

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

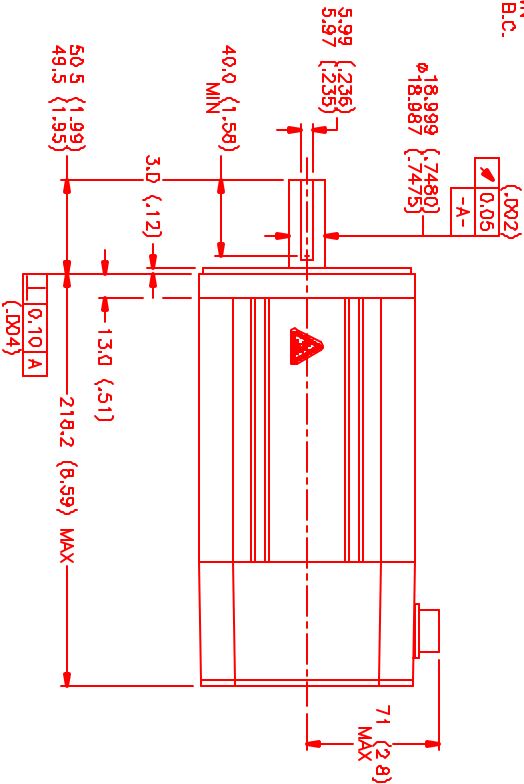
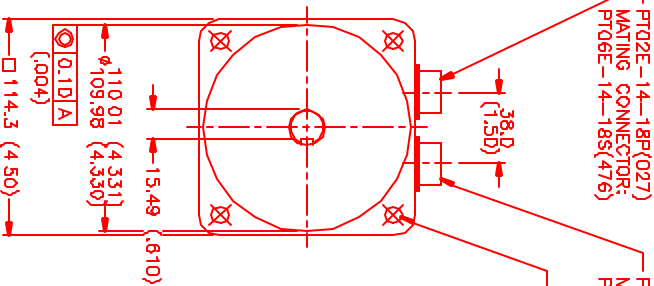
MOTOR PARAMETERS	UNITS	VALUE
MOTOR HORSEPOWER	HP RATED	1.2
	KW RATED	.88
MAX. OPERATING SPEED	N MAX	2100
SPEED @ RATED TORQUE	N RATED	1500
* CONTINUOUS RATED TORQUE	IN-LBS[Nm]	50 [0.5,6]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	54 [0.6,1]
CONTINUOUS LINE CURRENT	AMPS	4.4
PEAK CURRENT	AMPS	189.1 [21.3]
MAX. THEORETICAL ACCEL	RAD/SEC <sup>2</sup>	54.029
TORQUE SENSITIVITY	KI [IN-LBS/AMPI[Nm/AMP]	12.4 [1.42]
BACK EMF (LINE TO LINE)	Vrms/Krpm	110.0
D.C. RESISTANCE (P-P)	OHMS	3.3
INDUCTANCE (P-P)	MILLIHENRIES	24.4
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> [Kg-M <sup>2</sup> ]	.00351 [0.00039]
STATIC FRICTION	Tf [IN-LBS[Nm]	10. [1.1]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1 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:**

1. AXIAL LOAD: 50 LBS MAX
2. RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 17.8 LBS. [ 8.1 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

ENCODER: (290-0052)  
DH48-2000PS-LB-SV



**CONNECTION CHART**

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

MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
A	ØR	RED
B	ØS	BLACK
C	ØT	BLUE
D	PE GND	GRN/YEL
E	-	-

**ENCODER/THERM. CONNECTOR:**

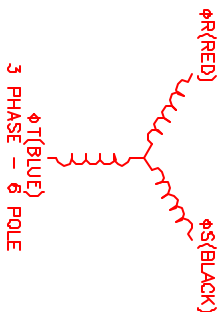
PT02E-14-18P(027) (270-00024)

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
A	THERM	BLACK
L	THERM	BLACK
J	GND	GRN/YEL

**MOTOR & HALL POSITION CHART**

HALL LEADS	BROWN	RED	GRAY	BLUE	WHITE
MOTOR LEADS	BLACK	RED	RED	BLUE	BLUE
VIEW ON THE OSCILLOSCOPE	AAAAA	AAAAA	AAAAA	AAAAA	AAAAA

\*MOTOR ROTATION CCR COUNTS DIRECTION (LOOKING AT THE FACE OF THE MOTOR)



**TITLE**

REV	DESCRIPTION	DATE	APP'D.
1	ISSUE FOR PRODUCTION	2/8/99	MVS
	PRELIMINARY		

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MPM1141BTGZIN1N	INS Systems Corporation Automation Division	1/2x1

DATE: 2/8/99

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

DATE: 2/8/99

REV: 1