

MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	4.9
KILOWATTS	KW RATED	3.6
MAX. OPERATING SPEED	N MAX	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	9.8
PEAK TORQUE	IN-LBS [Nm]	390.0 [43.9]
PEAK CURRENT	AMPS	29.6
MAX. THEORETICAL ACCEL.	RAD/SEC ²	36,792
TORQUE SENSITIVITY	Kt [N-LBS/AMP] [Nm/AMP]	12.9 [1.5]
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	Jm [N-LBS-SEC ²] [kg-M ²]	.0106 [0.0119]
STATIC FRICTION	Tf [N-LBS] [Nm]	2.4 [.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:

1. AXIAL LOAD: 50 LBS MAX
2. RADIAL LOAD: 150 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65
4. MOTOR WEIGHT: 32.8 LBS. [14.9 kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

ENCODER: (290-00052)

OIH48-2000P6-16-5V

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	PIN	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	
A	THERM	BLACK	
L	THERM	BLACK	
J	GND	GRN/YEL	

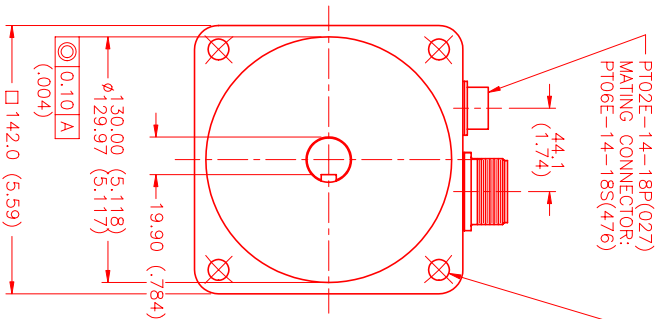
MOTOR & HALL POSITION CHART

HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK
VIEW ON THE OSCILLOSCOPE			

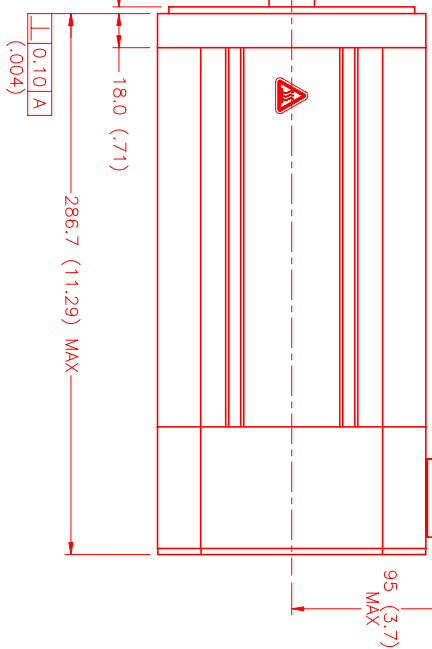
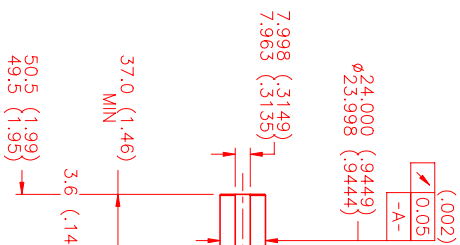
*MOTOR ROTATION CCM (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)



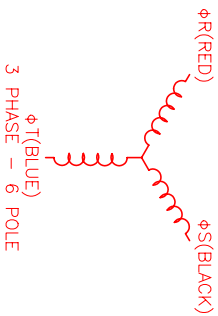
WAVE REPRESENTING HALL SENSOR



Φ11.00 (.433) THRU (4) EO SPD AS SHOWN ON Φ1.65(.064) B.C.



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



NO.	PART NUMBER	DESCRIPTION	QTY.
1	UNLSE3500	UNLSE3500	1
2	MTS	MTS Systems Corporation Automation Division	1
3	DATE: 8/9/99	TITLE: "C"/TRAP/460/MET/72000/CONN	REV: 1/2-1
4	DESIGNED BY: MVS	CHECKED BY:	APPROVED BY:
5	DRAWING NUMBER: MPM1421CTUJN1N	SCALE: 1/2-1	