

MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	20.9
KILOWATTS	KW	15.6
MAX. OPERATING SPEED	N MAX	3000
SPEED @ RATED TORQUE	N RATED	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	36.0
PEAK TORQUE	IN-LBS [Nm]	1920.0 [215.0]
PEAK CURRENT	AMPS	108.0
MAX. THEORETICAL ACCEL.	RAD/SEC ²	24.030
TORQUE SENSITIVITY	Kt [IN-LBS/AMP/Nm/AMP]	17.6 [2.0]
BACK EMF (LINE TO LINE)	Vrms/Krpm	158.0
D.C. RESISTANCE (P-P)	OHMS	0.44
INDUCTANCE (P-P)	MILLIHENRIES	6.8
ROTOR INERTIA W/BRAKE	Jm [IN-LBS-SEC ² /Kg-M ²]	0.0799 [0.00902]
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. TEMPERATURE 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: 116 LBS. [52.6 kg]
- MOTOR FINISH: BLACK EPOXY
- MILLIMETERS (INCHES)

ENCODER: (290-00052)

01H48-2000P6-L6-5V

FAILSAFE BRAKE:

MIN HOLDING TORQUE: 90 FT-LBS
INPUT VOLTAGE: 24 VOLTS

CONNECTION CHART

ENC/THERM/BRK CONNECTOR:
PTO2E-16-23P(027)
(270-00219)

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

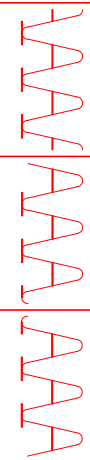
ENC/THERM/BRK	WIRE FUNCTION	WIRE COLOR	WIRE LEADS
T	GROUND	BLACK	
K	+5VDC	RED	
B	CH A	BLUE	
C	CH AV	BLUE/BLK	
N	CH B	GREEN	
P	CH BV	GRN/BLK	
M	CH Z	YELLOW	
U	CH ZA	YEL/BLK	
E	CH U	BROWN	
R	CH UV	BRN/BLK	
F	CH V	GRAY	
S	CH VV	GRAY/BLK	
G	CH W	WHITE	
H	CH WV	WHT/BLK	
D	GND/CABLE	SHLD	
A	THERM	BLACK	
L	THERM	BLACK	
J	GND	GRN/YEL	
V	BRK (+)	DIODE	
W	BRK (-)	IN4007	
X	BRK SHLD	-	
Y	-	-	
Z	-	-	

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

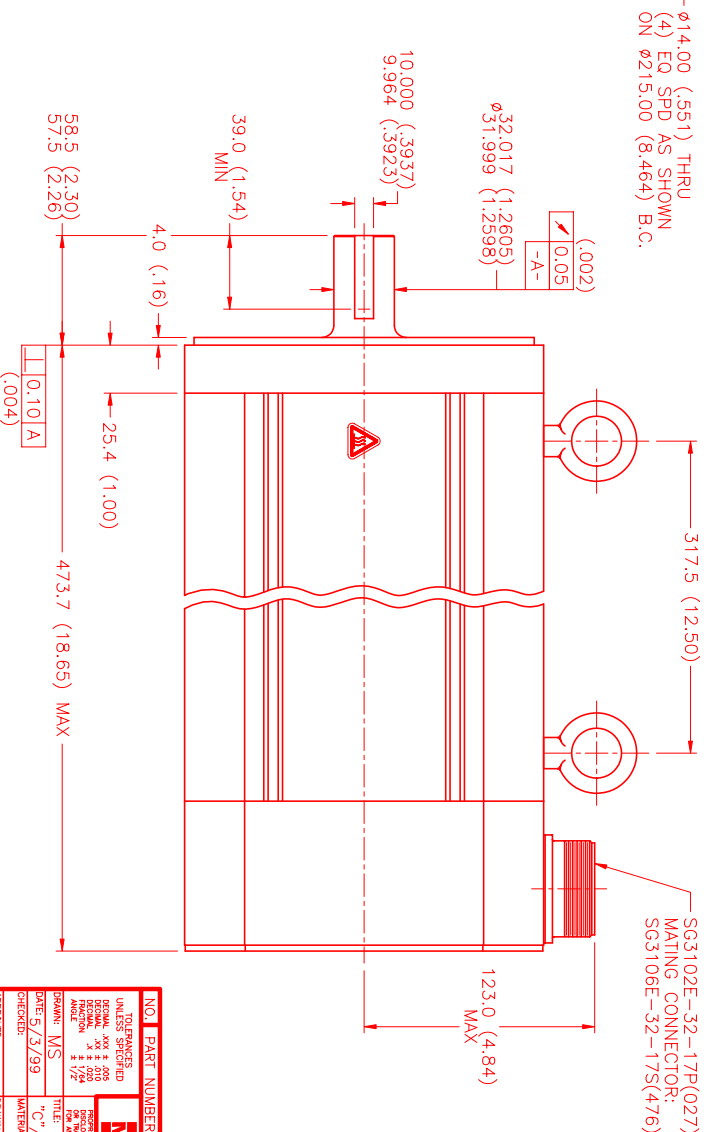
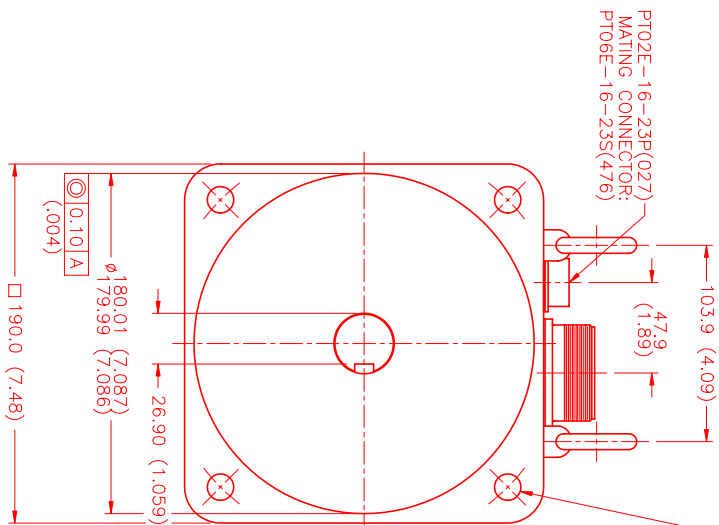
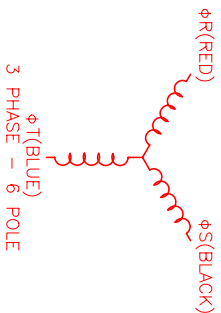
MOTOR & HALL POSITION CHART

HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

VIEW ON THE OSCILLOSCOPE



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



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

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MTS	MTS Systems Corporation Automation Division	

REV.	DESCRIPTION	DATE	APP.
PRELIMINARY		5/19/99	ELS

UNLESS SPECIFIED	DATE: 5/3/99	TITLE: "C"/TRAP/460/MET/72/CONN/BRK
DESIGNED BY: MJS	CHECKED BY:	MATERIAL:
APPROVED BY:	DATE: 5/3/99	SCALE: 1/2=1

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MTS	MTS Systems Corporation Automation Division	