

**MOTOR DATA @ 460 VAC (TRAP)**

MOTOR PARAMETERS	UNITS	VALUE
MOTOR HORSEPOWER	HP RATED	4.6
	KW RATED	3.4
MAX OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	N RATED	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	N-LEBS [Nm]	96.8 [10.9]
* CONTINUOUS STALL TORQUE	N-LEBS [Nm]	116.2 [13.1]
CONTINUOUS LINE CURRENT	AMPS	9.4
PEAK TORQUE	N-LEBS [Nm]	408.7 [45.7]
PEAK CURRENT	AMPS	32.8
MAX THEORETICAL ACCEL	RAD/SEC <sup>2</sup>	41,081
TORQUE SENSITIVITY	Kt [N-LEBS/AMP/Nm/AMP]	12.4 [1.42]
BACK EMF (LINE TO LINE)	Vrms/Krpm	110.0
D.C. RESISTANCE (P-P)	OHMS	1.0
INDUCTANCE (P-P)	MILLIHENRIES	8.0
ROTOR INERTIA W/BRAKE	Jm [N-LEBS-SEC <sup>2</sup> Kg-M <sup>2</sup> ]	.00991 [0.12]
STATIC FRICTION	Tf [N-LEBS [Nm]	1.8 [0.2]

**CONNECTION CHART**

MOTOR/BRAKE CONNECTOR:  
PT02E-16-8P(027)

PT02E-16-8P(027)  
(270-00032)

MOTOR/BRAKE	WIRE FUNCTION	WIRE COLOR
A	4R	RED
B	4S	BLACK
C	4T	BLUE
D	PE GND	GRN/YEL
E	BRK SHLD	-
F	BRK (+)	DIODE
G	BRK (-)	1N4007
H	-	-

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

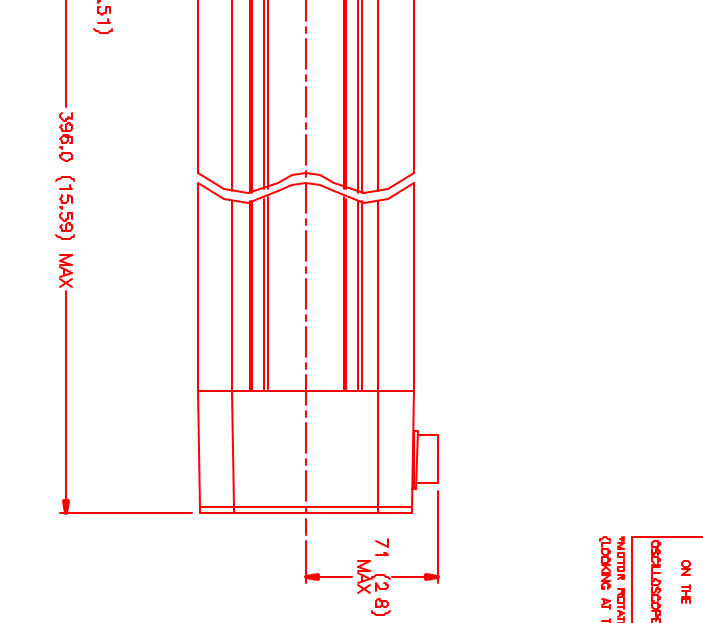
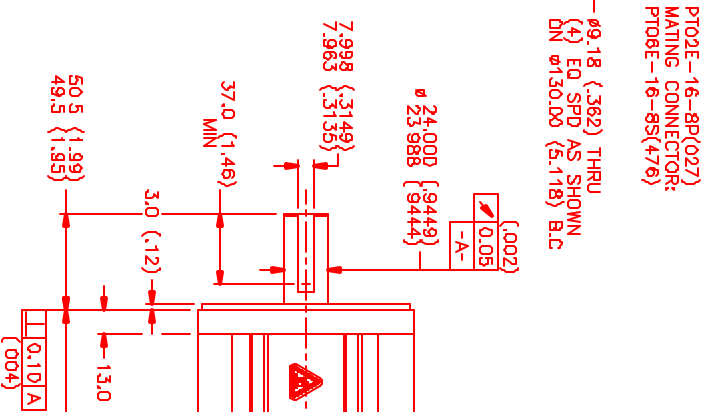
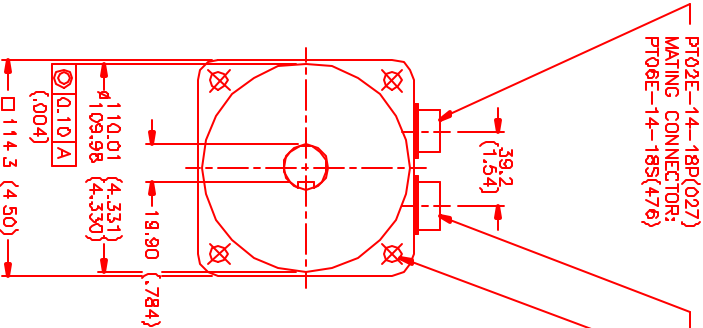
PT02E-14-18P(027)  
(270-00024)

ENC/THERM	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
E	CH Z	YEL/BLK
U	CH U	BROWN
R	CH V	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

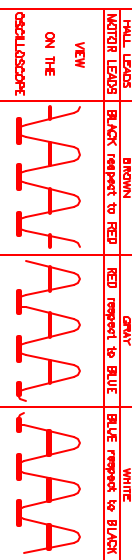
\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1/2" ALUMINUM HEATSINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

- MECHANICAL NOTES:**
- AXIAL LEADS: 50 LBS MAX
  - RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
  - MOTOR SEALED TO IP65
  - MOTOR WEIGHT: 40.6 LBS [18.4 Kg]
  - MOTOR FINISH: BLACK EPOXY
  - MOTOR OUTPUT SHAFT: STAINLESS STEEL
  - MILLIMETERS (INCHES)

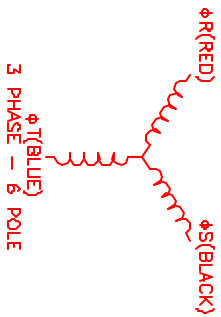
ENCODER: (290-D0052)  
OH48-2000P6-L6-5V  
FAILURE BRAKE:  
MIN HOLDING TORQUE: 240 IN-LBS  
INPUT VOLTAGE: 24 VOLTS



**MOTOR & HALL POSITION CHART**



MOTOR ROTATION (CW (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR))  
WAVE REPRESENTING STATOR OUTPUT  
WAVE REPRESENTING HALL SENSOR



NO.	PART NUMBER	DESCRIPTION	QTY.
1	MPS Systems Corporation Automation Division		
DATE	7/20/89	TITLE	C <sup>o</sup> /TRAP/460/MET/TZ/CONN/BRK
DESIGNED		DRAWN	
APPROVED		SCALE	1/2"=1