

MOTOR DATA @ 54 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	.19
KILOWATTS	KW	.14
MAX. OPERATING SPEED	N. MAX RPM	2500
SPEED @ RATED TORQUE	RPM	1500
* CONTINUOUS RATED TORQUE @ 1500 RPM	IN-LBS [Nm]	8.0 [0.9]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	10.0 [1.1]
CONTINUOUS LINE CURRENT	AMPS (RMS/φ)	4.0
PEAK TORQUE	IN-LBS [Nm]	30.0 [3.4]
PEAK CURRENT	AMPS (RMS/φ)	11.0
MAX. THEORETICAL ACCEL.	RAD/SEC ²	187,500
TORQUE SENSITIVITY	Kt IN-LBS/AMP (RMS/φ) [Nm/AMP (RMS/φ)]	2.8 [.32]
BACK EMF (LINE TO LINE)	Vrms/Krpm	17.8
D.C. RESISTANCE (P-P)	OHMS	3.1
INDUCTANCE (P-P)	MILLIHENRIES	5.1
ROTOR INERTIA	Jm [IN-LBS-SEC ²] [Kg-M ²]	.000159 [0.0000179]
STATIC FRICTION	Tf [IN-LBS] [Nm]	.8 [0.09]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 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: 3.6 LBS. [1.6 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- INCHES (MILLIMETERS)

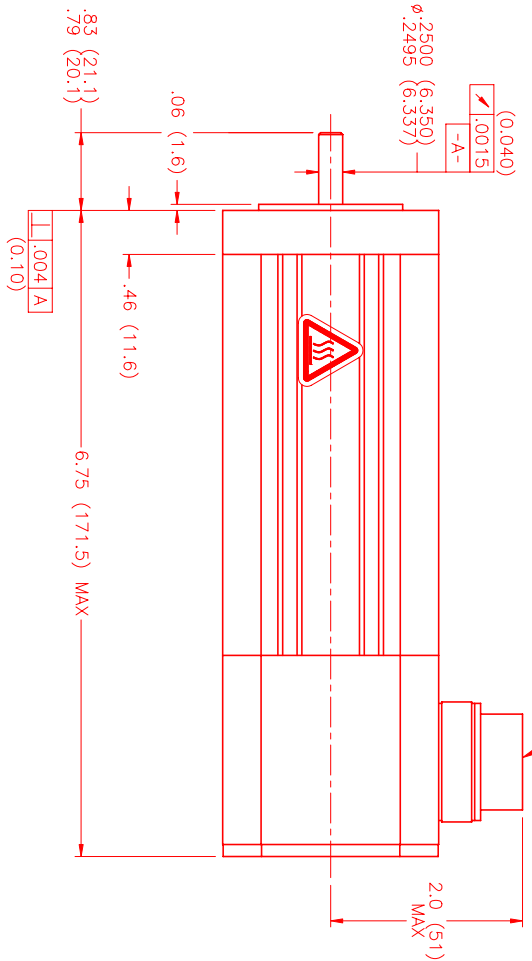
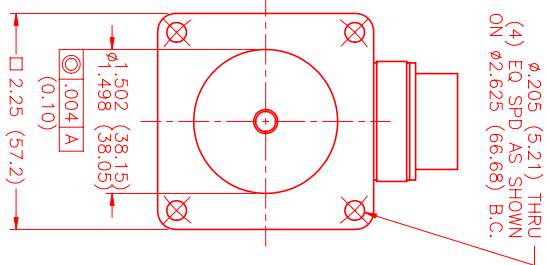
ENCODER: (290-00065)
OH35-1000P4-L6-SV

CONNECTION CHART

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

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

ENC/THERM WIRE	LEADS
PN	WIRE FUNCTION 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 WHI/BLK
N	GND/CABLE SHLD
S	THERM BLACK
R	THERM BLACK
P	-
Z	-

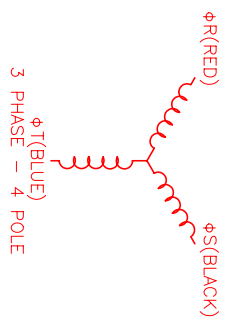


PT02E-16-23P(027)
MATING CONNECTOR:
PT06E-16-23S(476)

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

MOTOR & HALL POSITION CHART

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			
DESIGN	MTS	MTS Systems Corporation	
DATE	9/29/99		
APPROVED			
DRAWN	MPM664ASE6JM1N		

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		3/20/00	LIN

SCALE: 1:1