

# ECR UltraSynch™

## ECM Motor with Integrated Electronic Control

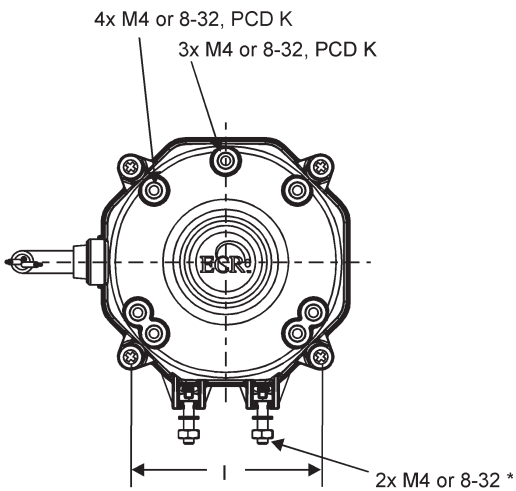
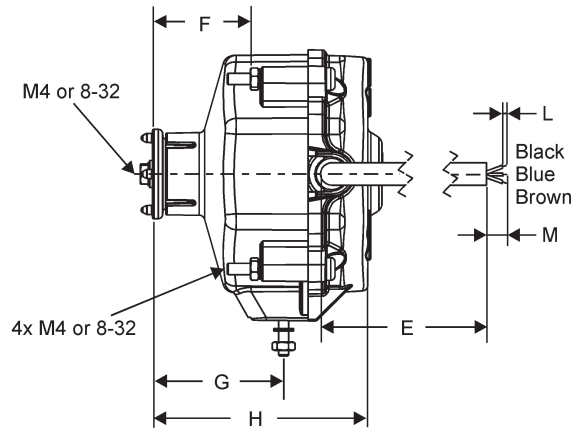
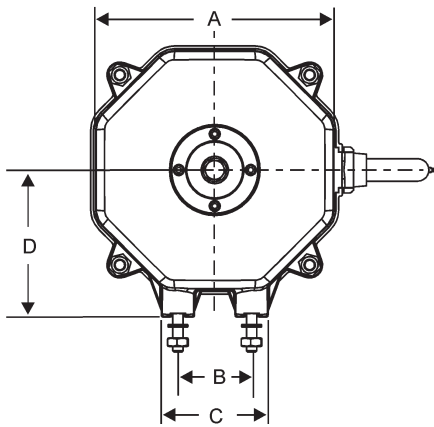


| Motor      | Voltage<br>V / Hz | Current<br>A | Speed<br>RPM | Output Power<br>W | Protection<br>IP | Approval           |
|------------|-------------------|--------------|--------------|-------------------|------------------|--------------------|
| ECR82Pxxx1 | 230 / 50          | 0.16         | 1500         | 12                | 55               | CE, VDE, ATEX, CCC |
| ECR82Pxxx2 | 230 / 60          | 0.19         | 1800         | 16                | 55               | UL, cUL            |
| ECR92Pxxx2 | 120 / 60          | 0.34         | 1800         | 16                | 55               | UL, cUL            |

### Product Specifications

|                                    |   |
|------------------------------------|---|
| Approvals                          |   |
| Speed                              | Precision fixed speed. Different airflow performance is achieved by selecting impellers of different size and pitch.  |
| Unique Features                    | UltraSynch™ technology means that the motor speed remains absolutely constant regardless of power supply fluctuations.  |
| Electronic Control Safety Features | If the motor fails to start or is forced outside the preset range, locked rotor/stall detection switches the motor to standby mode, with automatic restart after 40 seconds. This software detection protects the motor with a timed restart algorithm to limit maximum winding temperature.<br>Self-resetting thermal protection stops the motor if over-temperature occurs. The motor restarts when the winding temperature is back within the operating range. |
| Moisture and Dust Protection       | ECR UltraSynch™ motors are IP55. In all UltraSynch™ motors a conformal coating is applied to the electronic control board for complete moisture protection.   |
| Operating Temperature              | -30°C to +50°C (-22°F to +122°F).   |
| Voltage Range                      | 190V-254V<br>90V-140V   |
| Direction of Rotation              | Reversible. Direction of rotation can be either CCW SE (standard) or CW SE (upon request) as seen when facing the motor from Shaft End (SE). For CCW SE rotation, the black and blue wires are connected together. For CW SE rotation, the black wire is connected to the brown wire.   |
| Weight                             | 0.80 kg (1.76 lb)   |
| Special Designs                    | Timed reverse: motor reverses direction of rotation during defrost and keeps condenser coils clean and more efficient. This reduces energy and service costs.<br>Different power leads.<br>For more special designs, please contact a Wellington office near you.   |

**\* Recommended for New Designs \***



| Dimensions | A    | B    | C    | D    | E     | F    | G    | H    | I    | K    | L    | M    |
|------------|------|------|------|------|-------|------|------|------|------|------|------|------|
| mm         | 84   | 26   | 38   | 52   | 500   | 34.5 | 46   | 77   | 67   | 71.4 | 7    | 50   |
| inches     | 3.30 | 1.02 | 1.50 | 2.05 | 19.68 | 1.36 | 1.81 | 3.03 | 2.64 | 2.81 | 0.28 | 1.97 |

\* 2x M4 or 8-32 threaded bolts are not included but available upon request.

K screws maximum depth is 6 mm (0.23 inches).

|       |              |
|-------|--------------|
| Black | Control lead |
| Blue  | Neutral      |
| Brown | Line / Phase |