

MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
KILOWATTS	HP RATED	2.9
MAX. OPERATING SPEED	KW RATED	2.1
SPEED @ RATED TORQUE	N MAX RPM	1750
* CONTINUOUS RATED TORQUE @ 1500 RPM	RPM	1500
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	120.0 [13.5]
CONTINUOUS LINE CURRENT	AMPS	130.0 [14.7]
PEAK TORQUE	IN-LBS [Nm]	4.9
PEAK CURRENT	AMPS	390.0 [43.9]
MAX. THEORETICAL ACCEL.	AMP/S	14.8
TORQUE SENSITIVITY	RAD/SEC ²	36.792
BACK EMF (LINE TO LINE)	Kt [IN-LBS/AMP] [Nm/AMP]	26.6 [3.0]
D.C. RESISTANCE (P-P)	Vrms/Krpm	230.0
INDUCTANCE (P-P)	OHMS	6.8
ROTOR INERTIA	MILLIHENRIES	48.9
STATIC FRICTION	Jm [IN-LBS-SEC ²] [Kg-M ²]	.0106 [0.0119]
	Tf [IN-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: (290-00102)
OH48-4096P6-16-5V

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
A	T	GROUND	BLACK
B	K	+5VDC	RED
C	B	CH A	BLUE
D	C	CH A\	BLUE/BLK
E	N	CH B	GREEN
F	P	CH B\	GRN/BLK
G	M	CH Z	YELLOW
H	U	CH Z\	YEL/BLK
I	E	CH U	BROWN
J	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

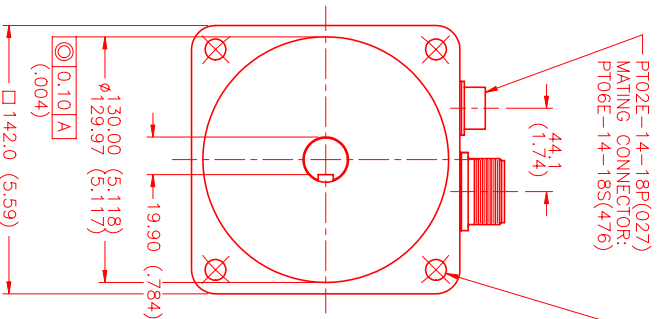
MOTOR & HALL POSITION CHART

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 CWM (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)

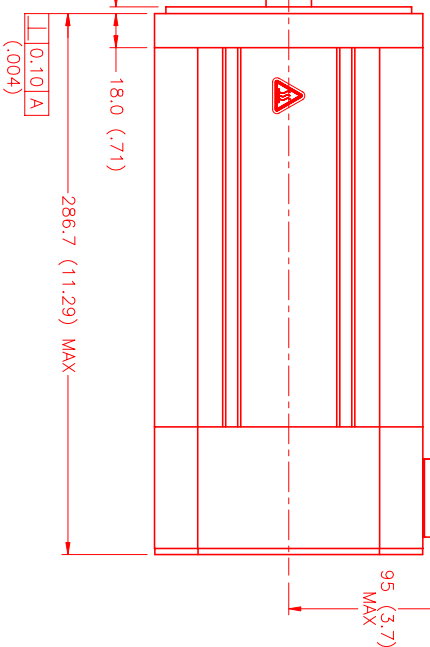
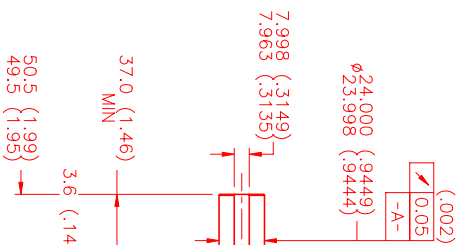


WAVE REPRESENTING HALL SENSOR

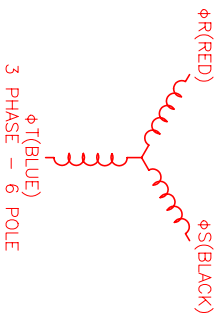


PT02E-14-18P(027) MATING CONNECTOR: PT06E-14-18S(476)

Φ11.00 (.433) THRU (4) EO SPD AS SHOWN ON Φ165.00 (6.496) B.C.



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



3 PHASE - 6 POLE

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL: .005 & .010			
FRACTIONAL: 1/16, 1/8, 1/4, 1/2			
ANGLE: 1/2°			
DRAWN: MVS			
DATE: 4/21/99			
CHECKED:			
APPROVED:			
ISSUING ENGINEER: MPM1421DUJZ1N			
SCALE: 1/2:1			

REV.	DESCRIPTION	DATE	APP'D.
PRELIMINARY		5/3/99	ELS

DATE:	REV:	DESCRIPTION:	REVISED BY:
5/3/99	PRELIMINARY		

MTS MTS Systems Corporation
Automation Division