A NIGHTMARE ON STEAK STREET:
SAVED IN THE NICK OF TIME

Compressor diagnostics averted a loss of thousands of dollars in meat market
It’s every business owner’s nightmare: you lock the doors at the end of a business day and leave for the night; by morning, you have thousands of dollars in ruined merchandise and have to turn customers away for days until you can reopen. For large businesses, it can mean not meeting quarterly profit expectations; for small businesses, it could mean a loss of revenue that impacts operations for months or longer. And if your business is in highly perishable food items, like grocery stores and restaurants, this bad dream can all too easily become a reality if your walk-in cooler fails.

For a small-town meat market in the Midwest, this nightmare nearly happened last year. After the store was closed for the day, the defrost timer in the walk-in cooler failed. Because the timer couldn’t operate properly, the compressor couldn’t run when the thermostat switched on the cooling setting. On an ordinary system, this would start a domino effect: the compressor fails, the cooler slowly warms up and the meat spoils. But because the market’s cooler had a scroll compressor with CoreSense™ technology, it intelligently responded to the issue and took early steps to save both the meat and the equipment.

**Failure is not an option**

When the compressor’s on-board diagnostics technology detects a system trip fault, it flashes alerts on the compressor and, when connected to a supervisory controller, sends a text, email or automated call to designated personnel, such as a facility manager. The idea is the sooner someone can respond to an issue, the more likely it can be addressed and food temperatures can be maintained.

In the event no one responds to the initial alert, CoreSense diagnostics then directs the system to reset. When the compressor still cannot cool down to the appropriate temperature, the system continues to attempt to save the food, resetting itself for up to four hours. At the end of this four-hour period, it sets off an alarm and then defaults to saving the equipment by shutting off the compressor and waiting for a manual reset. While the temperature in the cooler would slowly start to rise at this point, the system’s integrity would be maintained.

**Big or small, protect them all**

Because of the alarm, the facility manager of the meat market was able to respond in time. With a little troubleshooting, a qualified service contractor identified it was an issue with the timer, repaired it and reset the scroll compressor. While the timer is not part of the compressor itself, the diagnostics technology was still able to prevent the cooler from failing due to the issue.

More than $10,000 in food was saved, and the compressor and cooler weren’t damaged. Just as important, the reputation of the meat market remained intact; they opened the next day, and customers were none the wiser to the near disaster. And since store managers were aware of the issue as it occurred, they were able to closely monitor product integrity and ensure that they were maintaining the quality that their customers expect.

While the technology saved just one compressor in a smaller facility in this case, it is equally critical for large chain stores and restaurants. These facilities, which utilize multiple coolers, are all dependent on compressors to keep large quantities of food at specific temperatures — 24 hours a day, 365 days a year. Whether the store has one or ten coolers, it doesn’t matter; the technology performs the same series of events to protect both the merchandise and the equipment, ensuring food retailers are ready to serve their customers’ needs.