

MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	.48
KILOWATTS	KW RATED	.35
MAX. OPERATING SPEED	N MAX RPM	6000
SPEED @ RATED TORQUE	N RATED RPM	5000
* CONTINUOUS RATED TORQUE @ 5000 RPM	IN-LBS[Nm]	6.0[0.68]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	10.0[1.13]
CONTINUOUS LINE CURRENT	AMPS(RMS/φ)	2.2
PEAK TORQUE	IN-LBS[Nm]	30.0[3.4]
PEAK CURRENT	AMPS(RMS/φ)	6.6
MAX. THEORETICAL ACCEL.	RAD/SEC ²	163.043
TORQUE SENSITIVITY	Kt IN-LBS/AMP(RMS/φ) [Nm/AMP(RMS/φ)]	4.5[.51]
BACK EMF (LINE TO LINE)	Vrms/Krpm	28.3
D.C. RESISTANCE (P-P)	OHMS	28.3
INDUCTANCE (P-P)	MIHENRIES	11.0
ROTOR INERTIA W/ BRAKE	Jm IN-LBS-SEC ² [Kg-M ²]	.000184[.0000207]
STATIC FRICTION	Tf IN-LBS[Nm]	0.8[0.09]

*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: 4.3 LBS. [2.0 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- INCHES (MILLIMETERS)

ENCODER: (290-00056)

OIH35-2000P4-L6-5V

FAILSAFE BRAKE:

MIN HOLDING TORQUE: 10 IN-LBS
INPUT VOLTAGE: 24 VOLTS

CONNECTION CHART
MOTOR/ENCODER/THERM/BRAKE CONNECTOR:
PTO2E-16-23P(027)
(270-00219)

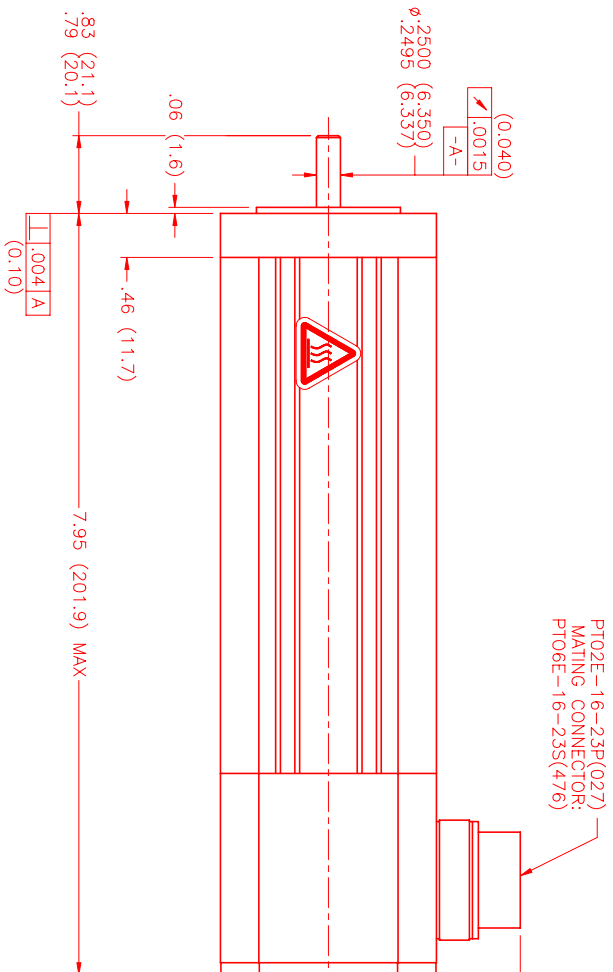
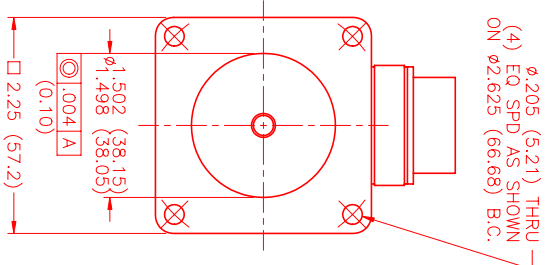
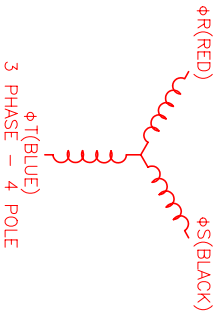
ENC/THERM/BRK	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
PIN	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
T	GROUND	BLACK	BLACK
E	+5VDC	RED	RED
F	CH A	BLUE	BLUE
U	CH A	BLUE/BLK	BLUE/BLK
G	CH B	GREEN	GREEN
V	CH B	GRN/BLK	GRN/BLK
H	CH Z	YELLOW	YELLOW
W	CH Z	YEL/BLK	YEL/BLK
J	CH U	BROWN	BROWN
K	CH U	BRN/BLK	BRN/BLK
X	CH V	GRAY	GRAY
L	CH V	GRAY/BLK	GRAY/BLK
Y	CH W	WHITE	WHITE
M	CH W	WHT/BLK	WHT/BLK
N	GND/CABLE	SHLD	SHLD
S	THERM	BLACK	BLACK
R	THERM	BLACK	BLACK
P	BRK (+)	DIODE	DIODE
Z	BRK (-)	1N4007	1N4007

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

MOTOR & HALL POSITION CHART

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

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



PTO2E-16-23P(027)
MATING CONNECTOR:
PTIO6E-16-23S(476)

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL ANGLES	30°		
FRAC. ANGLES	1/2°		
ANGLE	1/2°		
DATE	7/8/02		
CHECKED			
APPROVED			
DRAWING NUMBER	MPM664BSG6JN1R	SCALE	1/2:1

REV.	DESCRIPTION	DATE	APP.
PRELIMINARY		2/8/02	LIN

MTS MTS Systems Corporation
Automation Division