

### MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	.83
KILOWATTS	KW	.62
MAX. OPERATING SPEED	N. MAX RPM	5000
SPEED @ RATED TORQUE	N RATED RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS[Nm]	13.0[1.5]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	16.0[1.8]
CONTINUOUS LINE CURRENT	AMPS	1.9
PEAK TORQUE	IN-LBS[Nm]	58.8[6.6]
PEAK CURRENT	AMPS	7.0
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	95.610
TORQUE SENSITIVITY	Kt IN-LBS/AMP[Nm/AMP]	8.3[.94]
BACK EMF (LINE TO LINE)	Vrms/Krpm	74.2
D.C. RESISTANCE (P-P)	OHMS	15.3
INDUCTANCE (P-P)	MILLIHENRIES	39.7
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] Kg-M <sup>2</sup>	0.000615[0.0000693]
STATIC FRICTION	Tf [IN-LBS] [Nm]	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: (290-00073)  
OH48-2048P6-L6-5V

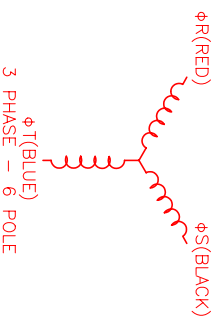
#### CONNECTION CHART

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

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

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	GREEN/BLK
M	CH Z	YELLOW
U	CH Z	YEL/BLK
E	CH U	BROWN
R	CH U	BROWN/BLK
F	CH V	GRAY
S	CH V	GRAY/BLK
G	CH W	WHITE
H	CH W	WHITE/BLK
D	GND/CABLE	SHIELD
A	THERM	BLACK
L	THERM	BLACK
J	GND	GRN/YEL

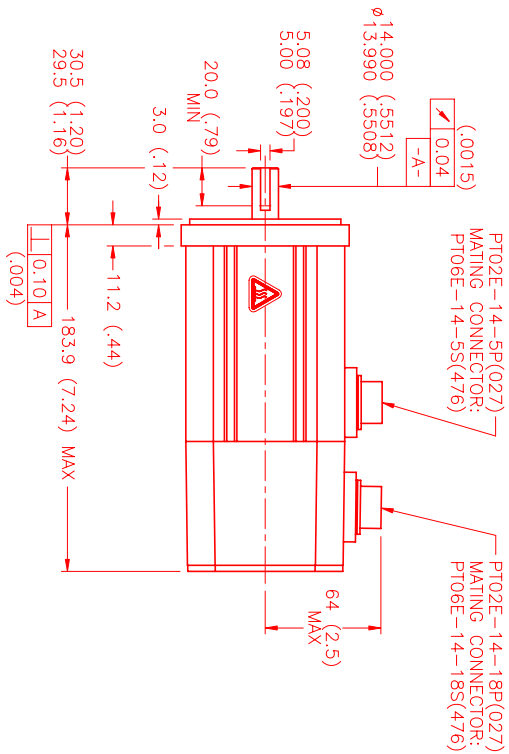
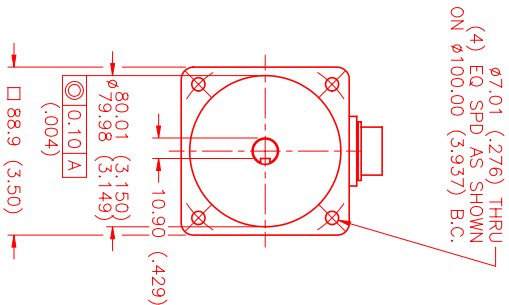
MOTOR WIRE LEADS	PIN	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED	RED
B	ΦS	BLUE	BLACK
C	ΦT	BLUE	BLUE
D	PE GND	GRN/YEL	GRN/YEL
E	-	-	-



#### MOTOR & HALL POSITION CHART

HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

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



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL ANG ± .005			
FRAC ANG ± .002			
DIAM ± .002			
ANG ± 1/2°			
DATE: 1/13/99			
DESIGNED BY: LIN			
CHECKED BY: LIN			
TITLE: "C"/TRAP/460/MET/72048/CONN			
APPROVED BY: MPM891CTJ7JY1N			
SCALE: 1/2:1			

REV.	DESCRIPTION	DATE	APP.
PRELIMINARY		1/13/99	LIN

#### REVISIONS

DATE	DESCRIPTION	APP.
1/13/99		LIN

MTS Systems Corporation  
Automation Division