

MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	3.3
KILOWATTS	KW RATED	2.5
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	IN-LBS [Nm]	69.1 [7.8]
* CONTINUOUS STALL TORQUE	IN-LBS [Nm]	83.0 [9.3]
CONTINUOUS LINE CURRENT	AMPS	6.7
PEAK CURRENT	AMPS	290.5 [32.7]
MAX. THEORETICAL ACCEL.	RAD/SEC ²	23.4
TORQUE SENSITIVITY	KT [IN-LBS/AMP] [Nm/AMP]	44.0 [15]
BACK EMF (LINE TO LINE)	Vrms/Krpm	12.4 [1.40]
D.C. RESISTANCE (P-P)	OHMS	110.0
INDUCTANCE (P-P)	MILLIHENRIES	1.8
ROTOR INERTIA	Jm [IN-LBS-SEC ²] [Kg-M ²]	0.0066 [0.0074]
STATIC FRICTION	Tf [IN-LBS] [Nm]	1.4 [16]

*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: 100 LBS MAX @ 1" FROM FACE
 - MOTOR SEALED TO IP65.
 - MOTOR WEIGHT: 26.4 LBS. [12.0 kg]
 - MOTOR FINISH: BLACK EPOXY
 - MOTOR OUTPUT SHAFT: STAINLESS STEEL
 - MILLIMETERS (INCHES)

ENCODER: (290-00075)
OH48-6000P6-L6-5V

CONNECTION CHART

MOTOR CONNECTOR:
PT02E-14-5P(027)
(270-00026)

MOTOR WIRE	WIRE LEADS
PIN	FUNCTION
A	ΦR
B	ΦS
C	ΦT
D	PE GND
E	-

ENCODER/THERM CONNECTOR:

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

ENC/THERM WIRE	WIRE LEADS
PIN	FUNCTION
T	GROUND
K	+5VDC
B	CH A
C	CH A \
N	CH B
P	CH B \
M	CH Z
U	CH Z \
E	CH U
R	CH U \
F	CH V
S	CH V \
G	CH W
H	CH W \
D	GND/CABLE SHLD
A	THERM
L	THERM
J	GND

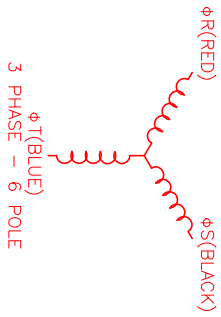
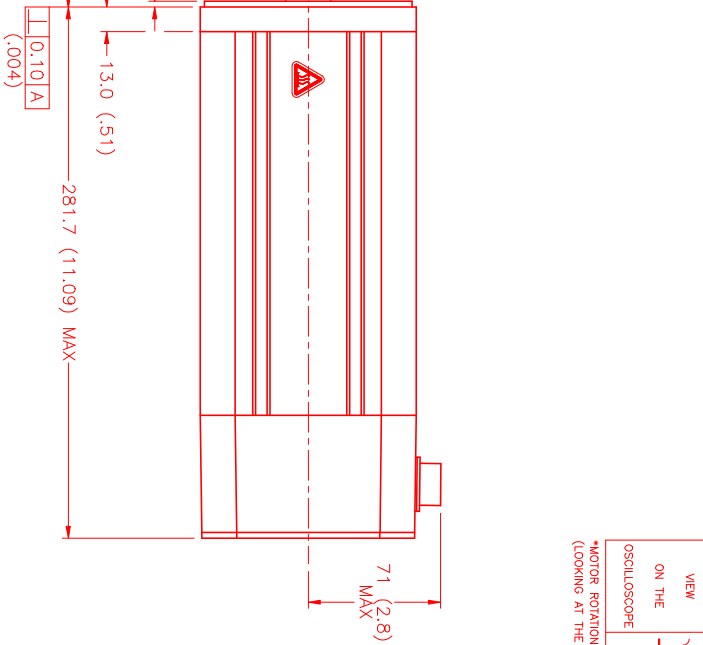
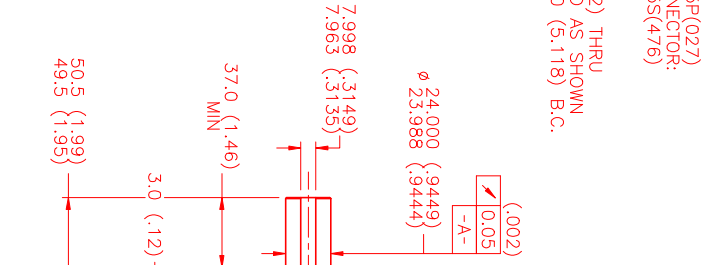
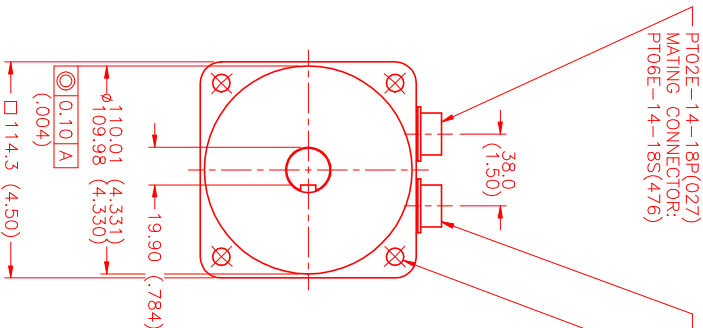
MOTOR & HALL POSITION CHART

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

WAVE REPRESENTING STATOR OUTPUT
 WAVE REPRESENTING HALL SENSOR



REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		10/27/00	AJS

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DESIGN: MPM 1142CTUJTIN			
DATE: 10/27/00			
SCALE: 1/2:1			

MTS
Automation Division

DATE: 10/27/00
SCALE: 1/2:1
DRAWING NUMBER: MPM1142CTUJTIN