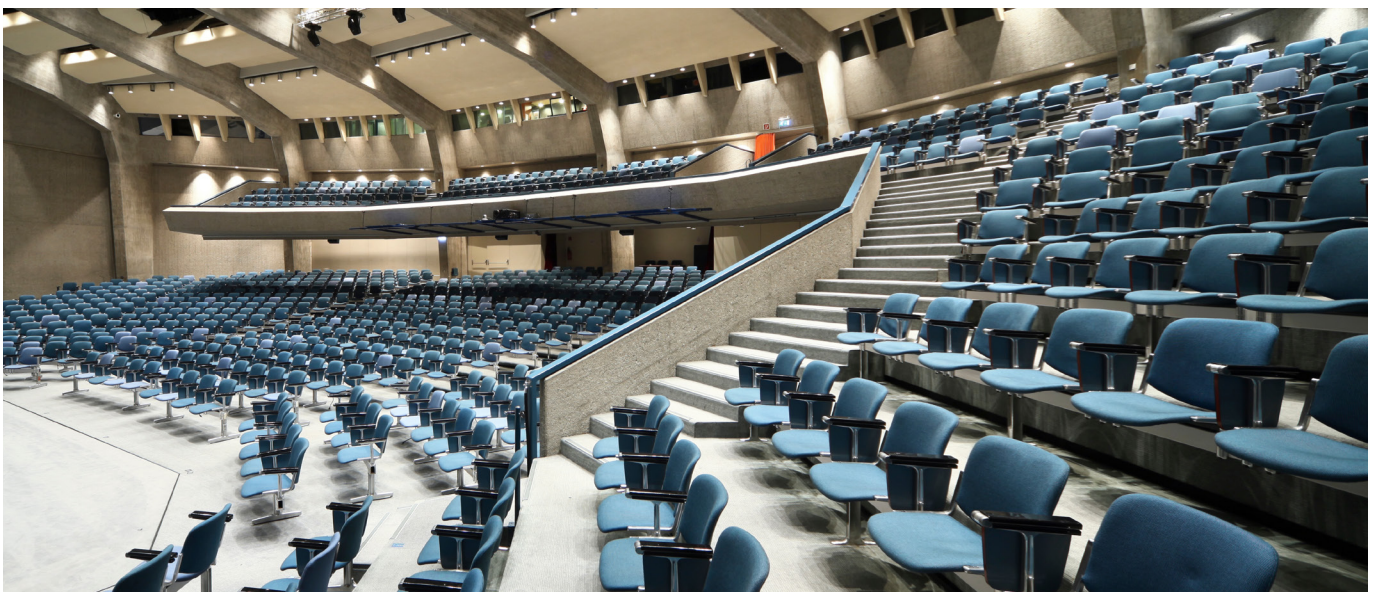
Motor control drive offerings

Copeland offers AC drives to be paired with Copeland variable speed scroll compressors. These drives have integrated compressor electronics technology and RS485 Modbus communication as a standard.

**Comprehensive protection
and reliability**

Copeland variable speed scroll compressors take reliability to a new level with the integration of compressor electronics technology (formerly CoreSense technology). These active protection algorithms incorporated into the motor control drive safeguard the compressor and drive from many adverse operating conditions. The types of protection features include:

- Locked rotor detection
- Phase loss detection
- Maximum operating current detection
- Discharge line temperature protection
- Anti-short cycling



To learn more, visit copeland.com

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