

### MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HP RATED	HP	13.1
KW RATED	KW	9.8
MAX. OPERATING SPEED	N MAX RPM	3000
SPEED @ RATED TORQUE	N RATED RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS [Nm]	344.0 [38.6]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	400.0 [44.9]
CONTINUOUS LINE CURRENT	AMPS (RMS/φ)	31.7
PEAK TORQUE	IN-LBS [Nm]	1200.0 [134.8]
PEAK CURRENT	AMPS (RMS/φ)	95.3
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	24,194
TORQUE SENSITIVITY	Kt [N-LBS/AMP (RMS/φ)] [Nm/AMP (RMS/φ)]	12.6 [1.42]
BACK EMF (LINE TO LINE)	Vrms/Krpm	79.0
D.C. RESISTANCE (P-P)	OHMS	0.31
INDUCTANCE (P-P)	MILLIHENRIES	3.70
ROTOR INERTIA W/BRAKE	Jm [IN-LBS-SEC <sup>2</sup> ] [Kg-M <sup>2</sup> ]	0.0496 [0.00560]
STATIC FRICTION	Tf [IN-LBS] [Nm]	8.2 [0.92]

\*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: 85 LBS. [ 39 Kg]
- MOTOR FINISH: BLACK EPOXY
- MILLIMETERS (INCHES)

#### FAILSAFE BRAKE:

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

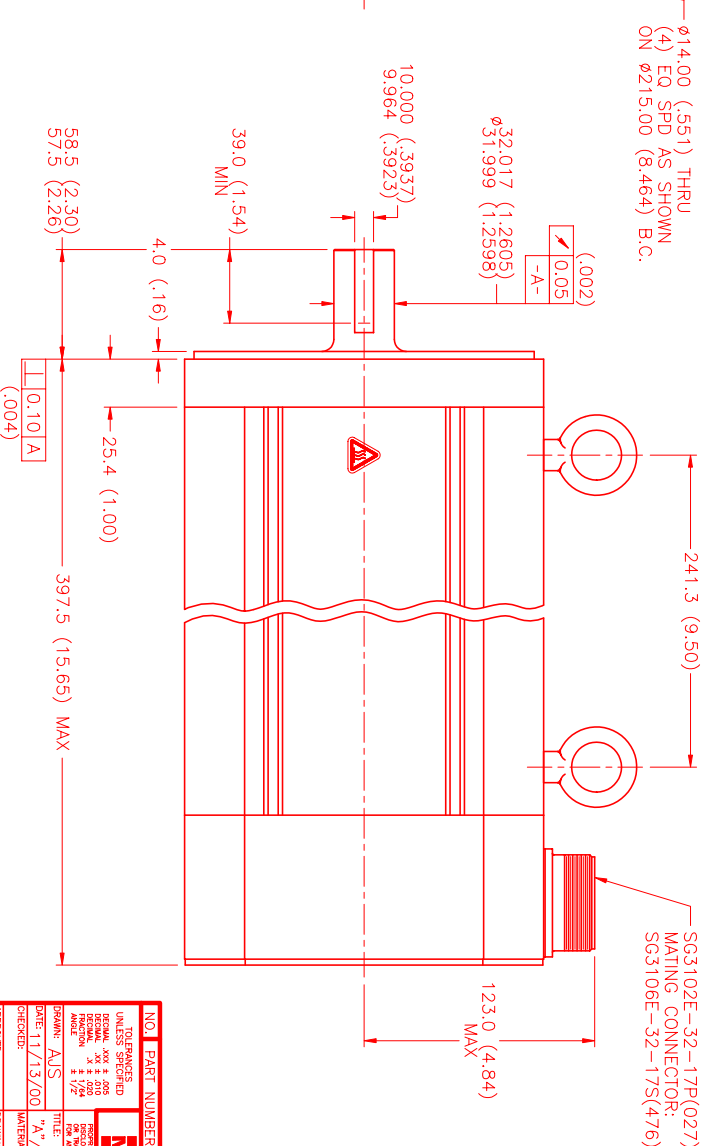
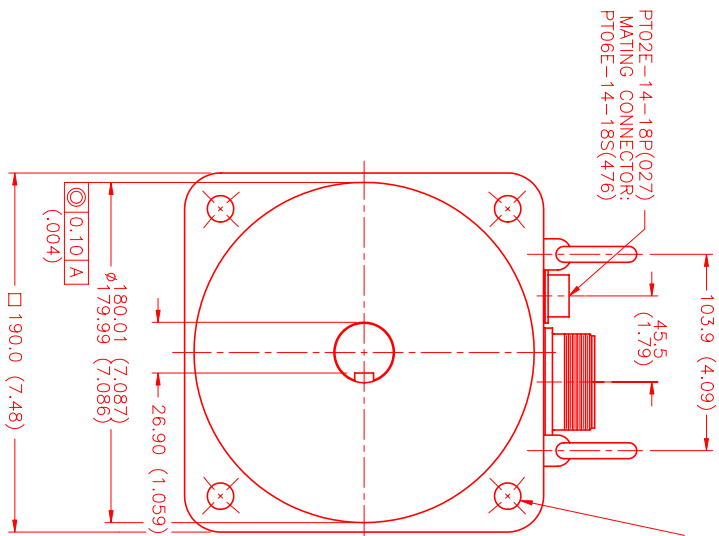
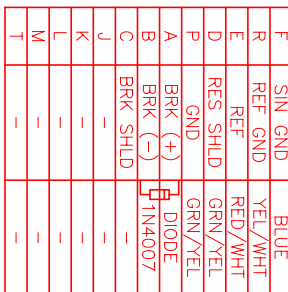
#### CONNECTION CHART

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

RES/THERM/BRK CONNECTOR:  
PT02E-14-18P(027)  
(270-00024)

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

RES/THERM/BRK WIRE LEADS	WIRE FUNCTION	WIRE COLOR
U	THERM	BLACK
N	THERM	BLACK
H	SIN	YELLOW
G	COS GND	BLACK
S	COS	RED
F	SIN GND	BLUE
R	REF GND	YEL/WHT
E	REF	RED/WHT
D	RES SHLD	GRN/YEL
P	GND	GRN/YEL
A	BRK (+)	DIODE
B	BRK (-)	1N4007
C	BRK SHLD	-
J	-	-
K	-	-
L	-	-
M	-	-
T	-	-



NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL: MAX 4 DIG			
FRACTIONAL: MAX 4 DIG			
ANGLES: MAX 1/2°			
SCALE: 1/2"			
DATE: 11/13/00			
DESIGNED BY: AJS			
CHECKED BY:			
APPROVED BY:			
DRAWING NUMBER: MPM1901ASG7G1R			
SCALE: 1/2-1			

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		11/13/00	AJS

REVISIONS

DATE: 11/13/00  
APPD.: AJS

MTS  
Automation Division

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