

MOTOR DATA @ 460 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	20.9
KILOWATTS	KW	15.6
MAX. OPERATING SPEED	N MAX RPM	3000
SPEED @ RATED TORQUE	N RATED RPM	2400
* CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS[Nm]	550.0[61.8]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	640.0[71.9]
CONTINUOUS LINE CURRENT	AMPS[RMS/φ]	25.5
PEAK TORQUE	IN-LBS[Nm]	1920.0[215.0]
PEAK CURRENT	AMPS[RMS/φ]	76.4
MAX. THEORETICAL ACCEL.	RAD/SEC ²	24.030
TORQUE SENSITIVITY	Kt [IN-LBS/AMP/RMS/φ] [Nm/AMP/RMS/φ]	24.9[2.8]
BACK EMF (LINE TO LINE)	Vrms/Krpm	158.0
D.C. RESISTANCE (P-P)	OHMS	.44
INDUCTANCE (P-P)	MILLIHENRIES	6.8
ROTOR INERTIA W/BRAKE	Jm [IN-LBS-SEC ²] [Kg-M ²]	.07991[.00902]
STATIC FRICTION	Tf [IN-LBS[Nm]]	9.8[1.1]

*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.

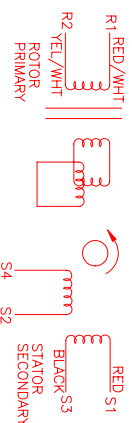
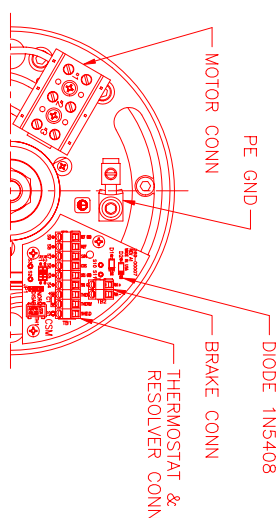
- MECHANICAL NOTES:**
- AXIAL LOAD: 100 LBS MAX
 - RADIAL LOAD: 250 LBS MAX @ 1" FROM FACE
 - MOTOR SEALED TO IP65.
 - MOTOR WEIGHT: 117 LBS. [53.1 kg]
 - MOTOR FINISH: BLACK EPOXY
 - MILLIMETERS (INCHES)

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

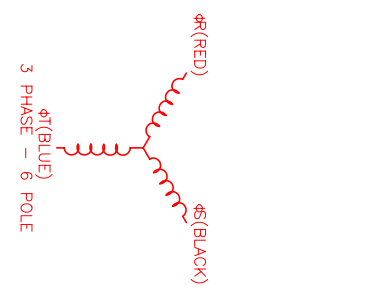
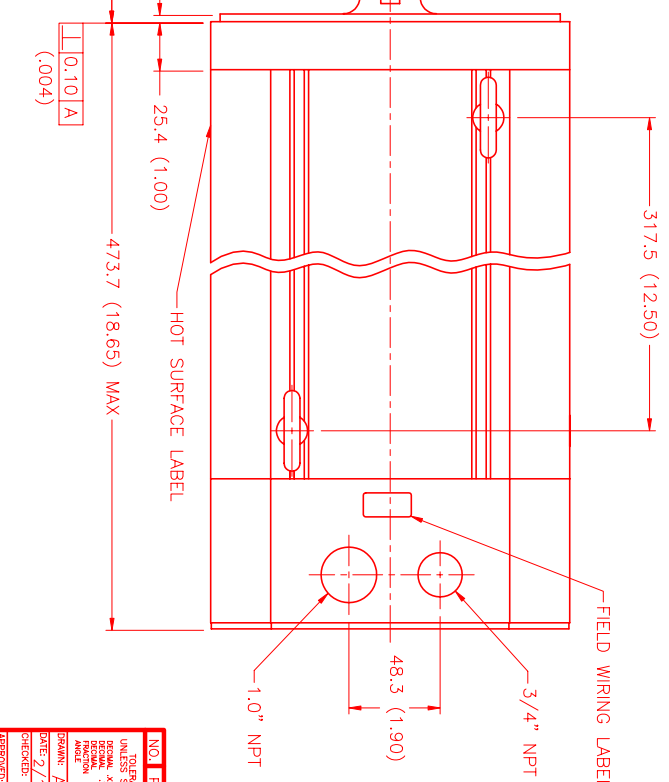
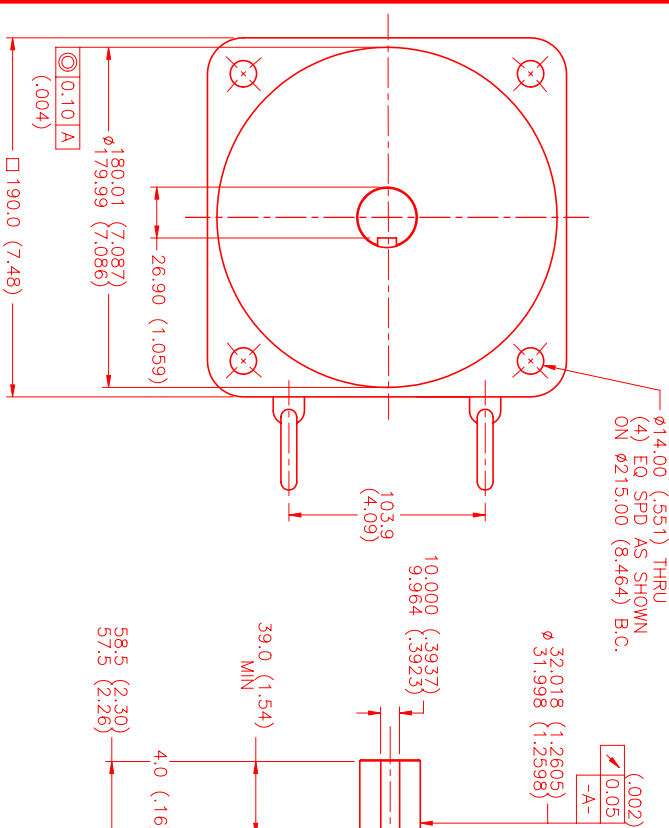
CONNECTION CHART

MOTOR WIRE	LEADS	WIRE	WIRE	LEADS
TERM	FUNCTION	WIRE	COLOR	WIRE
1	φR	RED	RED	φS
2	φS	BLACK	BLACK	φT
3	φT	BLUE	BLUE	PE GND
-	PE GND	-	-	-

RES/THERM/BRK	WIRE	WIRE	LEADS
TERM	FUNCTION	WIRE	COLOR
S11	BRK (+)	DIODE	φS
S10	BRK (-)	φTNS408	φS
S9	REF GND	YEL/WHIT	φT
S8	REF	RED/WHIT	φT
S7	SIN	YELLOW	φT
S6	COS	RED	φT
S5	COS GND	BLACK	φT
S4	SIN GND	BLUE	φT
S3	THERM	BLACK	φT
S2	THERM	BLACK	φT
S1	GND/SHLD	GRN/YEL	φT



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



NO. 1	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DECIMAL: .005 & .005			
FRACTIONAL: 1/32 & 1/32			
ANGLES: 1/2°			
ISO: AIS			
DATE: 2/17/00			
CHECKED:			
APPROVED:			
DRAWING NUMBER: MPM1902CSU7G3R			
SCALE: 1:2			

DATE: 2/17/00	REV: PRELIMINARY	DESCRIPTION: MPM1902CSU7G3R
DATE: 2/17/00	REV: AIS	DESCRIPTION: REVISIONS

MTS MTS Systems Corporation
 Automation Division