

MOTOR DATA @ 460 VAC (SINE)

| MOTOR PARAMETERS | UNITS | VALUE |
|--------------------------------------|--|----------------|
| HORSEPOWER | HP | 20.9 |
| KILOWATTS | KW | 15.6 |
| MAX. OPERATING SPEED | N MAX RPM | 3000 |
| SPEED @ RATED TORQUE | N RATED RPM | 2400 |
| * CONTINUOUS RATED TORQUE @ 2400 RPM | IN-LBS [Nm] | 550.0 [61.8] |
| * CONTINUOUS STALL TORQUE | IN-LBS [Nm] | 640.0 [71.9] |
| CONTINUOUS LINE CURRENT | AMPS (RMS/φ) | 23.5 |
| PEAK TORQUE | IN-LBS [Nm] | 1920.0 [215.0] |
| PEAK CURRENT | AMPS (RMS/φ) | 76.4 |
| MAX. THEORETICAL ACCEL. | RAD/SEC ² | 26,890 |
| TORQUE SENSITIVITY | Kt [IN-LBS/AMP (RMS/φ)] [Nm/AMP (RMS/φ)] | 24.9 [2.81] |
| BACK EMF (LINE TO LINE) | Vrms/Krpm | 158.0 |
| D.C. RESISTANCE (P-P) | OHMS | 6.8 |
| INDUCTANCE (P-P) | MILLIHENRIES | 9.1 [1.1] |
| ROTOR INERTIA W/BRAKE | Jm [IN-LBS-SEC ²] [Kg-M ²] | .0714 [0.0807] |
| STATIC FRICTION | Tf [IN-LBS] [Nm] | 9.1 [1.1] |

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 14" X 14" X 3/4" ALUMINUM HEATSINK. TEMPERATURE 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: 100 LBS MAX
- RADIAL LOAD: 250 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 118 LBS. [53.5 kg]
- MOTOR FINISH: BLACK EPOXY
- MILLIMETERS (INCHES)

ENCODER: (290-00073)

OH48-2048P6-L6-5V

PERMANENT MAGNET BRAKE:

MIN HOLDING TORQUE: 360 IN-LBS
INPUT VOLTAGE: 24 VOLTS

CONNECTION CHART

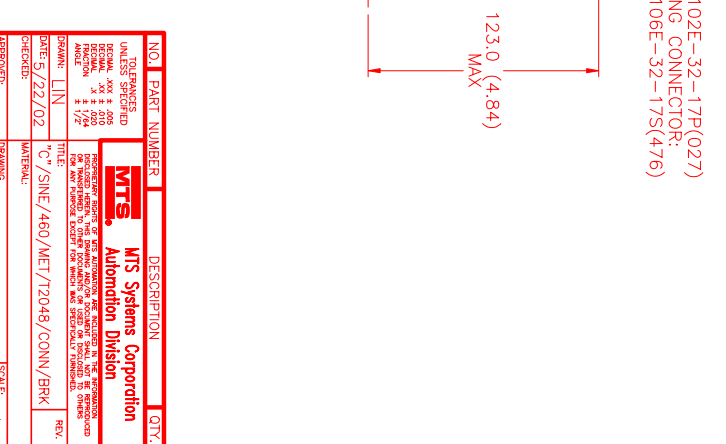
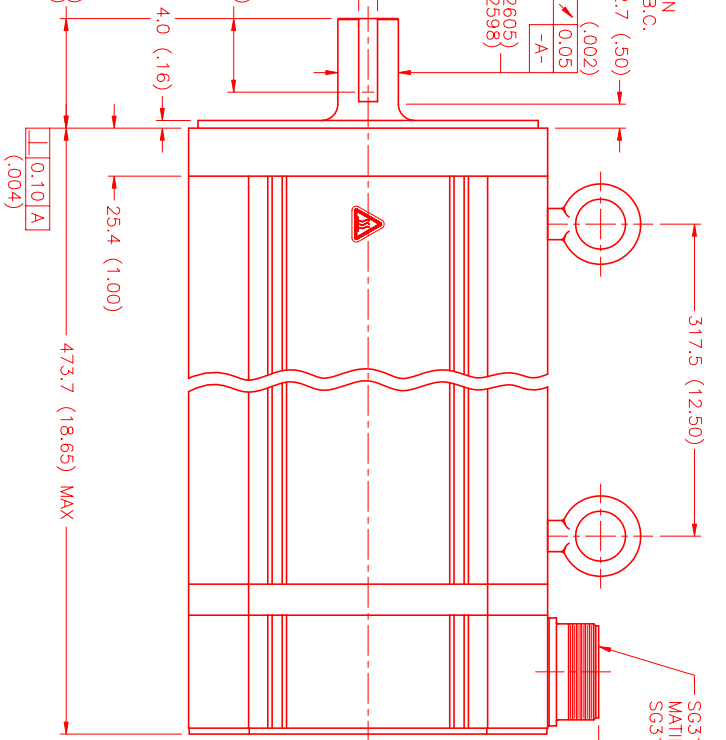
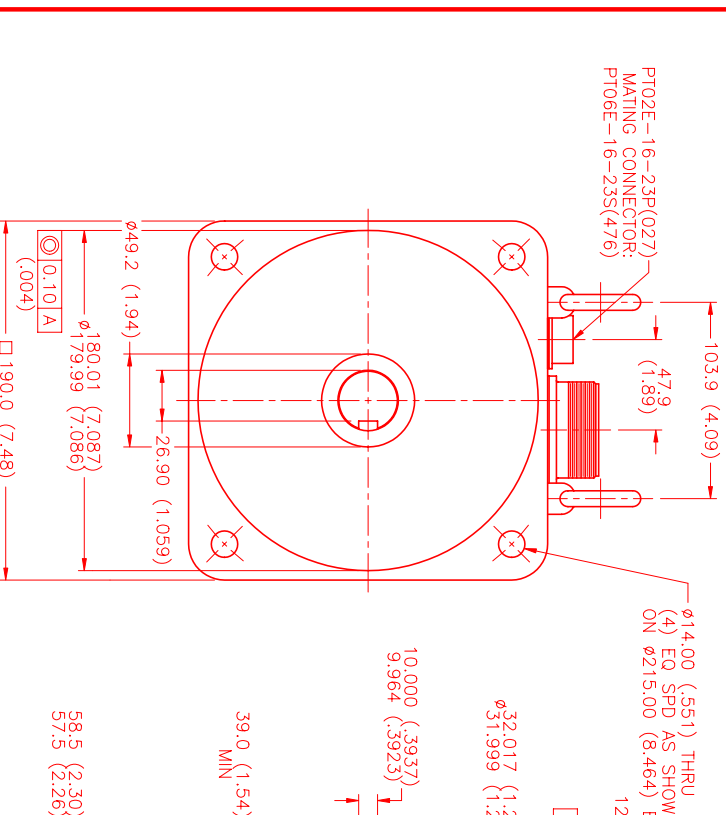
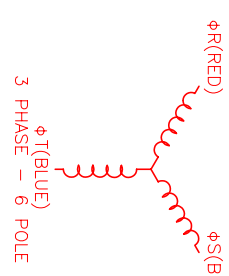
ENC/THERM/BRK CONNECTOR:
PT02E-16-23P(027)
(270-00219)

| ENC/THERM/BRK | WIRE FUNCTION | WIRE COLOR | WIRE LEADS |
|---------------|---------------|------------|------------|
| 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 | |
| V | BRK (+) | RED | |
| W | BRK (-) | BLUE | |
| X | BRK SHLD | - | |
| Y | - | - | |
| Z | - | - | |

MOTOR CONNECTOR:

SG3102E-32-17P(027)
(270-00066)

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



| NO. | PART NUMBER | DESCRIPTION | QTY. |
|-----|-------------|--|------|
| 1 | MTS | MTS Systems Corporation Automation Division | |

UNLESS SPECIFIED
DIMENSIONS ARE IN INCHES
DECIMALS AND FRACTIONS
DIMENSIONS ARE TO BE
HOLDING TOLERANCES
UNLESS OTHERWISE SPECIFIED
DATE: 5/22/02
DRAWN: JLN
CHECKED:
APPROVED:
SCALE: 1/2=1

| REV. | DESCRIPTION | DATE | APP. |
|-------------|-------------|---------|------|
| PRELIMINARY | | 5/22/02 | JLN |

DATE: 5/22/02
DRAWING NUMBER: MPM1902CSJ7JY1Q