

MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
MOTOR HORSEPOWER	HP RATED	4.9
	KW RATED	3.6
MAX. OPERATING SPEED	N. MAX RPM	3400
SPEED @ RATED TORQUE	N RATED RPM	2800
* CONTINUOUS RATED TORQUE @ 2800 RPM	IN-LBS[Nm]	110.0 [12.4]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	130.0 [14.7]
CONTINUOUS LINE CURRENT	AMPS[RMS/φ]	6.9
PEAK TORQUE	IN-LBS[Nm]	390.0 [43.9]
PEAK CURRENT	AMPS[RMS/φ]	20.9
MAX. THEORETICAL ACCEL.	RAD/SEC ²	30.233
TORQUE SENSITIVITY	Kt [N-LBS/AMP[RMS]/(N/A)MIN/AMP[RMS/φ]]	18.2 [2.1]
BACK EMF (LINE TO LINE)	Vrms/Krpm	115.0
D.C. RESISTANCE (P-P)	OHMS	1.9
INDUCTANCE (P-P)	MILLIHENRIES	13.0
ROTOR INERTIA W/ BRAKE	Jm [IN-LBS-SEC ²] [Kg-M ²]	.0129 [0.0145]
STATIC FRICTION	Tf [IN-LBS] [Nm]	2.4 [0.27]

*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:

- AXIAL LOAD: 50 LBS MAX
- RADIAL LOAD: 150 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 45 LBS. [20.4 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

FAILSAFE BRAKE:

MIN HOLDING TORQUE: 360 IN-LBS
INPUT VOLTAGE: 24 VOLTS

CONNECTION CHART

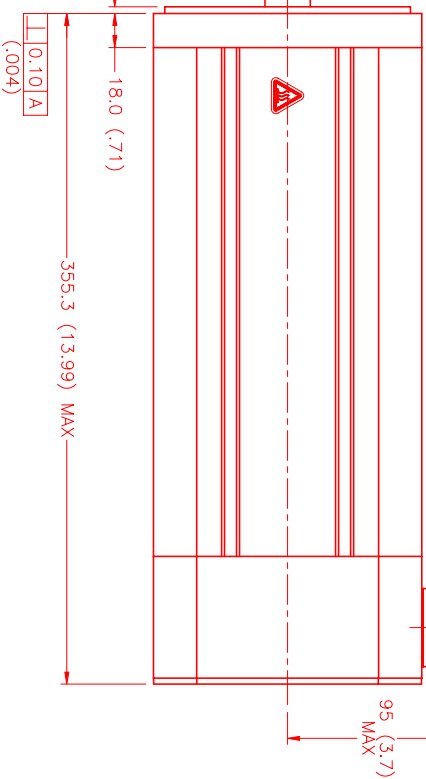
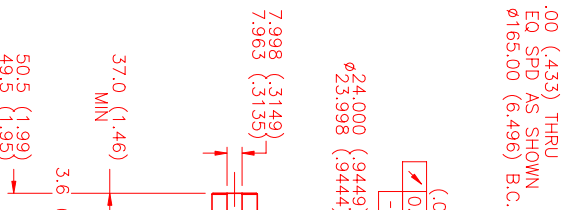
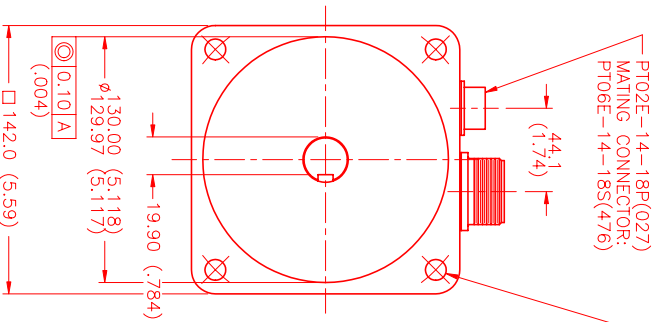
MOTOR CONNECTOR:
SG3102E-22-22P(027)
(270-00017)

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

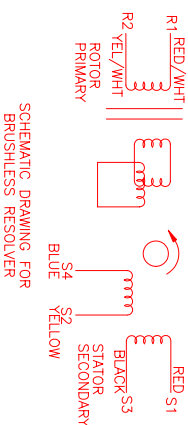
RESOLVER/THERM CONNECTOR:

PT02E-14-18P(027)
(270-00024)

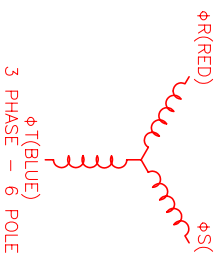
PIN	WIRE FUNCTION	WIRE COLOR
U	THERM	BLACK
N	THERM	BLACK
H	SIN	YELLOW
G	COS GND	BLACK
S	COS	RED
F	SIN GND	BLUE
R	REF GND	YEL/WHIT
E	REF	RED/WHIT
D	RES. SHLD	GRN/YEL
P	GND	GRN/YEL
A	BRK (+)	DIODE
B	BRK (-)	1N4007
C	BRK SHLD	-
J	-	-
K	-	-
L	-	-
M	-	-
T	-	-



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



SCHEMATIC DRAWING FOR
BRUSHLESS RESOLVER



REV.	DESCRIPTION	DATE	APP'D.
PRELIMINARY		8/31/00	MVS

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			

DATE: 8/31/00
DRAWN: MVS
CHECKED:
APPROVED:

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