

# MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	1.96
KILOWATTS	KW RATED	1.46
MAX. OPERATING SPEED	N MAX RPM	4100
SPEED @ RATED TORQUE	N RATED RPM	3600
* CONTINUOUS RATED TORQUE	IN-LBS[Nm]	34.4[3.8]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	39.0[4.4]
CONTINUOUS LINE CURRENT	AMPS	6.3
PEAK TORQUE	IN-LBS[Nm]	137.0[15.5]
PEAK CURRENT	AMPS	23.1
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	90.132
TORQUE SENSITIVITY	Kt [IN-LBS/AMP] [Nm/AMP]	6.2[0.7]
BACK EMF (LINE TO LINE)	Vrms/Krpm	55.0
D.C. RESISTANCE (P-P)	OHMS	1.9
INDUCTANCE (P-P)	MILLIHENRIES	7.5
ROTOR INERTIA W/BRAKE	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	.00152[.000171]
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 1/4" 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:

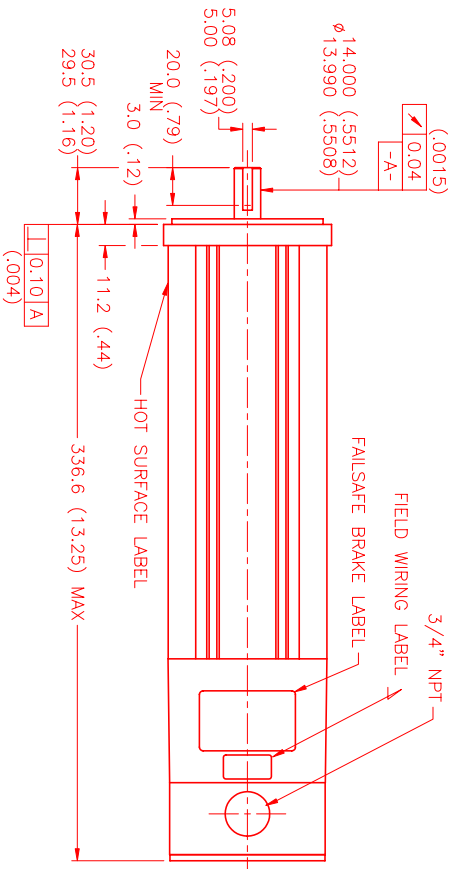
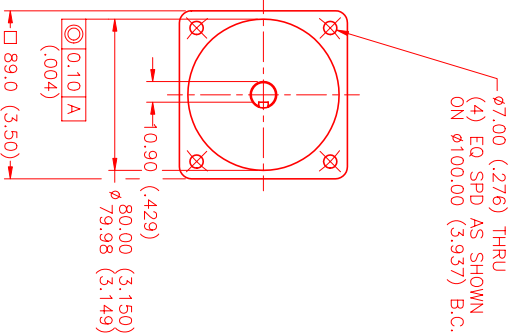
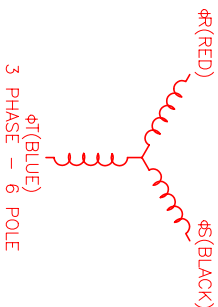
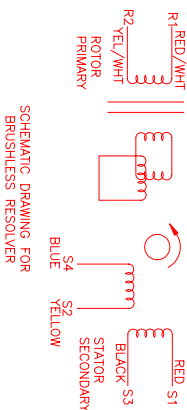
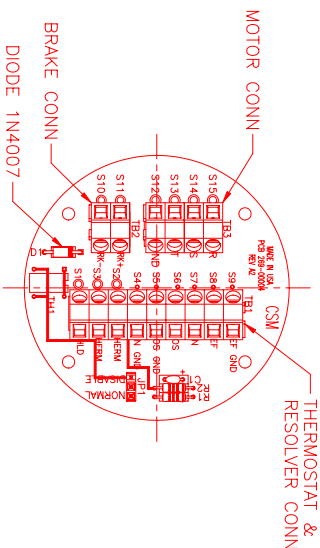
- AXIAL LOAD: 25 LBS MAX
- RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 15.6 LBS. [ 7.1 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

**FAILSAFE BRAKE:**  
 MIN HOLDING TORQUE: 60 IN-LBS  
 INPUT VOLTAGE: 24 VOLTS

### CONNECTION CHART

MOTOR/BRAKE WIRE LEADS	WIRE FUNCTION	WIRE COLOR
S15	ΦR	RED
S14	ΦS	BLACK
S13	ΦT	BLUE
S12	PE GND	GRN/YEL
S11	BRK (+)	BLUE
S10	BRK (-)	BLUE

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



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL ANGLES			
FRAC. ANGLES			
DATE	7/23/99	TITLE	"A"/230/MET/RES/NPT/BRAKE
CHECKED	MVS	DRAWING NUMBER	MPM893ATG7G3R
APPROVED		SCALE	1/2:1

**MTS** Systems Corporation  
Automation Division

REV.	DESCRIPTION	DATE	APP.
PRELIMINARY		4/4/00	LIN

DATE: 4/23/00  
 DRAWING NUMBER: MPM893ATG7G3R