

MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	2.1
	KW RATED	1.6
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	RPM	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	8.7
PEAK CURRENT	IN-LBS[Nm]	189.0[21.3]
	AMPS	30.5
MAX. THEORETICAL ACCEL.	RAD/SEC ²	54,000
TORQUE SENSITIVITY	Kt IN-LBS/AMPI Nm/AMP	6.21.711
BACK EMF (LINE TO LINE)	Vrms/Krpm	55.0
D.C. RESISTANCE (P-P)	OHMS	.82
INDUCTANCE (P-P)	MILLIHENRIES	6.1
ROTOR INERTIA	Jm [IN-LBS-SEC ²] Kg-M ²	.0035[.00039]
STATIC FRICTION	Tf [IN-LBS] [Nm]	1.0[.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:

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. INCHES (MILLIMETERS)

ENCODER: (290-00107)

OH48-4096B6-L6-5V

CONNECTION CHART

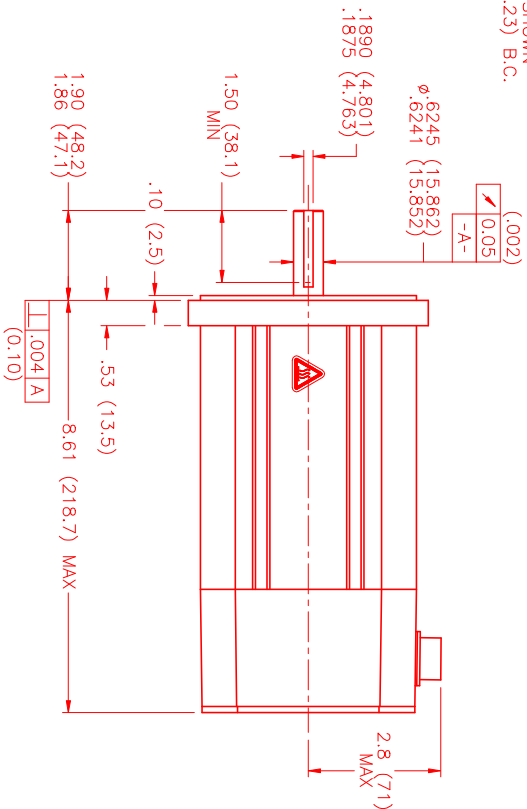
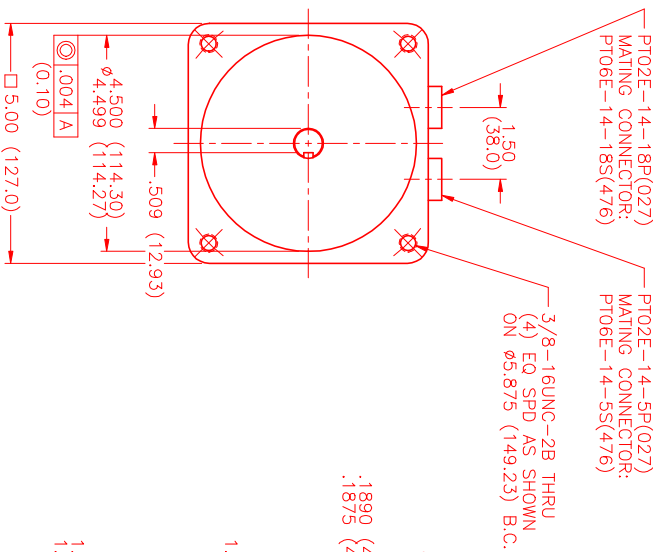
MOTOR CONNECTOR:
PT02E-14-5P(027)
(270-00026)

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

ENCODER/THERM CONNECTOR:

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

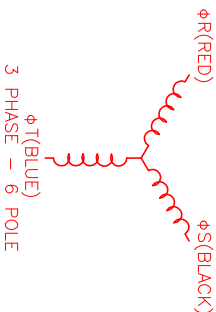
ENC/THERM WIRE LEADS	PIN	WIRE FUNCTION	WIRE COLOR
	T	GROUND	BLACK
	K	+5VDC	RED
	B	CH A	BLUE
	C	CH A'	BLUE/BLK
	N	CH B	GREEN
	P	CH B'	GRN/BLK
	M	CH Z	YELLOW
	U	CH Z'	YEL/BLK
	E	CH U	BROWN
	R	CH UV	BRN/BLK
	F	CH V	GRAY
	S	CH V'	GRAY/BLK
	G	CH W	WHITE
	H	CH W'	WHT/BLK
	D	GND/CABLE	SHLD
	A	THERM	BLACK
	L	THERM	BLACK
	J	GND	GRN/YEL



MOTOR & HALL POSITION CHART

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

*MOTOR ROTATION CW (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DESIGN: 400 # 400			
REVISION: 1			
DATE: 10/13/00			
APPROVED: [Signature]			

REV.	DESCRIPTION	DATE	APPD.
1	PRELIMINARY	10/13/00	AJS

MTS # T/RAP/230/ENG/14096/CONN DRAWING NUMBER: MPM1141ATG6JZ1N

MTS Systems Corporation
Automation Division

RESISTANCE TO SOLVENTS: RESISTANT TO MOST COMMON INDUSTRIAL SOLVENTS. RESISTANT TO OILS AND GREASES. RESISTANT TO WEAR AND TEAR. RESISTANT TO CORROSION.

SCALE: 1/2:1