

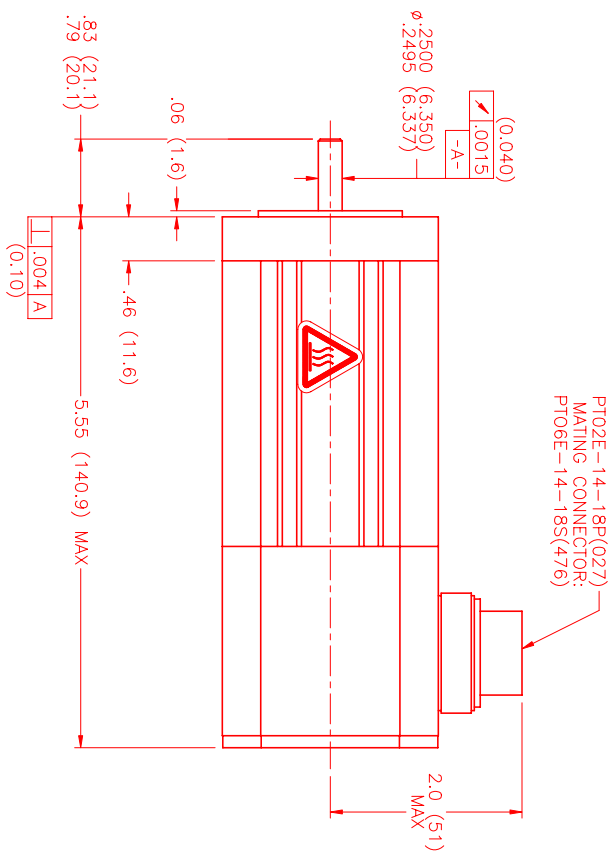
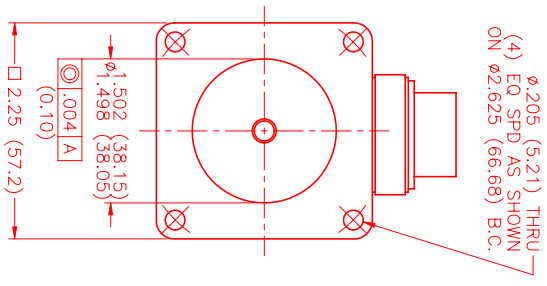
**MOTOR DATA @ 230 VAC (SINE)**

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	0.21
KILOWATTS	KW	0.16
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/(RMS/Φ)	1.8
PEAK TORQUE	IN-LBS[Nm]	15.1[1.7]
PEAK CURRENT	AMPS/(RMS/Φ)	5.4
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	155,670
TORQUE SENSITIVITY	Kt IN-LBS/AMP/(RMS/Φ)[Nm/AMP/(RMS/Φ)]	2.89[0.33]
BACK EMF (LINE TO LINE)	Vrms/Krpm	18.2
D.C. RESISTANCE (P-P)	OHMS	8.4
INDUCTANCE (P-P)	±10% 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:**

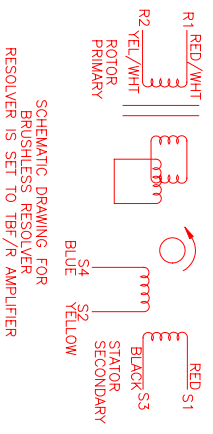
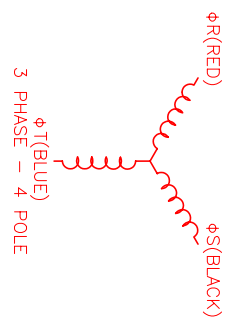
1. AXIAL LOAD: 15 LBS MAX
2. RADIAL LOAD: 20 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 2.7 LBS [ 1.2 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)



**CONNECTION CHART**  
**MOTOR/THERM/RESOLVER CONNECTOR:**  
 PTO2E-14-18P(027)  
 (270-00024)

MTR/THERM/RES	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
A	ΦR	RED	
B	ΦS	BLACK	
C	ΦT	BLUE	
D	PE GND	GRN/YEL	
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	
J	RES SHLD	GRN/YEL	
K	-	-	
L	-	-	
M	-	-	
P	-	-	
T	-	-	

PTO2E-14-18P(027)  
 MATING CONNECTOR:  
 PTO6E-14-18S(476)



SCHEMATIC DRAWING FOR  
 BRUSHLESS RESOLVER  
 RESOLVER IS SET TO TBF/R AMPLIFIER

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		3/27/02	MS

NO. PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED		
DECIMAL: 1/16, 1/8, 1/4, 1/2, 3/4, 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 25, 30, 40, 50, 60, 75, 100, 125, 150, 200, 250, 300, 400, 500, 600, 800, 1000, 1250, 1500, 2000, 2500, 3000, 4000, 5000, 6000, 8000, 10000, 12500, 15000, 20000, 25000, 30000, 40000, 50000, 60000, 80000, 100000, 125000, 150000, 200000, 250000, 300000, 400000, 500000, 600000, 800000, 1000000, 1250000, 1500000, 2000000, 2500000, 3000000, 4000000, 5000000, 6000000, 8000000, 10000000, 12500000, 15000000, 20000000, 25000000, 30000000, 40000000, 50000000, 60000000, 80000000, 100000000, 125000000, 150000000, 200000000, 250000000, 300000000, 400000000, 500000000, 600000000, 800000000, 1000000000, 1250000000, 1500000000, 2000000000, 2500000000, 3000000000, 4000000000, 5000000000, 6000000000, 8000000000, 10000000000, 12500000000, 15000000000, 20000000000, 25000000000, 30000000000, 40000000000, 50000000000, 60000000000, 80000000000, 100000000000, 125000000000, 150000000000, 200000000000, 250000000000, 300000000000, 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