MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	1.3
KILOWATTS	KW RATED	KW	1.0
MAX. OPERATING SPEED	N MAX	RPM	3800
SPEED @ RATED TORQUE	N RATED	RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM		IN-LBS [Nm]	28.0 [3.2]
* CONTINUOUS STALL TORQUE		IN-LBS [Nm]	38.0 [4.3]
CONTINUOUS LINE CURRENT		AMPS	3.0
PEAK TORQUE	Tpk	IN-LBS [Nm]	114.0 [12.9]
PEAK CURRENT		AMPS	9.0
MAX. THEORETICAL ACCEL		RAD/SEC²	80,000
TORQUE SENSITIVITY	Kt	IN-LBS/AMP [Nm/AMP]	12.4 [1.40]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	110.0
D.C. RESISTANCE (P-P)	±10%	OHMS	13.5
INDUCTANCE (P-P)	±10%	MILLIHENRIES	62.1
ROTOR INERTIA	Jm	IN-LBS-SEC² [Kg-M²]	.0019 [.00021]
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 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: 50 LBS MAX
2. RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 14.8 LBS [6.7 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. INCHES (MILLIMETERS)

CONNECTION CHART

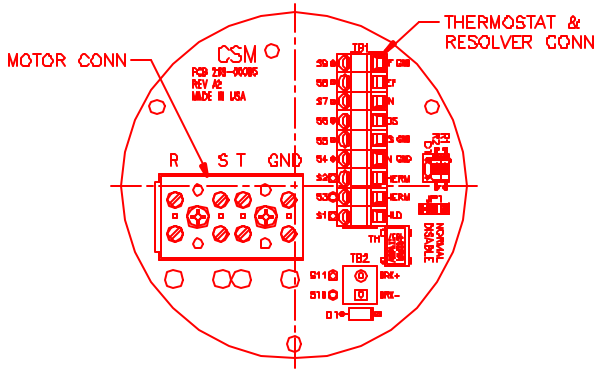
MOTOR WIRE LEADS		
TERMINAL	WIRE FUNCTION	WIRE COLOR
–	ΦR	RED
–	ΦS	BLACK
–	ΦT	BLUE
–	PE GND	GRN/YEL

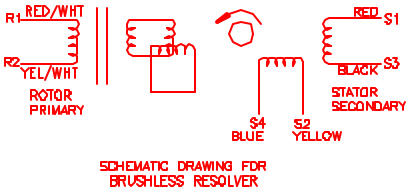
RES/THERM WIRE LEADS		
TERMINAL	WIRE FUNCTION	WIRE COLOR
S9	REF GND	YEL/WHT
S8	REF	RED/WHT
S7	SIN	YELLOW
S6	COS	RED
S5	COS GND	BLACK
S4	SIN GND	BLUE
S3	THERM	BLACK
S2	THERM	BLACK
S1	RES SHLD	GRN/YEL

TITLE	DRAWING NUMBER
"C"/TRAP/460/ENG/RES/NPT	MPM1140CTJ6G3N

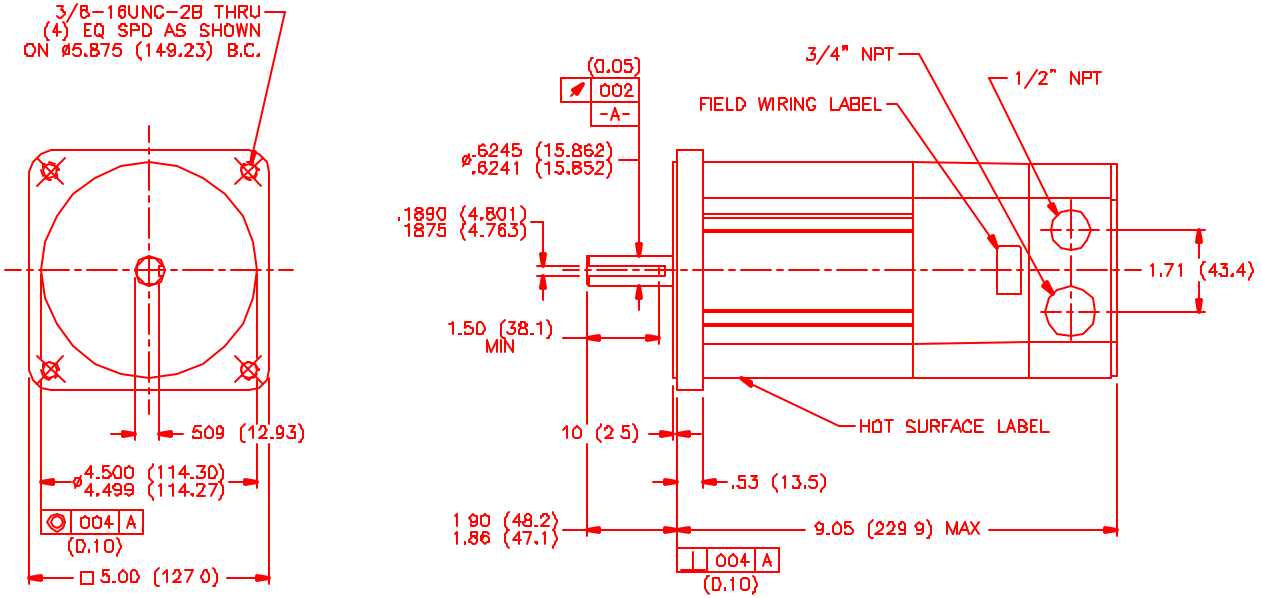
REVISIONS

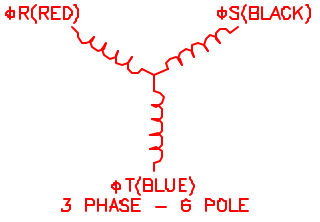
REV.	DESCRIPTION	DATE	APPD.
	PRELIMINARY	4/23/01	LIN





SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER





3 PHASE – 6 POLE

NO.	PART NUMBER	DESCRIPTION	QTY.

TOLERANCES UNLESS SPECIFIED

MTS Systems Corporation
Automation Division

PROPRIETARY INFORMATION. THE DRAWING AND THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF MTS SYSTEMS CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR OTHERWISE WITHOUT PERMISSION.

DRAWN	AJS
DATE	3/28/01
CHECKED	
APPROVED	
TITLE	"C"/TRAP/460/ENG/RES/NPT
REV	
MATERIAL	
DRAWING NUMBER	MPM1140CTJ6G3N
SCALE	1/2:1