

MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
MOTOR HORSEPOWER	HP RATED	7.5
	KW RATED	5.7
MAX. OPERATING SPEED	N MAX RPM	3400
SPEED @ RATED TORQUE	N RATED RPM	2800
* CONTINUOUS RATED TORQUE @ 2800 RPM	IN-LBS[Nm]	170.0 [19.2]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	210.0 [23.7]
CONTINUOUS LINE CURRENT	AMPS/(RMS/φ)	11.2
PEAK TORQUE	IN-LBS[Nm]	630.0 [70.8]
PEAK CURRENT	AMPS/(RMS/φ)	33.5
MAX. THEORETICAL ACCEL.	RAD/SEC ²	33,511
TORQUE SENSITIVITY	Kt [N-LBS/AMP/(RMS/φ)]/[Nm/AMP/(RMS/φ)]	18.2 [2.1]
BACK EMF (LINE TO LINE)	Vrms/Krpm	115.0
D.C. RESISTANCE (P-P)	OHMS	0.68
INDUCTANCE (P-P)	MILLIHENRIES	5.6
ROTOR INERTIA	Jm [IN-LBS-SEC ²] [Kg-M ²]	.0188 [0.0212]
STATIC FRICTION	Tf [IN-LBS[Nm]]	3.0 [3.4]

*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.

ENCODER: (290-00073)

OH48-2048P6-L6-SV

- 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: 48.2 LBS. [21.9 Kg]
 5. MOTOR FINISH: BLACK EPOXY
 6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
 7. MILLIMETERS (INCHES)

CONNECTION CHART

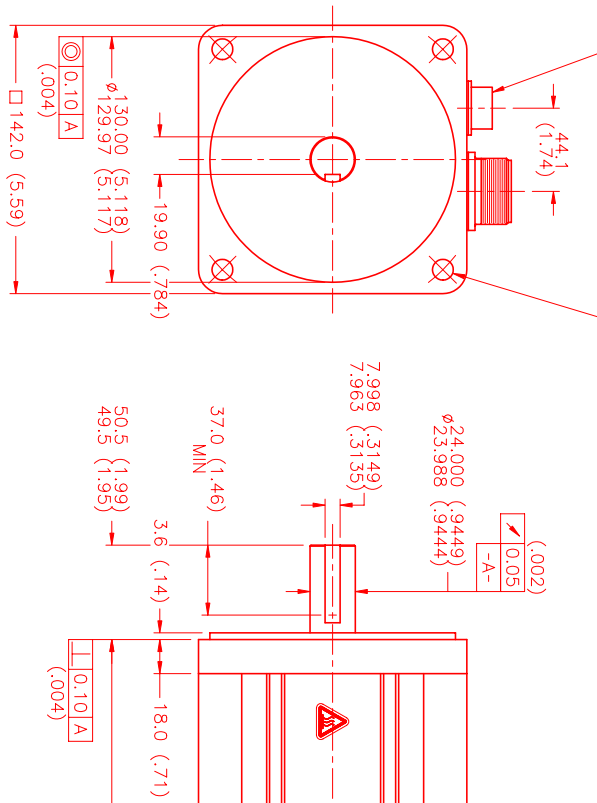
MOTOR CONNECTOR:
SG3102E-22-22P(027)
(270-00017)

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

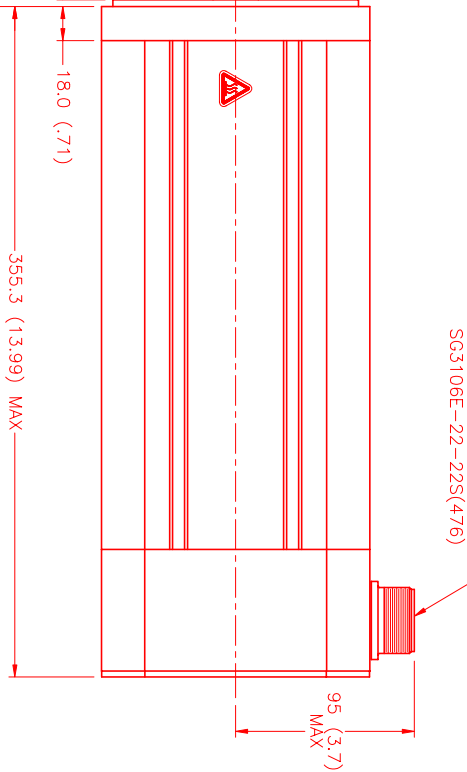
ENCODER/THERM CONNECTOR:
PT02E-14-18P(027)
(270-00024)

ENC/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK
K	+5VDC	RED
B	CH A	BLUE
C	CH A	BLUE/BLK
N	CH B	GREEN
P	CH B	GRN/BLK
M	CH Z	YELLOW
U	CH Z	YEL/BLK
E	CH U	BROWN
R	CH U	BRN/BLK
F	CH V	GRAY
S	CH V	GRAY/BLK
G	CH W	WHITE
H	CH W	WHT/BLK
D	GND/CABLE SHLD	BLACK
A	THERM	BLACK
L	THERM	BLACK
J	GND	GRN/YEL

PT02E-14-18P(027)
MATING CONNECTOR:
PT06E-14-18S(476)



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



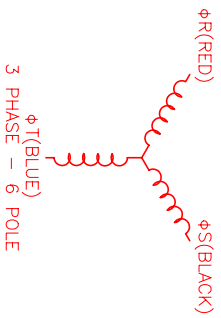
MOTOR & HALL POSITION CHART

HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

VIEW ON THE OSCILLOSCOPE

MOTOR ROTATION COW (COUNTER CLOCKWISE)
(LOOKING AT THE FACE OF THE MOTOR)

WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



NO.	PART NUMBER	DESCRIPTION	QTY.
1	MTS	MTS Systems Corporation Automation Division	

DATE: 11/28/00
DRAWN: AIS
CHECKED: MTS
APPROVED: MPM1422CSJ7JY1N

SCALE: 1/2:1

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		11/28/00	AIS

DATE: C:/SINE/460/MET/T2048/CONN
DRAWING NUMBER: MPM1422CSJ7JY1N