

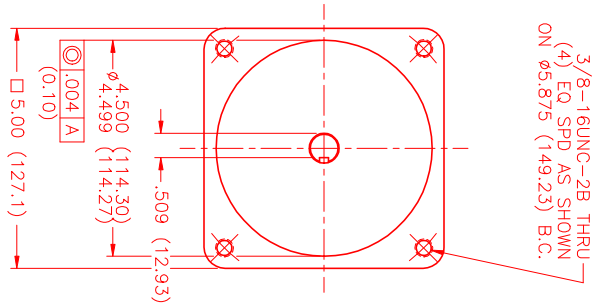
**MOTOR DATA @ 230 VAC (TRAP)**

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	2.1
KILOWATTS	KW	1.6
MAX. OPERATING SPEED	N MAX RPM	4200
SPEED @ RATED TORQUE	N RATED RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	IN-LBS[Nm]	45.0[5.1]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	54.0[6.1]
CONTINUOUS LINE CURRENT	AMPS	8.7
PEAK TORQUE	IN-LBS[Nm]	189.1[21.3]
MAX. THEORETICAL ACCEL.	AMPS	30.5
TORQUE SENSITIVITY	RAD/SEC <sup>2</sup>	54.029
BACK EMF (LINE TO LINE)	Kt[IN-LBS/AMP][Nm/AMP]	6.2[.71]
D.C. RESISTANCE (P-P)	Vrms/krpm	55.0
INDUCTANCE (P-P)	OHMS	.82
ROTOR INERTIA	MILLIHENRIES	6.1
STATIC FRICTION	Jm[IN-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ]	.0035[.00039]
	Tf[IN-LBS][Nm]	1.0[0.11]

\*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:**

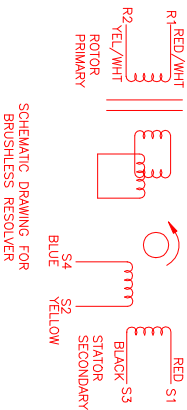
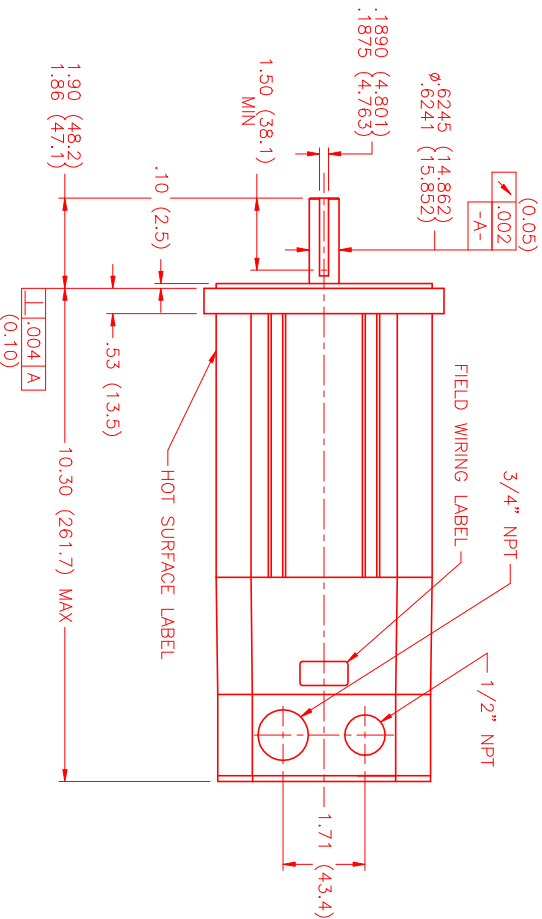
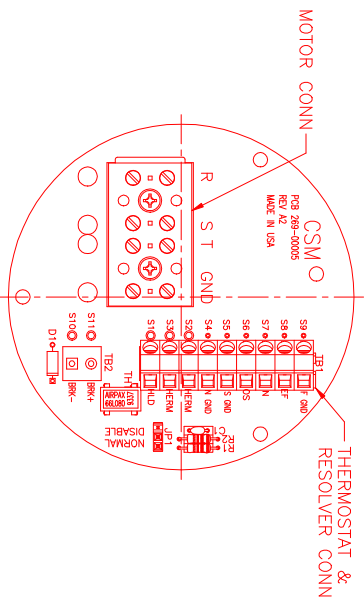
1. AXIAL LOAD: 50 LBS MAX
2. RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 20.8 LBS. [ 9.4 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)



**CONNECTION CHART**

MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
TERMINAL	FUNCTION	COLOR
—	ΦR	RED
—	ΦS	BLACK
—	ΦT	BLUE
—	PE GND	GRN/YEL

RES/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
TERMINAL	FUNCTION	COLOR
S9	REF GND	YEL/WHI
S8	REF	RED/WHI
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

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		6/11/99	MVS

MTS- "A" TRAP /230/ENG/RES/NPT  
 DRAWING NUMBER: MPM1141ATG6C3N

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DESIGNAL: 300 & 200			
DESIGNAL: 300 & 200			
DESIGNAL: 300 & 200			
ANGEL: 1/2"			
DATE: 6/11/99			
DESIGNED BY: MVS			
CHECKED BY:			
TITLE: "A" TRAP /230/ENG/RES/NPT			
MATERIAL:			
APPROVED BY:			
DRAWING NUMBER: MPM1141ATG6C3N			
SCALE: 1/2:1			

**MTS** Systems Corporation  
 Automation Division