

## Redefining Refrigeration

*Built for maximum convenience, performance and protection*



The factors driving the selection of commercial refrigeration equipment in convenience stores and restaurants have changed drastically in recent years. While reliable refrigeration is still a top priority, the days of “just keep it cold” have given way to a much broader range of operator challenges and concerns, including:

- Offsetting rising energy costs with new energy efficiency targets
- Reducing energy consumption to meet minimum efficiency levels
- Creating optimal in- and outside-store environments for customers and neighbors

- Identifying the potential for equipment failure in advance to prevent costly product loss
- Evaluating the critical role of refrigeration system architecture in total store energy usage

Enter the Copeland Scroll™ Outdoor Refrigeration Unit, X-Line Series, purpose-built for medium- and low-temperature, walk-in coolers, freezers and display cases commonly found in c-stores and restaurants. Utilizing scroll compressor technology, variable speed fan motor control, large capacity condenser coils, enhanced vapor injection (in low-temperature models only) and advanced electronic controls, the X-Line meets today’s challenging small-format refrigeration requirements.

### Much-improved Energy Efficiencies

With proven Copeland Scroll compressor technology, large condenser coils and smart controls, X-Line units typically provide annual efficiency improvements of 20 percent or more compared to legacy equipment and technology. Additional efficiencies are gained when the outdoor units are used in place of traditional self-contained or other indoor systems by removing the additional heat load from the building’s air conditioning system.



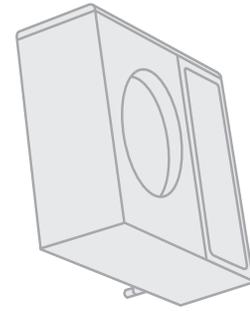
### Superior Reliability and Protection Through Advanced Diagnostics

Built-in CoreSense™ diagnostics and protection allow operators to stop worrying about product loss from equipment downtime. Errors can be quickly communicated to service technicians and the system can take action to protect against many system faults that could otherwise cause a compressor failure. The end results are improved reliability, extended compressor lifespan and greatly reduced lifecycle costs.

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## Installation Flexibility From Slim Chassis

The X-Line's slim profile, lightweight design and wall-mount option give operators the flexibility to install the unit in the most space-constrained locations. In fact, the X-Line is so unobtrusive it's often mistaken for an AC split unit. This flexibility lowers installation costs and helps avoid expensive system design workarounds or relocation issues.



## Ultra-quiet Operation From Strategic Noise Abatement Design

Operators located near residential areas or noise-restricted zones can take heart in having the quietest standard unit available on the market today. At only 55 to 59 decibels, the units produce less sound than a normal conversation. In most applications, unit noise is virtually undetectable. The units are unobtrusive and allow more mounting options where the sound produced by traditional units would prevent their use, such as customer-facing locations near entryways, patios or even indoors.

## Corrosion-resistant and Designed for Extreme Conditions

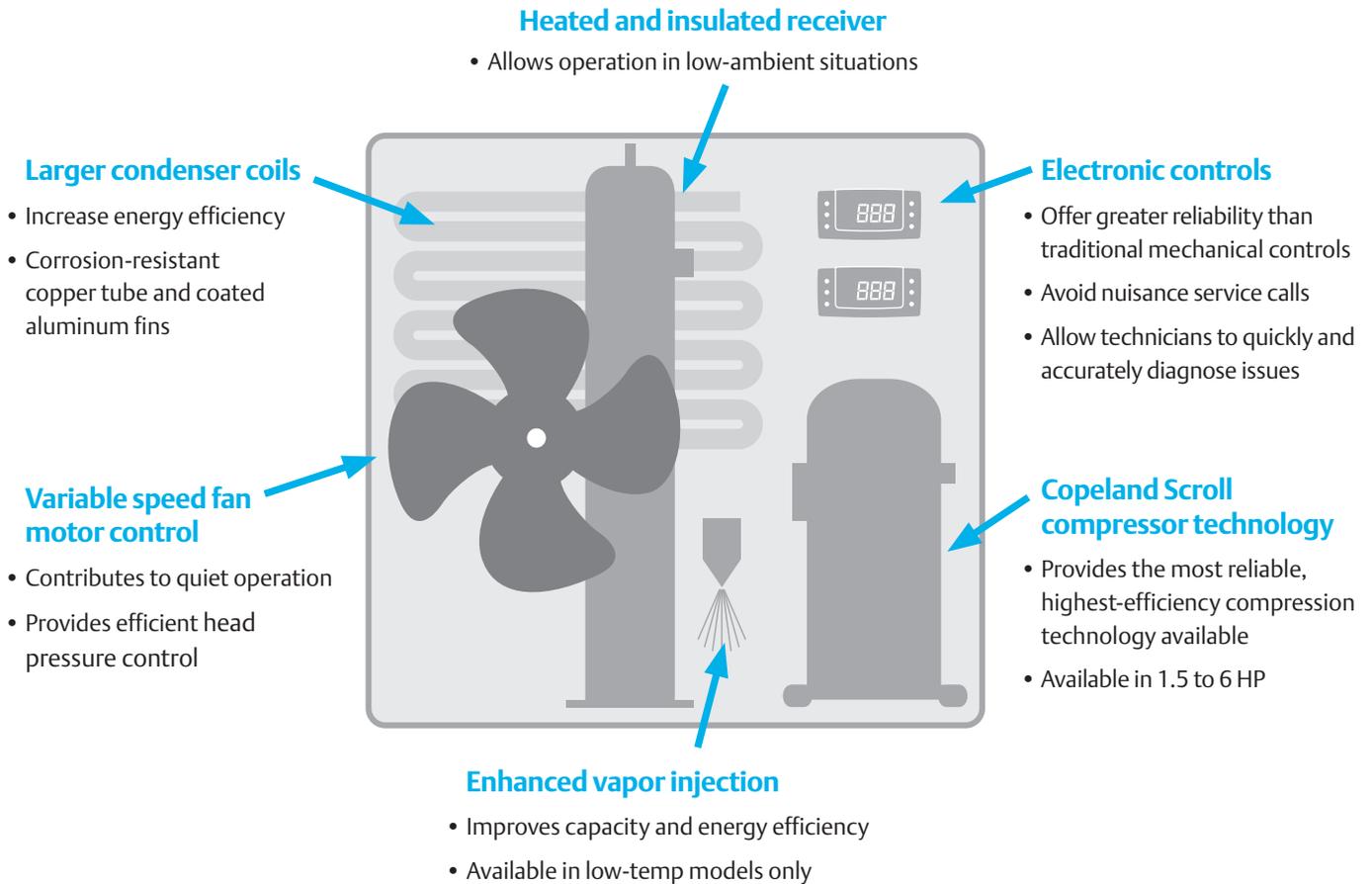
The X-Line is designed to withstand harsh and extreme environments, from arctic blasts to desert heats. Protective enclosure and condenser coil fin coatings resist corrosion in coastal zones. A heated and insulated receiver allows the unit to operate in ambient temperatures as low as -40 °F. CoreSense electronic controls constantly tune and adapt the system for optimum performance and efficiencies in any condition.



## Compliance With Regulatory Requirements

X-line models are tested to exceed the Department of Energy's new requirements for Annual Walk-In Energy Efficiency Factor (AWEF) ratings for walk-in refrigerators. With a horsepower range from 1.5 to 6, the X-Line is also designed for compatibility with R-404A and many of the refrigerants the EPA has named as acceptable substitutes, including: R-407 C/A, R-448A and R-449A. As acceptable refrigerants such as R-513A and R-450A continue to be introduced as substitutes, the X-Line will incorporate this growing list of alternatives. This makes X-Line units ideal for new equipment and service replacement applications.

## What's Inside



## Diagnostic features

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

- Over current protection
- Over/under voltage protection
- Unbalanced load detection
- Incorrect phase detection

- Discharge temperature protection
- High-pressure lockout
- Demand Cooling™
- Flood-back prediction
- Flooded start protection ("Bump-start" logic)
- Anti-short cycle time delay
- Digital fault code display/remote alarming

