MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	1.63
KILOWATTS	KW RATED	KW	1.22
MAX. OPERATING SPEED	N MAX	RPM	5000
SPEED @ RATED TORQUE	N RATED	RPM	4000
* CONTINUOUS RATED TORQUE @ 4000 RPM		IN-LBS[Nm]	25.5[2.9]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	30.0[.34]
CONTINUOUS LINE CURRENT		AMPS(RMS/Φ)	2.6
PEAK TORQUE	Tpk	IN-LBS[Nm]	105.0[11.9]
PEAK CURRENT		AMPS(RMS/Φ)	9.1
MAX. THEORETICAL ACCEL.		RAD/SEC²	105,954
TORQUE SENSITIVITY	Kt	IN-LBS/AMP(RMS/Φ)[Nm/AMP(RMS/Φ)]	11.6[1.3]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	73.2
D.C. RESISTANCE (P-P)	±10%	OHMS	5.52
INDUCTANCE (P-P)	±10%	MILLIHENRIES	17.4
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	.000991[.0001116]
STATIC FRICTION	Tf	IN-LBS[Nm]	.5[.06]

*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:
1. AXIAL LOAD: 25 LBS MAX
2. RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 11.7 LBS. [5.3 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

FAILSAFE BRAKE:
MIN HOLDING TORQUE: 60 IN-LBS
INPUT VOLTAGE: 24 VOLTS

ENCODER: (290-00107)
OIH48-4096P6-L6-5V

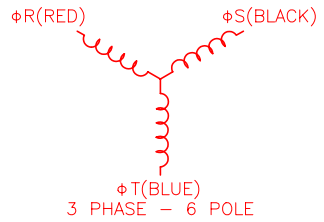
CONNECTION CHART

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

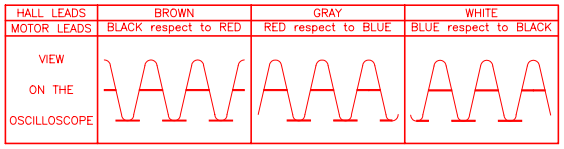
ENC/THERM WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK
K	+5VDC	RED
B	CH A	BLUE
C	CH A\	BLUE/BLK
N	CH B	GREEN
P	CH B\	GREEN/BLK
M	CH Z	YELLOW
U	CH Z\	YEL/BLK
E	CH U	BROWN
R	CH U\	BROWN/BLK
F	CH V	GRAY
S	CH V\	GRAY/BLK
G	CH W	WHITE
H	CH W\	WHITE/BLK
D	GND/CABLE	SHIELD
A	THERM	BLACK
L	THERM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

MOTOR/BRAKE CONNECTOR: PT02E-16-8P(027) (270-00032)

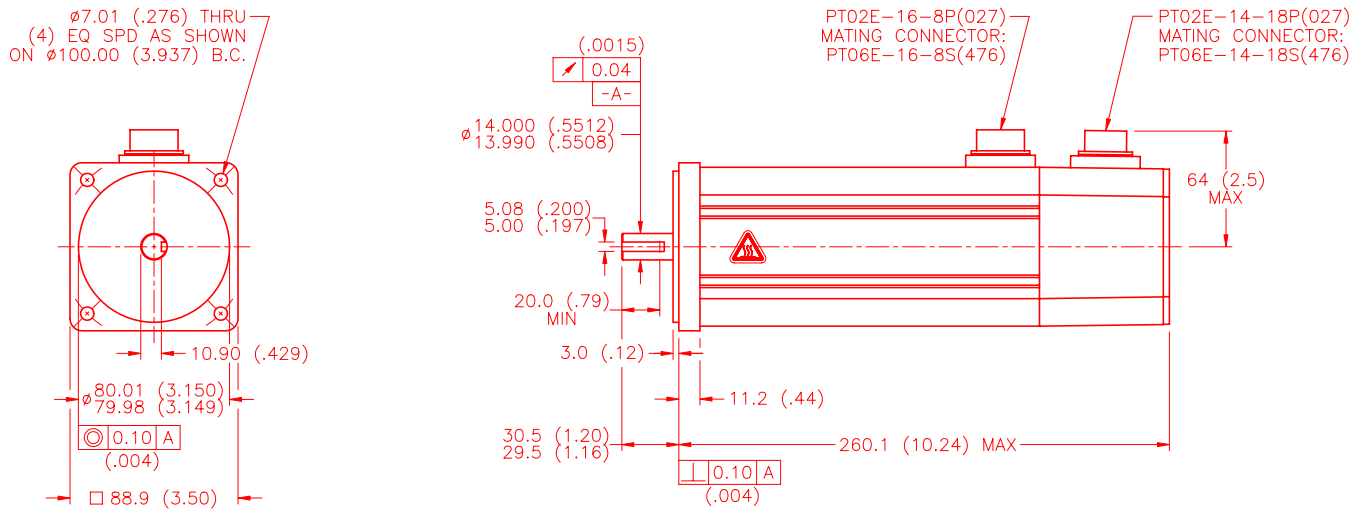
MOTOR/BRAKE WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL
E	BRK SHLD	–
F	BRK (+)	DIODE 1N4007
G	BRK (–)	
H	–	–



MOTOR & HALL POSITION CHART



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



REVISIONS			
REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	12/19/01	AJS

TITLE: "C"/SINE/460/MET/T4096/CONN/BRK
DRAWING NUMBER: MPM892CSJ7JZ1R

NO.	PART NUMBER	DESCRIPTION	QTY.

TOLERANCES UNLESS SPECIFIED
DECIMAL .XXX ± .005
DECIMAL .XX ± .010
DECIMAL .X ± .020
FRACTION ± 1/64
ANGLE ± 1/2°

MTS Systems Corporation
Automation Division

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DRAWN: AJS
DATE: 12/19/01
CHECKED:
APPROVED:
TITLE: "C"/SN/460/MET/T4096/CN/BRK
REV.
MATERIAL:
DRAWING NUMBER: MPM892CSJ7JZ1R
SCALE: 1/2:1