

### MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	20.9
KILOWATTS	KW RATED	15.6
MAX. OPERATING SPEED	N. MAX RPM	3000
SPEED @ RATED TORQUE	N RATED RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS[Nm]	550.0[61.8]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	640.0[71.9]
CONTINUOUS LINE CURRENT	AMPS	71.9
PEAK TORQUE	IN-LBS[Nm]	1780.0[200.0]
PEAK CURRENT	AMPS	200.0
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	24,930
TORQUE SENSITIVITY	Kt IN-LBS/AMP[Nm/AMP]	8.9[1.0]
BACK EMF (LINE TO LINE)	Vrms/Krpm	79.0
D.C. RESISTANCE (P-P)	OHMS	1.11
INDUCTANCE (P-P)	MILLIHENRIES	1.65
ROTOR INERTIA	Jm IN-LBS-SEC <sup>2</sup> [Kg-M <sup>2</sup> ]	.0714[.00807]
STATIC FRICTION	Tf IN-LBS[Nm]	9.8[1.1]

\*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: 100 LBS [ 45.4 kg ]
  - MOTOR FINISH: BLACK EPOXY
  - MILLIMETERS (INCHES)

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

### CONNECTION CHART

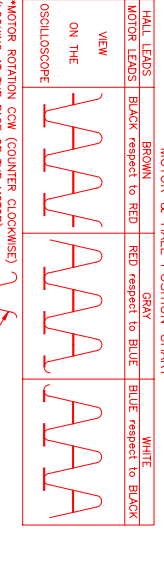
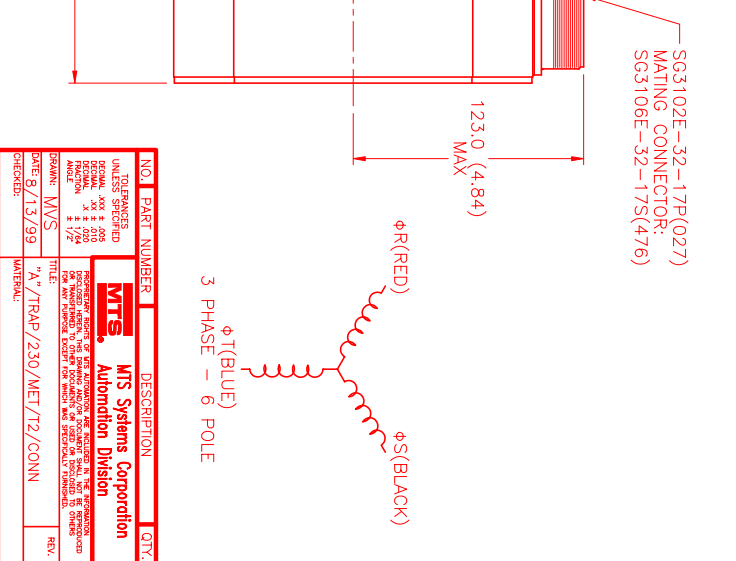
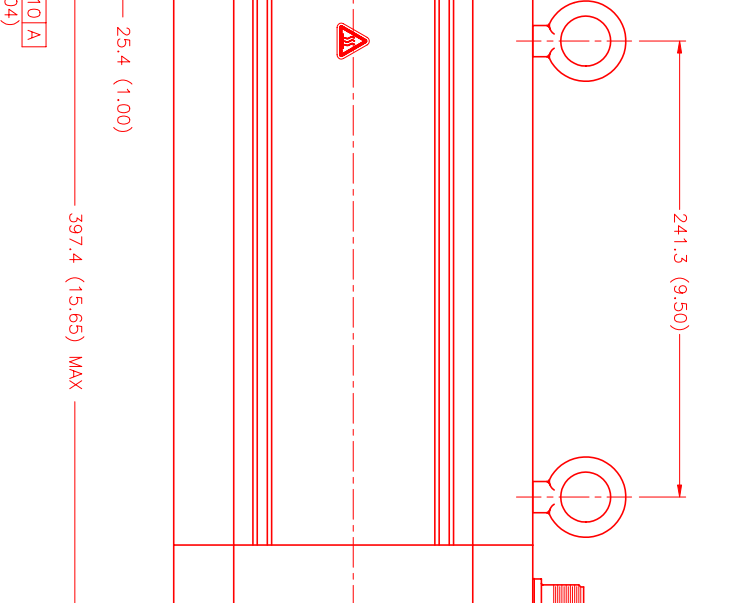
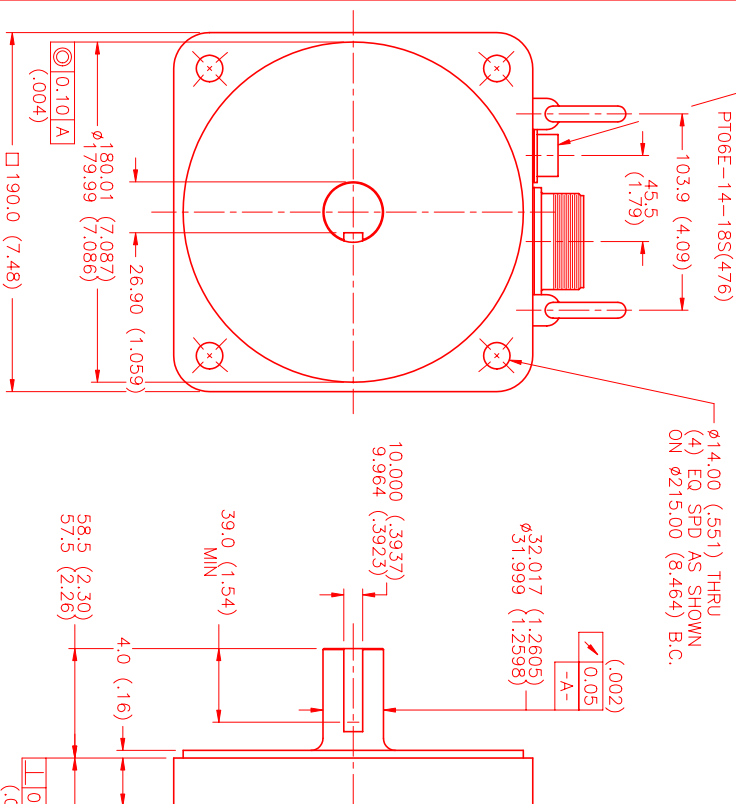
MOTOR CONNECTOR:  
SG3102E-32-17P(027)  
(270-00066)

MOTOR WIRE LEADS	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)

ENC/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK
K	+5VDC	RED
B	CH A	BLUE
N	CH B	GREEN
P	CH C	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.
1	MTS	MTS Systems Corporation Automation Division	

DATE: 8/13/99  
DRAWN: MVS  
CHECKED: MVS  
TITLE: "A" /TRAP /230/MET/T2/CONN  
MATERIAL: STAINLESS STEEL  
SCALE: 1/2:1