

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 TORQUE	IN-LBS[Nm]	189.1[21.3]
PEAK CURRENT	AMPS	30.5
MAX. THEORETICAL ACCEL.	RAD/SEC ²	54,029
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: (290-00064)

OH48-1000P6-L6-5V

CONNECTION CHART

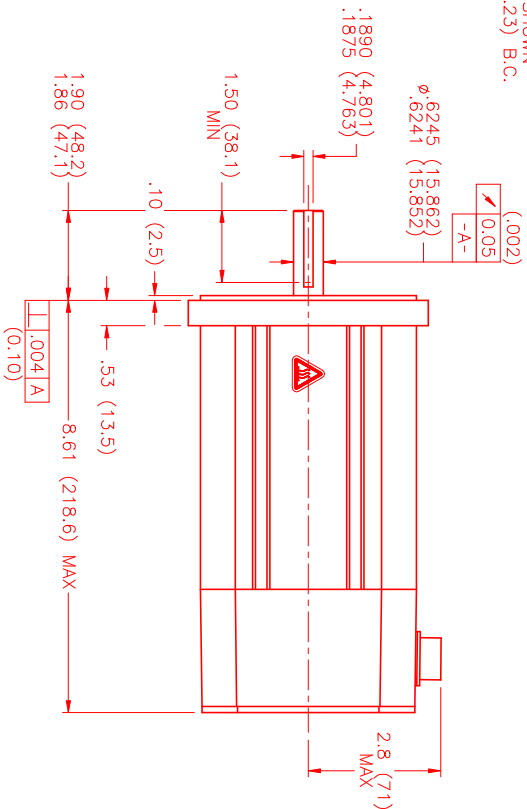
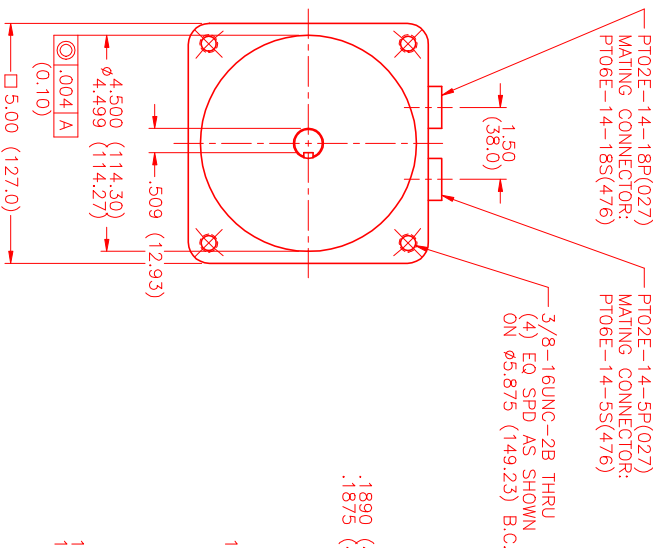
MOTOR CONNECTOR:
PT02E-14-5P(027)
(270-00026)

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

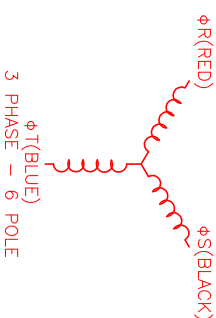


*MOTOR ROTATION C/W (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



MOTOR & HALL POSITION CHART

HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	BLUE respect to BLUE	BLUE respect to BLACK
VIEW ON THE OSCILLOSCOPE	AAAA	AAAA	AAAA



REV.	DESCRIPTION	DATE	APPD.
1	PRELIMINARY	4/19/00	LIN

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DESIGN: 2004-000			
DATE: 4/19/00			
SCALE: 1/2"			
APPROVED:			
DATE: 1/26/99			
SCALE: 1/2"			
APPROVED:			

MTS Systems Corporation
Automation Division

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