Ⓐ MOTOR DATA @ 230 VAC (TRAP)			
MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	0.79
KILOWATTS	KW RATED	KW	0.58
MAX. OPERATING SPEED	N MAX	RPM	4000
SPEED @ RATED TORQUE	N RATED	RPM	3000
* CONTINUOUS RATED TORQUE @ 3500 RPM		IN-LBS[Nm]	16.6[1.88]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	18.8[2.12]
CONTINUOUS LINE CURRENT		AMPS	3.2
PEAK TORQUE	Tpk	IN-LBS[Nm]	56.0[6.4]
PEAK CURRENT		AMPS	9.7
MAX. THEORETICAL ACCEL.		RAD/SEC²	110,000
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	5.82[0.658]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	51.8
D.C. RESISTANCE (P-P)	±10%	OHMS	5.5
INDUCTANCE (P-P)	±10%	MILLIHENRIES	13.0
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	0.00049[0.000055]
STATIC FRICTION	Tf	IN-LBS[Nm]	1.2[0.14]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 85°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.

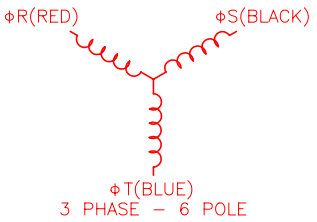
MECHANICAL NOTES:

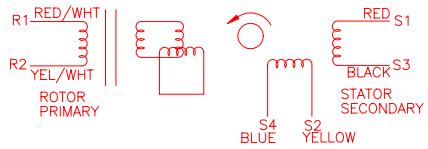
1. AXIAL LOAD: 20 LBS MAX
2. RADIAL LOAD: 35 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. Ⓐ MOTOR WEIGHT: 6.1 LBS. [2.8 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)
8. Ⓐ THIS MOTOR'S OUTPUT KEY IS A PRESS FIT.

CONNECTION CHART

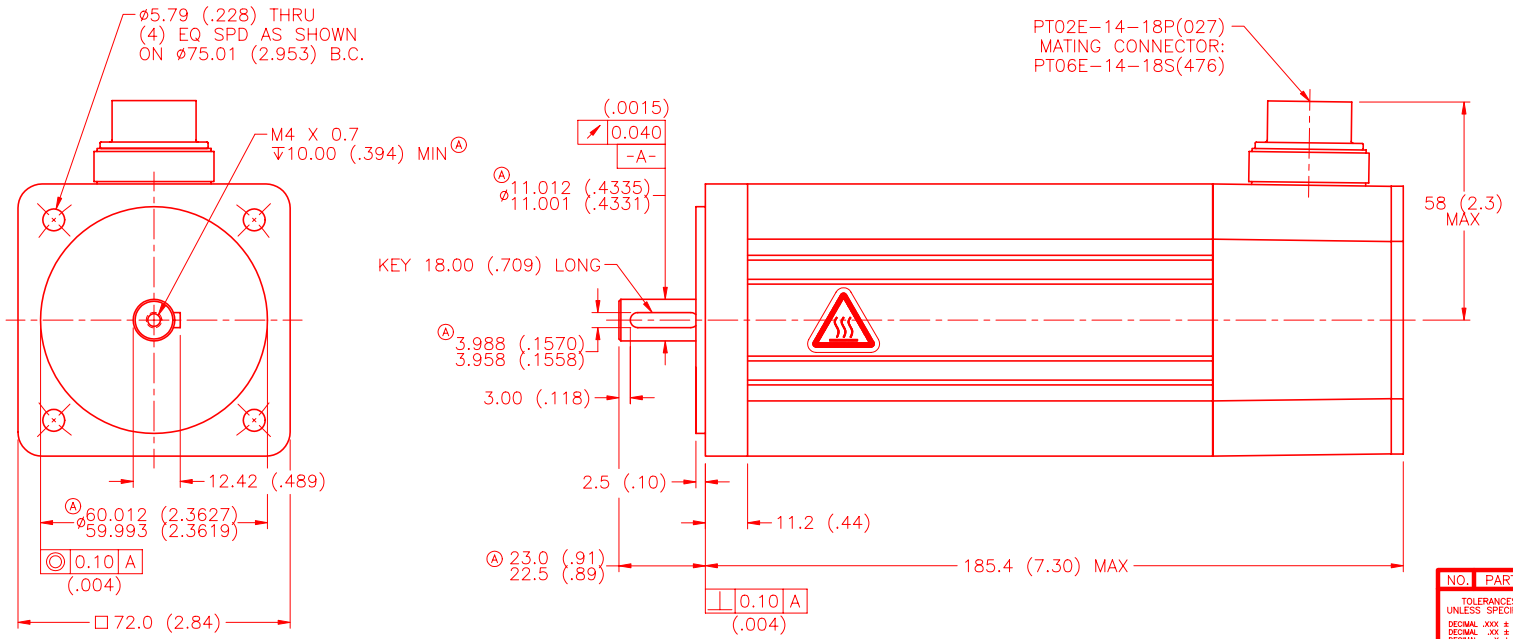
MOTOR/THERM/RESOLVER CONNECTOR:
PT02E-14-18P(027)
(270-00024)

MTR/RES/THERM WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
A	ΦR	RED
B	ΦS	BLACK
C	ΦT	BLUE
D	PE GND	GRN/YEL
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
J	RES SHLD	GRN/YEL
K	–	–
L	–	–
M	–	–
P	–	–
T	–	–





SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



REVISIONS			
REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	1/29/99	MS
A	E.C.O. – 558	2/2/00	AJS

TITLE: "C"/TRAP/230/MET/RES/CONN
DRAWING NUMBER: MPM724CTG7G1N

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: MS
DATE: 1/29/99
CHECKED:
APPROVED:
TITLE: "C"/TRAP/230/MET/RES/CONN
REV. A
MATERIAL:
DRAWING NUMBER: MPM724CTG7G1N
SCALE: 1:1