

Digital Compression Boosts Outdoor Condensing Unit Performance

Variable-capacity modulation maximizes energy savings, refrigeration reliability and installation flexibility



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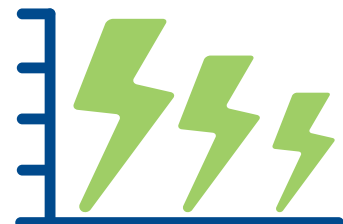
Precise temperature control and significant energy savings are now available with the Copeland™ Digital Outdoor Refrigeration Unit, X-Line Series. Building on the field-proven Copeland scroll compressor and X-Line outdoor condensing unit platforms, the digital X-Line Series delivers superior cooling and energy efficiency in small-format supermarkets, convenience stores and foodservice establishments — helping owners and operators to manage their refrigeration and food safety needs.

Digital modulation enables owners to maintain much more precise setting and tight control of case temperatures.

Maximize energy efficiencies and temperature precision

Digital Copeland scroll compression technologies enable continuous capacity modulation from 20 to 100 percent to deliver significant reductions in energy consumption and refrigeration improvements. Variable-capacity modulation allows the digital X-Line Series to deliver:

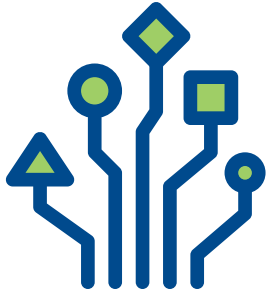
<i>Energy efficiency advantages</i>	<i>Refrigeration reliability improvements</i>
<ul style="list-style-type: none"> • Substantial annual energy efficiency improvements • Reduced compressor cycling • Longer equipment life • Decreased electrical load at startup 	<ul style="list-style-type: none"> • Precise setting and tight control over case temperatures • Load matching from 20 to 100 percent • Improved product integrity, which helps operators maximize food quality and safety



This helps operators minimize temperature deviations in refrigeration fixtures so that food is kept safe and at maximum quality. The digital X-Line Series combines compression technology with variable-speed fan motor control, large-capacity condenser coils, and smart protection and diagnostics to meet today's challenging refrigeration requirements.

Ideal for walk-in coolers and display cases, the digital X-Line delivers more precise, reliable refrigeration, longer-lasting equipment, and lower energy bills in medium-temperature applications.

Simply put, the digital X-Line is engineered for operators seeking to lower energy bills and manage food quality and safety.

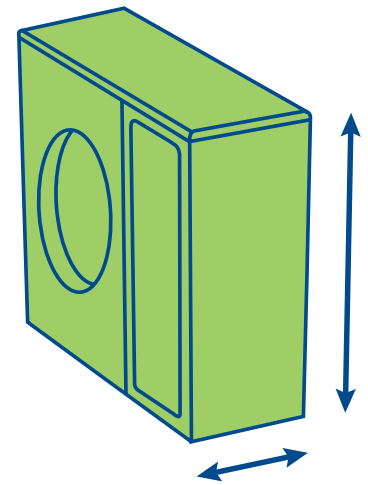


Superior reliability and protection through advanced diagnostics

Onboard diagnostics and protection allow operators to take action to minimize product loss from equipment downtime. Errors can be quickly communicated to service technicians, and the system can make changes to protect against faults that might otherwise cause a compressor failure. Operators can expect improved reliability, an extended compressor lifespan and greatly reduced lifecycle costs.

Installation flexibility from slim chassis

The digital X-Line Series' slim profile, lightweight design and wall-mount option give operators the flexibility to install the units, even in locations with significant space constraints. In fact, digital X-Line Series units are so unobtrusive they're often mistaken for an AC split unit. This helps operators lower installation costs and avoid expensive system design workarounds and/or relocation issues. The digital X-line Series even can be applied to systems featuring multiple evaporators.



Ultra-quiet operation from strategic noise abatement design

Operators located near residential areas or noise-restricted zones benefit from using the quietest standard unit available. Under most expected operating conditions, the units produce less sound than a normal conversation. In most applications, noise from the digital X-Line Series is practically undetectable. The units are unobtrusive and allow more mounting options where the sound produced by traditional units might prevent their use, such as customer-facing locations near entryways, patios or even indoors.

Corrosion-resistant and designed for extreme conditions

The digital X-Line Series is equipped to operate in harsh and extreme environments, from low ambient conditions to temperatures up to 120 °F. Protective, pre-painted enclosures and condenser coil fin coatings also resist corrosion in coastal zones. A heated and insulated receiver enables the units to operate in low ambient temperatures. Electronic controls help to constantly tune and adapt the system for optimum performance and efficiencies in any condition.



What's inside

Heated and insulated receiver

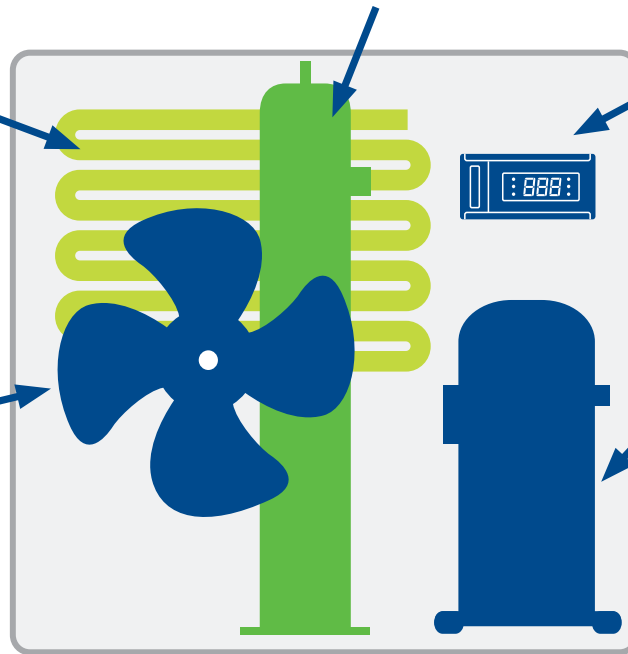
- Allows operation in low ambient temperature situations

Larger condenser coils

- Increase energy efficiency
- Corrosion-resistant copper tube and coated aluminum fins

Variable-speed fan motor control

- Contributes to quiet operation
- Provides efficient head pressure control



Electronic controls

- Offer greater reliability than traditional mechanical controls
- Avoid nuisance service calls
- Allow technicians to diagnose issues quickly and accurately

Copeland scroll digital compressor technology

- Based upon field-proven Copeland scroll design
- Provides the most reliable, highest-efficiency compression available
- Available in 3 to 6 horsepower

Digital technologies

- Variable-capacity modulation for precise temperature control
- Highly flexible load matching
- Linear power reduction relative to modulated capacity

Diagnostic features

Onboard diagnostics provides connectivity to facility management control systems (including Emerson's Site Supervisor suite of control products) to alert owner/operators of faults and key performance indicators (KPIs).

- Over-current protection
- Incorrect phase detection
- High-pressure lockout
- Flood-back prediction
- Demand Cooling™
- Flooded start protection ("bump-start" logic)
- Discharge temperature protection
- Anti-short cycle time delay
- Digital fault code display/remote alarming
- Over/under voltage protection



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