

# MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	.22
KILOWATTS	KW	.16
MAX. OPERATING SPEED	N. MAX RPM	5000
SPEED @ RATED TORQUE	N RATED RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS[Nm]	3.4(0.38)
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	5.0(0.56)
CONTINUOUS LINE CURRENT	AMPS	2.4
PEAK TORQUE	IN-LBS[Nm]	15.1(1.7)
PEAK CURRENT	AMPS	7.2
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	155,670
TORQUE SENSITIVITY	Kt [IN-LBS/AMP] [Nm/AMP]	2.0(0.23)
BACK EMF (LINE TO LINE)	Vrms/Krpm	18.2
D.C. RESISTANCE (P-P)	OHMS	8.4
INDUCTANCE (P-P)	MILLIHENRIES	11.6
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	0.000097(0.0000109)
STATIC FRICTION	Tf [IN-LBS] [Nm]	0.5(0.06)

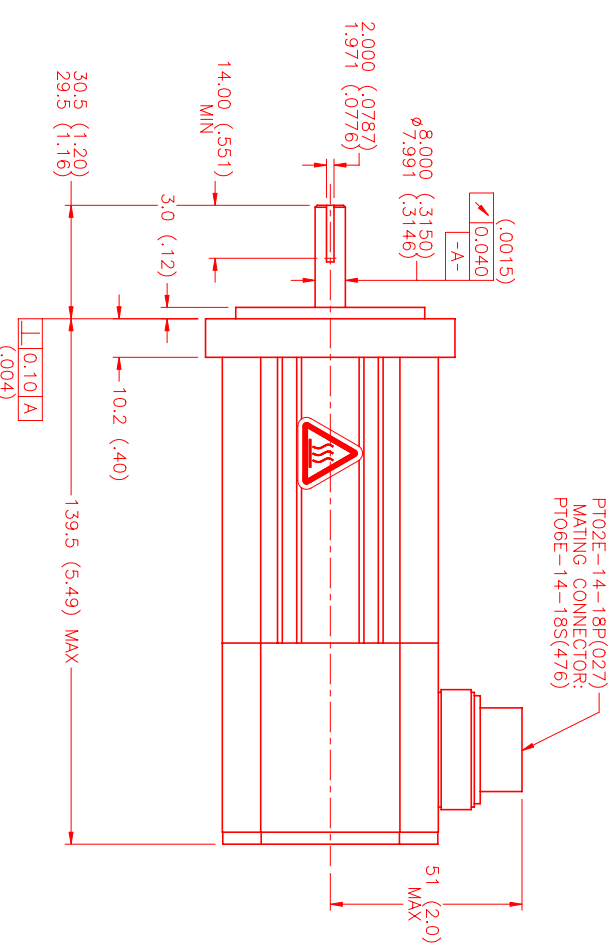
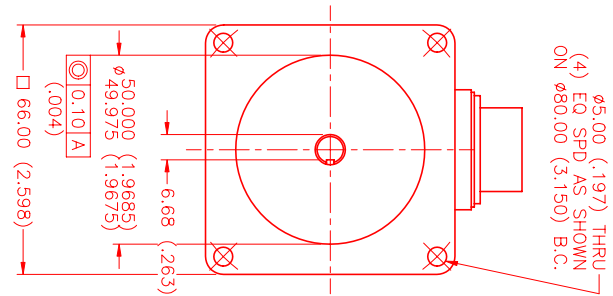
\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 10" X 1/4" ALUMINUM HEATSINK. THERMOSTAT IN STATOR WINDINGS WILL OPEN IF WINDING TEMPERATURE EXCEEDS 155°C. THIS ALLOWS FOR AN APPROXIMATE +10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS.

### MECHANICAL NOTES:

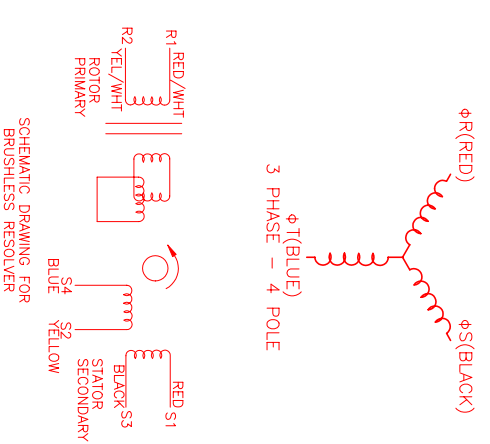
1. AXIAL PLAY: 15 LBS MAX
2. RADIAL PLAY: 20 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 2.8 LBS. [ 1.3 kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

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

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



PT02E-14-18P(027)  
MATING CONNECTOR:  
PT06E-14-18S(476)



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		12/14/98	MS

MTS # /TRAP/230/MET/RES/CONN Drawing Number MPM662ATG7G1N

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL ANGLES	30° & 45°		
DECIMAL ANGLES	1/2°		
ISO ANGLES	1/2°		
ISO ANGLES	1/2°		
ISO ANGLES	1/2°		
DATE	12/14/98		
CHECKED	MS		
APPROVED			
DRAWING NUMBER	MPM662ATG7G1N		
SCALE	1:1		

MTS Automation Division