

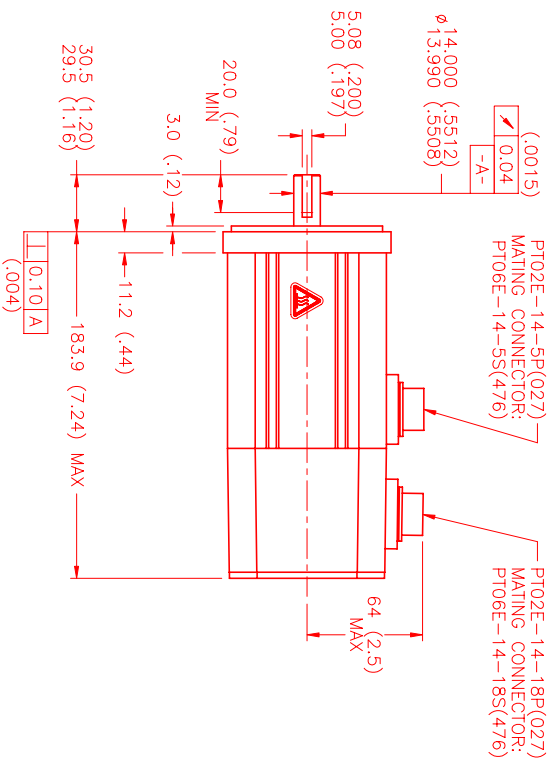
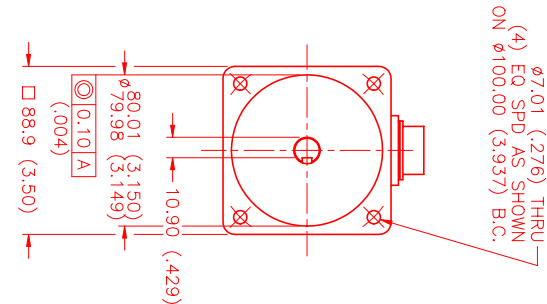
### MOTOR DATA @ 110 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	0.46
KILOWATTS	KW	0.35
MAX. OPERATING SPEED	N. MAX RPM	2600
SPEED @ RATED TORQUE	N RATED RPM	2000
* CONTINUOUS RATED TORQUE @ 4000 RPM	IN-LBS[Nm]	14.5[1.6]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	16.0[1.8]
CONTINUOUS LINE CURRENT	AMPS	4.0
PEAK TORQUE	IN-LBS[Nm]	48.0[5.4]
PEAK CURRENT	AMPS	11.0
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	78,049
TORQUE SENSITIVITY	Kt [IN-LBS/AMP] [Nm/AMP]	4.2[0.48]
BACK EMF (LINE TO LINE)	Vrms/Krpm	37.6
D.C. RESISTANCE (P-P)	OHMS	3.8
INDUCANCE (P-P)	MILLIHENRIES	10.4
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	0.000615[0.0000693]
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 1/4" 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: 7.2 LBS. [ 3.3 kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

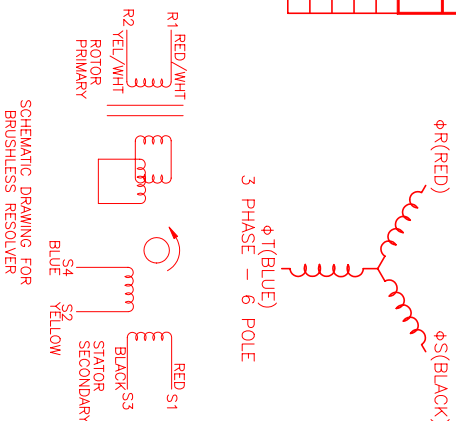


#### CONNECTION CHART RESOLVER/THERM CONNECTOR: PT02E-14-18P(027) (270-00024)

RES/THERM	WIRE	WIRE LEADS
PIN	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/WHIT
E	REF	RED/WHIT
D	RES SHLD	GRN/YEL
P	GND	GRN/YEL
A	-	-
B	-	-
C	-	-
J	-	-
K	-	-
L	-	-
M	-	-
T	-	-

#### MOTOR WIRE LEADS PT02E-14-5P(027) (270-00026)

PIN	WIRE	WIRE COLOR
FUNCTION	FUNCTION	FUNCTION
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL
E	-	-



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER

REV. 1	DESCRIPTION	DATE	APP'D.
PRELIMINARY		4/17/00	AJS

#### REVISIONS

REV. 1	DESCRIPTION	DATE	APP'D.
PRELIMINARY		4/17/00	AJS

NO. 1	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DESIGN: MPM	DATE: 4/11/00	SCALE: 1/2=1	
APPROVED:			

MTS Systems Corporation  
Automation Division