

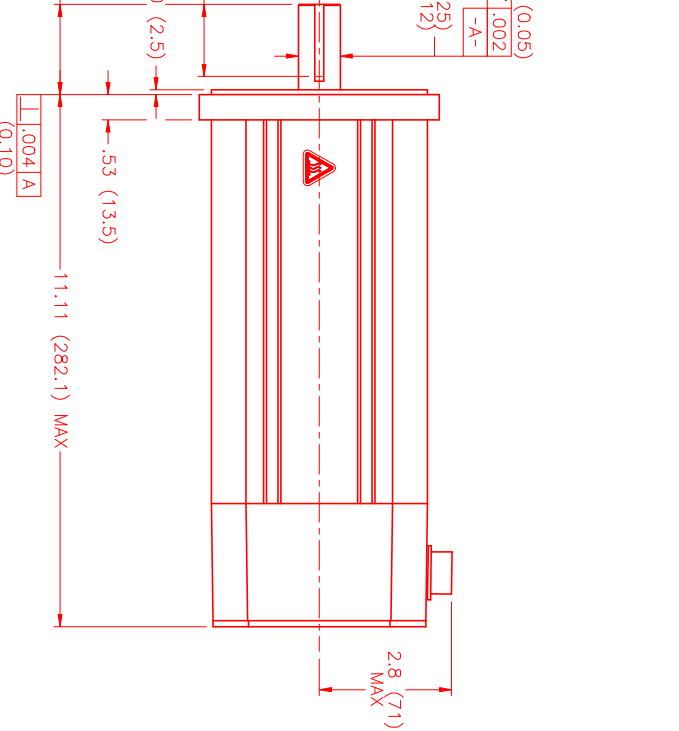
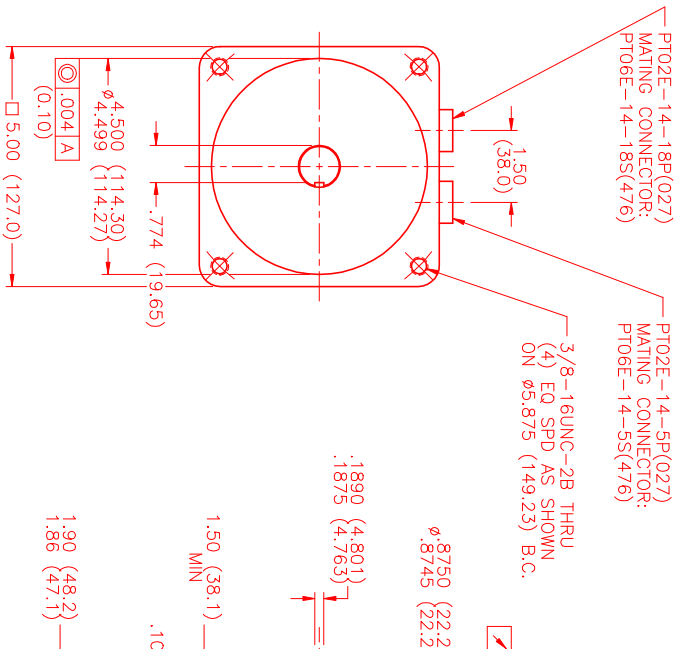
MOTOR DATA @ 230 VAC (SINE)

| MOTOR PARAMETERS | UNITS | VALUE |
|---------------------------|--|----------------|
| HORSEPOWER | HP RATED | 1.8 |
| KILOWATTS | KW RATED | 1.33 |
| MAX. OPERATING SPEED | N MAX | 2100 |
| SPEED @ RATED TORQUE | N RATED | 1900 |
| * CONTINUOUS RATED TORQUE | N RATED | 75.0 [8.4] |
| * CONTINUOUS STALL TORQUE | N-LBS [Nm] | 83.0 [9.3] |
| CONTINUOUS LINE CURRENT | AMPS (RMS/φ) | 4.7 |
| PEAK CURRENT | N-LBS [Nm] | 290.5 [32.7] |
| MAX. THEORETICAL ACCEL. | AMPS (RMS/φ) | 16.5 |
| TORQUE SENSITIVITY | RAD/SEC ² | 44.015 |
| BACK EMF (LINE TO LINE) | Kt N-LBS/AMP (RMS/φ) [Nm/AMP (RMS/φ)] | 17.5 [1.98] |
| D.C. RESISTANCE (P-P) | ±10% OHMS | 110.0 |
| INDUCTANCE (P-P) | ±10% MILLIHENRIES | 12.6 |
| ROTOR INERTIA | Jm [N-LBS-SEC ²] Kg-M ² | .0066 [0.0074] |
| STATIC FRICTION | Tf [N-LBS] [Nm] | 1.4 [1.16] |

*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:

1. AXIAL LOAD: 50 LBS MAX
2. RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 26.8 LBS. [12.2 kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)



CONNECTION CHART

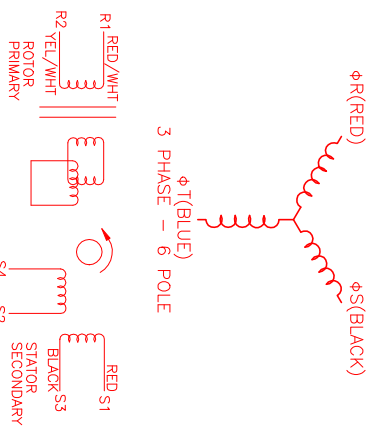
MOTOR CONNECTOR:
PTO2E-14-5P(027)
(270-00026)

| PIN | WIRE FUNCTION | WIRE COLOR |
|-----|---------------|------------|
| A | φR | RED |
| B | φS | BLACK |
| C | φT | BLUE |
| D | PE GND | GRN/YEL |
| E | - | - |

RESOLVER/THERM CONNECTOR:

PTO2E-14-18P(027)
(270-00024)

| PIN | WIRE FUNCTION | WIRE COLOR |
|-----|---------------|------------|
| U | THERM | BLACK |
| N | THERM | BLACK |
| H | SIN | YELLOW |
| G | COS GND | BLACK |
| S | COS | RED |
| F | SIN GND | BLUE |
| R | REF GND | YEL/WHI |
| E | REF | RED/WHI |
| D | RES SHLD | GRN/YEL |
| P | GND | GRN/YEL |
| A | - | - |
| B | - | - |
| C | - | - |
| J | - | - |
| K | - | - |
| L | - | - |
| M | - | - |
| T | - | - |



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER

| REV. | DESCRIPTION | DATE | APPD. |
|-------------|-------------|----------|-------|
| PRELIMINARY | | 11/18/99 | ELS |

| | | |
|----------------------------------|-------------------------|--------------|
| NO. PART NUMBER | DESCRIPTION | QTY. |
| UNLESS SPECIFIED | | |
| DATE: 11/9/99 | DATE: 11/9/99 | |
| DESIGNED BY: MVS | CHECKED BY: MVS | |
| DRAWN BY: MVS | APPROVED BY: MVS | |
| TITLE: "B"/SINE/230/ENG/RES/CONN | MATERIAL: MP1142BSG6G1N | SCALE: 1/2:1 |



MTS Systems Corporation
Automation Division

RESOLVER/THERM CONNECTOR: PTO2E-14-18P(027) (270-00024)