

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

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	1.2
KILOWATTS	KW RATED	0.88
MAX. OPERATING SPEED	N MAX	2100
SPEED @ RATED TORQUE	N RATED	1500
* CONTINUOUS RATED TORQUE	IN-LBS[Nm]	50.0 [5.6]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	54.0 [6.1]
CONTINUOUS LINE CURRENT	AMPS	4.4
PEAK CURRENT	IN-LBS [Nm]	189.1 [21.3]
MAX. THEORETICAL ACCEL.	AMPS	15.3
TORQUE SENSITIVITY	RAD/SEC <sup>2</sup>	72.961
BACK EMF (LINE TO LINE)	Kt IN-LBS/AMP [Nm/AMP]	12.4 [1.42]
D.C. RESISTANCE (P-P)	Vrms/Krpm	110.0
INDUCTANCE (P-P)	OHMS	3.20
ROTOR INERTIA	MILLIHMENRIES	17.5
STATIC FRICTION	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	.0035 [0.00039]
	Tf [IN-LBS] [Nm]	1.0 [0.11]

**CONNECTION CHART**

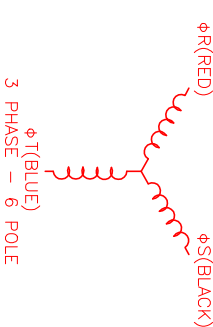
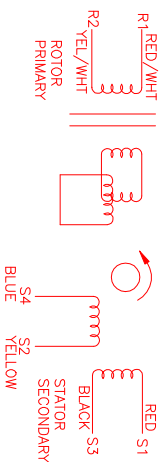
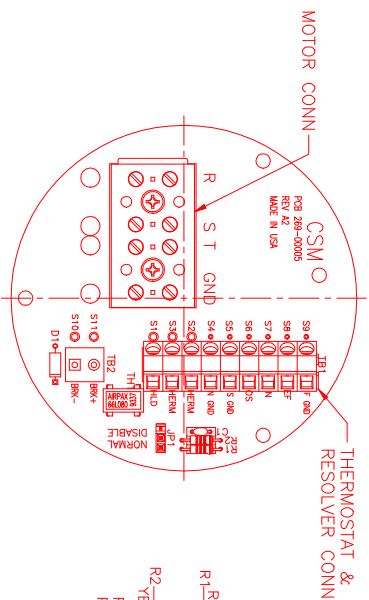
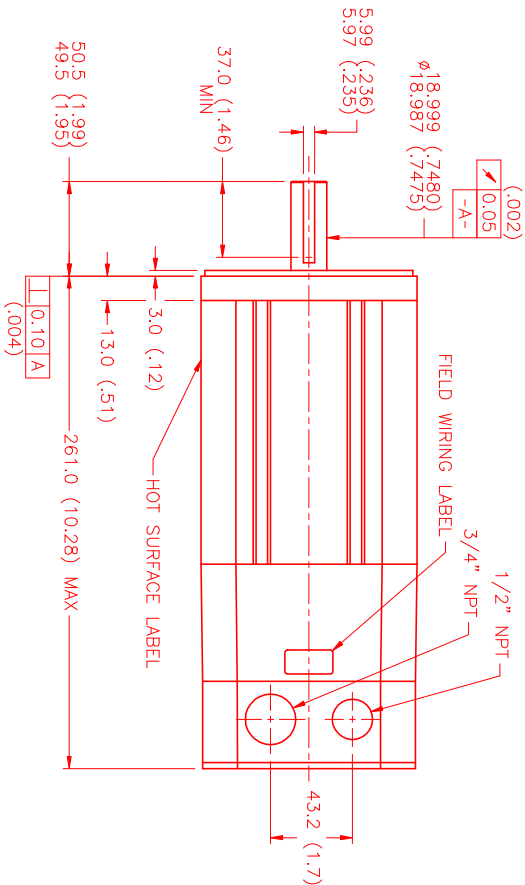
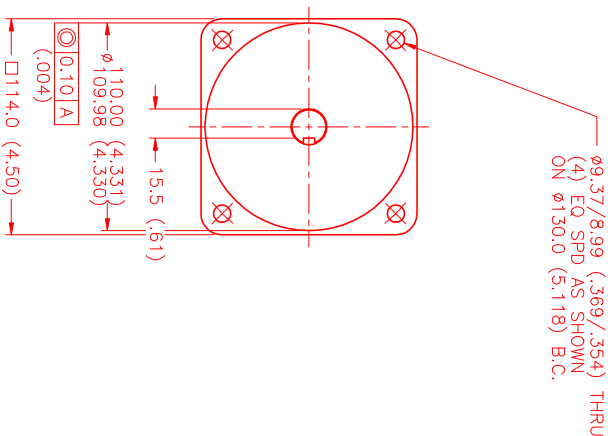
MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
1	ΦR	RED
2	ΦS	BLACK
3	ΦT	BLUE
4	PE GND	GRN/YEL

RESOLVER WIRE LEADS	WIRE FUNCTION	WIRE COLOR
S9	REF GND	YEL/WHIT
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	SHIELD	GRN/YEL

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 1 1/2" X 1 1/2" X 1 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: 19.4 LBS. [ 8.8 kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)



REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		6/14/99	MVS

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DESIGN	MTS	MTS Systems Corporation	
DESIGN	Automation Division		
DATE	6/4/99		
APPROVED			
SCALE	1/2:1		