

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

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	6.8
KILOWATTS	KW RATED	5.1
MAX. OPERATING SPEED	N. MAX RPM	2700
SPEED @ RATED TORQUE	N RATED RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS [Nm]	179.0 [20.2]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	210.0 [23.7]
CONTINUOUS LINE CURRENT	AMPS (RMS/φ)	18.7
PEAK TORQUE	IN-LBS [Nm]	630.0 [70.8]
PEAK CURRENT	AMPS (RMS/φ)	56.3
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	33,511
TORQUE SENSITIVITY	Kt IN-LBS/AMP (RMS/φ) [Nm/AMP (RMS/φ)]	11.21 [1.26]
BACK EMF (LINE TO LINE)	Vrms/Krpm	70.0
D.C. RESISTANCE (P-P)	OHMS	.24
INDUCTANCE (P-P)	MILLIHENRIES	2.0
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	0.0188 [0.00212]
STATIC FRICTION	Tf [IN-LBS] [Nm]	3.0 [.34]

\*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:**

1. AXIAL LOAD: 50 LBS MAX
2. RADIAL LOAD: 150 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 48.8 LBS. [ 22.2 Kg ]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)

**ENCODER: (290-00073)**

OH48-2048P6-L6-5V

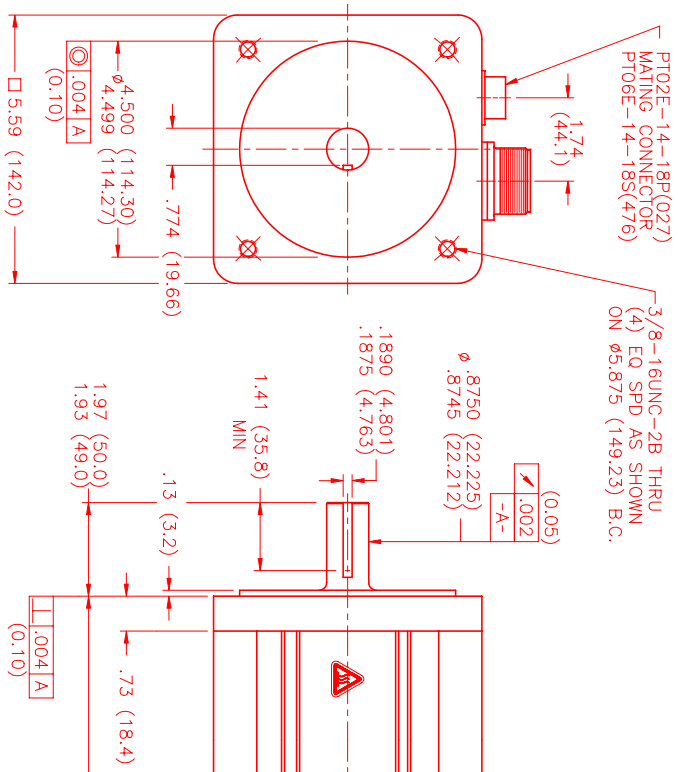
**CONNECTION CHART**

MOTOR CONNECTOR:  
SG102E-22-22P(027)  
(270-00017)

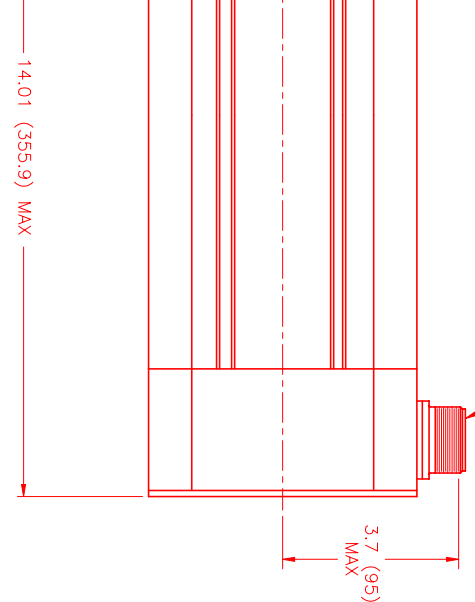
PIN	WIRE FUNCTION	WIRE COLOR
A	φR	RED
B	φS	BLACK
C	φT	BLUE
D	PE GND	GRN/YEL

ENCODER/THERM CONNECTOR:  
PT02E-14-18P(027)  
(270-00024)

PIN	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK
K	+5VDC	RED
B	CH A	BLUE
N	CH A\	BLUE/BLK
C	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



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

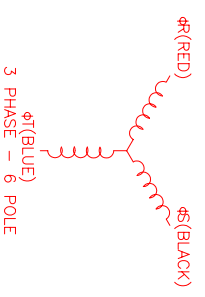


\*MOTOR ROTATION CWM (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



**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



NO.	PART NUMBER	DESCRIPTION	QTY.
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