MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	.55
KILOWATTS	KW RATED	KW	.41
MAX. OPERATING SPEED	N MAX	RPM	3000
SPEED @ RATED TORQUE	N RATED	RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM		IN-LBS[Nm]	14.5[1.64]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	16.0[1.81]
CONTINUOUS LINE CURRENT		AMPS	1.9
PEAK TORQUE	Tpk	IN-LBS[Nm]	58.8[6.64]
PEAK CURRENT		AMPS	7.0
MAX. THEORETICAL ACCEL.		RAD/SEC²	95,610
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	8.4[.96]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	75.2
D.C. RESISTANCE (P-P)	±10%	OHMS	15.6
INDUCTANCE (P-P)	±10%	MILLIHENRIES	39.6
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	.000615[.0000693]
STATIC FRICTION	Tf	IN-LBS[Nm]	.4[.05]

*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: 25 LBS MAX
2. RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 7.2 LBS. [3.3 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

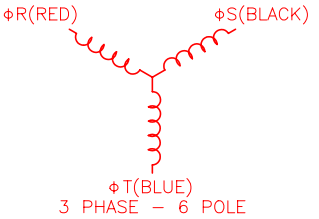
CONNECTION CHART

MOTOR CONNECTOR:
PT02E-14-5P(027)
(270-00026)

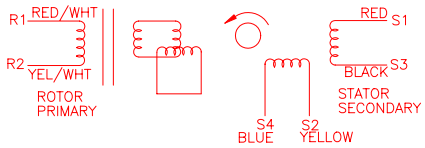
MOTOR WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL
E	–	–

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

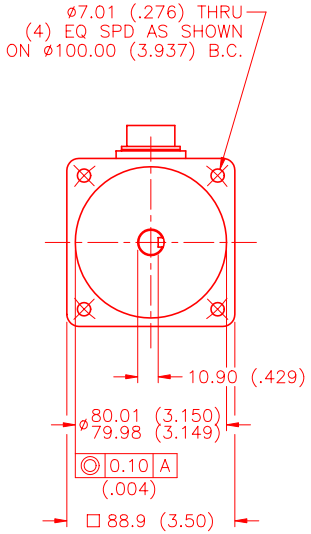
RES/THERM WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
U	THERM	BLACK
N	THERM	BLACK
H	SIN	YELLOW
G	COS GND	BLACK
S	COS	RED
F	SIN GND	BLUE
R	REF GND	YEL/WHT
E	REF	RED/WHT
D	RES SHLD	GRN/YEL
P	GND	GRN/YEL
A	–	–
B	–	–
C	–	–
J	–	–
K	–	–
L	–	–
M	–	–
T	–	–

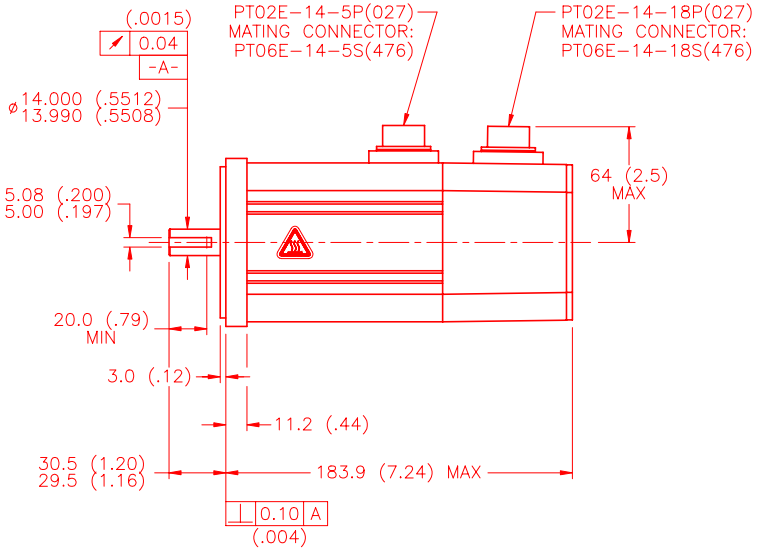


3 PHASE – 6 POLE



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER
RESOLVER IS SET FOR A TBF/R AMPLIFIER





REVISIONS			
REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	5/15/02	LIN

TITLE: "B"/TRAP/230/MET/TBFR/CONN
DRAWING NUMBER: MPM891BTG7H1N

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
DATE: 5/15/02
CHECKED:
APPROVED:
TITLE: "B"/TRAP/230/MET/TBFR/CONN
REV.
MATERIAL:
DRAWING NUMBER: MPM891BTG7H1N
SCALE: 1/2:1