

MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	13.1
KILOWATTS	KW	9.8
MAX. OPERATING SPEED	N MAX	3000
SPEED @ RATED TORQUE	N RATED	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS[N_m]	344.0[38.6]
* CONTINUOUS STALL TORQUE	IN-LBS[N_m]	400.0[44.9]
CONTINUOUS LINE CURRENT	AMPS/(RMS/ ϕ)	15.9
PEAK TORQUE	IN-LBS[N_m]	1200.0[134.8]
PEAK CURRENT	AMPS/(RMS/ ϕ)	47.7
MAX. THEORETICAL ACCEL.	RAD/SEC ²	24,194
TORQUE SENSITIVITY	K τ [IN-LBS/AMP/(RMS/ ϕ)]	24.9[2.8]
BACK EMF (LINE TO LINE)	Vrms/Krpm	158.0
D.C. RESISTANCE (P-P)	OHMS	1.41
INDUCTANCE (P-P)	MILLIHENRIES	15.5
ROTOR INERTIA W/BRAKE	Jm [IN-LBS-SEC ²][Kg-M ²]	.0496[.00560]
STATIC FRICTION	Tf [IN-LBS][Nm]	8.2[.92]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 14" X 14" X 14" X 3/4" 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.

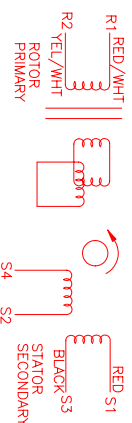
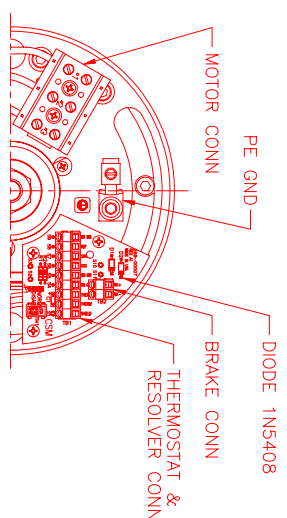
- MECHANICAL NOTES:**
- AXIAL LOAD: 100 LBS MAX
 - RADIAL LOAD: 250 LBS MAX @ 1" FROM FACE
 - MOTOR SEALED TO IP65.
 - MOTOR WEIGHT: 86 LBS. [39 kg]
 - MOTOR FINISH: BLACK EPOXY
 - MILLIMETERS (INCHES)

FAILSAFE BRAKE: (290-00025)
 MIN. HOLDING TORQUE: 90 FT-LBS.
 INPUT VOLTAGE: 24 VOLTS

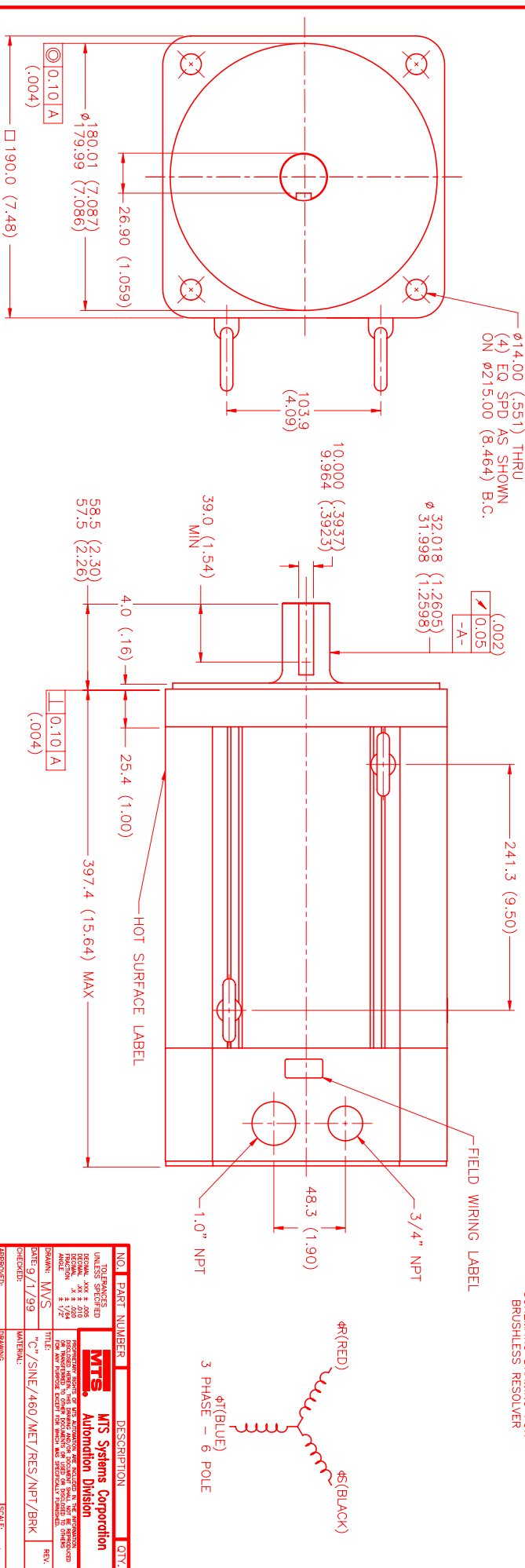
CONNECTION CHART

MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
1	ϕ R	RED
2	ϕ S	BLACK
3	ϕ T	BLUE
-	PE GND	-

RES/THERM/BRK WIRE LEADS	WIRE FUNCTION	WIRE COLOR
S11	BRK (+)	DIODE
S10	BRK (-)	TN5408
S9	REF GND	YEL/WHIT
S8	REF	RED/WHIT
S7	SIN	YELLOW
S6	COS	RED
S5	COS GND	BLACK
S4	SIN GND	BLUE
S3	THERM	BLACK
S2	THERM	BLACK
S1	GND/SHLD	GRN/YEL



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



NO. 1	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL: .005 & .006			
FRACTIONAL: 1/32, 1/16, 1/8, 1/4, 1/2, 3/4, 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100, 120, 150, 200, 250, 300, 400, 500, 600, 800, 1000			
ANGLE: 1/2, 1, 1.5, 2, 3, 4, 6, 8, 10, 12, 15, 20, 25, 30, 40, 45, 60, 90, 120, 150, 180			
ISO: MYS			
DATE: 9/1/99			
TITLE: "C"/SINE/460/MET/RES/NPT/BRK			
APPROVED: [Signature]	DRAWING NUMBER: MPM1901CSU7G3R	SCALE: 1/2:1	

DATE: 9/1/99	REV: PRELIMINARY	DESCRIPTION: "C"/MET/RES/NPT/BRK	DRAWING NUMBER: MPM1901CSU7G3R
DATE: 9/1/99	REV: 3/1/00	DESCRIPTION: REVISIONS	DRAWING NUMBER: MPM1901CSU7G3R
DATE: 9/1/99	REV: LIN	DESCRIPTION: REVISIONS	DRAWING NUMBER: MPM1901CSU7G3R