

**@ MOTOR DATA @ 460 VAC (SINE)**

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	9.8
KILOWATTS	KW	7.3
MAX. OPERATING SPEED	N MAX	3400
SPEED @ RATED TORQUE	N RATED	2800
* CONTINUOUS RATED TORQUE @ 2800 RPM	IN-LBS[ $N_{m1}$ ]	220.0[24.8]
* CONTINUOUS STALL TORQUE	IN-LBS[ $N_{m1}$ ]	280.0[31.5]
CONTINUOUS LINE CURRENT	AMPS[RMS/φ]	14.9
PEAK CURRENT	IN-LBS[ $N_{m1}$ ]	840.0[94.4]
MAX. THEORETICAL ACCEL.	AMPS[RMS/φ]	44.7
TORQUE SENSITIVITY	RAD/SEC <sup>2</sup>	30.769
BACK EMF (LINE TO LINE)	Kt [IN-LBS/AMP/RMS/φ][Nm/AMP/RMS/φ]	18.2[2.1]
D.C. RESISTANCE (P-P)	Vrms/krpm	115.0
INDUCTANCE (P-P)	OHMS	.42
ROTOR INERTIA	MILLIENRIES	4.3
STATIC FRICTION	Jm [IN-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ]	.0273[.00308]
	Tf [IN-LBS[ $N_{m1}$ ]	3.6[.40]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1/2" 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:**

1. AXIAL LOAD: 50 LBS MAX
2. RADIAL LOAD: 150 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 65 LBS. [ 29.5 kg ]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

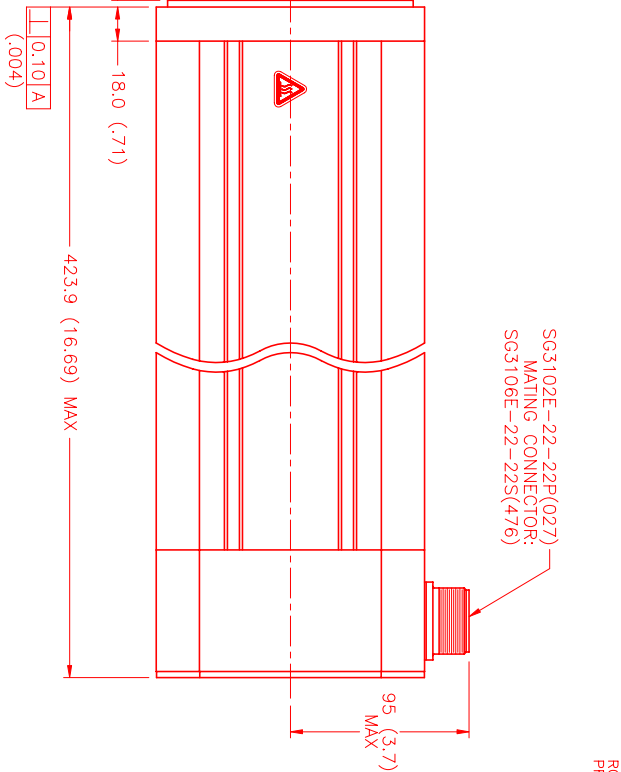
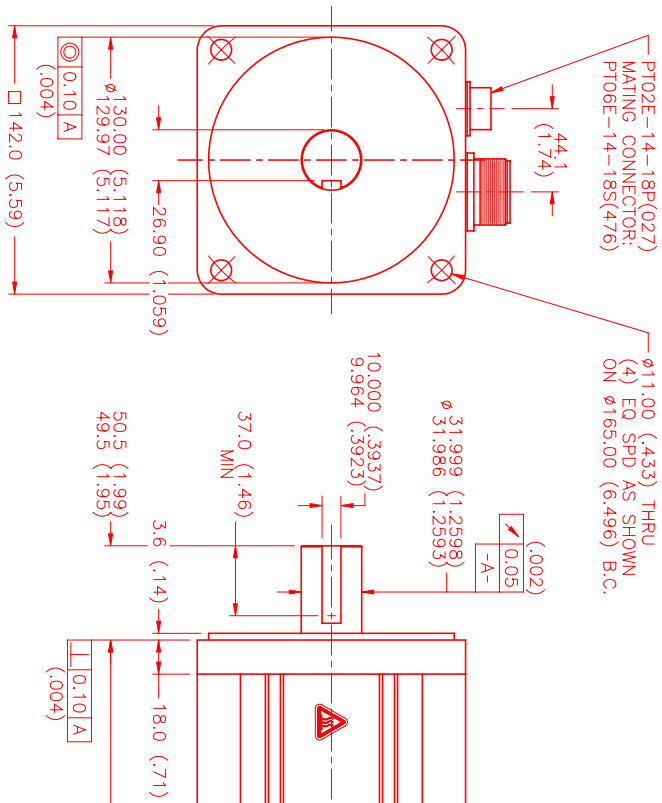
**CONNECTION CHART**

MOTOR CONNECTOR:  
SG3102E-22-22P(027)  
(270-00017)

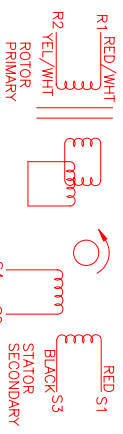
MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
A	φR	RED
B	φS	BLACK
C	φT	BLUE
D	PE GND	GRN/YEL

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

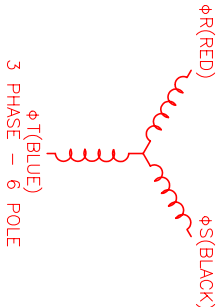
RES/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
A	RES	BLACK
B	THERM	BLACK
C	THERM	BLACK
D	THERM	BLACK
E	THERM	BLACK
F	THERM	BLACK
G	THERM	BLACK
H	THERM	BLACK
I	THERM	BLACK
J	THERM	BLACK
K	THERM	BLACK
L	THERM	BLACK
M	THERM	BLACK
N	THERM	BLACK
O	THERM	BLACK
P	THERM	BLACK
Q	THERM	BLACK
R	THERM	BLACK
S	THERM	BLACK
T	THERM	BLACK



SG3102E-22-22P(027)  
MATING CONNECTOR:  
SG3106E-22-22S(476)



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



3 PHASE - 6 POLE

REV.	DESCRIPTION	DATE	APPD.
A	E.C.O. - 643	3/11/02	AJS

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MPM1423CSU7G1N	MOTOR	1

**MTS**  
Automation Division

DATE: 7/9/01  
TITLE: "C"/SINE/460/MET/RES/CONN  
SCALE: 1/2:1