

MOTOR DATA @ 110 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	0.22
KILOWATTS	KW RATED	0.16
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(RMS/φ)	1.7
PEAK TORQUE	TPK	15.1[1.71]
PEAK CURRENT	IN-LBS[Nm]	5.1
MAX. THEORETICAL ACCEL.	AMPS(RMS/φ)	157.292
TORQUE SENSITIVITY	RAD/SEC ²	2.86[0.32]
BACK EMF (LINE TO LINE)	Kt	18.0
D.C. RESISTANCE (P-P)	Vrms/Krpm	8.4
INDUCTANCE (P-P)	OHMS	11.6
ROTOR INERTIA	Jm [IN-LBS-SEC ²] Kg-M ²	0.000097[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 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)

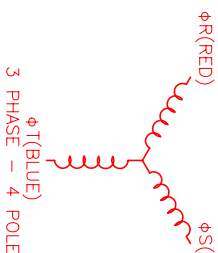
ENCODER: (290-00056)

OH35-2000P4-L6-5V

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

ENC/THERM WIRE	WIRE LEADS
PIN	FUNCTION
T	GROUND
E	+5VDC
F	CH A
U	CH A'
G	CH B
V	CH B'
H	CH Z
W	CH Z'
J	CH U
K	CH U'
X	CH V
L	CH V'
Y	CH W
M	CH W'
N	GND/CABLE
S	THERM
R	THERM
P	-
Z	-

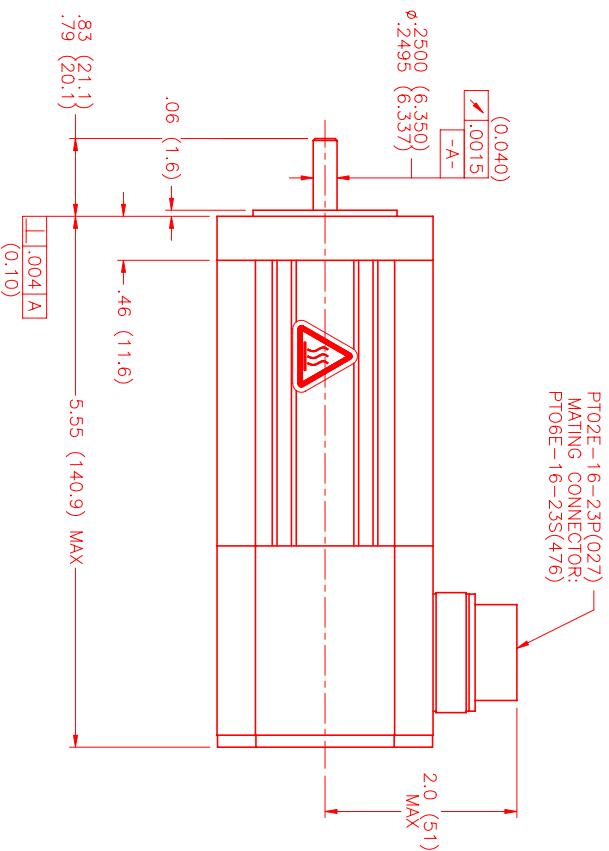
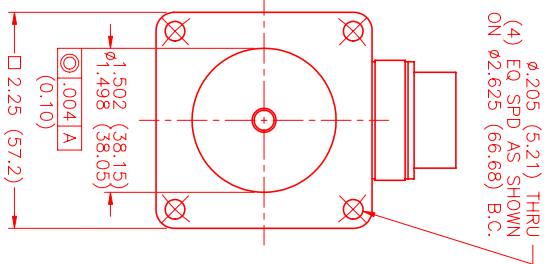
MOTOR WIRE	WIRE LEADS
PIN	FUNCTION
A	φR
B	φS
C	φT
D	PE GND



MOTOR & HALL POSITION CHART

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

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



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

NO.	PART NUMBER	DESCRIPTION	QTY.
1	PT02E-16-23P(027)	MOTOR	1
2	PT06E-16-23S(476)	MATING CONNECTOR	1

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REV.	DESCRIPTION	DATE	APP.
PRELIMINARY		11/17/98	MS

REVISIONS

REV.	DESCRIPTION	DATE	APP.
PRELIMINARY		11/17/98	MS

MTS Automation

Custom Servo Motors

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2	PT06E-16-23S(476)	MATING CONNECTOR	1