

MOTOR DATA @ 230 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	18.0
KILOWATTS	KW RATED	13.4
MAX. OPERATING SPEED	N MAX	1500
SPEED @ RATED TORQUE	N RATED	1200
* CONTINUOUS RATED TORQUE @ 1200 RPM	IN-LBS [Nm]	939.0 [105.0]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	1092.0 [123.0]
CONTINUOUS LINE CURRENT	AMPS	62.0
PEAK TORQUE	IN-LBS [Nm]	3276.0 [370.0]
PEAK CURRENT	AMPS	185.0
MAX. THEORETICAL ACCEL.	RAD/SEC ²	23,152
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	1.19
INDUCTANCE (P-P)	MILLIHENRIES	3.2
ROTOR INERTIA	Jm [IN-LBS-SEC ²] [Kg-M ²]	.1415 [0.160]
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 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: 178 LBS. [80.7 kg]
- MOTOR FINISH: BLACK EPOXY
- MILLIMETERS (INCHES)

FAILSAFE BRAKE:

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

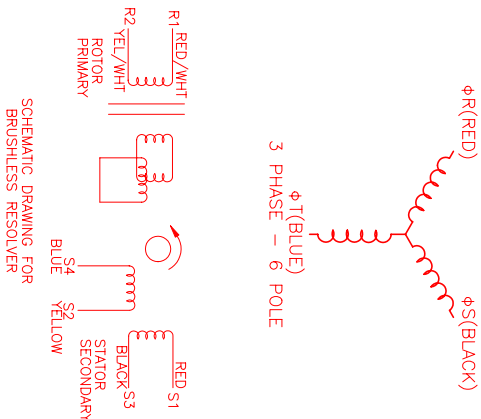
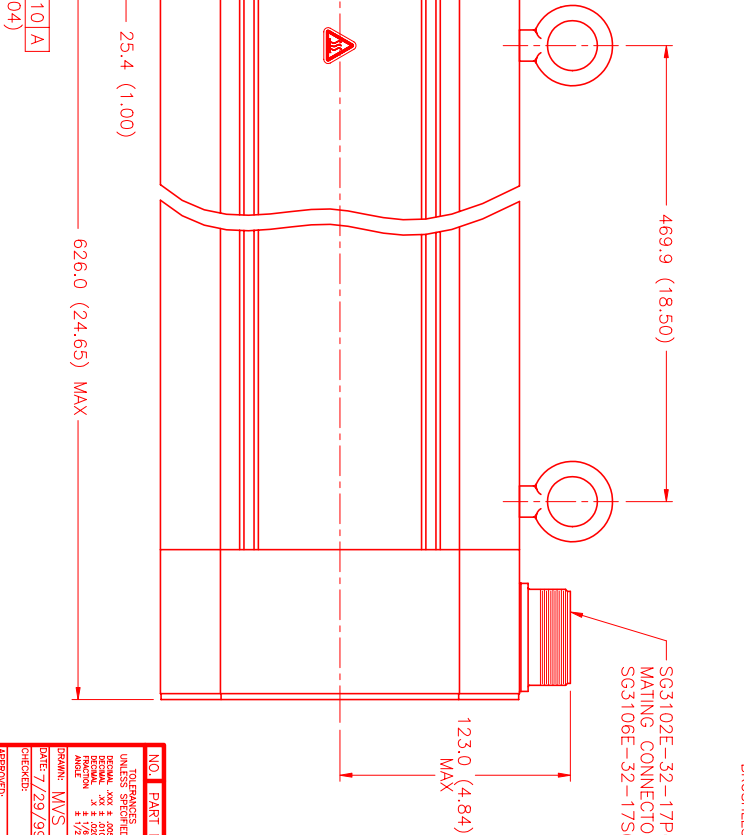
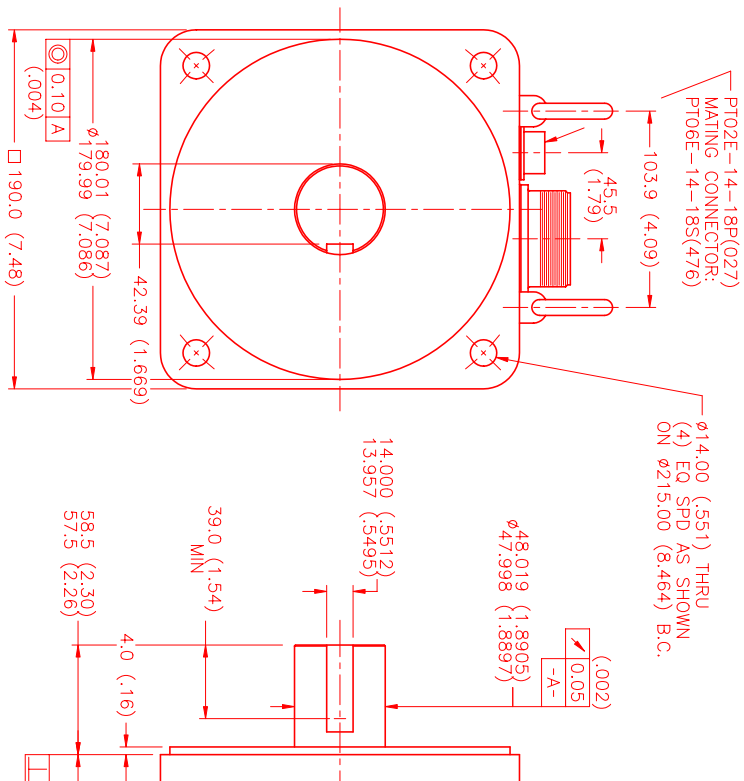
CONNECTION CHART

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

PIN	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE_GND	GRN/YEL

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

PIN	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/WHIT
E	REF	RED/WHIT
D	RES_SHLD	GRN/YEL
P	RES_SHLD	GRN/YEL
A	BRK (+)	DIODE
B	BRK (-)	DIODE
C	BRK_SHLD	DIODE
J	-	-
K	-	-
L	-	-
M	-	-
T	-	-



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		10/7/99	ELS

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MTS	MTS Systems Corporation Automation Division	
2	B/TRAP/230/MET/RES/CONN/BRK		

UNLESS SPECIFIED	REVISIONS
DECIMAL ANGLES ± .005	DATE
FRACTIONAL ANGLES ± .002	APPD.
ANGLES ± 1/2°	REV.

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MTS	MTS Systems Corporation Automation Division	
2	B/TRAP/230/MET/RES/CONN/BRK		