MOTOR DATA @ 110 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	0.46
KILOWATTS	KW RATED	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[1.6]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	16.0[1.8]
CONTINUOUS LINE CURRENT		AMPS	4.0
PEAK TORQUE	Tpk	IN-LBS[Nm]	48.0[5.4]
PEAK CURRENT		AMPS	11.0
MAX. THEORETICAL ACCEL.		RAD/SEC²	62,745
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	4.2[0.48]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	37.6
D.C. RESISTANCE (P-P)	±10%	OHMS	3.8
INDUCTANCE (P-P)	±10%	MILLIHENRIES	9.4
ROTOR INERTIA W/BRAKE	Jm	IN-LBS-SEC²[Kg-M²]	0.000765[0.0000861]
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:

1. AXIAL LOAD: 25 LBS MAX
2. RADIAL LOAD: 40 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 9.2 LBS [4.2 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)

FAILSAFE BRAKE:

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

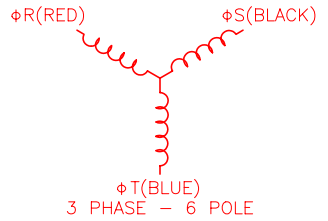
CONNECTION CHART

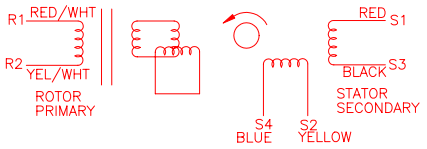
MOTOR/BRAKE CONNECTOR: PT02E-16-8P(027) (270-00032)

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	–	–

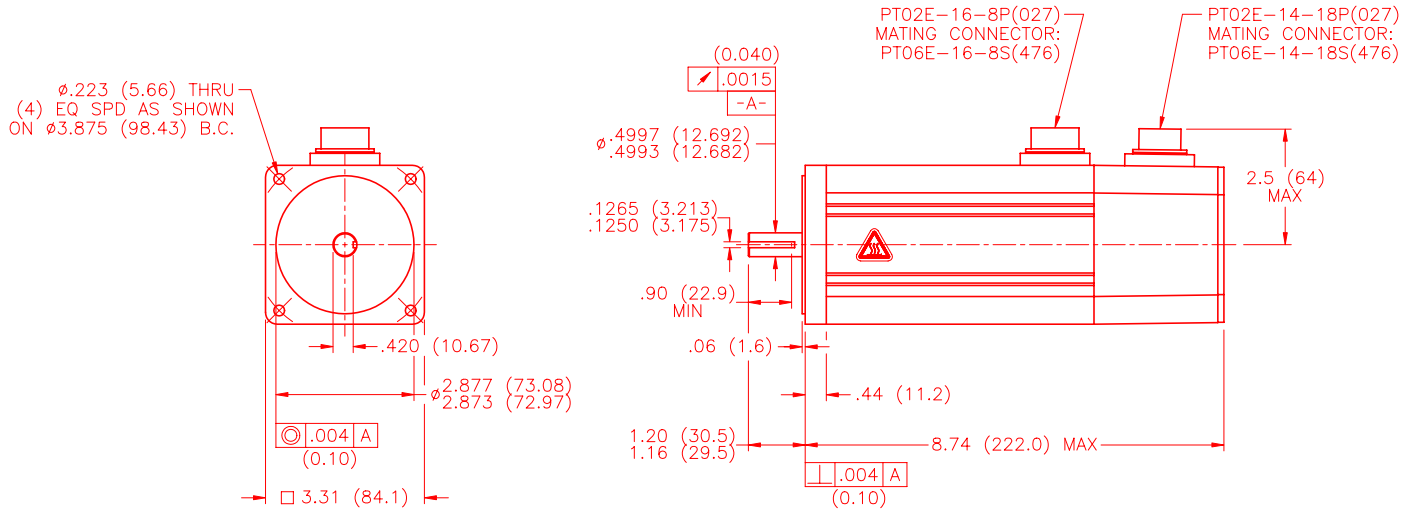
RESOLVER/THERM CONNECTOR: PT02E-14-18P(027) (270-00024)

RES/THERM WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
U	THERM	BLACK
N	THERM	BLACK
H	SIN	YELLOW
G	COS GND	BLACK
S	COS	RED
F	SIN GND	BLUE
R	REF GND	YEL/WHT
E	REF	RED/WHT
D	RES SHLD	GRN/YEL
P	GND	GRN/YEL
A	–	–
B	–	–
C	–	–
J	–	–
K	–	–
L	–	–
M	–	–
T	–	–





SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



REVISIONS			
REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	4/1/99	MVS

TITLE: "A"/TRAP/110/ENG/RES/CONN/BRK
DRAWING NUMBER: MPM891ATF6G1R

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

PROPRIETARY RIGHTS OF MTS AUTOMATION ARE INCLUDED IN THE INFORMATION DISCLOSED HEREIN. THIS DRAWING AND/OR DOCUMENT SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR USED OR DISCLOSED TO OTHERS FOR ANY PURPOSE EXCEPT FOR WHICH IMA SPECIFICALLY FURNISHED.

DRAWN: MVS
DATE: 4/1/99
CHECKED:
APPROVED:
TITLE: "A"/TRAP/110/ENG/RES/CONN/BRK
REV.
MATERIAL:
DRAWING NUMBER: MPM891ATF6G1R
SCALE: 1/2:1