

MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	1.3
KILOWATTS	KW RATED	0.93
MAX. OPERATING SPEED	N MAX RPM	6000
SPEED @ RATED TORQUE	N RATED RPM	5000
CONTINUOUS RATED TORQUE	IN-LBS[Nm]	15.81(1.84)
CONTINUOUS STALL TORQUE	IN-LBS[Nm]	18.81(2.12)
CONTINUOUS LINE CURRENT	AMPS(RMS/Φ)	4.4
PEAK TORQUE	IN-LBS[Nm]	56.0(6.4)
PEAK CURRENT	AMPS(RMS/Φ)	13.2
MAX. THEORETICAL ACCEL.	RAD/SEC ²	114,286
TORQUE SENSITIVITY	Kt IN-LBS/AMPER(RMS/Φ)/IN/AMPER(RMS/Φ)	4.26(0.481)
BACK EMF (LINE TO LINE)	Vrms/Krpm	26.8
D.C. RESISTANCE (P-P)	OHMS	1.5
INDUCTANCE (P-P)	MILLIHENRIES	3.6
ROTOR INERTIA	Jm IN-LBS-SEC ² Kg-M ²	0.00049(0.000055)
STATIC FRICTION	Tf IN-LBS[Nm]	1.2(0.14)

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 85°C ON MOTOR, MOTOR MOUNTED ON A 12" X 12" X 1/2" 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: 20 LBS MAX
- RADIAL LOAD: 35 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 5.9 LBS. [2.7 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)
- THIS MOTOR'S OUTPUT KEY IS A PRESS FIT.

ENCODER: (290-00158)
OH35-2048P6-L6-5V

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

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

MOTOR & HALL POSITION CHART

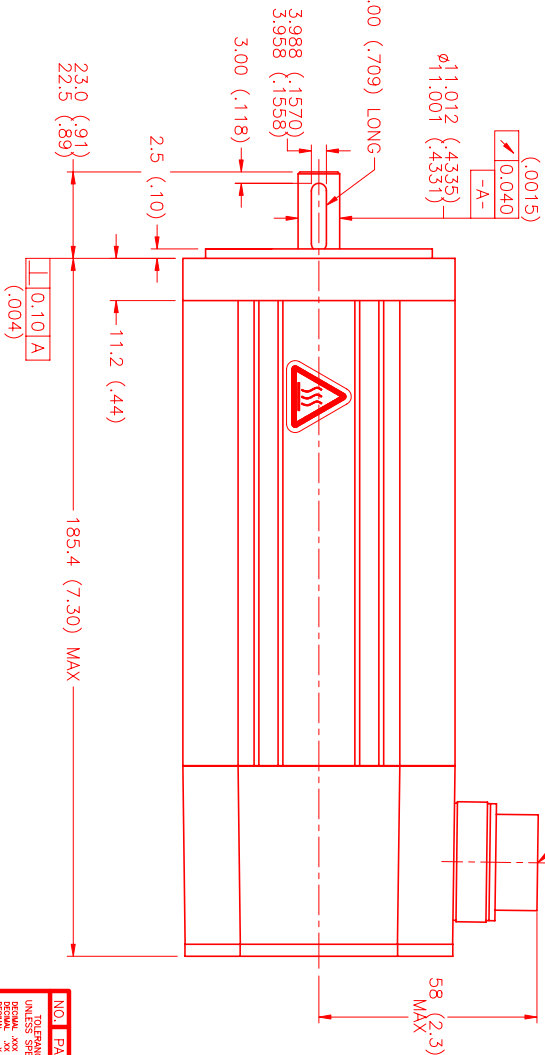
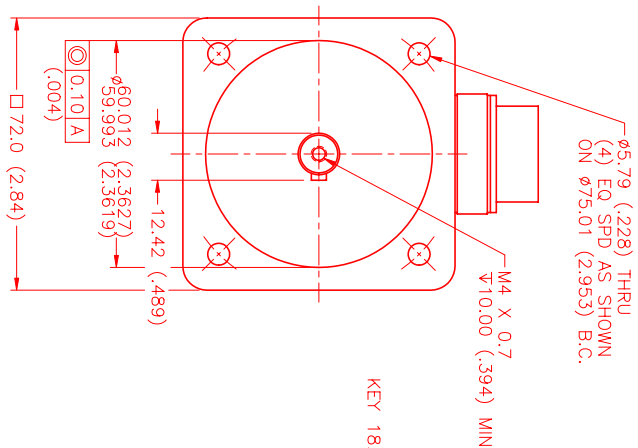
HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

VIEW ON THE OSCILLOSCOPE

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



WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



DATE: 5/31/00	REV: PRELIMINARY
REVISIONS	
DATE	DESCRIPTION
5/31/00	MVS

NO. PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED		
DECIMAL: 1/16 & 1/32	MTS MTS Systems Corporation	
FRACTIONAL: 1/2, 3/4, 1/4, 1/8, 1/16, 1/32	Automation Division	
ANGLE: 1/2		
FORM: MVS		
DATE: 5/31/00	TITLE: "B" /SINE/230/MET/T2048/CONN	REV:
CHECKED:	MATERIAL:	
APPROVED:	DRAWING NUMBER: MPM724BSG7JY1N	SCALE: 1:1