



## TECHNICAL DATA SHEET

# Q-Sync®: The Most Efficient Commercial Refrigeration Motor in History

The Next Big Leap in Efficiency is Here

### The next generation of motors has arrived.

Designed to be the highest efficiency motor ever created, Q-Sync® motor technology is the first giant leap forward in motor design in more than 50 years. Its unique design uses up to 50% less energy than EC motors, and up to 80% less than shaded-pole, while providing consistent power output and airflow in any application. By using grid supplied AC current without the need to rectify to DC, Q-Sync® offers consistent operation with higher power factors than alternative offerings. The Q-Sync® motor is designed for superior reliability and service life with universal mounts that easily adapt to most applications (and when combined with our complete fan assembly make installation 4X faster!).



Q-Sync® 6-12W 50Hz

## PRODUCT SPECIFICATIONS

Q-Sync® Synchronous Motor

| Model                            | QSM12-2B-CW   |
|----------------------------------|---|
| Part Number                      | 30058-01  |
| Volts                            | 230 V   |
| Voltage Range                    | 207-253 V   |
| Running Current (Amps)           | 0.079 A   |
| Locked Rotor Current (Amps)      | 1.22 A  |
| Horse Power                      | 1/62 HP   |
| Watts                            | 6-12 W  |
| RPM                              | 1500  |
| Frequency                        | 50 Hz   |
| Rotation (opposite end of shaft) | CWOSE   |
| Phase                            | 1   |
| Temp                             | -40°C - 55°C (-40°F - 122°F)                          |
| Protection                       | Thermally Protected                                   |
| Surge Protection                 | 6000 V  |
| Approvals                        | UL / CSA / CE   |
| CSA / UL File Number             | E465664   |
| Class                            | Class A (105 C)                                       |
| Motor Type                       | Continuous Air Over                                   |
| Plug                             | 2 Pin Lyall M-2-24                                    |
| Cable Length                     | 16 Inches Long  |
| Cable Rating                     | 300 V, 105 C 18/2 CSA                                 |
| Cable Rating                     | 300 V, 105 C 18/2 UL                                  |
| Shaft Diameter                   | 8 mm / .3149 in                                       |
| Front Mounting Pattern           | 95.25 mm / 3.75 in                                    |
| Rear Mounting Pattern            | 71.45 mm / 2.813 in                                   |
| Foot Mounting                    | 8-32 in pattern 1.125 in x .625 in                    |
| Fan Mount Screw Size             | 8-32 in   |
| Moisture Protection              | IP65  |
| Fan Blade Pitch                  | 8 inch, 25 degrees                                    |
| Speeds                           | Single  |
| Design Life                      | 10 years  |
| Warranty                         | 2 years   |
| Maximum Operating Altitude       | 3048 m / 10,000 ft                                    |
| Weight Motor Only                | 2 lbs / 0.91 kg                                       |
| Box Dimension Motor Only         | LxWxH 7 x 6.25 x 4 in<br>LxWxH 17.8 x 15.9 x 10.2 cm  |
| Weight Motor, Basket, Fan Ass    | 3.5 lbs / 1.59 kg                                     |
| Box Dimension Fan Assembly       | LxWxH 12.5 x 12 x 5.5 in<br>LxWxH 31.8 x 30.5 x 14 cm |
| Efficiency @12W (rated power)    | 74%   |
| Power Factor                     | 0.92  |
| Amps                             | 0.077 A   |
| Volts                            | 230 V   |

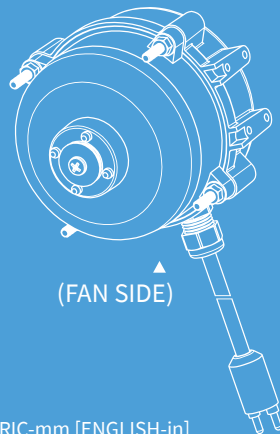
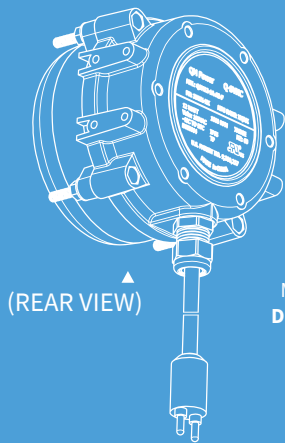
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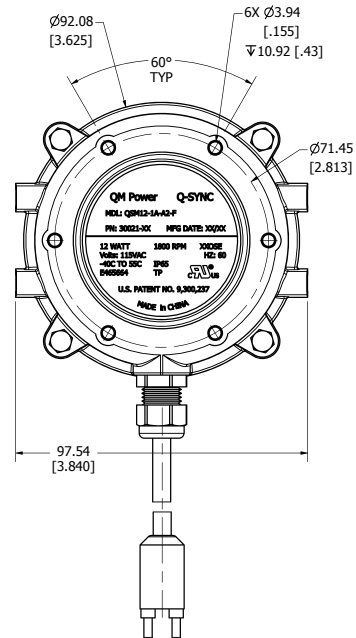
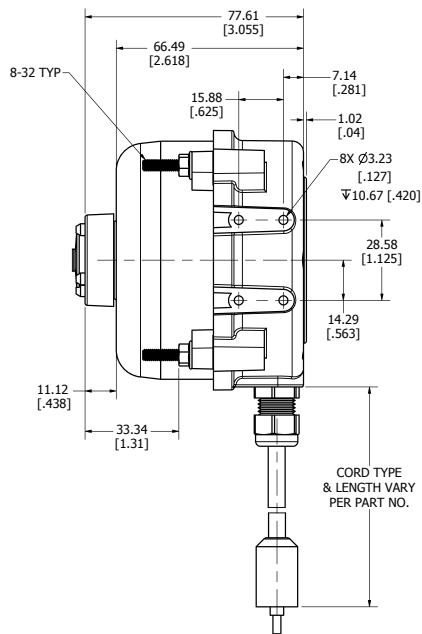
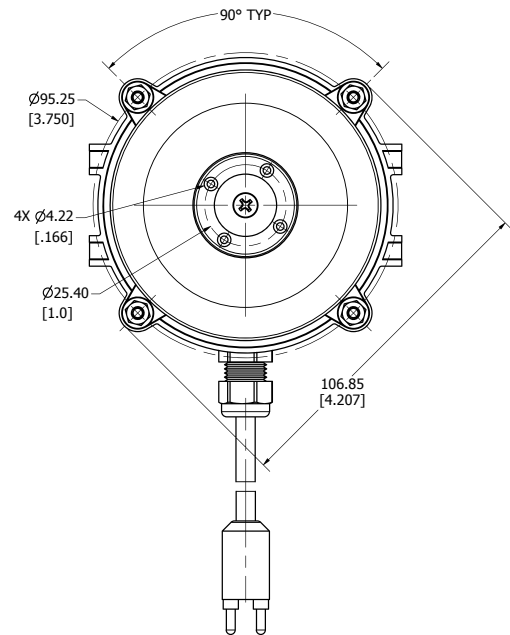
## ASSEMBLY



METRIC-mm [ENGLISH-in]  
**DIMENSIONAL TOLERANCE**  
 (Unless Otherwise Specified)

|                    |         |
|--------------------|---------|
| X.XX               | ±0.13   |
| [.XXX]             | ±[.005] |
| X.X                | ±0.25   |
| [.XX]              | ±[.010] |
| X                  | ±0.5    |
| [.X or FRACTIONAL] | ±[.020] |

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