

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

MOTOR PARAMETERS	UNITS	VALUE
MOTOR POWER	HP RATED	2.1
	KW RATED	1.6
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	N RATED	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	IN-LBS [Nm]	45.0 [5.1]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	54.0 [6.1]
CONTINUOUS LINE CURRENT	AMPS [RMS/φ]	6.2
PEAK CURRENT	IN-LBS [Nm]	189.1 [21.3]
	AMPS [RMS/φ]	21.6
MAX. THEORETICAL ACCEL	RAD/SEC <sup>2</sup>	54,029
TORQUE SENSITIVITY	Kt IN-LBS/AMP/[RMS/φ] [Nm/AMP/[RMS/φ]	8.8 [0.99]
BACK EMF (LINE TO LINE)	±10% Vrms/Krpm	55.0
D.C. RESISTANCE (P-P)	±10% OHMS	.82
INDUCTANCE (P-P)	±10% MILLIHENRIES	6.1
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] [kg-M <sup>2</sup> ]	.00351 [0.00039]
STATIC FRICTION	Tf [IN-LBS] [Nm]	1.0 [0.11]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 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:**
- AXIAL LOAD: 50 LBS MAX
  - RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
  - MOTOR SEALED TO IP65.
  - MOTOR WEIGHT: 17.8 LBS. [ 8.1 Kg]
  - MOTOR FINISH: BLACK EPOXY
  - MOTOR OUTPUT SHAFT: STAINLESS STEEL
  - MILLIMETERS (INCHES)

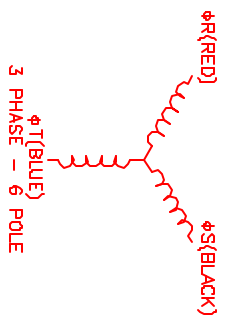
ENCODER: (290-00146)  
OIH48-250DP8-LB-5V

**CONNECTION CHART**  
MOTOR CONNECTOR:  
PT02E-14-5P(Q27)  
(270-00026)

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

**ENCODER/THERM CONNECTOR:**  
PT02E-14-1BP(Q27)  
(270-00024)

PIN	WIRE FUNCTION	WIRE COLOR
T	GND	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
V	CH U	BRN/BLK
R	CH V	GRAY
F	CH V	GRAY/BLK
S	CH W	WHITE
G	CH W	WHT/BLK
H	CH W	WHT/BLK
D	GND/CABLE	SHLD
A	THERM	BLACK
L	THERM	BLACK
J	GND	GRN/YEL



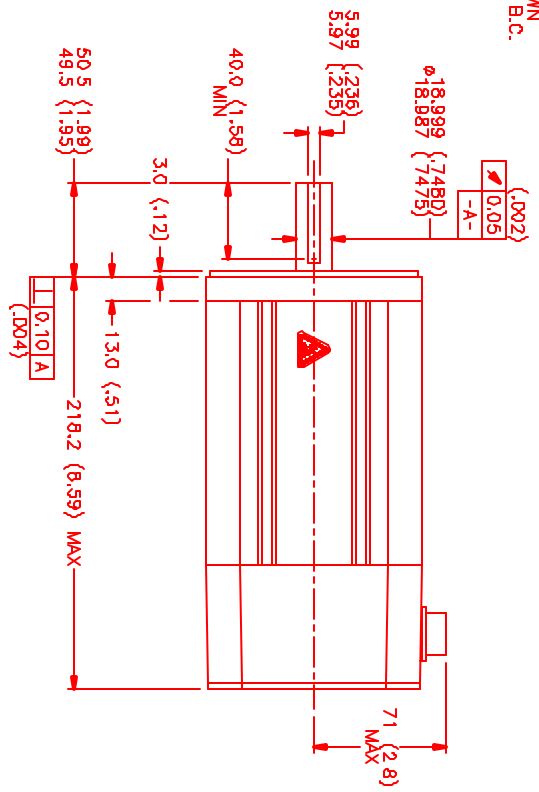
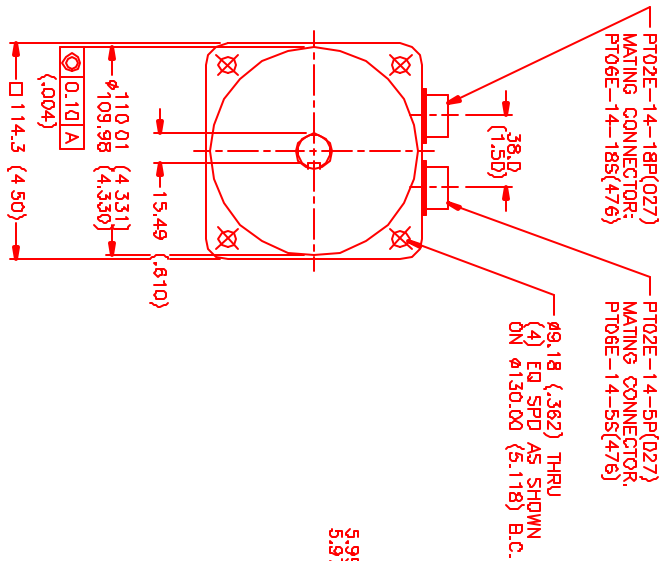
**MOTOR & HALL POSITION CHART**

HALL LEVLS	BROWN	DRY	WHITE
MOTOR LEVLS	BLACK RESPOND TO RED	RED RESPOND TO BLUE	BLUE RESPOND TO BLACK

VIEW ON THE OSCILLOSCOPE

WAVE REPRESENTING STATOR OUTPUT (LOOKING AT THE FACE OF THE MOTOR)

WAVE REPRESENTING HALL SENSOR



NO.	PART NUMBER	DESCRIPTION	QTY.
1	PT02E-14-5P(Q27)	MATING CONNECTOR	1
2	PT02E-14-1BP(Q27)	MATING CONNECTOR	1

NO. PART NUMBER DESCRIPTION QTY.

UNITS: INCHES

DATE: 9/25/00

DESIGNED BY: [Signature]

CHECKED BY: [Signature]

APPROVED BY: [Signature]

REV

TITLE: MPM1141ASG7/L1N

DATE: 9/25/00

SCALE: 1/2"

PROJECT: MPM1141ASG7/L1N

REV 1/2"

FILE: 9/25/00/rev/conn

REVISIONS

REV	DESCRIPTION	DATE	APP.
1 <td>PRELIMINARY <td>9/25/00 <td>LIN </td></td></td>	PRELIMINARY <td>9/25/00 <td>LIN </td></td>	9/25/00 <td>LIN </td>	LIN

DATE: 9/25/00

APP: LIN