

### MOTOR DATA @ 230 VAC (SINE)

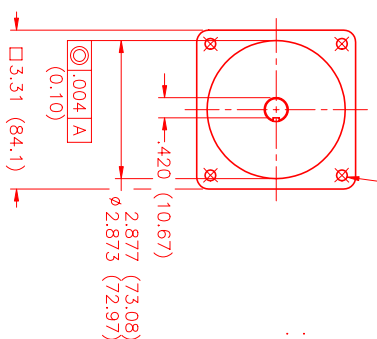
MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	1.10
KILOWATTS	KW	.85
MAX. OPERATING SPEED	N MAX	2000
SPEED @ RATED TORQUE	RPM	1500
* CONTINUOUS RATED TORQUE @ 1500 RPM	IN-LBS [Nm]	36.0 [4.0]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	39.0 [4.4]
CONTINUOUS LINE CURRENT	AMPS (RMS/φ)	2.1
PEAK TORQUE	IN-LBS [Nm]	137.0 [15.5]
PEAK CURRENT	AMPS (RMS/φ)	7.9
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	100,000
TORQUE SENSITIVITY	Kt [N-LBS/AMPERE/φ] [Nm/AMPERE/φ]	17.5 [1.98]
BACK EMF (LINE TO LINE)	Vrms/Krpm	110.0
D.C. RESISTANCE (P-P)	OHMS	7.7
INDUCTANCE (P-P)	MILLIHENRIES	29.1
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	.00137 [0.00154]
STATIC FRICTION	Tf [IN-LBS] [Nm]	0.6 [0.07]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 10" X 10" 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:

- AXIAL LOAD: 25 LBS MAX
- RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 13 LBS. [ 5.9 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- INCHES (MILLIMETERS)

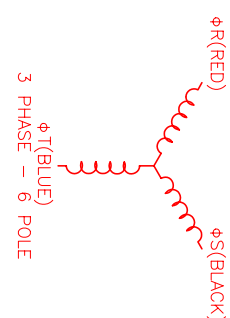
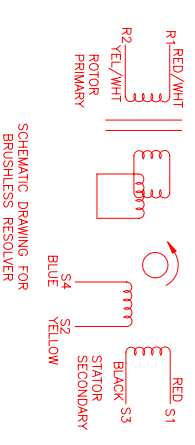
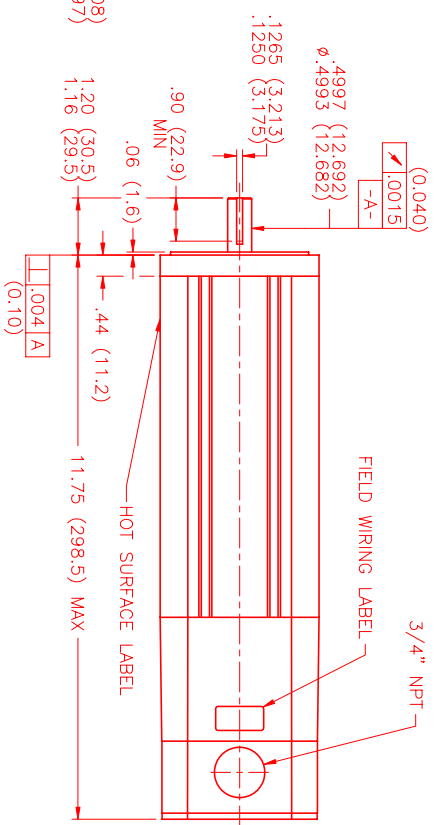
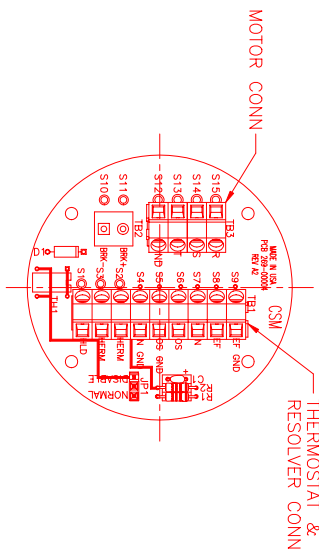
(4) EQ SPD AS SHOWN ON Ø3.875 (98.43) B.C.



### CONNECTION CHART

MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
S15	ΦS	RED
S14	ΦS	BLACK
S13	ΦT	BLUE
S12	PE GND	GRN/YEL

RES/THERM WIRE LEADS	WIRE FUNCTION	WIRE 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



REV#	DESCRIPTION	DATE	APPD.
PRELIMINARY		3/30/01	AJS

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MPM893BSC6G3N	Brushless Resolver	1

DATE: 3/27/01  
 DRAWN: AJS  
 CHECKED:  
 APPROVED:

MTS Systems Corporation  
 Automation Division  
 SCALE: 1/2:1