

### MOTOR DATA @ 110 VAC (TRAP)

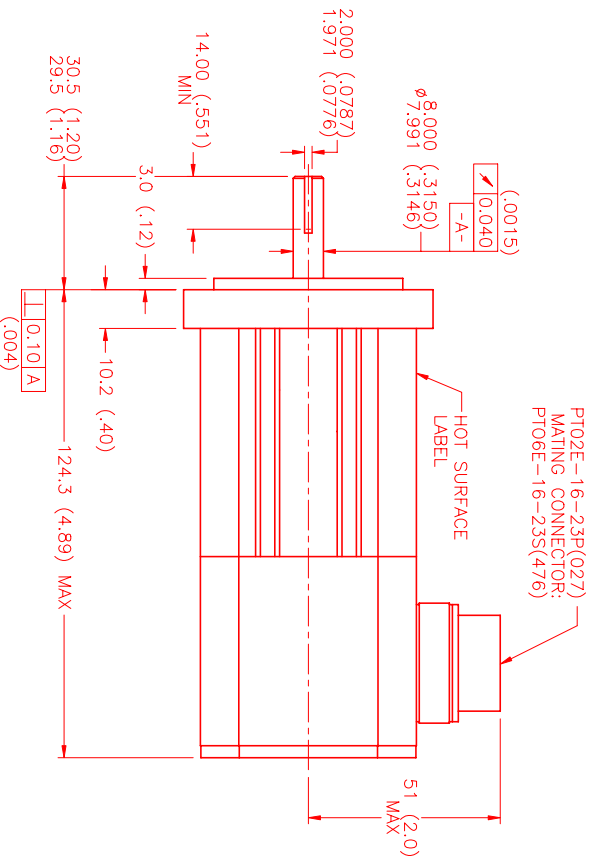
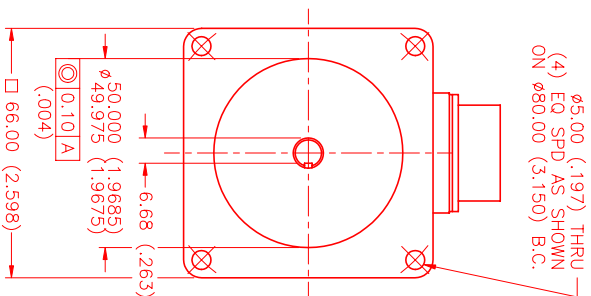
MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	.15
KILOWATTS	KW RATED	.11
MAX. OPERATING SPEED	N. MAX RPM	6000
SPEED @ RATED TORQUE	N RATED RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS[Nm]	2.3(.26)
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	2.6(.29)
CONTINUOUS LINE CURRENT	AMPS	3.0
PEAK TORQUE	IN-LBS[Nm]	7.8(0.9)
PEAK CURRENT	AMPS	9.7
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	118,182
TORQUE SENSITIVITY	IN-LBS/AMP[Nm/AMP]	1.03(.12)
BACK EMF (LINE TO LINE)	Vrms/Krpm	9.2
D.C. RESISTANCE (P-P)	OHMS	6.9
INDUCANCE (P-P)	MILLIHENRIES	7.7
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ]	.000066(.0000075)
STATIC FRICTION	Tf [IN-LBS][Nm]	.35(.040)

\*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: 2.2 LBS. [ 1.0 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

#### ENCODER: (290-00056) OH35-2000P4-L6-5V



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

HOT SURFACE LABEL

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

MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL

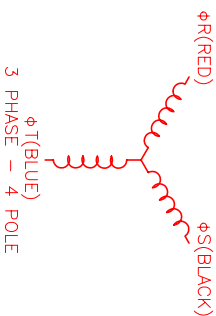
ENC/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK
E	+5VDC	RED
F	CH A	BLUE
U	CH A	BLUE/BLK
G	CH B	GREEN
V	CH B	GRN/BLK
H	CH Z	YELLOW
W	CH Z	YEL/BLK
J	CH U	BROWN
K	CH U	BRN/BLK
X	CH V	GRAY
L	CH V	GRAY/BLK
Y	CH W	WHITE
M	CH W	WHT/BLK
N	GND/CABLE	SHLD
S	THERM	BLACK
R	THERM	BLACK
P	-	-
Z	-	-

#### 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	AAAF	AAA	AAA

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

WAVE REPRESENTING STATOR OUTPUT (LOOKING AT THE FACE OF THE MOTOR)



NO.	PART NUMBER	DESCRIPTION	QTY.
1	MPM661ATF7JUN1N	MOTOR	1

UNLESS SPECIFIED OTHERWISE  
**MTS** Systems Corporation  
 Automation Division

DESIGN: MVS  
 DATE: 8/26/99  
 DRAWING NUMBER: MPM661ATF7JUN1N  
 SCALE: 1:1

REV.	DESCRIPTION	DATE	APP.
1	PRELIMINARY	4/11/00	LIN

#### REVISIONS

DATE: 4/11/00  
 DRAWING NUMBER: MPM661ATF7JUN1N