

MOTOR DATA @ 460 VAC

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	0.38
KILOWATTS	KW RATED	0.28
MAX. OPERATING SPEED	N. MAX RPM	3600
SPEED @ RATED TORQUE	N RATED RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	N-LBS[Nm]	8.0[0.90]
* CONTINUOUS STALL TORQUE	N-LBS[Nm]	10.0[1.12]
CONTINUOUS LINE CURRENT	AMPS(RMS/φ)	0.81
PEAK TORQUE	Tpk	30.0[3.4]
PEAK CURRENT	AMPS(RMS/φ)	2.43
MAX. THEORETICAL ACCEL.	RAD/SEC ²	188,679
TORQUE SENSITIVITY	Kt [N-LBS/AMP(RMS/φ)]/[Nm/AMP(RMS/φ)]	11.3[1.28]
BACK EMF (LINE TO LINE)	Vrms/Krpm	54.8
D.C. RESISTANCE (P-P)	OHMS	29.1
INDUCTANCE (P-P)	MILLIHENRIES	48.0
ROTOR INERTIA	Jm [N-LBS-SEC ²] [Kg-M ²]	0.0000159[0.0000179]
STATIC FRICTION	Tf	0.8[0.09]

*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:

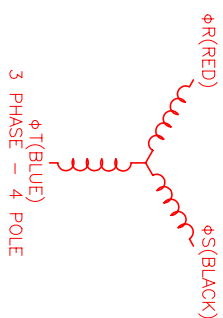
- AXIAL LOAD: 15 LBS MAX
- RADIAL LOAD: 20 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 3.6 LBS. [1.6 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

ENCODER: (290-00056)
OH35-2000P4-L6-SV

CONNECTION CHART
MOTOR/ENCODER/THERM CONNECTOR:
PTO2E-16-23P
(270-00219)

ENC/THERM	WIRE FUNCTION	WIRE COLOR	LEADS
	GROUND	BLACK	
	+5VDC	RED	
	CH A	BLUE	
	CH B	BLUE/BLK	
	CH V	GREEN	
	CH B V	GREEN/BLK	
	CH Z	YELLOW	
	CH Z V	YEL/BLK	
	CH U	BROWN	
	CH U V	BROWN/BLK	
	CH V	GRAY	
	CH V V	GRAY/BLK	
	CH W	WHITE	
	CH W V	WHITE/BLK	
	GND/CABLE	SHIELD	
	THERM	BLACK	
	THERM	BLACK	
	P	-	
	Z	-	

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



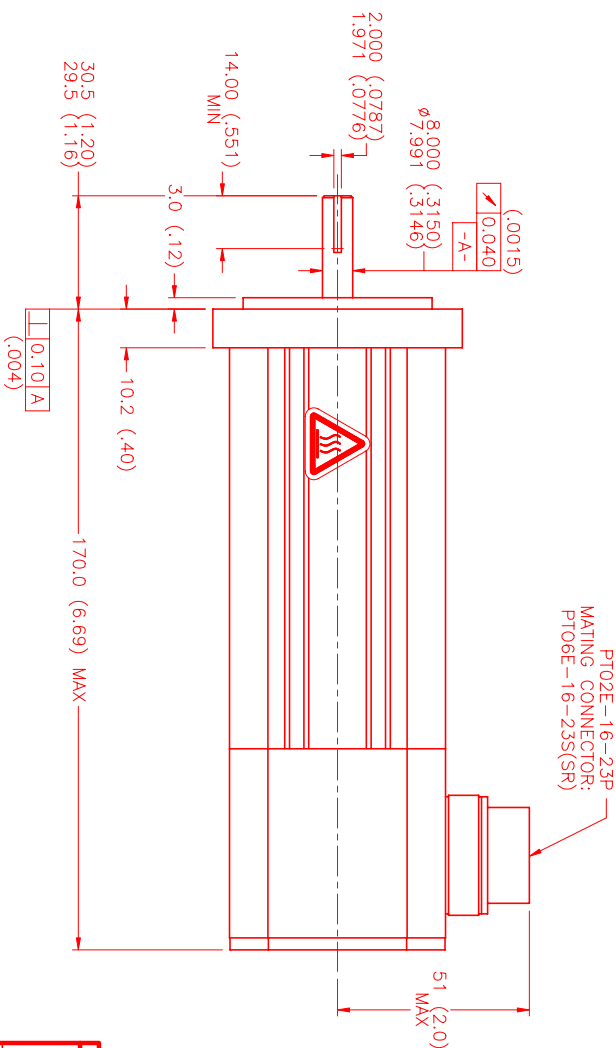
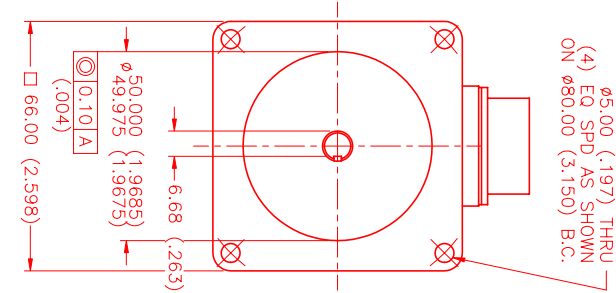
MOTOR & HALL POSITION CHART

HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

VIEW ON THE OSCILLOSCOPE



WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



PTO2E-16-23P
MATING CONNECTOR:
PTO6E-16-23S(SR)

51 (2.0)
MAX

<p>REV. DESCRIPTION DATE APPD. MS</p> <p>PRELIMINARY 10/7/98 MS</p>		<p>DATE: 10/7/98</p> <p>SCALE: 1:1</p>	
<p>NO. PART NUMBER DESCRIPTION QTY.</p>		<p>DATE: 10/7/98</p> <p>CHECKED: MPM</p> <p>APPROVED: MPM</p>	
<p>UNLESS SPECIFIED</p> <p>DECIMAL: 1/16" & 3/32"</p> <p>FRACTIONS: 1/8" & 1/4"</p> <p>ANGLE: 1/2"</p> <p>FORM: MS</p>		<p>DATE: 10/7/98</p> <p>SCALE: 1:1</p>	
<p>MTS Automation Division</p>		<p>DATE: 10/7/98</p> <p>SCALE: 1:1</p>	
<p>UNLESS SPECIFIED</p> <p>DECIMAL: 1/16" & 3/32"</p> <p>FRACTIONS: 1/8" & 1/4"</p> <p>ANGLE: 1/2"</p> <p>FORM: MS</p>		<p>DATE: 10/7/98</p> <p>SCALE: 1:1</p>	