MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	1.05
KILOWATTS	KW RATED	KW	0.78
MAX. OPERATING SPEED	N MAX	RPM	3000
SPEED @ RATED TORQUE	N RATED	RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM		IN-LBS[Nm]	27.5[3.1]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	30.0[3.4]
CONTINUOUS LINE CURRENT		AMPS	3.7
PEAK TORQUE	Tpk	IN-LBS[Nm]	111.5[12.6]
PEAK CURRENT		AMPS	13.6
MAX. THEORETICAL ACCEL.		RAD/SEC²	97,721
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	8.2[0.94]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	73.2
D.C. RESISTANCE (P-P)	±10%	OHMS	6.0
INDUCTANCE (P-P)	±10%	MILLIHENRIES	20.2
ROTOR INERTIA W/ BRAKE	Jm	IN-LBS-SEC²[Kg-M²]	.001141[.0001285]
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: 25 LBS MAX
2. RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 12.6 LBS. [5.7 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)

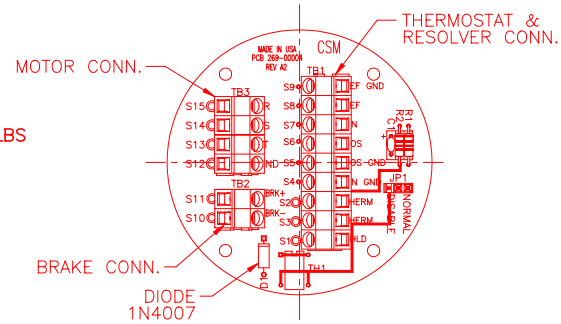
FAILSAFE BRAKE:

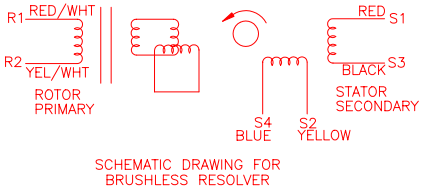
MIN HOLDING TORQUE: 60 IN-LBS
INPUT VOLTAGE: 24 VOLTS

CONNECTION CHART

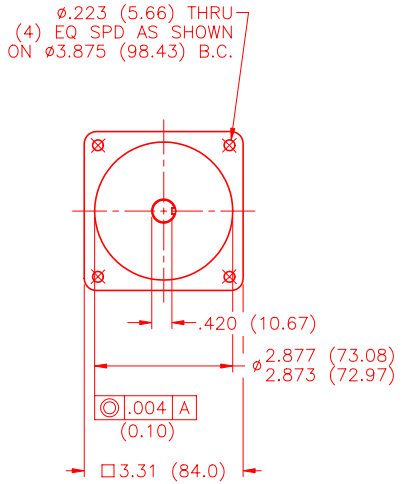
MOTOR/BRAKE WIRE LEADS		
TERMINAL	WIRE FUNCTION	WIRE COLOR
S15	ΦR	RED
S14	ΦS	BLACK
S13	ΦT	BLUE
S12	PE GND	GRN/YEL
S11	BRK (+)	1N4007
S10	BRK (-)	DIODE

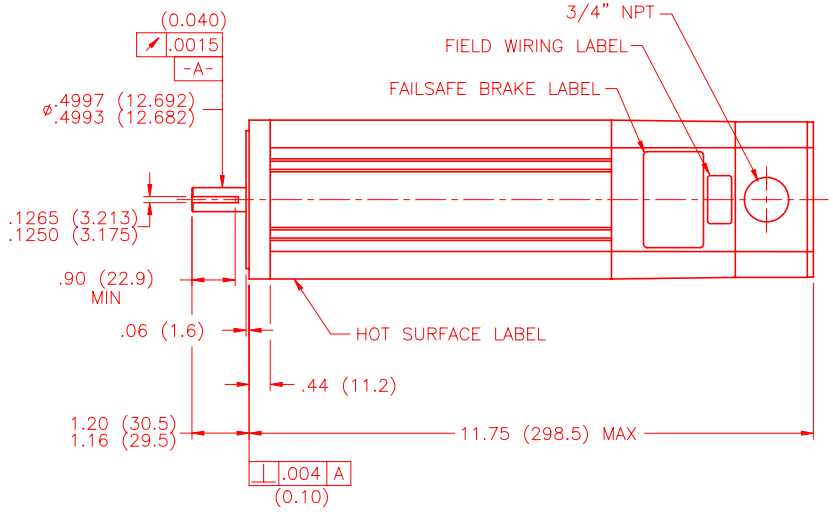
RES/THERM WIRE LEADS		
TERMINAL	WIRE FUNCTION	WIRE COLOR
S9	REF GND	YEL/WHT
S8	REF	RED/WHT
S7	SIN	YELLOW
S6	COS	RED
S5	COS GND	BLACK
S4	SIN GND	BLUE
S3	THERM	BLACK
S2	THERM	BLACK
S1	RES SHLD	GRN/YEL

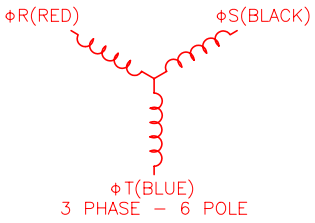




SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER







TITLE: "B"/TRAP/230/ENG/RES/NPT/BRK
DRAWING NUMBER: MPM892BTG6G3R

REVISIONS

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	7/23/99	MVS

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: 7/23/99
CHECKED:
APPROVED:
TITLE: "B"/TRAP/230/ENG/RES/NPT/BRK
REV.
MATERIAL:
DRAWING NUMBER: MPM892BTG6G3R
SCALE: 1/2:1