

**MOTOR DATA @ 460 VAC (SINE)**

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	18.0
KILOWATTS	KW RATED	13.4
MAX. OPERATING SPEED	N. MAX RPM	1500
SPEED @ RATED TORQUE	N RATED RPM	1200
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS[Nm]	939.0 [105.0]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	1092.0 [123.0]
CONTINUOUS LINE CURRENT	AMPS[RMS/φ]	21.9
PEAK TORQUE	IN-LBS[Nm]	3276.0 [370.0]
PEAK CURRENT	AMPS[RMS/φ]	65.8
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	24,632
TORQUE SENSITIVITY	Kt IN-LBS/AMP[RMS/φ] / Nm/AMP[RMS/φ]	49.5 [5.6]
BACK EMF (LINE TO LINE)	Vrms/Krpm	316.0
D.C. RESISTANCE (P-P)	OHMS	.72
INDUCTANCE (P-P)	MILLIHENRIES	13.4
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	.133 [0.150]
STATIC FRICTION	Tf [IN-LBS] [Nm]	13.0 [1.5]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 14" X 14" X 3/4" 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: 100 LBS MAX
  - RADIAL LOAD: 250 LBS MAX @ 1" FROM FACE
  - MOTOR SEALED TO IP65
  - MOTOR WEIGHT: 160 LBS [ 72.6 Kg ]
  - MOTOR FINISH: BLACK EPOXY
  - MILLIMETERS (INCHES)

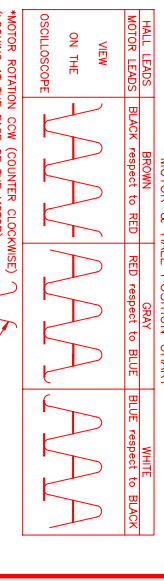
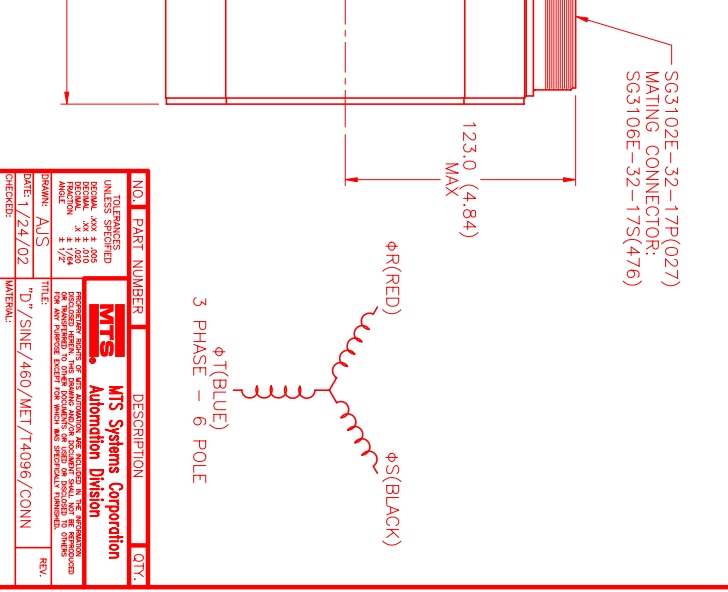
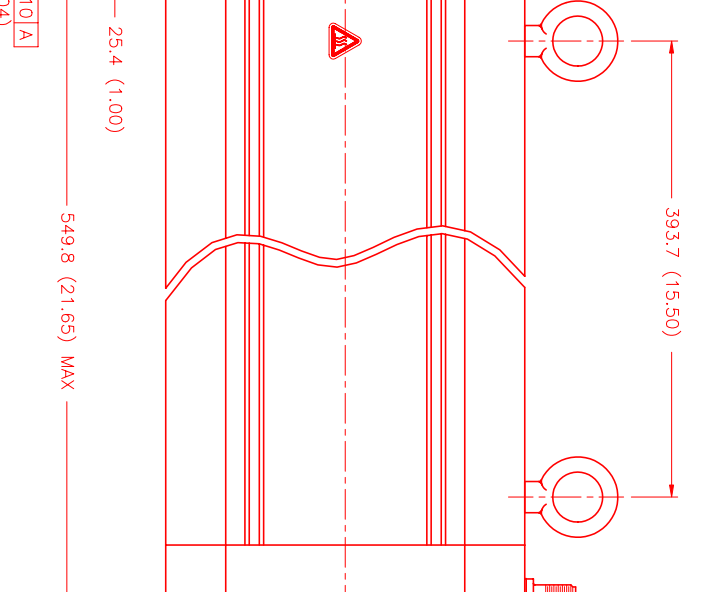
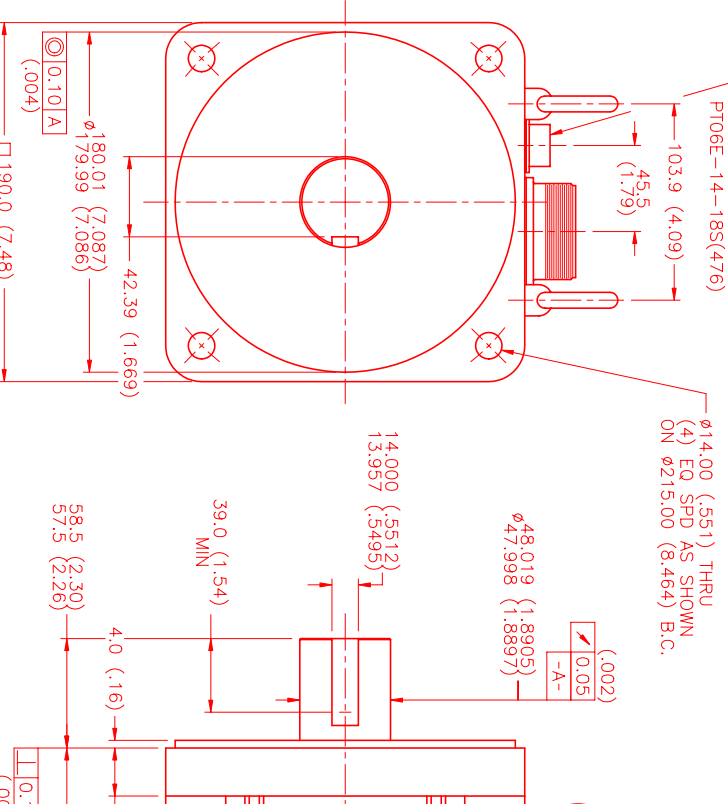
**ENCODER: (290-00107)**  
OH48-4096P6-L6-5V

**CONNECTION CHART**  
MOTOR CONNECTOR:  
SG3102E-32-17P(027)  
(270-00066)

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

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

ENC/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK
K	+5VDC	RED
B	CH A	BLUE
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	BLK
A	THERM	BLACK
L	THERM	BLACK
J	GND	GRN/YEL



SG3102E-32-17P(027)  
MATING CONNECTOR:  
SG3106E-32-17S(476)

NO. PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED		
REVISIONS		
REV.	DESCRIPTION	DATE
PRELIMINARY		1/24/02
APPROVED:		AS

DATE: 1/24/02

SCALE: 1/2:1

ISSUING ENGINEER: MPM1904DSJ74Z1N

SCALE: 1/2:1

DATE: 1/24/02

REV: 1/24/02

PRELIMINARY

DATE: 1/24/02

APPROVED: AS

**MTS**  
Automation Division