

MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	13.1
KILOWATTS	KW	9.8
MAX. OPERATING SPEED	N. MAX RPM	3000
SPEED @ RATED TORQUE	RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS[Nm]	344.0 [38.6]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	400.0 [44.9]
CONTINUOUS LINE CURRENT	AMPS	22.5
PEAK TORQUE	IN-LBS[Nm]	1200.0 [134.8]
PEAK CURRENT	AMPS	67.4
MAX. THEORETICAL ACCEL.	RAD/SEC ²	29,197
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	1.41
INDUCTANCE (P-P)	MILLIHENRIES	15.5
ROTOR INERTIA	Jm [IN-LBS-SEC ²][Kg-M ²]	.0411 [0.00464]
STATIC FRICTION	Tf [IN-LBS][Nm]	8.2 [.92]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 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: 67 LBS [30.4 kg]
 - MOTOR FINISH: BLACK EPOXY
 - MILLIMETERS (INCHES)

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

ENCODER: (290-00064)
OH48-1000P6-L6-5V

CONNECTION CHART

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

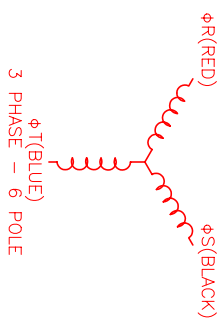
MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL

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

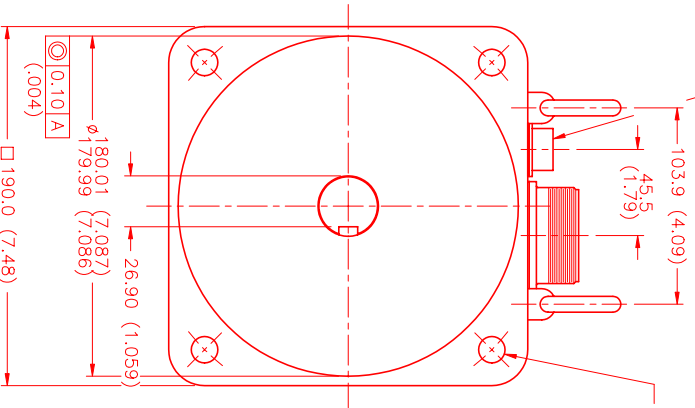
ENC/THERM WIRE LEADS	PIN	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK	
K	+5VDC	RED	
B	CH A	BLUE	
C	CH A	BLUE/BLK	
N	CH B	GREEN	
P	CH B	GRN/BLK	
M	CH Z	YELLOW	
U	CH Z	YEL/BLK	
E	CH U	BROWN	
R	CH U	BRN/BLK	
F	CH V	GRAY	
S	CH V	GRAY/BLK	
G	CH W	WHITE	
H	CH W	WHT/BLK	
D	GND/CABLE	SHLD	
A	THERM	BLACK	
L	THERM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

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

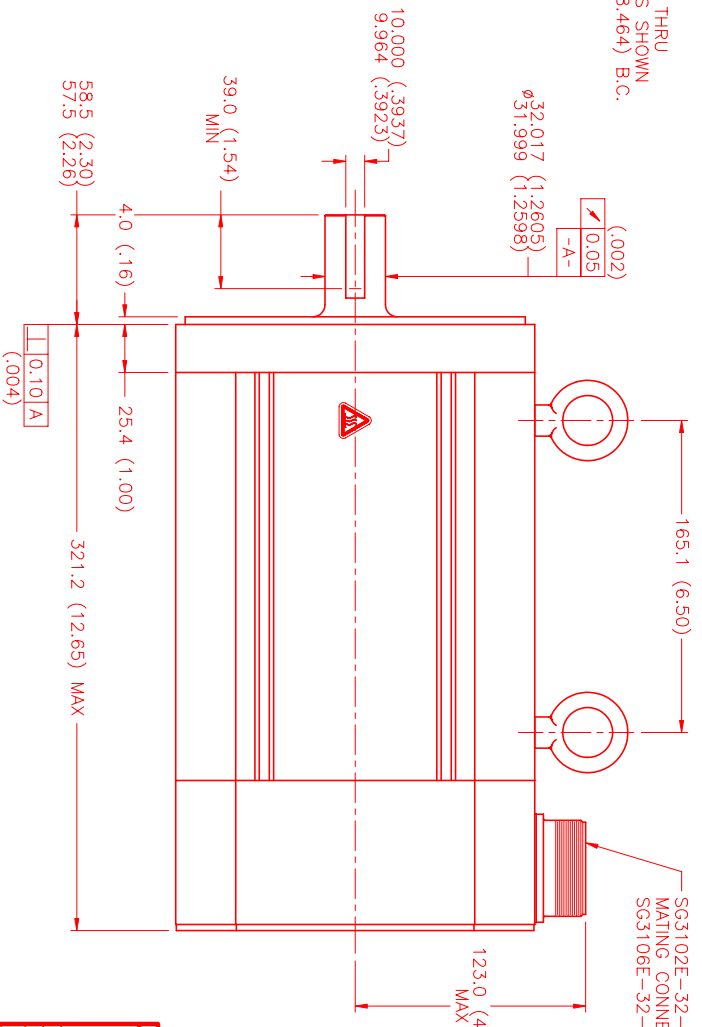
MOTOR & HALL POSITION CHART



ON THE OSCILLOSCOPE
WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



Ø14.00 (.551) THRU
(4) EQ SPD AS SHOWN
ON Ø215.00 (8.464) B.C.



SG3102E-32-17P(027)
MATING CONNECTOR:
SG3106E-32-17S(476)

NO.	PART NUMBER	DESCRIPTION	QTY
1	SG3102E-32-17P(027)	MOTOR	1
2	SG3106E-32-17S(476)	MATING CONNECTOR	1

UNLESS SPECIFIED	DESIGNATION	DATE	APP'D.
DESIGN: MVS	8/13/99	8/16/99	MVS
CHECKED:			
DATE: 8/13/99	TITLE: "C"/TRAP/460/MET/71/CONN		
APPROVED:	DRAWING NUMBER: MPM1901CTU7JM1N	SCALE: 1/2:1	

MTS Systems Corporation
Automation Division