MOTOR DATA @ 110 VAC SINE

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	.22
KILOWATTS	KW RATED	KW	.16
MAX. OPERATING SPEED	N MAX	RPM	5000
SPEED @ RATED TORQUE	N RATED	RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM		IN-LBS[Nm]	3.4[.38]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	5.0[.56]
CONTINUOUS LINE CURRENT		AMPS(RMS/Φ)	1.7
PEAK TORQUE	Tpk	IN-LBS[Nm]	15.1[1.7]
PEAK CURRENT		AMPS(RMS/Φ)	5.1
MAX. THEORETICAL ACCEL.		RAD/SEC²	157,292
TORQUE SENSITIVITY	Kt	IN-LBS/AMP(RMS/Φ)[Nm/AMP(RMS/Φ)]	2.86[.32]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	18.2
D.C. RESISTANCE (P-P)	±10%	OHMS	8.4
INDUCTANCE (P-P)	±10%	MILLIHENRIES	11.6
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	.000097[.0000109]
STATIC FRICTION	Tf	IN-LBS[Nm]	.5[.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:

1. AXIAL LOAD: 15 LBS MAX
2. RADIAL LOAD: 20 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 2.7 LBS [1.2 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

ENCODER: (290-00056)
OIH35-2000P4-L6-5V

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

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

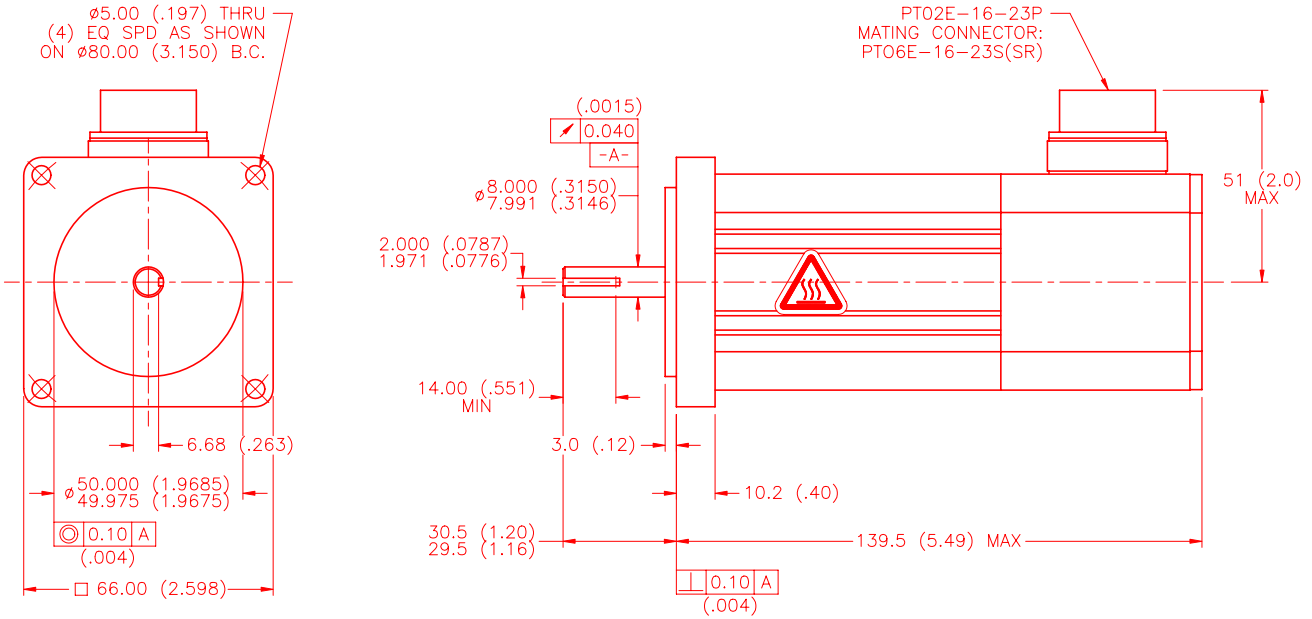
ENC/THERM WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK
E	+5VDC	RED
F	CH A	BLUE
U	CH A\	BLUE/BLK
G	CH B	GREEN
V	CH B\	GREEN/BLK
H	CH Z	YELLOW
W	CH Z\	YEL/BLK
J	CH U	BROWN
K	CH U\	BROWN/BLK
X	CH V	GRAY
L	CH V\	GRAY/BLK
Y	CH W	WHITE
M	CH W\	WHITE/BLK
N	GND/CABLE	SHIELD
S	THERM	BLACK
R	THERM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

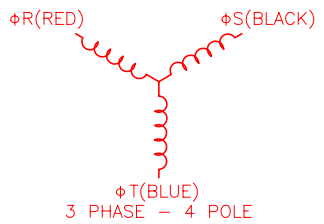
MOTOR & HALL POSITION CHART

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

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

WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR





TITLE: "A"/MET/T2/CONN	DRAWING NUMBER: MPM662ASF7JN1N

REVISIONS

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	11/6/98	LIN

NO.	PART NUMBER	DESCRIPTION	QTY.

TOLERANCES UNLESS SPECIFIED
DECIMAL .XXX ± .005
DECIMAL .XX ± .010
DECIMAL .X ± .020
FRACTION ± 1/64
ANGLE ± 1/2°

MTS Systems Corporation
Automation Division

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DRAWN: LIN	TITLE: "A"/SINE/110V/MET/T2/CONN	REV.
DATE: 11/6/98		
CHECKED:	MATERIAL:	
APPROVED:	DRAWING NUMBER: MPM662ASF7JN1N	SCALE: 1:1