FRIGITEK & EC MOTORS

The Frigitek® controller is designed to reduce the energy used by evaporator fans in refrigeration systems by reducing the speed of the fans whenever there is no demand for cooling.

Under normal operation the fans operate continuously, even when the evaporator is not actively cooling.

Reducing the speed of the fan motor reduces both the energy used by the motor and the additional heat generated by the motor.

WHAT THE BUZZ IS ALL ABOUT:

- The latest generation Electronically Commutated Motors (ECMs) are the industry standard for energy efficiency and reliability.
- Single Phase ECMs are about 70% efficient whereas Shaded-Pole Motors are ONLY 10%-35% efficient.
- When combined with a Frigitek controller an EC Motor uses (an almost unbelievable) **97%** LESS POWER.
- Replacing Shaded Pole and Permanent Split Capacitor motors with ECMs is considered an excellent energy efficiency measure.

ENERGY SAVINGS:

- The speed of the motor is reduced from 1550 RPMs to 500 when the compressor is not pumping coolant to the evaporator. Running at 1/3 the RPMs lowers fan power consumption to 1/9 the original load.
- ECM technology generates dramatically less heat than standard motors. This in turn lowers the heat load that must be overcome by the compressor, lowering compressor run time by an average 25%.
- Installing Frigitek and ECMs on an evaporator with 3 motors and total of 5.4 Amps will save approximately 6,000 Kilowatt Hours/year. That's a $900 reduction in utility costs.

NON-ENERGY BENEFITS:

- A reduction in drying out of the products in the freezer or cooler from reduced air movement.
- A reduction in noise from the fans.
- The reduced run-time will reduce maintenance on and increase the life expectancy of the compressor.

keepyourcool.org

KEEP YOUR COOL®

BEEMS save money. save energy. save the planet.

253 Polaris Ave. | Mountain View CA 94043
TEL: 650.968.1805 | FAX: 408.904.4518