MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	35.7
KILOWATTS	KW RATED	KW	26.7
MAX. OPERATING SPEED	N MAX	RPM	3000
SPEED @ RATED TORQUE	N RATED	RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM		IN-LBS[Nm]	939.0[105.0]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	1092.0[123.0]
CONTINUOUS LINE CURRENT		AMPS	62.0
PEAK TORQUE	Tpk	IN-LBS[Nm]	3276.0[370.0]
PEAK CURRENT		AMPS	186.0
MAX. THEORETICAL ACCEL.		RAD/SEC²	24,632
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	17.6[2.0]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	158.0
D.C. RESISTANCE (P-P)	±10%	OHMS	.19
INDUCTANCE (P-P)	±10%	MILLIHENRIES	3.2
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	.133[.0150]
STATIC FRICTION	Tf	IN-LBS[Nm]	13.0[1.5]

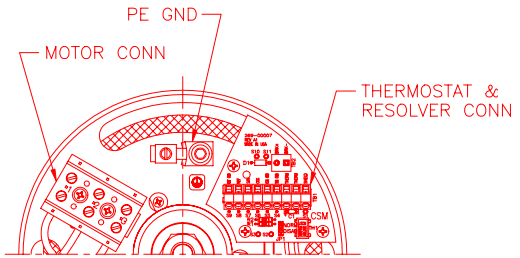
*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 14" X 14" X 3/4" ALUMINUM HEATSINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

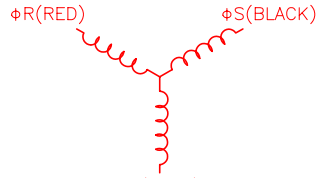
MECHANICAL NOTES:
1. AXIAL LOAD: 100 LBS MAX
2. RADIAL LOAD: 250 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 161 LBS. [73 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MILLIMETERS (INCHES)

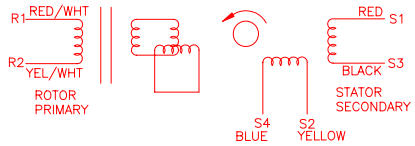
CONNECTION CHART

MOTOR WIRE LEADS		
TERMINAL	WIRE FUNCTION	WIRE COLOR
1	ΦR	RED
2	ΦS	BLACK
3	ΦT	BLUE
–	PE GND	–

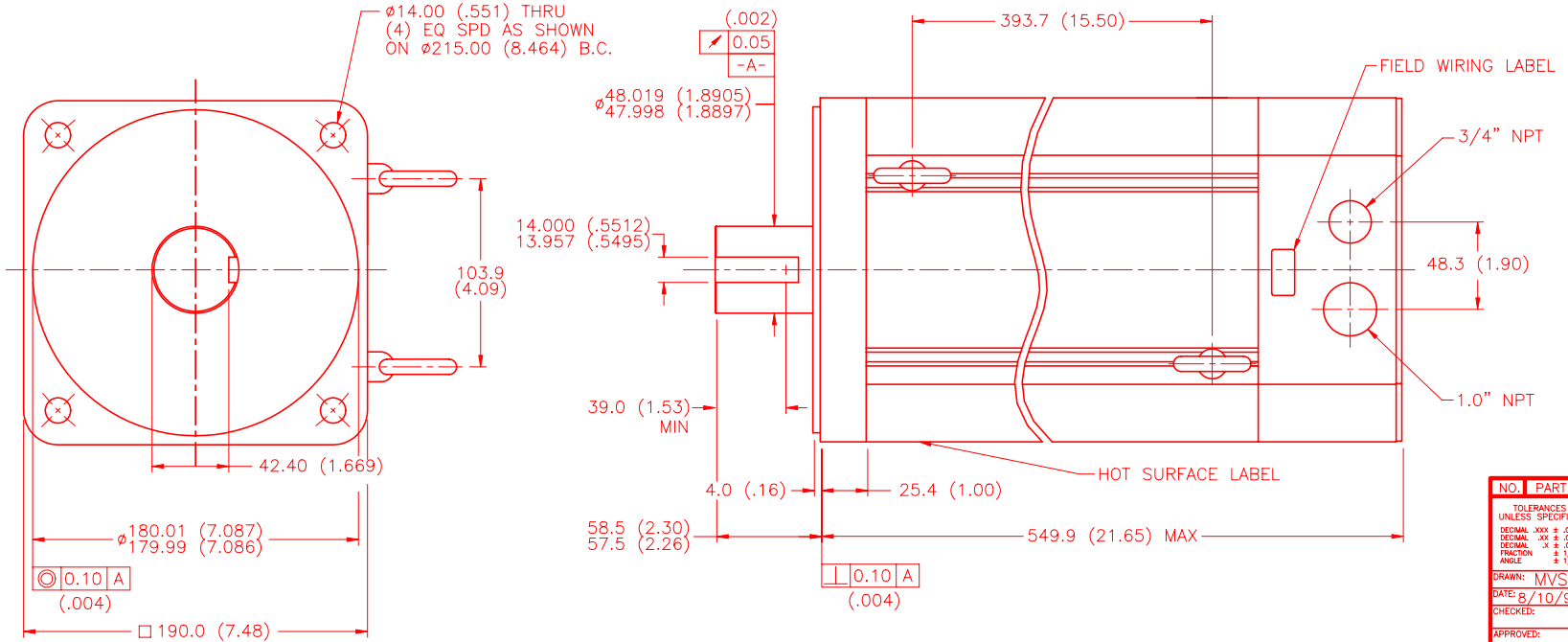
RES/THERM WIRE LEADS		
TERMINAL	WIRE FUNCTION	WIRE COLOR
S9	REF GND	YEL/WHT
S8	REF	RED/WHT
S7	SIN	YELLOW
S6	COS	RED
S5	COS GND	BLACK
S4	SIN GND	BLUE
S3	THERM	BLACK
S2	THERM	BLACK
S1	RES SHLD	GRN/YEL







SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



TITLE: "C"/TRAP/460/MET/RES/NPT	DRAWING NUMBER: MPM1904CTJ7G3N

REVISIONS

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	3/27/00	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: MVS
DATE: 8/10/99
CHECKED:
APPROVED:

TITLE: "C"/TRAP/460/MET/RES/NPT
REV.
MATERIAL:
DRAWING NUMBER: MPM1904CTJ7G3N
SCALE: 1/2:1