

**MOTOR DATA @ 230 VAC (TRAP)**

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	2.1
	KW RATED	1.6
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	N RATED	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	N-LEBS [Nm]	45.0 [5.1]
* CONTINUOUS STALL TORQUE	N-LEBS [Nm]	54.0 [6.1]
CONTINUOUS LINE CURRENT	AMPS	8.7
PEAK TORQUE	N-LEBS [Nm]	189.1 [21.3]
PEAK CURRENT	AMPS	30.5
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	54,029
TORQUE SENSITIVITY	Kt N-LEBS/AMP [Nm/AMP]	6.21 .711
BACK EMF (LINE TO LINE)	Vrms/Krpm	55.0
D.C. RESISTANCE (P-P)	OHMS	.82
INDUCTANCE (P-P)	MILLIHENRIES	6.1
ROTOR INERTIA	Jm [N-LEBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	0.0035 [0.00039]
STATIC FRICTION	Tf [N-LEBS] [Nm]	1.0 [ .11 ]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1/2" 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: 50 LBS MAX
2. RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 18 LBS. [ 8.2 kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

**CONNECTION CHART**

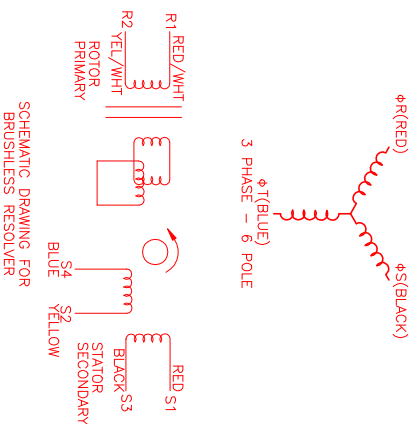
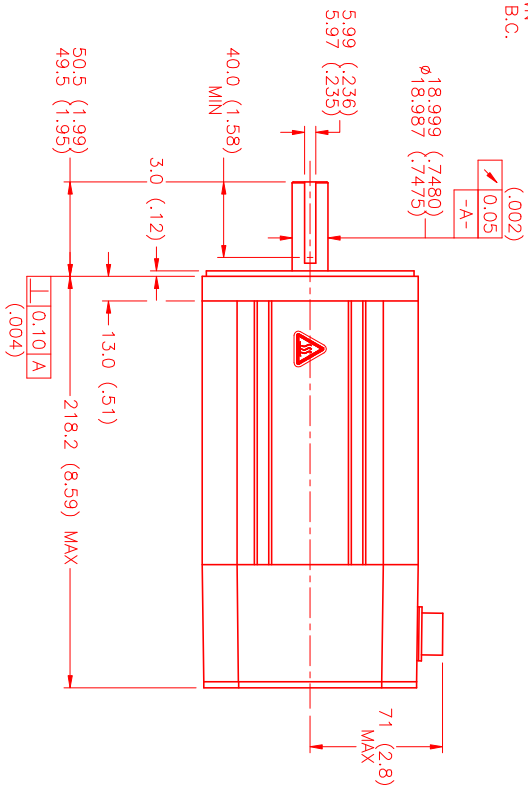
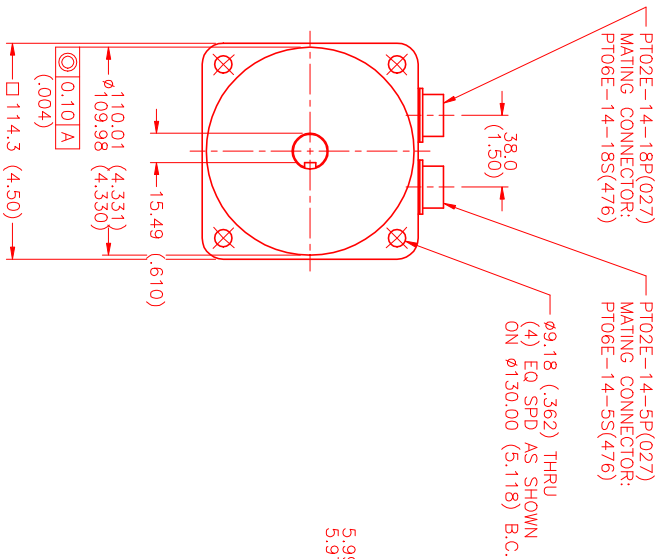
MOTOR CONNECTOR:  
PT02E-14-5P(027)  
(270-00026)

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

**RESOLVER/THERM CONNECTOR:**

PT02E-14-18P(027)  
(270-00024)

RES/THERM WIRE	LEADS	WIRE COLOR
A	RES	BLACK
B	THERM	BLACK
C	SIN	YELLOW
D	COS	BLACK
E	SIN GND	BLUE
F	REF GND	YEL/WHI
G	RES SHLD	GRN/YEL
H	GND	GRN/YEL
I	-	-
J	-	-
K	-	-
L	-	-
M	-	-
T	-	-



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER

REV.	DESCRIPTION	DATE	APPD.
1	PRELIMINARY	2/10/00	LIN

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DESIGN: JMS & JMS			
DATE: 12/16/98			
SCALE: 1/2:1			
APPROVED:			

**MTS**  
Automation Division

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

FORM: MVS  
TITLE: "A" TRAP /230/MEIRIC/RES/CONN  
MATERIAL:  
DRAWING NUMBER: MPM1141ATG7G-1N