

MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS		UNITS	VALUE
HORSEPOWER	HP RATED	Hp	2.1
KILOWATTS	KW RATED	KW	1.6
MAX. OPERATING SPEED	N MAX	RPM	4200
SPEED @ RATED TORQUE	N RATED	RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM		IN-LBS[Nm]	45.0[5.1]
* CONTINUOUS STALL TORQUE		IN-LBS[Nm]	54.0[6.1]
CONTINUOUS LINE CURRENT		AMPS	4.4
PEAK TORQUE	Tpk	IN-LBS[Nm]	189.1[21.3]
PEAK CURRENT		AMPS	15.3
MAX. THEORETICAL ACCEL		RAD/SEC ²	48,487
TORQUE SENSITIVITY	Kt	IN-LBS/AMP[Nm/AMP]	12.4[1.42]
BACK EMF (LINE TO LINE)	±10%	Vrms/Krpm	110.0
D.C. RESISTANCE (P-P)	±10%	OHMS	3.2
INDUCTANCE (P-P)	±10%	MILLIHENRIES	24.0
ROTOR INERTIA W/BRAKE	Jm	IN-LBS-SEC ² [Kg-M ²]	.0039[.00044]
STATIC FRICTION	Tf	IN-LBS[Nm]	1.0[.11]

*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:

- AXIAL LOAD: 50 LBS MAX
- RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 23.7 LBS. [10.8 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- INCHES (MILLIMETERS)

FAILSAFE BRAKE:

- MIN HOLDING TORQUE: 240 IN-LBS
 INPUT VOLTAGE: 24 VOLTS

CONNECTION CHART

MOTOR/BRAKE CONNECTOR:
 PTD2E-16-8P(027)
 (270-00032)

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

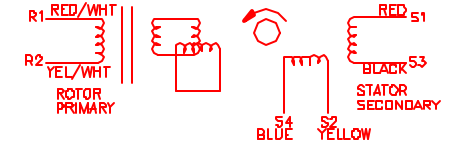
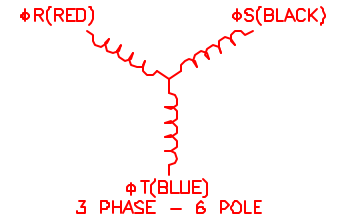
MOTOR/BRAKE WIRE LEADS

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
G	BRK (-)	1N4007
H	-	-

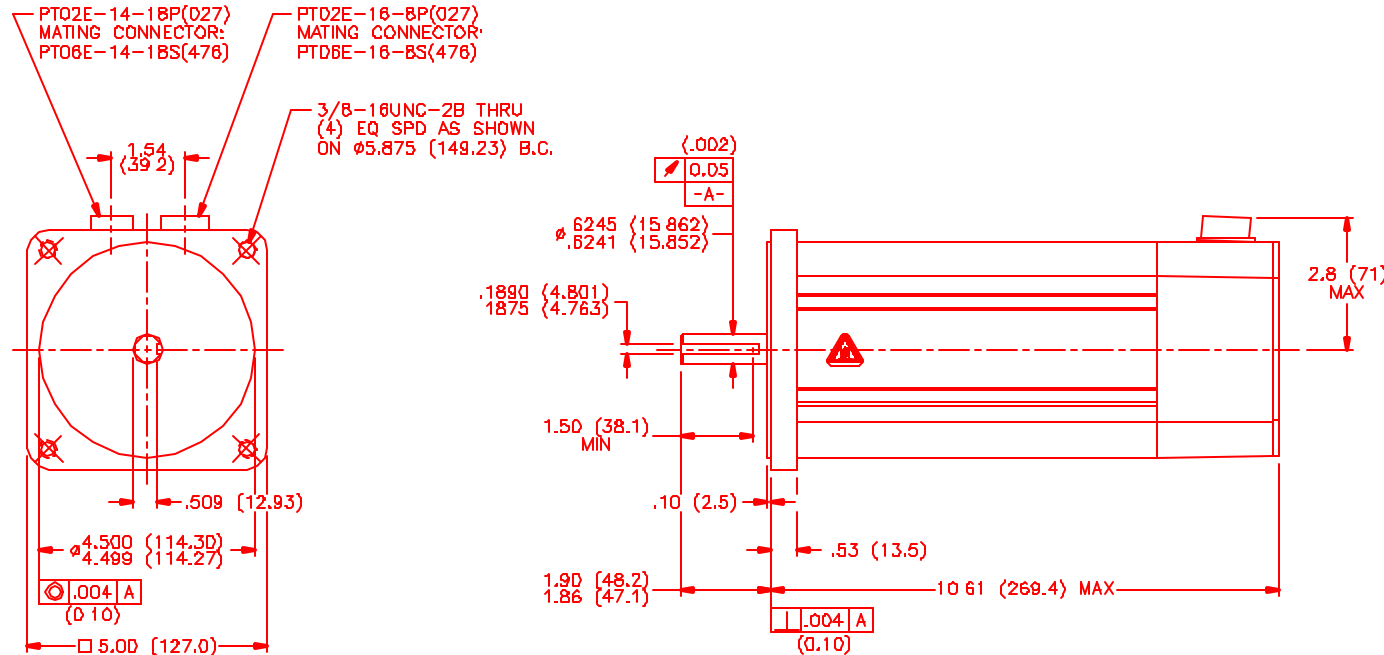
RES/THERM WIRE LEADS

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	-	-

TITLE		REVISED		MPM1141CTJ6G1R	
REVISIONS					
REV.	DESCRIPTION	DATE	APPR.		
	PRELIMINARY	1/11/99	MVS		



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



NO.	PART NUMBER	DESCRIPTION	QTY.
REFERENCES UNLESS NOTED OTHERWISE: DECIMAL SIZE & COG DECIMAL SIZE & COG FRACTION & DIA FRACTION & DIA FRACTION & DIA FRACTION & DIA			
MTS Systems Corporation Automation Division			
DESIGNER: MVS DRAWN: MVS CHECKED: MVS APPROVED: MVS			
DATE: 1/11/99		TITLE: "C"/460/ENG/RES/CONN/BRK	
MATERIAL:		REV:	
PART NUMBER: MPM1141CTJ6G1R			SCALE: 1/2:1