

Copeland oil-free centrifugal compressor

Featuring Aero-lift bearing technology enabling oil-free solutions in chiller applications

Optimized efficiency, simple design, maximum performance

Robust cooling capacity

Meeting the demanding cooling load requirements of mission-critical, air-cooled chiller applications requires high-tonnage, high-speed compressors that can deliver robust, precise and reliable performance.

Energy efficiency

Compared to existing screw compressor technology, the Copeland oil-free centrifugal compressor delivers significant energy efficiency gains in full- and part-load conditions.

Flexible architecture

Independent configuration of compressor, electronic controls and VFDs opens new design options for chiller OEMs while allowing systems to be customized for various and/or specific application requirements.

Performance enhancing algorithms

The Copeland oil-free centrifugal compressor leverages intelligent control algorithms and predictive data models to optimize performance and reliability.



Benefits

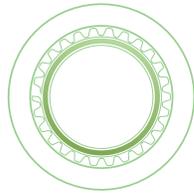
- Lower lifecycle costs
- High part load efficiency
- Reliability only found in Copeland compressors
- Reduced carbon footprint

Standard Model	Tons	Capacity
RLL-28M1-7X9	80 ton water-cooled	280 kW (955 kBtu/hr)
RLL-35M1-7X9	100 ton water-cooled	350 kW (1194 kBtu/hr)

Note: nominal capacity rated at AHRI Standard 550/590 conditions

Copeland oil-free centrifugal compressors offer a low-complexity solution that delivers high performance with ground-breaking Aero-lift bearing technology. Designed to increase efficiency in chiller applications with low-GWP refrigerants. Optimized for use with lower global warming potential (GWP) refrigerants, R-1234ze and R-515B.

Copeland offers a full-package solution that has been optimized with the oil free centrifugal compressors. The full solution includes the Copeland oil-free centrifugal compressor, Copeland high speed drive, and Copeland iPro controller.

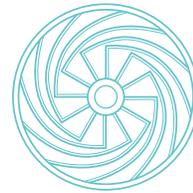


Aero-lift bearing

Self-lifting fluid film provides frictionless performance

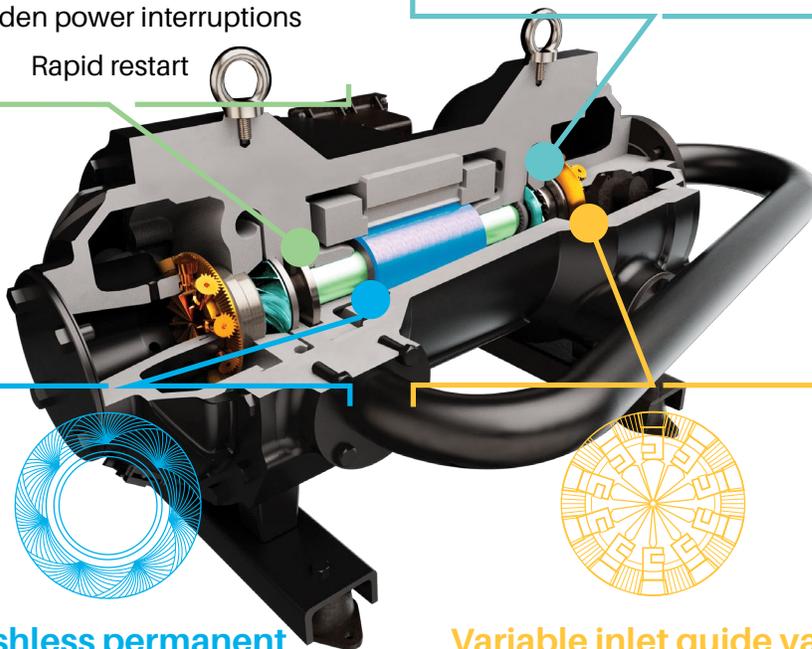
Stands up to intense conditions such as sudden power interruptions

Rapid restart



Two-stage impellers

Handle higher lift and low lift for broader operating range and increased turndown



Brushless permanent magnet motor

High-efficiency motor for high-speed applications



Variable inlet guide vane

Helps guide refrigerant flow to maximize compressor range in surge and choke conditions

To learn more, visit [copeland.com](https://www.copeland.com)

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