MOTOR DATA @ 110 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	.48
KILOWATTS	KW RATED	KW	.35
MAX. OPERATING SPEED	N MAX	RPM	6500
SPEED @ RATED TORQUE	N RATED	RPM	5000
* CONTINUOUS RATED TORQUE @ 5000 RPM		IN-LBS[Nm]	6.0[.68]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	10.0[1.12]
CONTINUOUS LINE CURRENT		AMPS	5.0
PEAK TORQUE	Tpk	IN-LBS[Nm]	30.0[3.4]
PEAK CURRENT		AMPS	10.0
MAX. THEORETICAL ACCEL.		RAD/SEC²	163,043
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	2.0[.23]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	17.8
D.C. RESISTANCE (P-P)	±10%	OHMS	3.1
INDUCTANCE (P-P)	±10%	MILLIHENRIES	5.1
ROTOR INERTIA W/BRAKE	Jm	IN-LBS-SEC²[Kg-M²]	.000184[.0000207]
STATIC FRICTION	Tf	IN-LBS[Nm]	.8[.09]

*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: 15 LBS MAX
2. RADIAL LOAD: 20 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 4.3 LBS. [2.0 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)

ENCODER: (290-00056)
OIH35-2000P4-L6-5V

FAILSAFE BRAKE:
MIN HOLDING TORQUE: 10 IN-LBS
INPUT VOLTAGE: 24 VOLTS

CONNECTION CHART
MOTOR/ENCODER/THERM/BRAKE CONNECTOR:
PT02E-16-23P(027)
(270-00219)

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

ENC/THERM/BRK WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
T	GROUND	BLACK
E	+5VDC	RED
F	CH A	BLUE
U	CH A\	BLUE/BLK
G	CH B	GREEN
V	CH B\	GRN/BLK
H	CH Z	YELLOW
W	CH Z\	YEL/BLK
J	CH U	BROWN
K	CH U\	BRN/BLK
X	CH V	GRAY
L	CH V\	GRAY/BLK
Y	CH W	WHITE
M	CH W\	WHT/BLK
N	GND/CABLE	SHLD
S	THERM	BLACK
R	THERM	BLACK
P	BRK (+)	DIODE
Z	BRK (-)	1N4007

TITLE: "A"/110/ENG/T2/CONN/BRK	DRAWING NUMBER: MPM664ATF6JN1R

REVISIONS

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	8/27/99	MVS

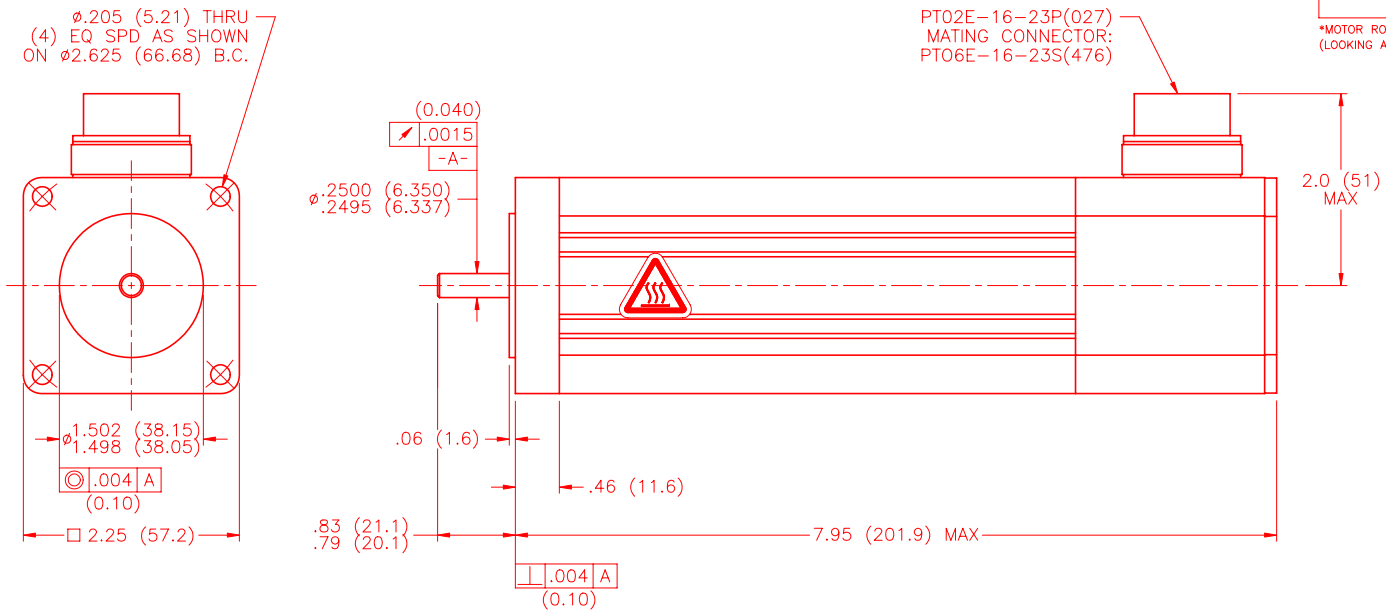
MOTOR & HALL POSITION CHART

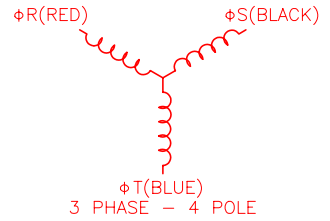
HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

VIEW ON THE OSCILLOSCOPE

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

WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR





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

DRAWN: MVS	TITLE: "A"/110/ENG/T2/CONN/BRK	REV.
DATE: 8/26/99		
CHECKED:	MATERIAL:	
APPROVED:	DRAWING NUMBER: MPM664ATF6JN1R	SCALE: 1:1