

MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	1.62
KILOWATTS	KW RATED	1.20
MAX. OPERATING SPEED	N. MAX RPM	5000
SPEED @ RATED TORQUE	N RATED RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS[Nm]	25.5[2.9]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	30.0[3.4]
CONTINUOUS LINE CURRENT	AMPS/(RMS/φ)	5.2
PEAK TORQUE	IN-LBS[Nm]	105.0[11.9]
PEAK CURRENT	AMPS/(RMS/φ)	18.9
MAX. THEORETICAL ACCEL.	RAD/SEC ²	105.954
TORQUE SENSITIVITY	Kt [N-LBS/AMPRMS/φ][Nm/AMPRMS/φ]	5.8[0.66]
BACK EMF (LINE TO LINE)	Vrms/Krpm	36.6
D.C. RESISTANCE (P-P)	OHMS	1.5
INDUCTANCE (P-P)	MILLIHENRIES	5.1
ROTOR INERTIA	Jm [IN-LBS-SEC ²][Kg-M ²]	.000991[.000116]
STATIC FRICTION	Tf [IN-LBS][Nm]	.5[.06]

*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:

1. AXIAL LOAD: 25 LBS MAX
2. RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 10 LBS [4.5 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)

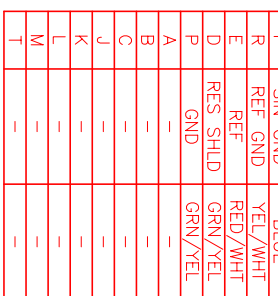
CONNECTION CHART

MOTOR CONNECTOR:
PT02E-14-5P
(270-00026)

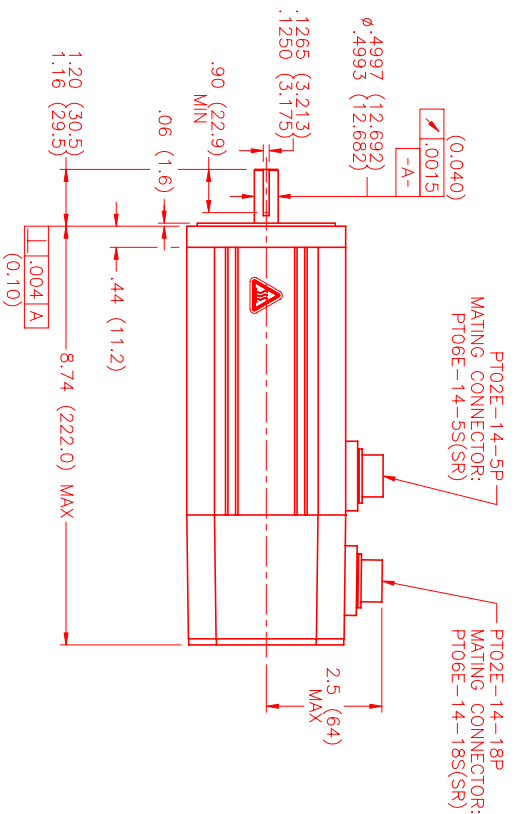
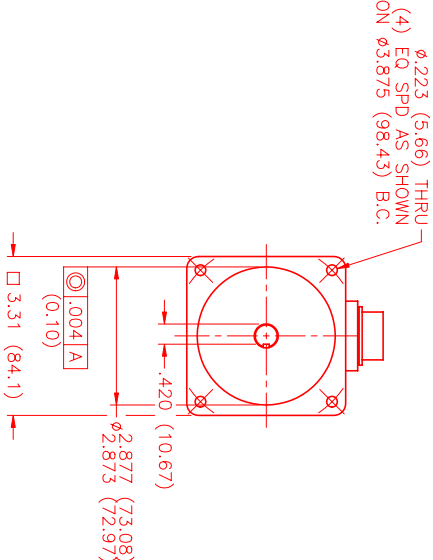
RESOLVER/THERM CONNECTOR:
PT02E-14-18P
(270-00024)

MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
A	φR	RED
B	φS	BLACK
C	φT	BLUE
D	PE GND	GRN/YEL
E	-	-

RES/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
U	THERM	BLACK
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
D	RES SHLD	GRN/YEL
P	GND	GRN/YEL
A	-	-
B	-	-
C	-	-
J	-	-
K	-	-
L	-	-
M	-	-
T	-	-



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL ANGLES	30°		
FRAC. ANGLES	1/2°		
DATE	11/9/01	TITLE	"A" SINE/230/ENG/RES/CONN
DRAWN	LN	CHECKED	
APPROVED		DATE	11/9/01
SCALE	1/2:1		

REV.	DESCRIPTION	DATE	APP.
PRELIMINARY		11/9/01	LN

MTS # 178P/230/ENG/RES/CONN Drawing Number: MPM892ASG6G1N

MTS Systems Corporation
Automation Division