

**MOTOR DATA @ 460 VAC (TRAP)**

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	3.3
KILOWATTS	KW	2.50
MAX. OPERATING SPEED	N MAX RPM	4200
SPEED @ RATED TORQUE	N RATED RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	N-LBS[Nm]	69.1 [7.8]
* CONTINUOUS STALL TORQUE	N-LBS[Nm]	83.0 [9.3]
CONTINUOUS LINE CURRENT	AMPS	6.7
PEAK CURRENT	AMPS	290.5 [32.7]
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	23.4
TORQUE SENSITIVITY	Kt N-IN-AMPI Nm/AMP	44.015
BACK EMF (LINE TO LINE)	Vrms/Krpm	12.4 [1.42]
D.C. RESISTANCE (P-P)	OHMS	110.0
INDUCTANCE (P-P)	MILLIHENRIES	1.8
ROTOR INERTIA	Jm [N-LBS-SEC <sup>2</sup> ] Kg-M <sup>2</sup>	12.1
STATIC FRICTION	Tf [N-LBS] Nm	.0066 [0.0074]
		1.4 [0.16]

**CONNECTION CHART**

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

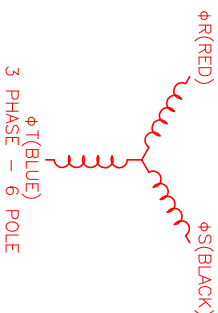
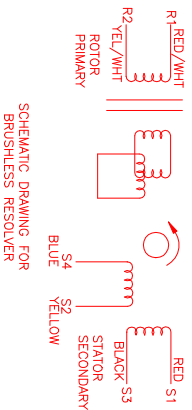
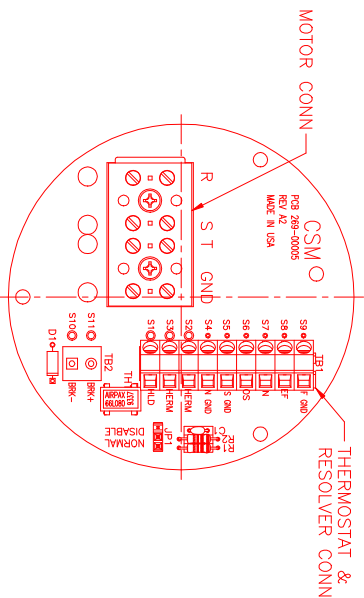
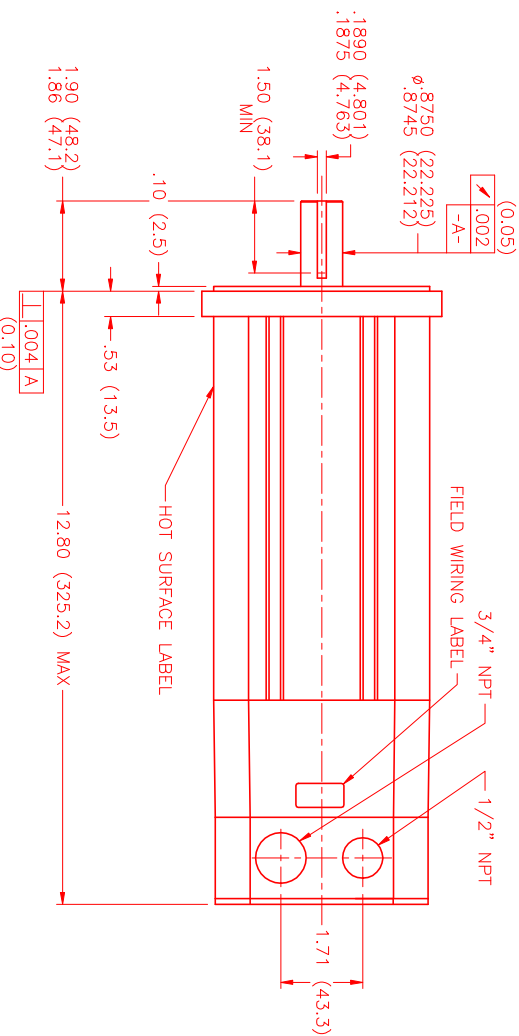
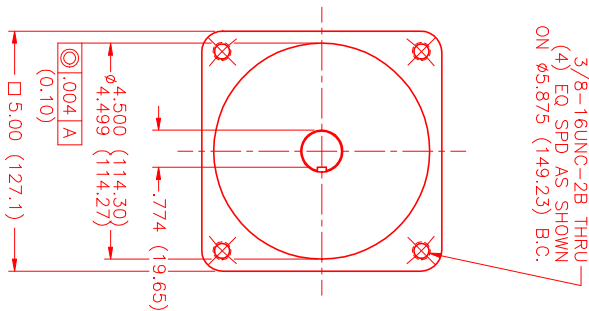
RES/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
TERMINAL	REF GND	YEL/WHIT
S9	REF	RED/WHIT
S8	SIN	YELLOW
S7	SIN	YELLOW
S6	COS	RED
S5	COS GND	BLACK
S4	SIN GND	BLUE
S3	THERM	BLACK
S2	THERM	BLACK
S1	RES SHLD	GRN/YEL

\*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: 27.9 LBS. [ 12.7 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)

3/8-16UNC-2B THRU  
(4) EO SPD AS SHOWN  
ON Ø5.875 (149.23) B.C.



REV#	DESCRIPTION	DATE	APPD.
1	PRELIMINARY	7/8/99	MVS

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MPM1142CTUG3N	3 PHASE - 6 POLE	1

**MTS** Systems Corporation  
 Automation Division  
 DATE: 7/8/99  
 DRAWING NUMBER: MPM1142CTUG3N  
 SCALE: 1/2:1  
 APPROVED: [Signature]