

### MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	0.82
KILOWATTS	KW	0.62
MAX. OPERATING SPEED	N. MAX RPM	5000
SPEED @ RATED TORQUE	N RATED RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS[Nm]	13.0[1.47]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	16.0[1.81]
CONTINUOUS LINE CURRENT	AMPS(RMS/φ)	2.7
PEAK TORQUE	IN-LBS[Nm]	58.8[6.64]
PEAK CURRENT	AMPS(RMS/φ)	9.9
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	76,863
TORQUE SENSITIVITY	Kt [IN-LBS/AMP/RMS/φ]/[Nm/AMP/RMS/φ]	5.9[.67]
BACK EMF (LINE TO LINE)	Vrms/Krpm	37.6
D.C. RESISTANCE (P-P)	OHMS	3.9
INDUCTANCE (P-P)	MILLIHENRIES	10.4
ROTOR INERTIA W/BRAKE	Jm [IN-LBS-SEC <sup>2</sup> ]/[Kg-M <sup>2</sup> ]	0.000765[0.0000861]
STATIC FRICTION	Tf [IN-LBS]/[Nm]	0.4[0.05]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 10" X 1 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: 9.4 LBS. [ 4.3 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL

#### FAILURE BRAKE:

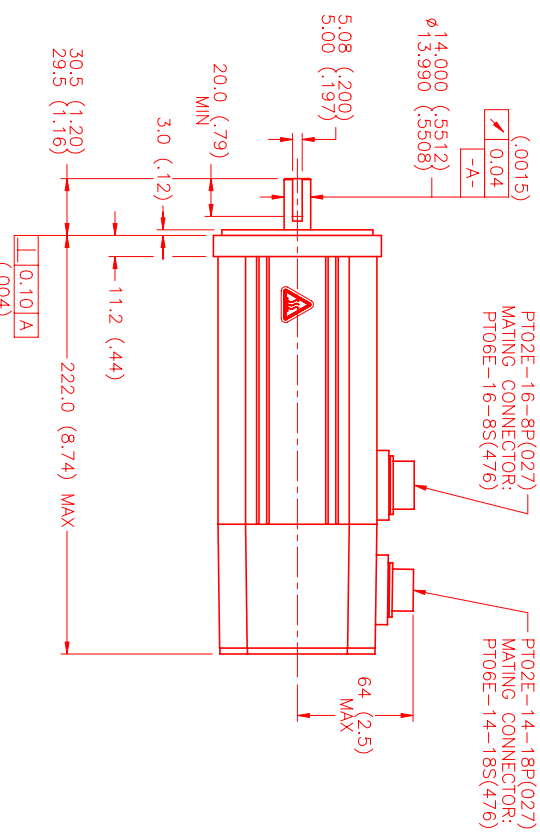
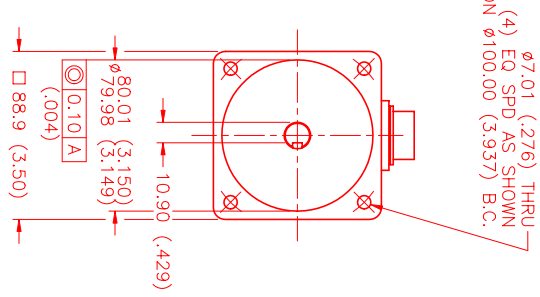
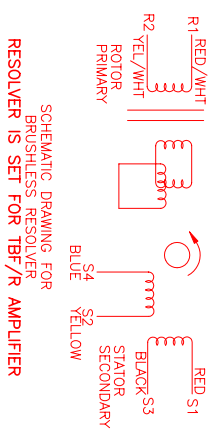
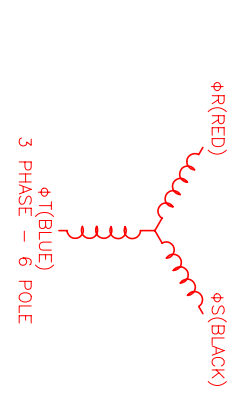
MIN HOLDING TORQUE: 60 IN-LBS  
INPUT VOLTAGE: 24 VOLTS

#### CONNECTION CHART MOTOR/BRAKE CONNECTOR: PT02E-16-8P(027) (270-00032)

MOTOR/BRAKE	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
A	φR	RED	RED
B	φS	BLACK	BLACK
C	φT	BLUE	BLUE
D	PE GND	GRN/YEL	BLACK
E	BRK SHLD	-	BLACK
F	BRK (+)	DIODE	RED
G	BRK (-)	PT1N4007	RED
H	-	-	-

#### RESOLVER/THERM CONNECTOR: PT02E-14-18P(027) (270-00024)

RES/THERM	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
U	THERM	BLACK	BLACK
N	THERM	BLACK	BLACK
H	SIN	YELLOW	YELLOW
G	COS GND	BLACK	BLACK
S	COS	RED	RED
F	SIN GND	BLUE	BLUE
R	REF GND	YEL/WHI	YEL/WHI
E	REF	RED/WHI	RED/WHI
D	RES. SHLD	GRN/YEL	GRN/YEL
P	GND	GRN/YEL	GRN/YEL
A	-	-	-
B	-	-	-
C	-	-	-
J	-	-	-
K	-	-	-
L	-	-	-
M	-	-	-
T	-	-	-



TITLE: 4"/230/MET/TBFR/CONV/BRK DRAWING NUMBER: MPM891ASG7H1R	
REVISIONS REV. DESCRIPTION DATE APP'D. PRELIMINARY 5/7/01 LIN	
NO. PART NUMBER UNLESS SPECIFIED	DESCRIPTION QTY.
DESIGNED: MTS CHECKED: LIN DATE: 5/7/01 DRAWING NUMBER: MPM891ASG7H1R	MTS Systems Corporation Automation Division TITLE: "A"/SIN/230/MET/TBFR/CON/BRK MATERIAL:
APPROVED:	SCALE: 1/2:1