The New EDGE for PrimeLINE® Models

Since Carrier Transicold first announced PrimeLINE® units with EDGE technology last December, shipping lines have discovered its fuel-saving benefits and a number have made the EDGE option their “standard.”

EDGE, which stands for Enhanced Digital for Greater Efficiency, includes a set of design enhancements that significantly boost performance of a machine that had already established a reputation for energy efficiency. The EDGE option reduces energy consumption for perishable cargoes by up to 20 percent compared with a standard PrimeLINE unit in normal operation. What’s more, when coupled with optional FuelWise™ power management software, EDGE technology delivers a remarkable 35 percent boost to fuel efficiency.

Here’s what an upgrade to EDGE technology includes:

- **Digital scroll compressor optimization** to reduce energy demand by providing both digital loading and unloading along with other enhancements.
- **Two-speed condenser motor** enabling low-speed operation under light loading conditions, thereby conserving more energy.
- **Refined evaporator fan geometry** with an enhanced fan profile and fine-tuned blade pitch for optimized airflow.

The above changes can add up to a 20 percent savings under real-world test conditions. An additional boost in performance comes when FuelWise optimization software is loaded into the unit’s controller.

The FuelWise software works by dynamically cycling the refrigeration system on and off to save energy while still maintaining temperature within +/- 0.25 degrees Celsius of set point on an hourly average. FuelWise software monitors air temperatures and integrates data every minute. It then automatically determines when to provide cooling and when to cycle off the system, while still maintaining the supply air temperature within a predetermined range.

As a premium option for new PrimeLINE units only, EDGE technology is now broadly available and can be specified with or without the new performance optimization software.