

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.



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

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