

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

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	26.5
PEAK TORQUE	IN-LBS [Nm]	630.0 [70.8]
PEAK CURRENT	AMPS	79.6
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	33,511
TORQUE SENSITIVITY	Kt IN-LBS/AMPI Nm/AMP	7.91 [89]
BACK EMF (LINE TO LINE)	Vrms/Krpm	70.0
D.C. RESISTANCE (P-P)	OHMS	2.5
INDUCTANCE (P-P)	MILLIHENRIES	2.0
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	.0188 [0.0212]
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 HEATSIK. 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: 48.2 LBS. [ 21.9 Kg ]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

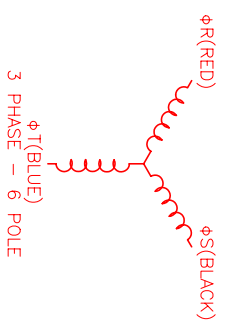
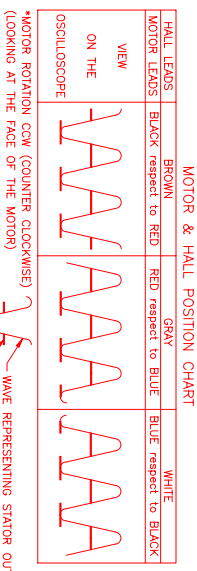
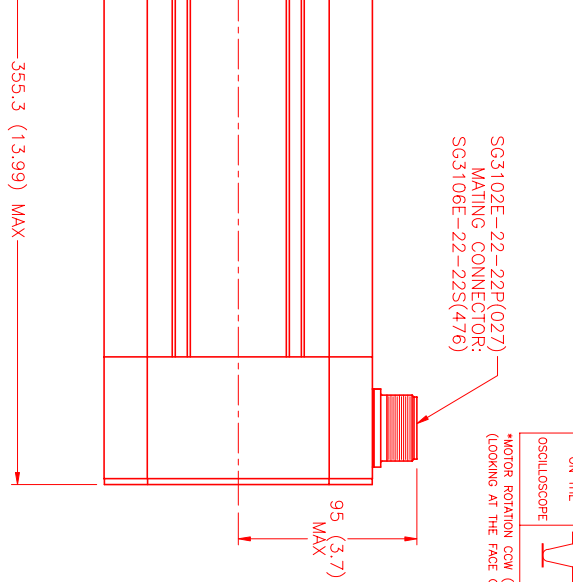
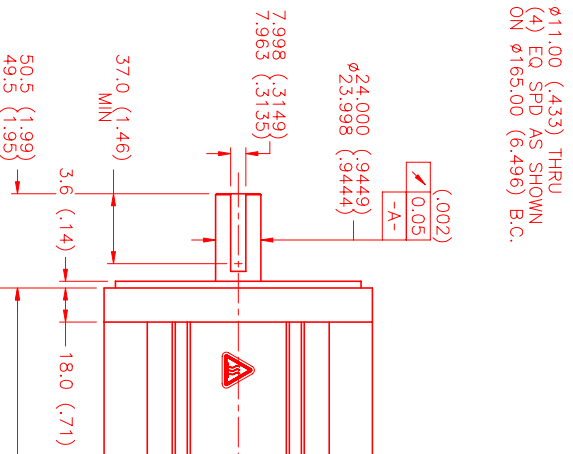
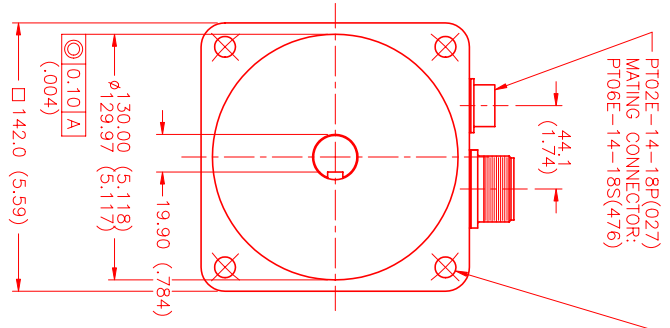
**ENCODER: (290-00052)**  
OH48-2000P6-L6-5V

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

MOTOR WIRE	LEADS
PIN	WIRE FUNCTION
A	ΦR
B	ΦS
C	ΦT
D	PE GND

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

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	BLACK
A	THERM	BLACK
L	THERM	BLACK
J	GND	GRN/YEL



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

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

DATE: 8/9/99	DESIGNER: MVS	CHECKED:	APPROVED:
TITLE: "A" /TRAP /230/MET /2000/CONN	MATERIAL:	SCALE: 1/2:1	

**MTS** MTS Systems Corporation  
Automation Division