MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	0.74
KILOWATTS	KW RATED	KW	0.55
MAX. OPERATING SPEED	N MAX	RPM	7000
SPEED @ RATED TORQUE	N RATED	RPM	5000
* CONTINUOUS RATED TORQUE @ 5000 RPM		IN-LBS[Nm]	9.4[1.1]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	11.3[1.28]
CONTINUOUS LINE CURRENT		AMPS(RMS/Φ)	2.7
PEAK TORQUE	Tpk	IN-LBS[Nm]	34.0[3.8]
PEAK CURRENT		AMPS(RMS/Φ)	8.2
MAX. THEORETICAL ACCEL.		RAD/SEC²	125,926
TORQUE SENSITIVITY	Kt	IN-LBS/AMP(RMS/Φ)[Nm/AMP(RMS/Φ)]	4.12[0.465]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	25.9
D.C. RESISTANCE (P-P)	±10%	OHMS	3.7
INDUCTANCE (P-P)	±10%	MILLIHENRIES	7.3
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	0.00027[0.000031]
STATIC FRICTION	Tf	IN-LBS[Nm]	0.8[0.09]

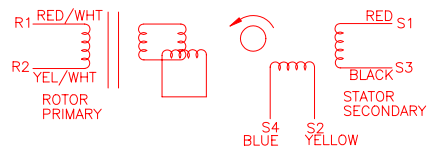
*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 85°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1/2" ALUMINUM HEATSINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

MECHANICAL NOTES:
1. AXIAL LOAD: 20 LBS MAX
2. RADIAL LOAD: 35 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 4.3 LBS. [2.0 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)
8. THIS MOTOR'S OUTPUT KEY IS A PRESS FIT.

CONNECTION CHART

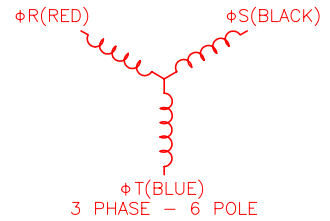
MOTOR/THERM/RESOLVER CONNECTOR:
PT02E-14-18P(027)
(270-00024)

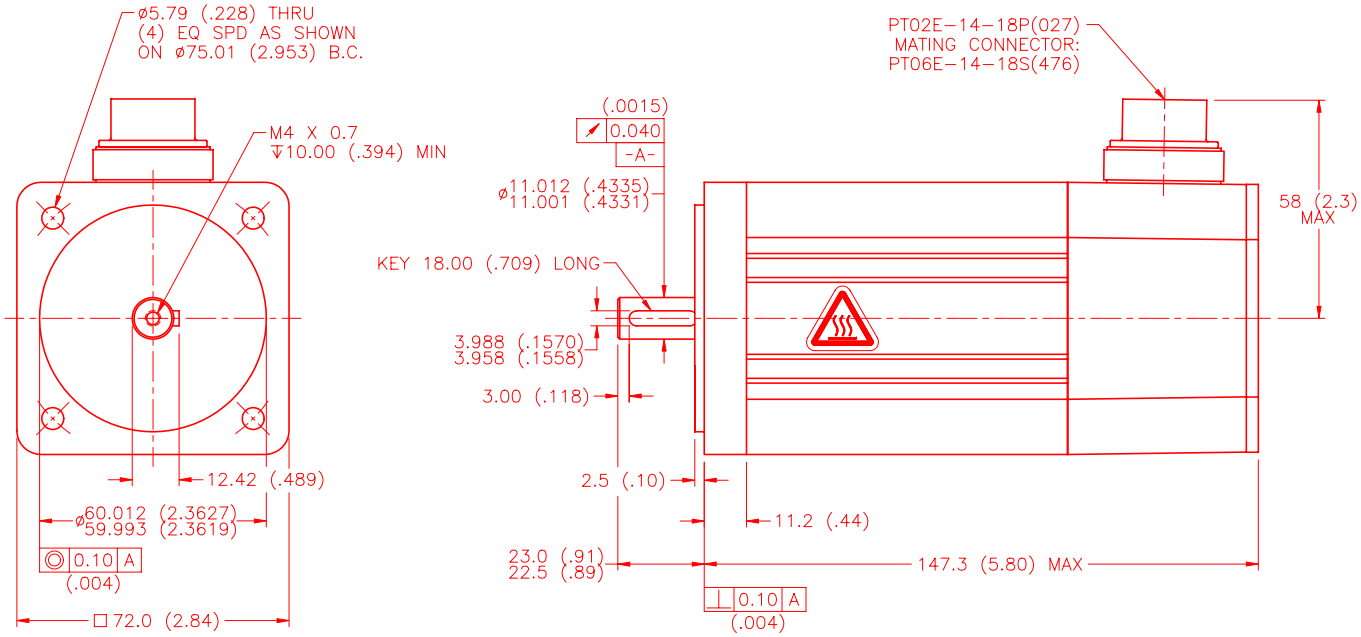
MTR/THERM/RES WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL
U	THERM	BLACK
N	THERM	BLACK
H	SIN	YELLOW
G	COS GND	BLACK
S	COS	RED
F	SIN GND	BLUE
R	REF GND	YEL/WHT
E	REF	RED/WHT
J	RES SHLD	GRN/YEL
K	–	–
L	–	–
M	–	–
P	–	–
T	–	–



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER

RESOLVER IS SET FOR TBF/R AMPLIFIER





TITLE:	DRAWING NUMBER:
"B"/SINE/230/MET/TBFR/CONN	MPM722BSG7H1N

REVISIONS

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	6/26/02	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: "B"/SINE/230/MET/TBFR/CONN	REV.
DATE: 6/26/02		
CHECKED:	MATERIAL:	
APPROVED:	DRAWING NUMBER: MPM722BSG7H1N	SCALE: 1:1