

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

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	4.4
KILOWATTS	KW	3.3
MAX. OPERATING SPEED	N MAX	2700
SPEED @ RATED TORQUE	N RATED	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS[INm]	115.0[13.0]
* CONTINUOUS STALL TORQUE	IN-LBS[INm]	130.0[14.7]
CONTINUOUS LINE CURRENT	AMPS	16.0
PEAK TORQUE	IN-LBS[INm]	390.0[43.9]
PEAK CURRENT	AMPS	48.0
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	30,234
TORQUE SENSITIVITY	K[IN-LBS/AMP][Nm/AMP]	7.9[0.89]
BACK EMF (LINE TO LINE)	Vrms/Krpm	70.0
D.C. RESISTANCE (P-P)	OHMS	.66
INDUCTANCE (P-P)	MILLIHENRIES	4.7
ROTOR INERTIA W/BRAKE	Jm[IN-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ]	.0129[.00145]
STATIC FRICTION	Tf[IN-LBS[INm]]	2.4[0.27]

\*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: 150 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 44.4 LBS. [ 20.1 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

**ENCODER: (290-00052)**  
OH48-2000P6-L6-5V

**FAILSAFE BRAKE:**  
MIN. HOLDING TORQUE: 240 IN-LBS  
INPUT VOLTAGE: 24 VOLTS

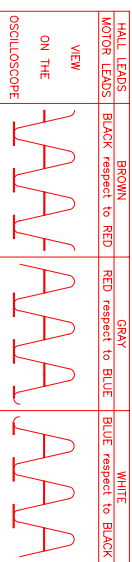
**CONNECTION CHART**

ENC/THERM/BRK CONNECTOR:  
PT02E-16-23P(027)  
(270-00219)

ENC/THERM/BRK PIN	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
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	
V	BRK (+)	DIODE	
W	BRK (-)	1N4007	
X	BRK SHLD	-	
Y	-	-	
Z	-	-	

MOTOR CONNECTOR:  
SG3102E-22-22P(027)  
(270-00017)

MOTOR PIN	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
A	ΦR	RED	
B	ΦS	BLACK	
C	ΦT	BLUE	
D	PE GND	GRN/YEL	

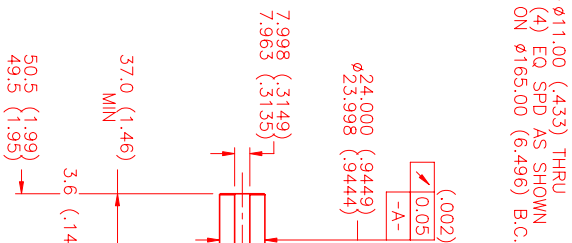
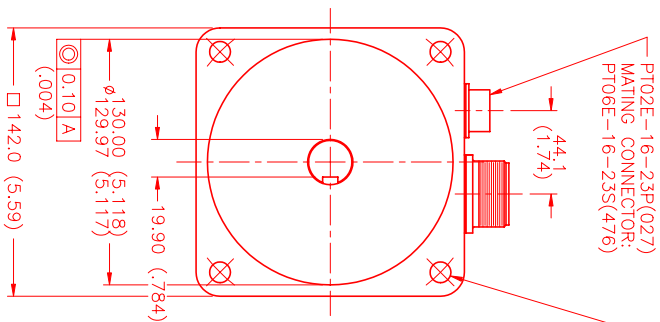


MOTOR & HALL POSITION CHART

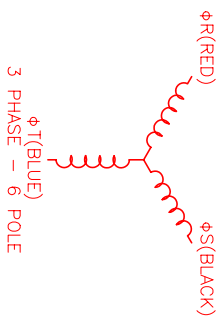
\*MOTOR ROTATION C/W (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



WAVE REPRESENTING HALL SENSOR



SG3102E-22-22P(027)  
MATING CONNECTOR:  
SG3106E-22-22S(476)



NO.	PART NUMBER	DESCRIPTION	QTY.
1	SG3102E-22-22P(027)	MATING CONNECTOR	1
2	SG3106E-22-22S(476)	MATING CONNECTOR	1

REV.	DESCRIPTION	DATE	APP.
PRELIMINARY		8/9/99	MVS

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