

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

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	1.80
KILOWATTS	KW	1.33
MAX. OPERATING SPEED	N MAX	2100
SPEED @ RATED TORQUE	N RATED	1500
* CONTINUOUS RATED TORQUE @ 1500 RPM	IN-LBS [Nm]	75.0 [8.4]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	83.0 [9.3]
CONTINUOUS LINE CURRENT	AMPS (RMS/φ)	4.7
PEAK CURRENT	AMP(S)(RMS/φ)	290.5 [32.7]
MAX. THEORETICAL ACCEL.	AMP(S)(RMS/φ)	16.5
TORQUE SENSITIVITY	RAD/SEC <sup>2</sup>	44.015
BACK EMF (LINE TO LINE)	Vrms/krpm	17.48 [1.97]
D.C. RESISTANCE (P-P)	OHMS	110.0
INDUCTANCE (P-P)	MILLIHENRIES	12.6
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ]	0.00066 [0.00074]
STATIC FRICTION	Tf [IN-LBS][Nm]	1.4 [0.16]

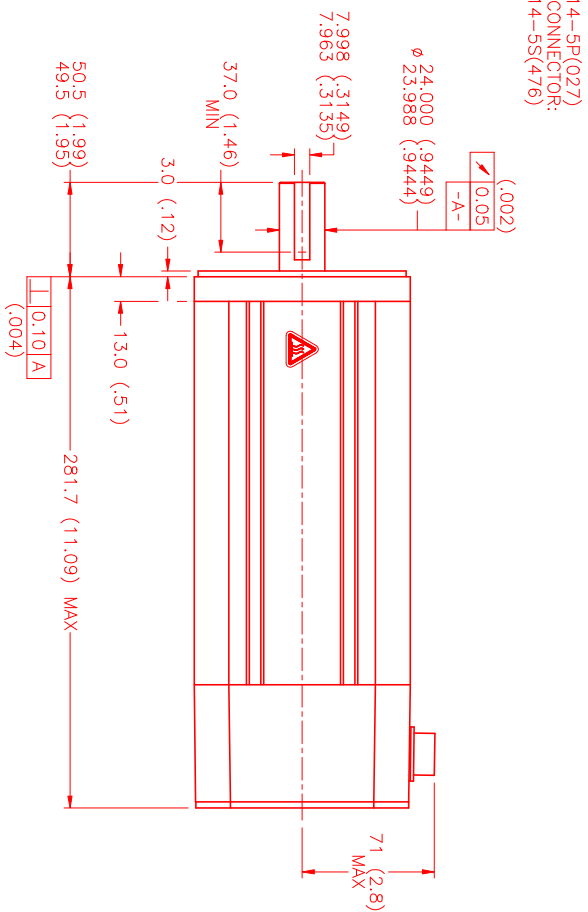
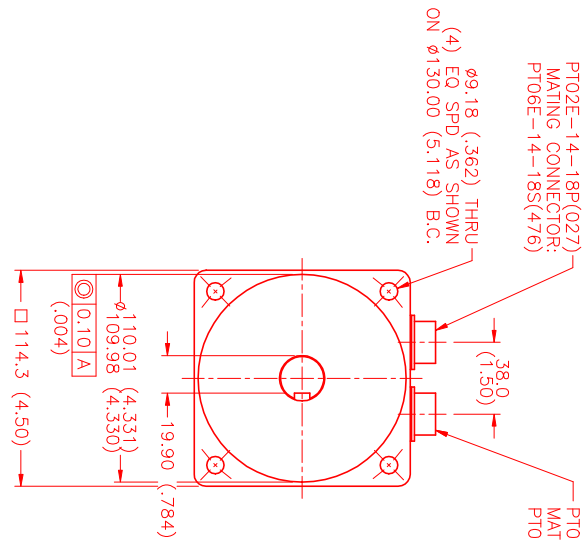
\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1/2" ALUMINUM HEAT-SINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

**MECHANICAL NOTES:**

- AXIAL LOAD: 50 LBS MAX
- RADIAL PLAY: 100 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 26.4 LBS. [ 12.0 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

**ENCODER: (290-00073)**

OH48-2048P6-L6-5V

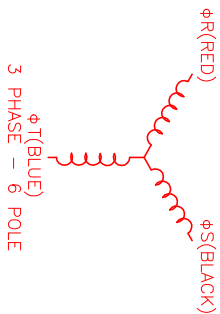


**CONNECTION CHART**  
ENCODER/THERM CONNECTOR:  
PT02E-14-18P(027)  
(270-00024)

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

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

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



**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 OSCILLOSCOPE	AAA	AAA	AAA

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



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DESIGN	DATE	BY	APP'D.
1	6/16/99	MS	MS
TITLE:	"B" SINE/230/MEI/T2048/CONN		
DATE:	6/16/99		
BY:	MS		
APP'D:	MS		
SCALE:	1/2:1		

REV.	DESCRIPTION	DATE	APP'D.
1	PRELIMINARY	6/16/99	MS

DATE: 5/3/96 230/MEI/T2048/CONN DRAWING NUMBER: MPM1142BSG7JY1N

**MTS**  
Automation Division