

MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	2.1
KILOWATTS	KW RATED	1.6
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	IN-LBS[Nm]	45.0[5.1]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	54.0[6.1]
CONTINUOUS LINE CURRENT	AMPS	8.7
PEAK TORQUE	IN-LBS[Nm]	189.1[21.3]
PEAK CURRENT	AMPS	30.5
MAX. THEORETICAL ACCEL.	RAD/SEC ²	48,487
TORQUE SENSITIVITY	Kt IN-LBS/AmpI [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 W/BRAKE	Jm [IN-LBS-SEC ²] [Kg-M ²]	.00391[.00044]
STATIC FRICTION	Tf [IN-LBS]	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:**
- AXIAL LOAD: 50 LBS MAX
 - RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
 - MOTOR SEALED TO IP65.
 - MOTOR WEIGHT: 23.3 LBS. [10.6 kg]
 - MOTOR FINISH: BLACK EPOXY
 - MOTOR OUTPUT SHAFT: STAINLESS STEEL
 - INCHES (MILLIMETERS)

ENCODER: (290-00052)
OH48-2000P6-L6-SV
FAILSAFE BRAKE:
MIN HOLDING TORQUE: 240 IN-LBS
INPUT VOLTAGE: 24 VOLTS

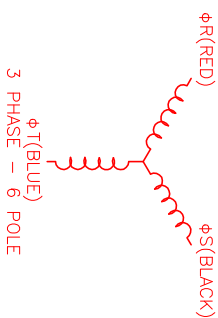
CONNECTION CHART

MOTOR/BRAKE CONNECTOR:
 PTO2E-16-8P(027)
 (270-00032)

MOTOR/BRAKE WIRE LEADS	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL.
E	BRK SHLD	—
F	BRK (+)	DIODE
G	BRK (-)	1N4007
H	—	—

ENCODER/THERM CONNECTOR:
 PTO2E-14-18P(027)
 (270-00024)

ENC/THERM WIRE LEADS	PIN	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK	
K	+5VDC	RED	
B	CH A	BLUE	
C	CH A \	BLUE/BLK	
N	CH B	GREEN	
P	CH B \	GRN/BLK	
M	CH Z	YELLOW	
U	CH Z \	YEL/BLK	
E	CH U	BROWN	
R	CH U \	BRN/BLK	
F	CH V	GRAY	
S	CH V \	GRAY/BLK	
G	CH W	WHITE	
H	CH W \	WHT/BLK	
D	GND/CABLE	SHLD	
A	THERM	BLACK	
L	THERM	BLACK	
J	GND	GRN/YEL	



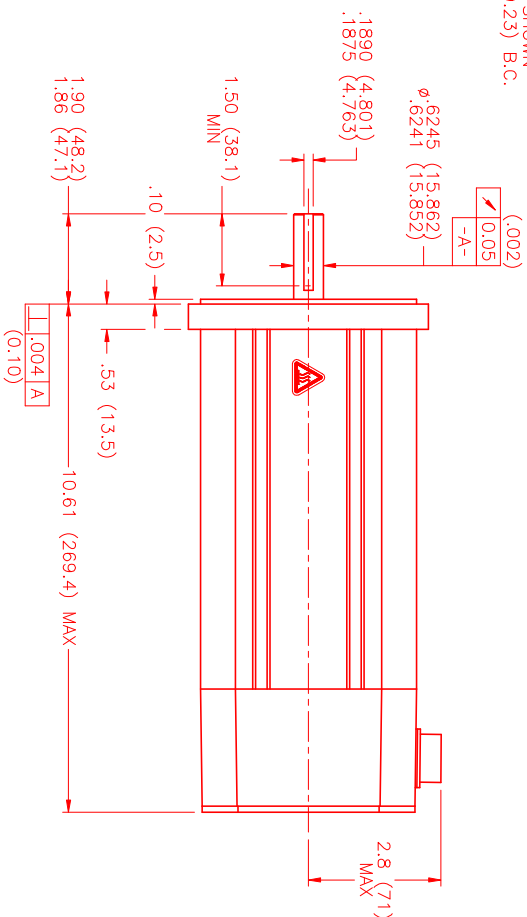
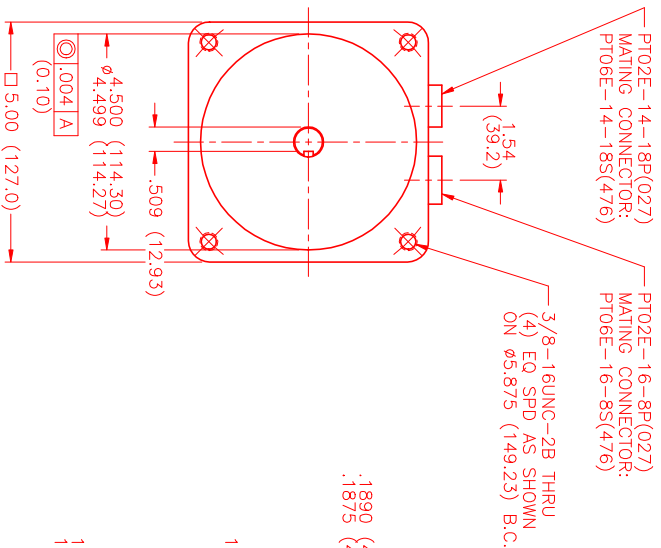
MOTOR & HALL POSITION CHART

HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK
VIEW ON THE OSCILLOSCOPE	AAAF AAAA AAAA		

*MOTOR ROTATION CWM (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



WAVE REPRESENTING HALL SENSOR



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DATE: 7/13/99			
DESIGNER: MVS			
CHECKED:			
APPROVED:			
SCALE: 1/2:1			

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		7/13/99	MVS

MVS
 Automation Division

TRAPEZOIDAL DRIVE MOTOR WITH ENCODER AND BRAKE
 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.