MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	.27
KILOWATTS	KW RATED	KW	.20
MAX. OPERATING SPEED	N MAX	RPM	3300
SPEED @ RATED TORQUE	N RATED	RPM	2800
* CONTINUOUS RATED TORQUE @ 2800 RPM		IN-LBS[Nm]	6.0[.68]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	7.5[.85]
CONTINUOUS LINE CURRENT		AMPS	2.3
PEAK TORQUE	Tpk	IN-LBS[Nm]	22.5[2.54]
PEAK CURRENT		AMPS	7.4
MAX. THEORETICAL ACCEL.		RAD/SEC²	175,781
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	3.2[.36]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	28.3
D.C. RESISTANCE (P-P)	±10%	OHMS	14.4
INDUCTANCE (P-P)	±10%	MILLIHENRIES	17.9
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	.000128[.0000145]
STATIC FRICTION	Tf	IN-LBS[Nm]	.65[.073]

*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: 3.2 LBS. [1.5 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

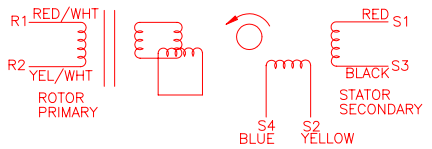
CONNECTION CHART
MOTOR/THERM/RESOLVER CONNECTOR:
PT02E-14-18P(027)
(270-00024)

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	–	–

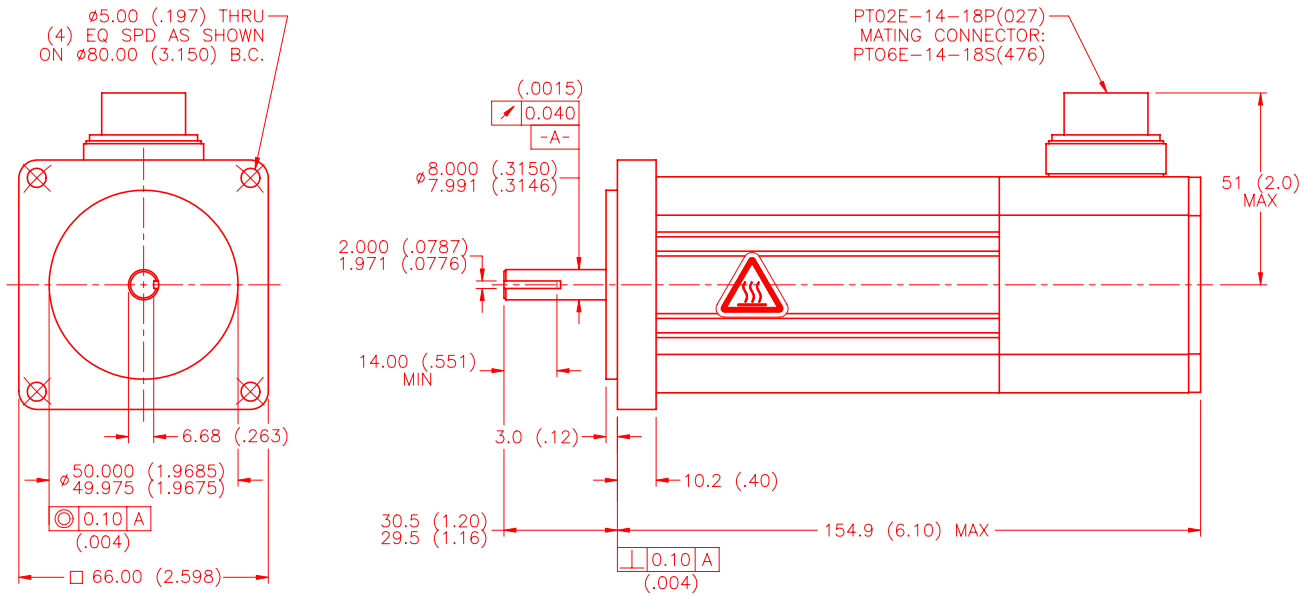
TITLE: "B"/TRAP/230/MET/RES/CONN	DRAWING NUMBER: MPM663BTG7G1N

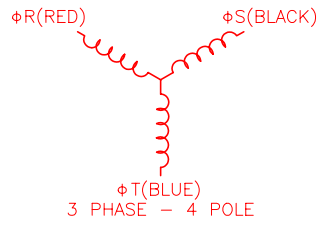
REVISIONS

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	4/12/00	LIN



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER





3 PHASE – 4 POLE

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: MVS
DATE: 8/17/99
CHECKED:
APPROVED:

TITLE: "B"/TRAP/230/MET/RES/CONN
REV.
MATERIAL:
DRAWING NUMBER: MPM663BTG7G1N
SCALE: 1:1