#### ELECTRONICALLY COMMUTATED (EC) MOTORS

## Electronically Commutated (EC) Motors Designed for Fan Coils

#### High Efficiency

Electronically Commutated (EC) motors are designed to offer greater efficiency than the traditional Permanent Split Capacitor (PSC) motors. EC motors maintain 60-80% efficiency throughout their operating range where PSC motors maximum efficiency at high speed is typically only 65% and as low as 25-40% at lower speeds.

### Fan Coil Control Flexibility

Control of the EC motor is handled through the Pulse-Width Modulating (PWM) board. The PWM board enables:

- Full variable speed\* (through 2-10 VDC signal)
- Single speed operation
- Operation with three speed low-voltage thermostats
  Each speed comes programmed from the factory, and can be independently adjusted in the field to help balance airflow

### Designed Specifically for Fan Coils

The EC motor used is specifically designed with fan coil horsepower requirements in mind (less than or equal to 1/4 HP). The new fan coil EC motors operate in a constant RPM mode compared to a constant airflow mode often associated with EC motor technology applied in Variable Air Volume boxes. Constant airflow applied in a fan coil application reduces efficiency.

#### Specifications

- Rated for continuous operation up to 131°F
- Bearings rated for L10 40,000 hours of continuous operation
- 1 motor for 3 voltages: 115V, 208-230V, 265V
- Unit nameplate amps based on specific unit size

\* Fan coils designated to operate with variable air volume capabilities require proper controls/sensors to ensure reliable operation.

# For more information, please contact us at www.enviro-tec.com/products/fcuproducts.html



PWM board used to support EC motor operation within Fan coils.



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