MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	1.96
KILOWATTS	KW RATED	KW	1.46
MAX. OPERATING SPEED	N MAX	RPM	4100
SPEED @ RATED TORQUE	N RATED	RPM	3600
* CONTINUOUS RATED TORQUE @ 3600 RPM		IN-LBS[Nm]	34.4[3.8]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	39.0[4.4]
CONTINUOUS LINE CURRENT		AMPS	3.2
PEAK TORQUE	Tpk	IN-LBS[Nm]	143.2[16.2]
PEAK CURRENT		AMPS	11.1
MAX. THEORETICAL ACCEL.		RAD/SEC²	104,526
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	12.4[1.4]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	110.0
D.C. RESISTANCE (P-P)	±10%	OHMS	7.8
INDUCTANCE (P-P)	±10%	MILLIHENRIES	28.2
ROTOR INERTIA	Jm	IN-LBS-SEC²[Kg-M²]	0.00137[0.000154]
STATIC FRICTION	Tf	IN-LBS[Nm]	0.6[0.07]

*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: 12.6 LBS. [5.7 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

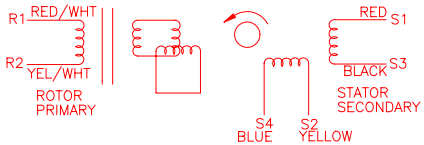
CONNECTION CHART

MOTOR/THERM CONNECTOR:
Ⓒ BEGA089NN00000007000
(270-00256)

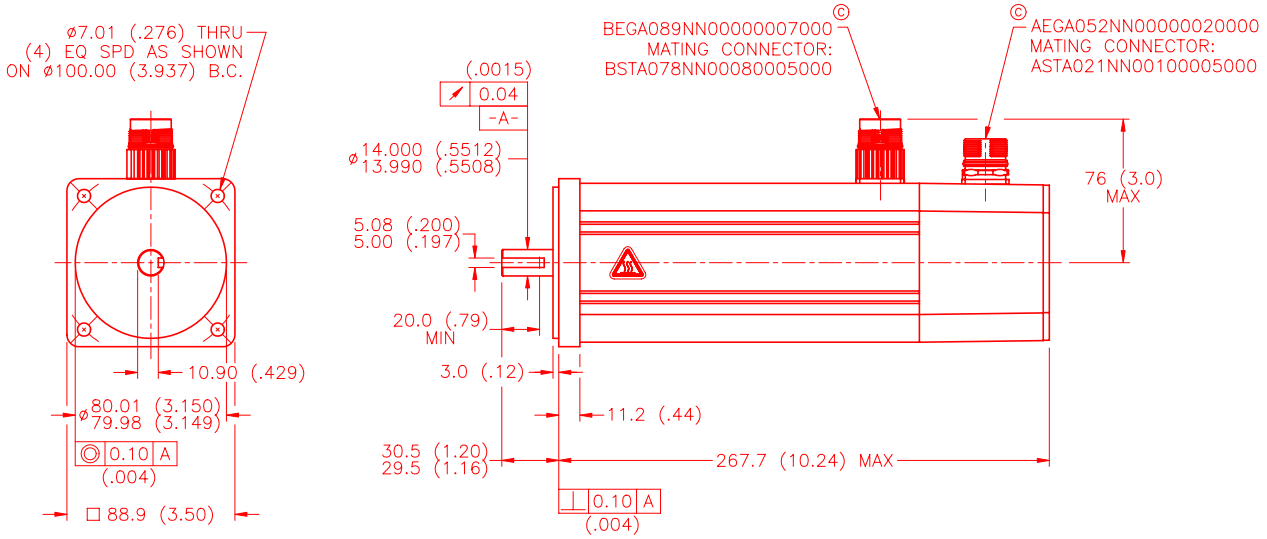
MOTOR/THERM WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
1	ΦR(U1)	RED
2	PE GND	GRN/YEL
3	ΦT(W1)	BLUE
4	ΦS(V1)	BLACK
A	–	–
B	–	–
C	THERM	BLACK
D	THERM	BLACK

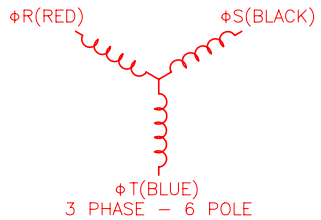
RESOLVER CONNECTOR:
Ⓒ AEGA052NN00000020000
(270-00257)

RESOLVER WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
1	–	–
2	REF(R1)	RED/WHT
3	REF GND(R2)	YEL/WHT
4	COS GND(S1)	BLACK
5	COS(S3)	RED
6	SIN(S2)	YELLOW
7	SIN GND(S4)	BLUE
8	–	–
9	–	–
10	–	–
11	–	–
12	–	–



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER





TITLE:	"C"/TRAP/460/MET/RES/INT	DRAWING NUMBER:	MPM893CTJ7G2N

REVISIONS

REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	10/29/99	MVS
A	E.C.O. – 547	11/3/99	MVS
B	E.C.O. – 572	5/25/00	AJS
C	E.C.O. – 620	4/10/01	AJS

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	TITLE: "C"/TRAP/460/MET/RES/INTERCON	REV. C
DATE: 9/9/98		
CHECKED:	MATERIAL:	
APPROVED:	DRAWING NUMBER: MPM893CTJ7G2N	SCALE: 1/2:1