

MOTOR DATA @ 460 VAC (TRAP)

| MOTOR PARAMETERS | UNITS | VALUE |
|--------------------------------------|--|-----------------|
| HORSEPOWER | HP RATED | 3.3 |
| KILOWATTS | KW | 2.5 |
| MAX. OPERATING SPEED | N MAX | 4200 |
| SPEED @ RATED TORQUE | RPM | 3000 |
| * CONTINUOUS RATED TORQUE @ 3000 RPM | N RATED | 69.1 [7.8] |
| * CONTINUOUS STALL TORQUE | IN-LBS [Nm] | 83.0 [9.3] |
| CONTINUOUS LINE CURRENT | AMPS | 6.7 |
| PEAK TORQUE | IN-LBS [Nm] | 290.5 [32.7] |
| PEAK CURRENT | AMPS | 23.4 |
| MAX. THEORETICAL ACCEL. | RAD/SEC ² | 44,015 |
| TORQUE SENSITIVITY | Kt IN-LBS/A [Nm/AMP] | 12.4 [1.42] |
| BACK EMF (LINE TO LINE) | Vrms/Krpm | 110.0 |
| D.C. RESISTANCE (P-P) | OHMS | 1.8 |
| INDUCTANCE (P-P) | MILLIHENRIES | 12.1 |
| ROTOR INERTIA | Jm [IN-LBS-SEC ²] [Kg-M ²] | .0066 [0.00074] |
| STATIC FRICTION | Tf [IN-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:

- AXIAL LOAD: 50 LBS MAX
- RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 26.6 LBS. [12.1 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- INCHES (MILLIMETERS)

ENCODER: (290-00052)

OIH48-2000P6-L6-5V

CONNECTION CHART

MOTOR CONNECTOR:
PT02E-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 | - | - |

ENCODER/THERM CONNECTOR:

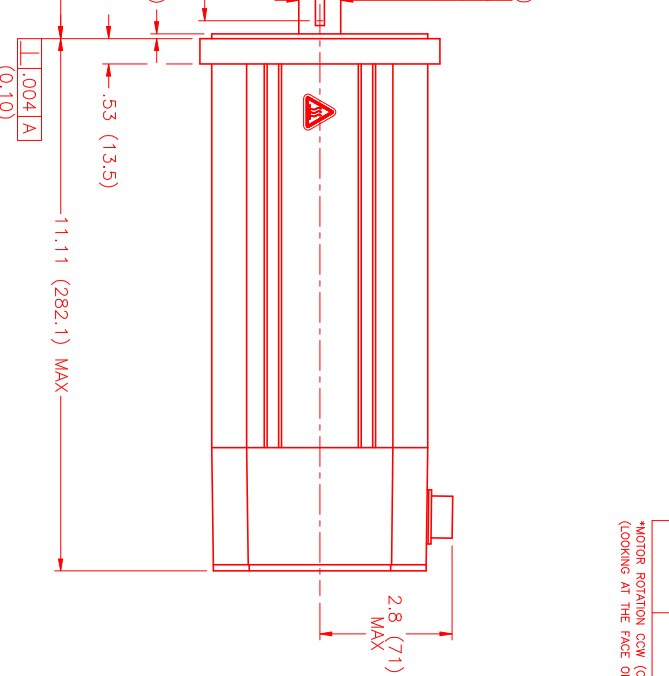
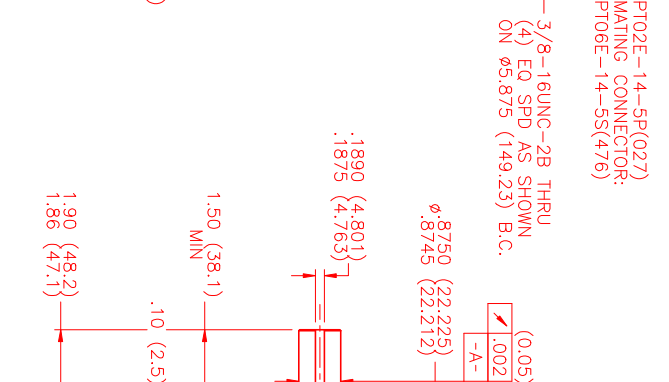
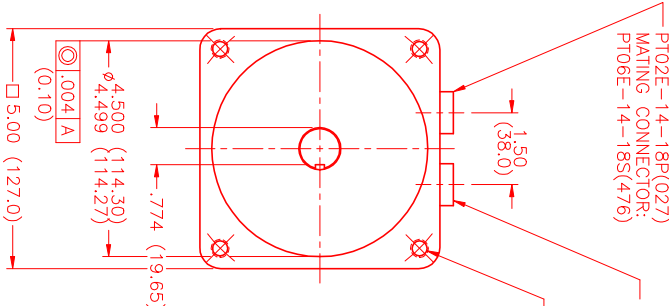
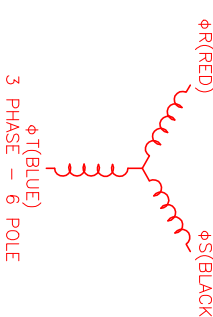
PT02E-14-18P(027)
(270-00024)

| PIN | WIRE FUNCTION | WIRE COLOR |
|-----|---------------|------------|
| T | GROUND | BLACK |
| K | +5VDC | RED |
| B | CH A | BLUE |
| C | CH A\ | BLUE/BLK |
| N | CH B | GREEN |
| P | CH B\ | GRN/BLK |
| M | CH Z | YELLOW |
| U | CH Z\ | YEL/BLK |
| E | CH U | BROWN |
| R | CH U\ | BRN/BLK |
| F | CH V | GRAY |
| S | CH V\ | GRAY/BLK |
| G | CH W | WHITE |
| H | CH W\ | WHT/BLK |
| D | GND/CABLE | SHLD |
| A | THERM | BLACK |
| L | THERM | BLACK |
| J | GND | GRN/YEL |

MOTOR & HALL POSITION CHART

| HALL LEADS | BROWN | GRAY | WHITE |
|------------------------|----------------------|---------------------|-----------------------|
| MOTOR LEADS | BLACK respect to RED | RED respect to BLUE | BLUE respect to BLACK |
| VIEW ON THE OSULOSCOPE | AAAF AAAA AAAA | | |

*MOTOR ROTATION C/W (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



| | |
|------------------------------|------------------|
| DATE: 1/27/00 | REV: PRELIMINARY |
| DESCRIPTION: REVISIONS | DATE: APPD: LIN |
| FORM NUMBER: MPM1142CTU6UN1N | SCALE: 1/2:1 |

| | | |
|--------------------------|------------------------------------|------|
| NO. PART NUMBER | DESCRIPTION | QTY. |
| UNLESS SPECIFIED | | |
| DESIGN: 400 & 400 | MTS MTS Systems Corporation | |
| DATE: 9/99 | Automation Division | |
| SCALE: 1/2 | | |
| DESIGNER: MVS | | |
| CHECKED: | | |
| APPROVED: | | |
| MATERIAL: | | |
| FORMING: MPM1142CTU6UN1N | | |