

Introducing the Highest Efficiency Electric Fan Motors:

## Q-Sync® 38-50W Permanent Magnet Synchronous Motors (60 Hz)



# Ground-breaking technology that returns money to your bottom line.

- Q-Sync® PMSM technology saves up to \$330 per year per motor in energy costs
- Realize immediate savings when you replace competitor motors with Q-Sync® motors
- Gain increased reliability and peace of mind with a longer design life and a 2-year warranty

## **Q-Sync® Advantages**

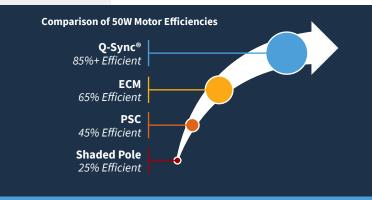
- ✓ Water resistant housing for carefree cleaning (IP65 Certified)
- ✓ Constant airflow and constant power maintain desired set temperatures

#### **Save More**

Q-Sync® motors reduce your energy cost.

## Annual Energy Cost Savings per Motor from using Q-Sync® PMSM Technology

Energy Costs	Q-Sync® vs. Shaded Pole	Q-Sync® vs. PSC	Q-Sync® vs. ECM	
\$0.20 / kWh	\$339.06	\$125.58	\$43.47	
\$0.15 / kWh	\$254.29	\$94.18	\$32.60	
\$0.10 / kWh	\$169.53	\$62.79	\$21.73	



- ✓ Less heat generated reduces the load on the refrigeration system
- ✓ Quieter motors enhance customer experience



### Q-Sync® Refrigeration Fan Motor Applications

#### 38-50W fan motors for:

- Walk-in Food Coolers
- External Rack Units
- Gas Evacuation Systems
- Radon Mitigation Systems



**Walk-in Food Coolers** 



**Gas Evacuation Systems** 



**External Rack Units** 



Radon Mitigation Systems

## Q-Sync® Product Features

#### **More Energy Efficient**

- ✓ 70-80% fewer watts consumed compared to shaded-pole motors
- ✓ 20-40% fewer watts consumed compared to ECM motors
- ✓ Up to 50% less energy at the meter and 80% less at the grid
- Less heat generated by the motor, reducing thermal stress on the refrigeration system

#### **Longer Life and Higher Reliability**

- ✓ Innovative and patented design results in 99% less duty cycle on electronics and increased surge protection
- Engineered to eliminate a start-stop capacitor which is a common failure point in other motors
- ✓ Lower in-rush current and better surge protection (up to 6000V)
- ✓ IP65 Certified (water and dust resistant)
- ✓ Built with extended life bearings
- Design life is 10+ years

#### **Easier to Install**

- ✓ A 16" cord with straight Lyall plug is standard
- $\checkmark$  Mounting options include using the four studs on the shaft end or the four bolt receptacles on the rear of the motor

Q-Sync® is recognized by the US Department of Energy as a High Impact Technology For Commercial Refrigeration



#### **How Q-Sync® Patented PMSM Technology Works**

QM Power's innovative design is the biggest breakthrough in motor technology in more than 50 years. Q-Sync® circuitry eliminates the need for electronic commutation to keep the motor spinning.

By operating the motor at the same frequency as the AC power line and **eliminating the AC to DC power conversions** from its circuit (no AC-to-DC rectifier, no DC link, and no DC-to-AC inverter), **Q-Sync® delivers unparalleled energy savings.** 

