

MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP RATED	14.4
KILOWATTS	KW RATED	10.8
MAX. OPERATING SPEED	N. MAX RPM	1500
SPEED @ RATED TORQUE	N RATED RPM	1200
* CONTINUOUS RATED TORQUE @ 1200 RPM	IN-LBS[Nm]	757.0[85.0]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	880.0[98.8]
CONTINUOUS LINE CURRENT	AMPS	25.0
PEAK TORQUE	IN-LBS[Nm]	2640.0[296.0]
PEAK CURRENT	AMPS	75.0
MAX. THEORETICAL ACCEL.	RAD/SEC ²	23.677
TORQUE SENSITIVITY	Kt IN-LBS/AMP[Nm/AMP]	35.0[4.0]
BACK EMF (LINE TO LINE)	Vrms/Krpm	316.0
D.C. RESISTANCE (P-P)	OHMS	1.09
INDUCTANCE (P-P)	MILLIHENRIES	17.2
ROTOR INERTIA W/BRK	Jm[IN-LBS-SEC ²][Kg-M ²]	.1115[.0126]
STATIC FRICTION	Tf[IN-LBS][Nm]	11.4[1.3]

*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 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:

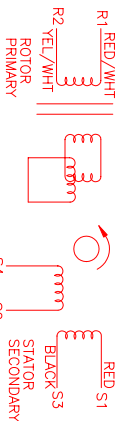
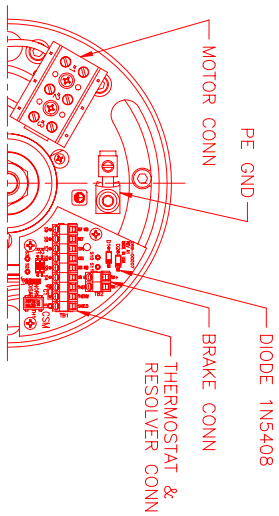
1. AXIAL LOAD: 100 LBS MAX
2. RADIAL LOAD: 250 LBS MAX @ 1" FROM FACE
3. MOTOR SEALED TO IP65.
4. MOTOR WEIGHT: 148 LBS. [67.1 kg]
5. MOTOR FINISH: BLACK EPOXY
6. MILLIMETERS (INCHES)

FAILSAFE BRAKE:
MIN. HOLDING TORQUE: 90 FT-LBS.
INPUT VOLTAGE: 24 VOLTS

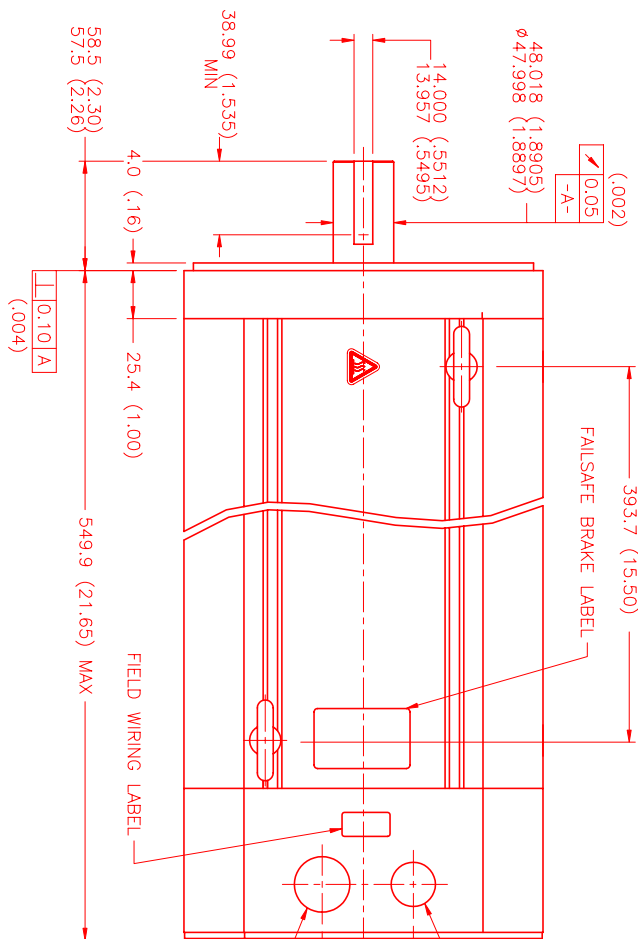
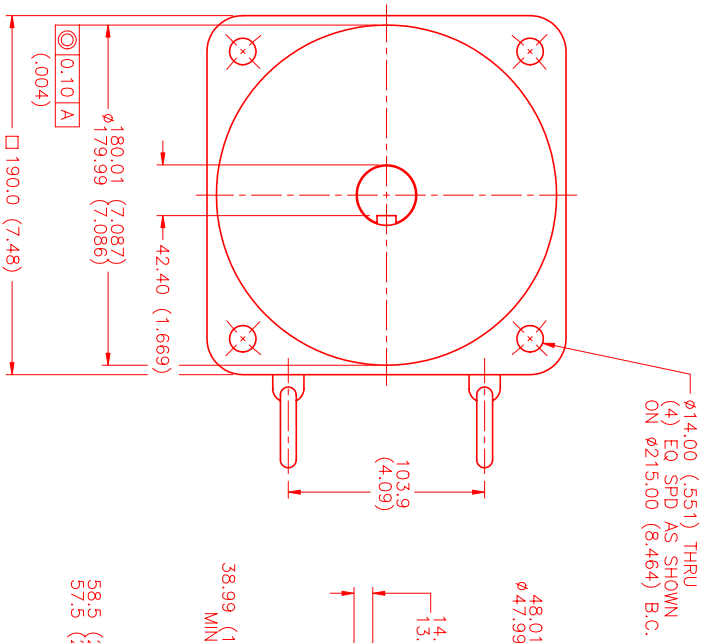
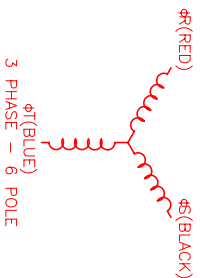
CONNECTION CHART

MOTOR WIRE LEADS	WIRE FUNCTION	WIRE COLOR
1	ΦR	RED
2	ΦS	BLACK
3	ΦT	BLUE
-	PE GND	GRN/YEL

RES/THERM/BRK WIRE LEADS	WIRE FUNCTION	WIRE COLOR
S11	BRK (+)	DIODE
S10	BRK (-)	INS408
S9	REF GND	YEL/WHI
S8	REF	RED/WHI
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.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DRINK	400 # 205		
DRINK	400 # 200		
DRINK	3 # 1/2"		
DRINK	3 # 1/2"		
DRINK	3 # 1/2"		
DATE	9/28/99	TITLE	
DESIGNED BY	MVS	DRAWN BY	
CHECKED BY		MATERIAL	
APPROVED BY		QUANTITY	
ISSUING ENGINEER	MPM1903DTUG3R	SCALE	1/2:1

REV.	DESCRIPTION	DATE	APPD.
PRELIMINARY		10/7/99	ELS

REVISIONS

DATE: 10/7/99
DESCRIPTION: MPM1903DTUG3R

MTS Systems Corporation
Automation Division