

MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	.35
KILOWATTS	KW RATED	.41
MAX. OPERATING SPEED	N MAX RPM	3000
SPEED @ RATED TORQUE	N RATED RPM	2400
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	14.5 [1.64]
* CONTINUOUS LINE CURRENT	AMPS (RMS/φ)	16.0 [1.81]
PEAK TORQUE	Tpk	58.8 [6.64]
PEAK CURRENT	AMPS (RMS/φ)	5.0
MAX. THEORETICAL ACCEL.	RAD/SEC ²	95.610
TORQUE SENSITIVITY	Kt [N-LBS/AMP (RMS/φ)] [Nm/AMP (RMS/φ)]	11.9 [1.35]
BACK EMF (LINE TO LINE)	Vrms/Krpm	75.2
D.C. RESISTANCE (P-P)	OHMS	15.6
INDUCTANCE (P-P)	MILLIHENRIES	39.6
ROTOR INERTIA	Jm [IN-LBS-SEC ²] [Kg-M ²]	.000615 [0.000693]
STATIC FRICTION	Tf [IN-LBS] [Nm]	.4 [0.05]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 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:

- AXIAL LOAD: 25 LBS MAX
- RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 7 LBS. [3.2 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- INCHES (MILLIMETERS)

CONNECTION CHART

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

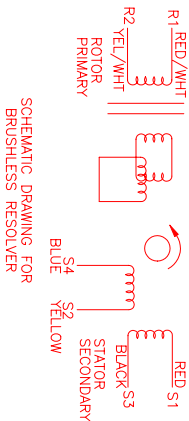
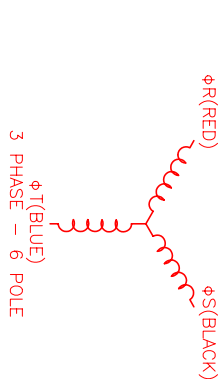
PIN	WIRE FUNCTION	WIRE COLOR
A	φR	RED
B	φS	BLACK
C	φT	BLUE
D	PE GND	GRN/YEL
E	-	-

RESOLVER/THERM CONNECTOR:

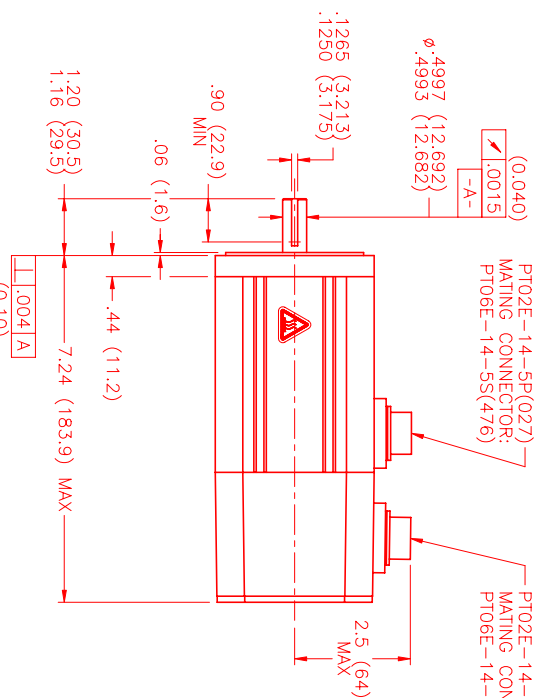
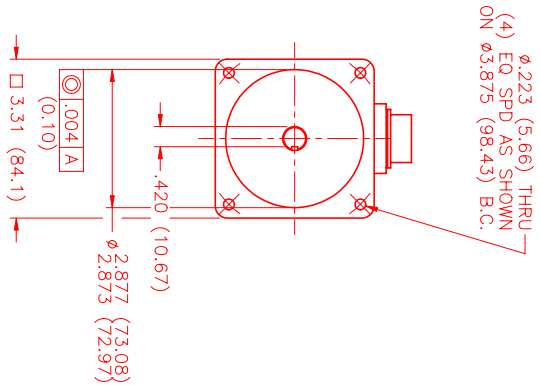
PT02E-14-18P(027)
(270-00024)

PIN	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	-	-

REV#	DESCRIPTION	DATE	APPD.
1	PRELIMINARY	12/27/99	MS



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



NO. PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED		
DECIMAL ANGLES ± .005		
DECIMAL ANGLES ± .020		
DECIMAL ANGLES ± .050		
DECIMAL ANGLES ± .125		
FRAMING: MPM891BSC6G1N		SCALE: 1/2:1

MTS MTS Systems Corporation
Automation Division

DATE: 12/27/99
DRAWING NUMBER: MPM891BSC6G1N
SCALE: 1/2:1