

Convenience store improves energy efficiency with Copeland Scroll® outdoor condensing unit

Result

- Ultra quiet 67 dBA scroll condensing unit saves \$350 per year in energy
- Advanced Copeland PerformanceAlert™ diagnostics module helped prevent unneeded service calls
- Variable-speed PSC fan motors enabled quieter operation

Application

Outdoor condensing unit for walk-in cooler.

Customer

Convenience store located in the northeast.

Challenge

Old condensing unit powered by a hermetic reciprocating compressor needed replacement. Old unit was loud and did not provide accurate temperature control during busiest months. Numerous service calls for failed components required hours of diagnostics. Customer desired a refrigeration solution with built-in diagnostics that was quiet, good looking and would save energy.

Solution

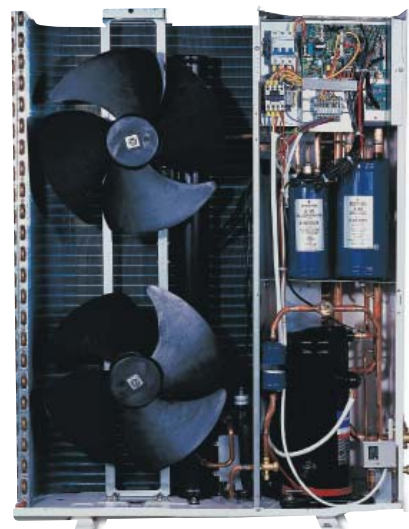
During 2009, Emerson engaged with the local refrigeration service contractor to deploy a Copeland Scroll Outdoor Condensing unit. This new unit was specifically engineered to deliver high efficiency, diagnostic protection, and flexibility.



Copeland Scroll compressors offer the highest energy efficiency levels to lower end user energy bills. With integrated controls, to optimize fan motor speed and maximize the heat transfer larger condenser coils, additional energy savings are achieved. Advanced protection and early warning against common failure conditions helps lower maintenance costs. To avoid unneeded service, protection against common nuisance conditions is provided, including exclusive liquid flood-back prediction and 'fresh start' logic to further protect the compressor. With the fault code retrieval capabilities of the Copeland PerformanceAlert™ controller, accuracy in the diagnosis of field issues is greatly enhanced, facilitating the service process to further reduce repair expenses.

Smooth scroll movement lowers sound and vibration levels. Ultra quiet variable speed fan motors and internal baffling further improve the sound quality, creating a better customer experience and providing additional location options.

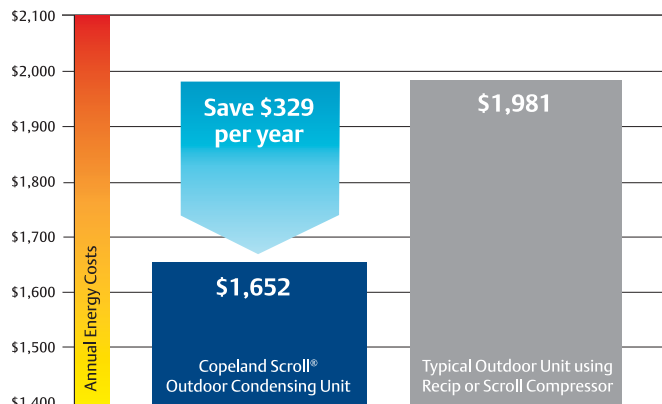
Customer found the Copeland Scroll Outdoor Condensing Unit to be quiet and provide excellent temperature control. Customer was pleased that the unit now sits neatly up against the building for easy access and a clean, professional appearance. Customer energy analysis shows savings of \$30 per month.



Resources

Learn more about the Copeland Scroll® Outdoor Condensing Unit at: EmersonClimate.com/copelandoutdoorunit

Annual Savings with Copeland Scroll® Outdoor Condensing Unit*



*Source of savings calculation, lab testing of 3HP medium temperature coolers based in Sidney, Ohio. Results may vary depending on system and location.

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