

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

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	0.35
KILOWATTS	KW	0.41
MAX. OPERATING SPEED	N. MAX RPM	3000
SPEED @ RATED TORQUE	N RATED RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS[INm]	14.5[1.64]
* CONTINUOUS STALL TORQUE	IN-LBS[INm]	16.0[1.81]
CONTINUOUS LINE CURRENT	AMPS[RMS/φ]	1.3
PEAK TORQUE	IN-LBS[INm]	58.8[6.64]
PEAK CURRENT	AMPS[RMS/φ]	4.9
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	95,610
TORQUE SENSITIVITY	Kt [IN-LBS/AMP/RMS/φ][Nm/AMP/RMS/φ]	11.9[1.4]
BACK EMF (LINE TO LINE)	Vrms/Krpm	75.2
D.C. RESISTANCE (P-P)	OHMS	15.6
INDUCTANCE (P-P)	MILLIHENRIES	39.6
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ]	.000615[.0000693]
STATIC FRICTION	Tf [IN-LBS[INm]]	0.4[0.05]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 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: 6.8 LBS. [ 3.1 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

**ENCODER: (290-00084)**  
OH48-5000P6-L6-SV

**CONNECTION CHART**

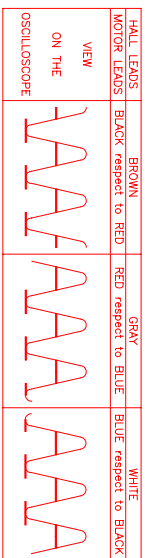
MOTOR CONNECTOR:  
PT02E-14-5P(027)  
(270-00026)

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

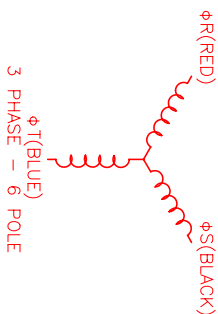
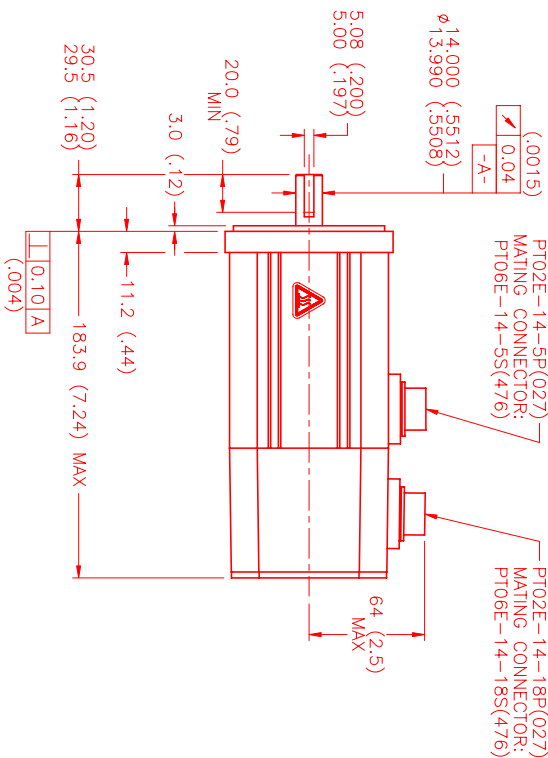
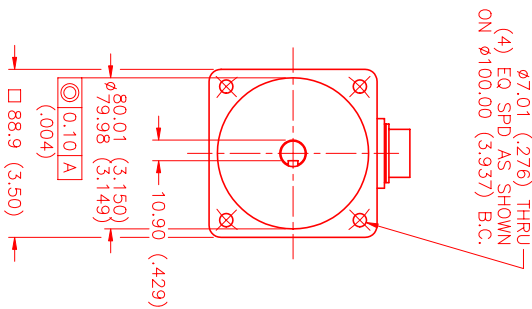
ENCODER/THERM CONNECTOR:  
PT02E-14-18P(027)  
(270-00024)

ENC/THERM WIRE LEADS	WIRE COLOR
Pin	FUNCTION
T	GROUND
K	+5VDC
B	CH A
C	CH A
N	CH B
P	CH B
M	CH Z
U	CH Z
E	CH U
R	CH U
F	CH V
S	CH V
G	CH W
H	CH W
D	GND/CABLE SHLD
A	THERM
L	THERM
J	GND

**MOTOR & HALL POSITION CHART**



\*MOTOR ROTATION CCW (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL	XXX # XXX		
FRACTIONAL	X # X/XX		
ANGLE	° ' /"		
DRAWN:	AJS		
CHECKED:			
DATE:	5/16/00		
TITLE:	"B"/SINE/230/MET/TS/CONN		
APPROVED:			
DRAWING NUMBER:	MPM891BSG7JQ1N	SCALE:	1/2:1

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	5/16/00	AJS

**MTS** MTS Systems Corporation  
Automation Division