

### MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	.22
	KW RATED	.16
MAX. OPERATING SPEED	N. MAX RPM	5000
SPEED @ RATED TORQUE	RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS[Nm]	3.4[0.38]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	5.0[0.56]
CONTINUOUS LINE CURRENT	AMPS	2.4
PEAK TORQUE	IN-LBS[Nm]	15.1[1.7]
PEAK CURRENT	AMPS	7.2
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	155,670
TORQUE SENSITIVITY	Kt IN-LBS/AMPI Nm/AMP	2.0[0.23]
BACK EMF (LINE TO LINE)	Vrms/Krpm	18.2
D.C. RESISTANCE (P-P)	OHMS	8.4
INDUCTANCE (P-P)	MILLIHENRIES	11.6
ROTOR INERTIA	Jm IN-LBS-SEC <sup>2</sup> [Kg-M <sup>2</sup> ]	0.0000997[0.0000109]
STATIC FRICTION	Tf IN-LBS[Nm]	0.5[0.06]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 10" X 10" X 1 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: 15 LBS MAX
- RADIAL LOAD: 20 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 2.6 LBS. [ 1.2 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- INCHES (MILLIMETERS)

#### ENCODER: (290-00056)

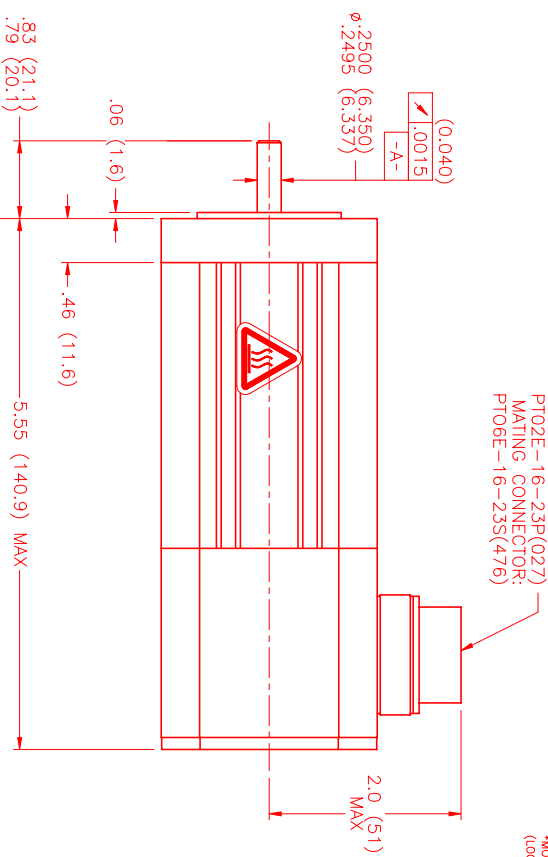
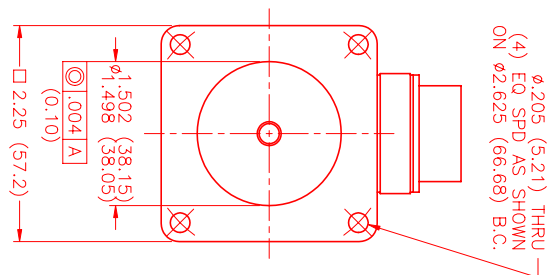
OH35-2000P4-L6-SV

### CONNECTION CHART

MOTOR/ENCODER/THERM CONNECTOR:  
PT02E-16-23P(027)  
(270-00219)

MOTOR WIRE LEADS	WIRE	WIRE COLOR
A	φR	RED
B	φS	BLACK
C	φT	BLUE
D	PE GND	GRN/YEL

ENC/THERM WIRE LEADS	PIN	WIRE FUNCTION	WIRE COLOR
	T	GROUND	BLACK
	E	+5VDC	RED
	F	CH A	BLUE
	U	CH A\	BLUE/BLK
	G	CH B	GREEN
	V	CH B\	GRN/BLK
	H	CH Z	YELLOW
	W	CH Z\	YEL/BLK
	J	CH U	BROWN
	K	CH U\	BRN/BLK
	X	CH V	GRAY
	L	CH V\	GRAY/BLK
	Y	CH W	WHITE
	M	CH W\	WHT/BLK
	N	GND/CABLE	SHLD
	S	THERM	BLACK
	R	THERM	BLACK
	P	-	-
	Z	-	-

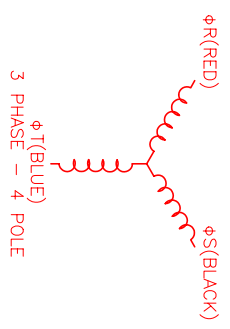


PT02E-16-23P(027)  
MATING CONNECTOR:  
PT06E-16-23S(476)

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

MOTOR & HALL POSITION CHART

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



NO.	PART NUMBER	DESCRIPTION	QTY
1	PT02E-16-23P(027)	MOTOR/ENCODER/THERM CONNECTOR	1

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		10/17/01	MS

NO.	PART NUMBER	DESCRIPTION	QTY
1	PT02E-16-23P(027)	MOTOR/ENCODER/THERM CONNECTOR	1

MTS Systems Corporation  
Automation Division

DATE: 10/17/01	CHECKED:	DATE: 10/17/01	APPROVED:
SCALE: 1:1			