MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	6.8
KILOWATTS	KW RATED	KW	5.1
MAX. OPERATING SPEED	N MAX	RPM	2700
SPEED @ RATED TORQUE	N RATED	RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM		IN-LBS[Nm]	179.0[20.2]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	210.0[23.7]
CONTINUOUS LINE CURRENT		AMPS	26.5
PEAK TORQUE	Tpk	IN-LBS[Nm]	630.0[70.8]
PEAK CURRENT		AMPS	79.6
MAX. THEORETICAL ACCEL.		RAD/SEC²	29,858
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	7.9[0.89]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	70.0
D.C. RESISTANCE (P-P)	±10%	OHMS	0.24
INDUCTANCE (P-P)	±10%	MILLIHENRIES	2.0
ROTOR INERTIA W/BRAKE	Jm	IN-LBS-SEC²[Kg-M²]	.0211[.00238]
STATIC FRICTION	Tf	IN-LBS[Nm]	3.0[0.34]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°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: 50 LBS MAX
2. RADIAL LOAD: 150 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 63 LBS. [27.6 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

CONNECTION CHART

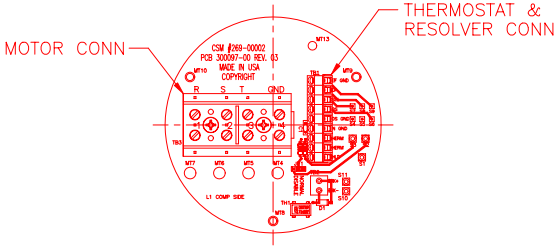
MOTOR WIRE LEADS		
TERMINAL	WIRE FUNCTION	WIRE COLOR
1	ΦR	RED
2	ΦS	BLACK
3	ΦT	BLUE
4	PE GND	GRN/YEL

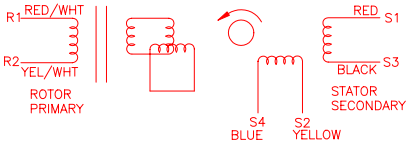
RES/THERM/BRAKE WIRE LEADS		
TERMINAL	WIRE FUNCTION	WIRE COLOR
S11	BRAKE (+)	DIODE
S10	BRAKE (-)	1N4007
S9	REF GND	YEL/WHITE
S8	REF	RED/WHITE
S7	SIN	YELLOW
S6	COS	RED
S5	COS GND	BLACK
S4	SIN GND	BLUE
S3	THERM	BLACK
S2	THERM	BLACK
S1	GND/SHIELD	GREEN

TITLE: "A"/TRAP/230/MET/RES/NPT/BRK
DRAWING NUMBER: MPM1422ATG7G3R

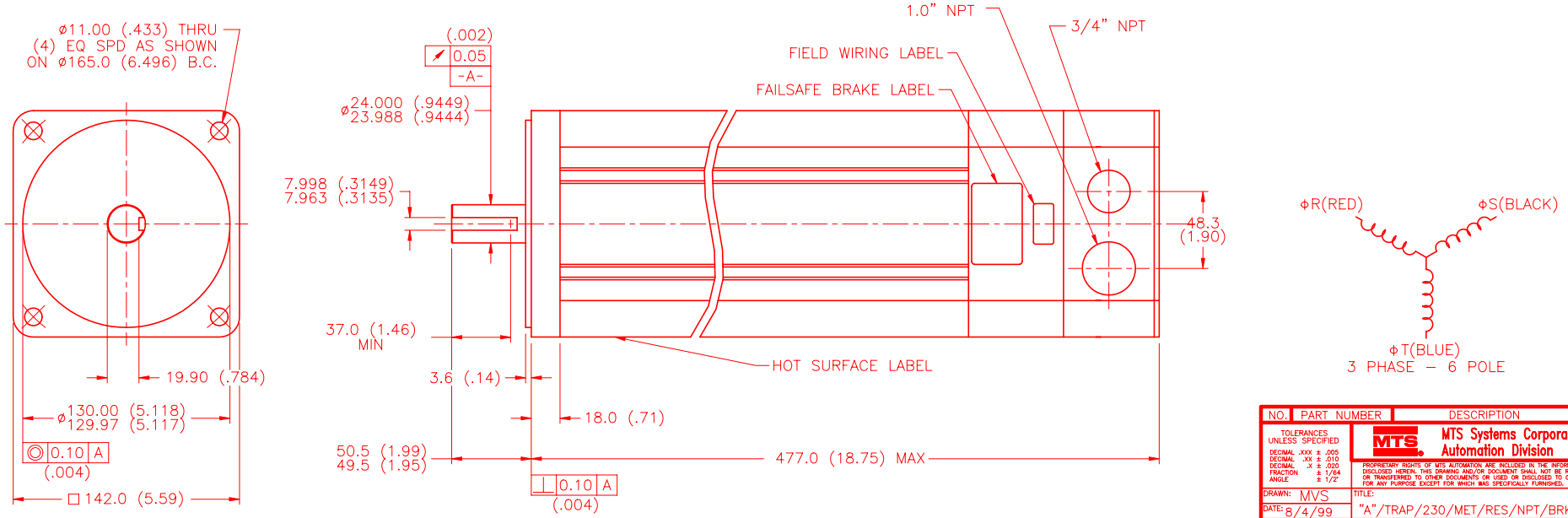
REVISIONS

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	8/4/99	MVS





SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



3 PHASE – 6 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: 8/4/99
CHECKED:
APPROVED:
TITLE: "A"/TRAP/230/MET/RES/NPT/BRK
REV.
MATERIAL:
DRAWING NUMBER: MPM1422ATG7G3R
SCALE: 1/2:1