

**MOTOR DATA @ 230 VAC (TRAP)**

| MOTOR PARAMETERS          | UNITS  | VALUE           |
|---------------------------|--|-----------------|
| MOTOR HORSEPOWER          | HP   | 3.3             |
| KILOWATTS                 | KW   | 2.5             |
| MAX OPERATING SPEED       | N MAX  | 4200            |
| SPEED @ RATED TORQUE      | N RATED  | 3000            |
| * CONTINUOUS STALL TORQUE | IN-LBS[Nm]                                       | 69 [1.7.8]      |
| * CONTINUOUS STALL TORQUE | IN-LBS[Nm]                                       | 83.0 [9.3]      |
| CONTINUOUS LINE CURRENT   | AMPS   | 13.4            |
| PEAK CURRENT              | AMPS   | 290.5 [32.7]    |
| MAX THEORETICAL ACCEL     | RAD/SEC <sup>2</sup>                             | 41,500          |
| TORQUE SENSITIVITY        | Kt [N-LBS/AMF][Nm/AMPI]                          | 6.2 [0.71]      |
| BACK EMF (LINE TO LINE)   | Vrms/Krpm  | 55.0            |
| D.C. RESISTANCE (P-P)     | OHMS   | 0.40            |
| INDUCTANCE (P-P)          | MILLIHENRIES                                     | 2.8             |
| ROTOR INERTIA W/BRAKE     | Jm [N-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ] | .0070 [0.00079] |
| STATIC FRICTION           | Tf [N-LBS][Nm]                                   | 1.4 [0.16]      |

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1/2" ALUMINUM HEATSINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

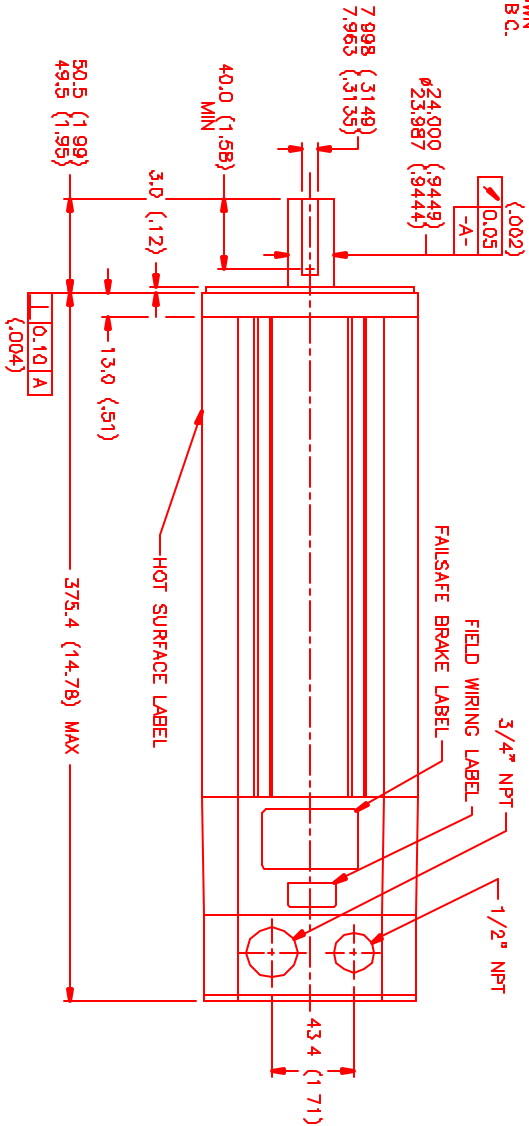
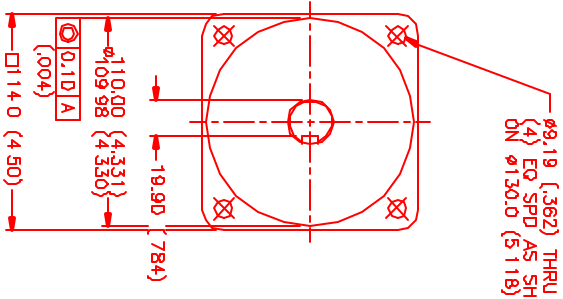
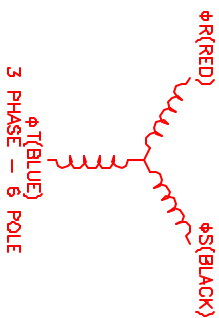
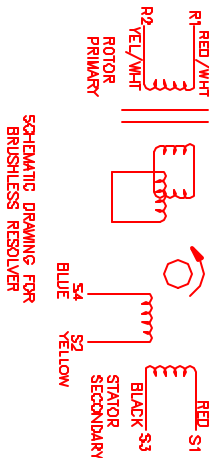
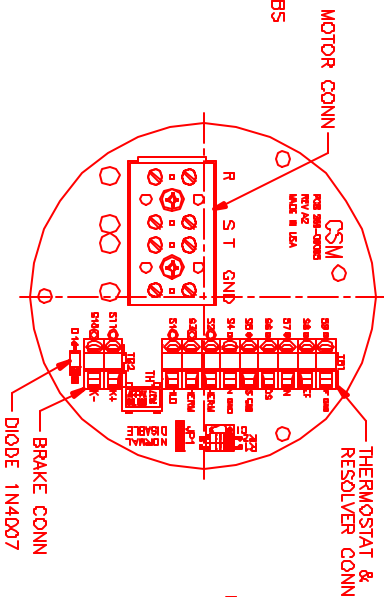
- MECHANICAL NOTES:**
- AXIAL LOAD: 50 LBS MAX
  - RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
  - MOTOR SEALED TO IP65.
  - MOTOR WEIGHT: 33.2 LBS. [15.1 Kg]
  - MOTOR FINISH: BLACK EPOXY
  - MOTOR OUTPUT SHAFT: STAINLESS STEEL
  - MILLIMETERS (INCHES)

**FAILSAFE BRAKE: (290-00006)**  
 MIN. HOLDING TORQUE: 240 IN-LBS  
 INPUT VOLTAGE: 24 VOLTS

**CONNECTION CHART**

| MOTOR WIRE LEADS | WIRE FUNCTION | WIRE COLOR |
|------------------|---------------|------------|
| TERMINAL         | FUNCTION      | COLOR      |
| -                | ΦR            | RED        |
| -                | ΦS            | BLACK      |
| -                | ΦT            | BLUE       |
| -                | PE GND        | GRN/YEL    |

| RES/BRAKE WIRE LEADS | WIRE FUNCTION | WIRE COLOR |
|----------------------|---------------|------------|
| TERMINAL             | FUNCTION      | COLOR      |
| S11                  | BRK (+)       | BLUE       |
| S10                  | BRK (-)       | BLUE       |
| S9                   | REF GND       | YEL/WHI    |
| S8                   | REF           | RED/WHI    |
| S7                   | SIN           | YELLOW     |
| S6                   | COS           | RED        |
| S5                   | COS GND       | BLACK      |
| S4                   | SIN GND       | BLUE       |
| S3                   | THERM         | BLACK      |
| S2                   | THERM         | BLACK      |
| S1                   | RES SHLD      | GRN/YEL    |



| NO.   | PART NUMBER    | DESCRIPTION                                    | QTY. |
|---|----------------|--|------|
| 1   | MPM1142ATG7G3R | MPS Systems Corporation<br>Automation Division | 1    |
| TITLE: MPM1142ATG7G3R<br>DATE: 7/8/98<br>DRAWN BY: [Signature]<br>CHECKED BY: [Signature]<br>APPROVED BY: [Signature] |                |  |      |

| REV. | DESCRIPTION | DATE   | APP. |
|------|-------------|--------|------|
| 1    | PRELIMINARY | 7/9/98 | M/S  |

TITLE: MPM1142ATG7G3R  
 REVISIONS  
 MPM1142ATG7G3R