

MOTOR DATA @ 110 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	0.46
KILOWATTS	KW	0.35
MAX. OPERATING SPEED	N. MAX RPM	2600
SPEED @ RATED TORQUE	N RATED RPM	2000
* CONTINUOUS RATED TORQUE @ 2000 RPM	IN-LBS[Nm]	14.5[1.60]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	16.0[1.81]
CONTINUOUS LINE CURRENT	AMPS	4.0
PEAK TORQUE	IN-LBS[Nm]	48.0[5.42]
PEAK CURRENT	AMPS	11.0
MAX. THEORETICAL ACCEL.	RAD/SEC ²	78,049
TORQUE SENSITIVITY	Kt [IN-LBS/AMP/Nm/AMP]	4.2[.48]
BACK EMF (LINE TO LINE)	Vrms/Krpm	37.6
D.C. RESISTANCE (P-P)	OHMS	3.8
INDUCTANCE (P-P)	MILLIHENRIES	10.4
ROTOR INERTIA	Jm [IN-LBS-SEC ²] Kg-M ²	0.000615[0.0000693]
STATIC FRICTION	Tf [IN-LBS] [Nm]	0.4[0.05]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 10" X 10" X 1/4" 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: 25 LBS MAX
- RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 6.8 LBS. [3.1 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

ENCODER: (290-00052)
OH48-2000P6-16-5V

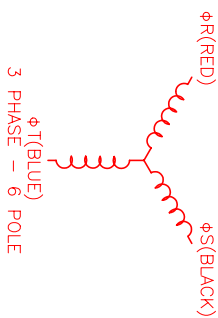
CONNECTION CHART

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

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

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

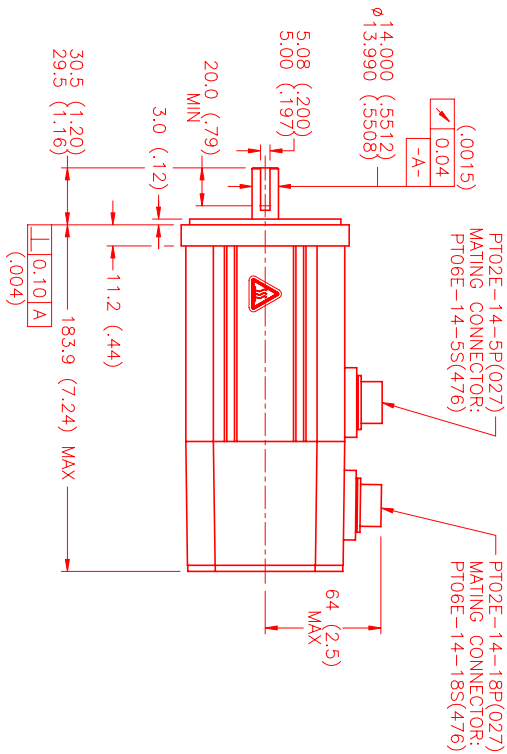
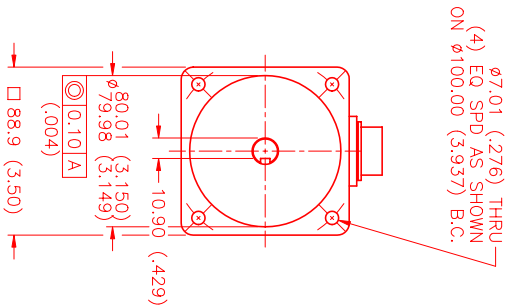
MOTOR WIRE LEADS	PIN	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED	RED
B	ΦS	BLUE	BLACK
C	ΦT	BLUE	BLUE
D	PE GND	GRN/YEL	GRN/YEL
E	-	-	-



MOTOR & HALL POSITION CHART

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

*MOTOR ROTATION CCW (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)
WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



PT02E-14-5P(027)
MATING CONNECTOR:
PT06E-14-5S(476)

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

REV: PRELIMINARY	DESCRIPTION: MPM891ATF7UN1N	DATE: 4/7/00	APPD: AJS
REVISIONS			
DRAWING NUMBER: MPM891ATF7UN1N			
TITLE: "A" /TRAP /110/MET /T2/CONN			
NO. PART NUMBER	DESCRIPTION	QTY.	
UNLESS SPECIFIED			
DECIMAL ANG ± .005			
FRAC ANG ± .002			
DIAM ANG ± .002			
ANG ± 1/2°			
FORM: AJS			
DATE: 4/7/00			
CHECKED:			
APPROVED:			
DRAWING NUMBER: MPM891ATF7UN1N	SCALE: 1/2:1		

MTS Systems Corporation
Automation Division