

MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	1.96
KILOWATTS	KW	1.46
MAX. OPERATING SPEED	N MAX	4100
SPEED @ RATED TORQUE	RPM	3600
* CONTINUOUS RATED TORQUE @ 3600 RPM	IN-LBS [Nm]	34.4 [3.8]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	39.0 [4.4]
CONTINUOUS LINE CURRENT	AMPS (RMS/φ)	3.2
PEAK TORQUE	IN-LBS [Nm]	143.2 [16.2]
PEAK CURRENT	AMPS (RMS/φ)	7.8
MAX. THEORETICAL ACCEL.	RAD/SEC ²	104.526
TORQUE SENSITIVITY	Kt [N-LBS/AMPERE/φ] [Nm/AMPERE/φ]	8.8 [0.99]
BACK EMF (LINE TO LINE)	Vrms/Krpm	110.0
D.C. RESISTANCE (P-P)	OHMS	7.8
INDUCTANCE (P-P)	MILLIHENRIES	28.2
ROTOR INERTIA	Jm [N-LBS-SEC ²] [Kg-M ²]	.00137 [0.000154]
STATIC FRICTION	Tf [N-LBS] [Nm]	0.6 [0.07]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 10" X 10" X 1/4" 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: 25 LBS MAX
- RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 12.4 LBS. [5.6 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

ENCODER: L290-001027

OH448-4096F6-L6-5V

CONNECTION CHART
MOTOR CONNECTOR:
PT02E-14-5P(027)
(270-00026)

MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
A	φR	RED
B	φS	BLACK
C	φT	BLUE
D	PE_GND	GRN/YEL
E	-	-

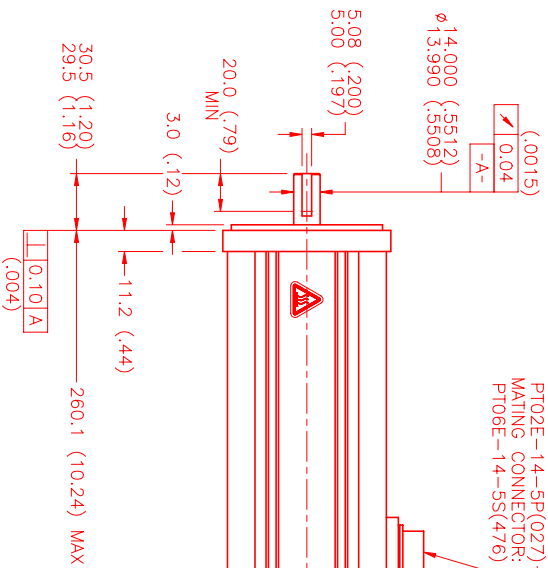
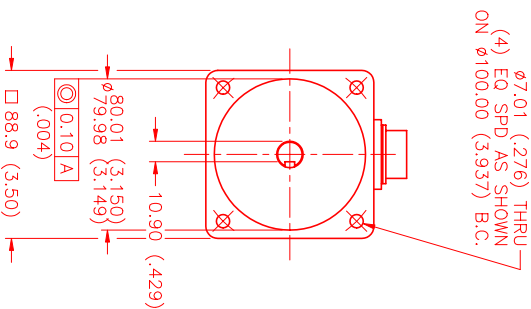
ENCODER/THERM CONNECTOR:
PT02E-14-18P(027)
(270-00024)

ENC/THERM WIRE LEADS	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	BLACK
A	THERM	BLACK
L	THERM	BLACK
J	GND	GRN/YEL

MOTOR & HALL POSITION CHART

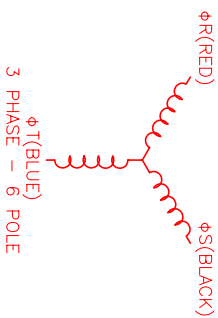
HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

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



PT02E-14-5P(027) MATING CONNECTOR: PT06E-14-5S(476)

PT02E-14-18P(027) MATING CONNECTOR: PT06E-14-18S(476)



NO.	PART NUMBER	DESCRIPTION	QTY
UNLESS SPECIFIED			
DECIMAL: 1/100 ± .005			
FRACTIONAL: 1/16 ± .002			
ANGLES: 1/2° ± .02			
SPACING: MVS			
DATE: 10/29/99			
CHECKED:			
APPROVED:			
DRAWING NUMBER: MPM893CSJ7JZ1N			SCALE: 1/2=1

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		12/30/99	LIN

MTS MTS Systems Corporation
Automation Division