

MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	35.7
KILOWATTS	KW RATED	26.7
MAX. OPERATING SPEED	N. MAX RPM	3000
SPEED @ RATED TORQUE	N RATED RPM	2400
* 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]	43.8
PEAK TORQUE	IN-LBS[Nm]	3276.0 [370.0]
PEAK CURRENT	AMPS[RMS/φ]	131.5
MAX. THEORETICAL ACCEL.	RAD/SEC ²	24.632
TORQUE SENSITIVITY	Kt [N-LBS/AMPERE/φ] [Nm/AMP/RMS/φ]	24.9 [2.8]
BACK EMF (LINE TO LINE)	Vrms/Krpm	158.0
D.C. RESISTANCE (P-P)	OHMS	.19
INDUCTANCE (P-P)	MILLIHENRIES	3.2
ROTOR INERTIA	Jm [IN-LBS-SEC ²] [Kg-M ²]	.133 [0.0150]
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 [73 kg]
 - MOTOR FINISH: BLACK EPOXY
 - MILLIMETERS (INCHES)

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

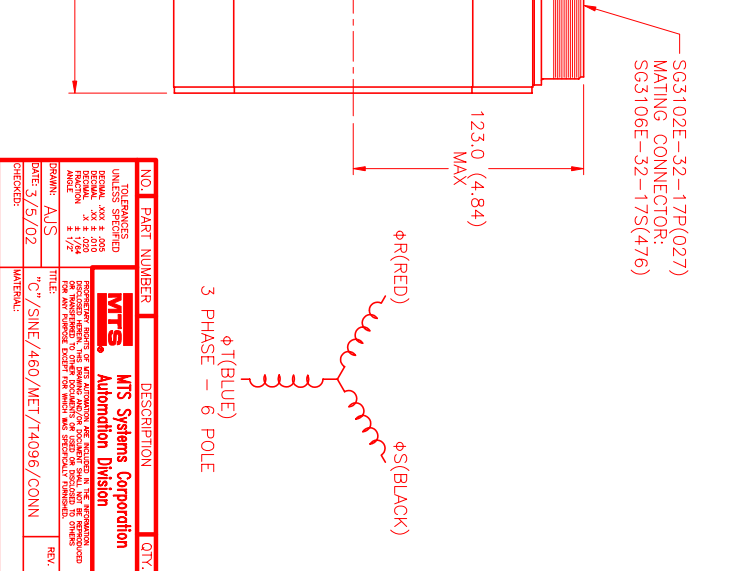
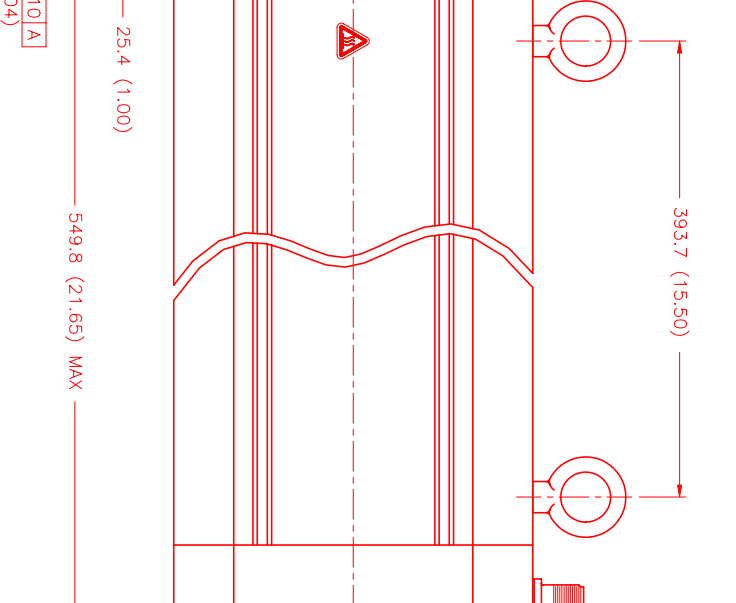
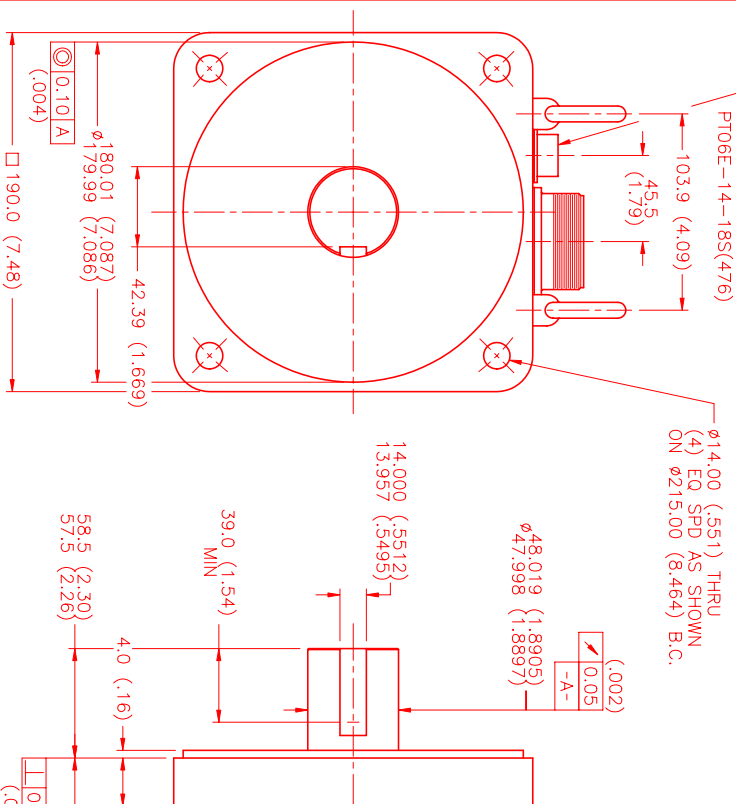
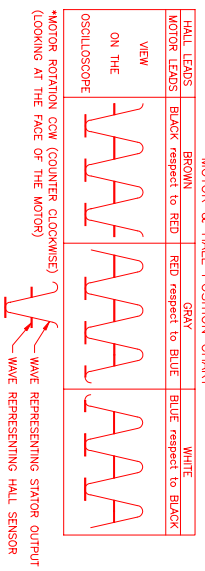
CONNECTION CHART
MOTOR CONNECTOR:
SG3102E-32-17P(027)
(270-00066)

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	BLUE/BLK
P	CH B	GREEN
M	CH Z	GRN/BLK
U	CH Z	YELLOW
E	CH Z	YEL/BLK
R	CH U	BROWN
F	CH V	BRN/BLK
S	CH V	GRAY
G	CH W	GRAY/BLK
H	CH W	WHITE
D	CH W	WHT/BLK
A	GND/CABLE	SHLD
L	THERM	BLACK
J	GND	GRN/YEL

HALL LEADS	WIRE FUNCTION	WIRE COLOR
VIEW	ON THE OSCILLOSCOPE	BLACK respect to RED
		RED respect to BLUE
		BLUE respect to BLACK



NO.	PART NUMBER	DESCRIPTION	QTY.
1	SG3102E-32-17P(027)	MOTOR	1
2	PT02E-14-18P(027)	ENCODER/THERM CONNECTOR	1
3	OH48-4096P6-L6-5V	ENCODER	1

REVISIONS	DATE	APPD.
PRELIMINARY	3/13/02	AJS

NO.	DATE	BY	DESCRIPTION
1	3/5/02	AJS	INITIAL DESIGN
2	3/5/02	AJS	REVISED TO ADD ENCODER
3	3/5/02	AJS	REVISED TO ADD MOTOR
4	3/5/02	AJS	REVISED TO ADD MOTOR
5	3/5/02	AJS	REVISED TO ADD MOTOR
6	3/5/02	AJS	REVISED TO ADD MOTOR
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SCALE: 1/2:1