

### MOTOR DATA @ 460 VAC (TRAP)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	12.4
KILOWATTS	KW	9.3
MAX. OPERATING SPEED	N MAX RPM	3400
SPEED @ RATED TORQUE	N RATED RPM	2800
* CONTINUOUS RATED TORQUE @ 2800 RPM	IN-LBS[ Nm]	280.0[31.6]
* CONTINUOUS STALL TORQUE	IN-LBS[ Nm]	360.0[40.7]
CONTINUOUS LINE CURRENT	AMPS	27.1
PEAK TORQUE	IN-LBS[ Nm]	1081.0[122.2]
PEAK CURRENT	AMPS	81.3
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	30,710
TORQUE SENSITIVITY	Kt [IN-LBS/AMP][Nm/AMP]	13.3[1.5]
BACK EMF (LINE TO LINE)	Vrms/Krpm	115.0
D.C. RESISTANCE (P-P)	OHMS	0.26
INDUCTANCE (P-P)	MILLIHENRIES	2.9
ROTOR INERTIA	Jm [IN-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ]	.0352[.00397]
STATIC FRICTION	Tf [IN-LBS][Nm]	4.2[0.47]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON MOTOR. MOTOR MOUNTED ON A 12" X 12" X 1 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.

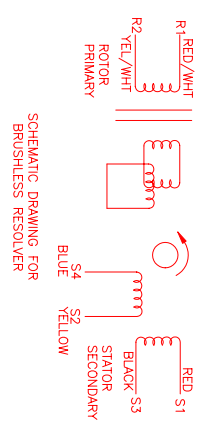
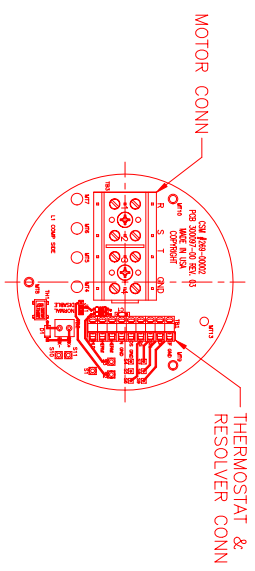
#### MECHANICAL NOTES:

- AXIAL LOAD: 50 LBS MAX
- RADIAL LOAD: 150 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 83 LBS. [ 37.6 kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)

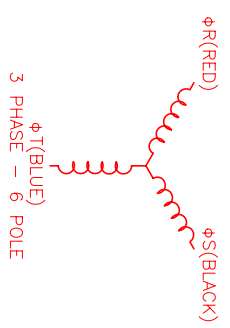
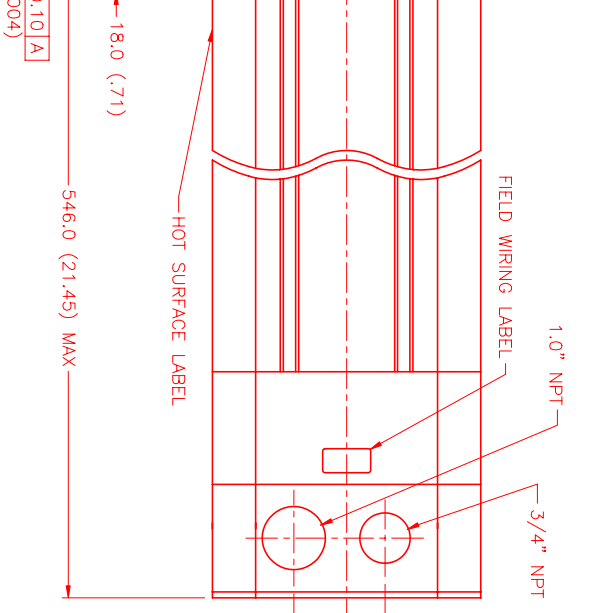
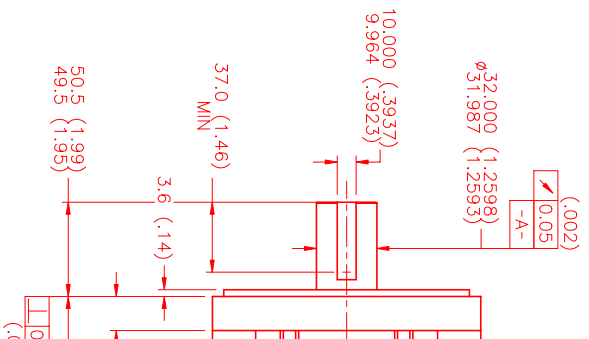
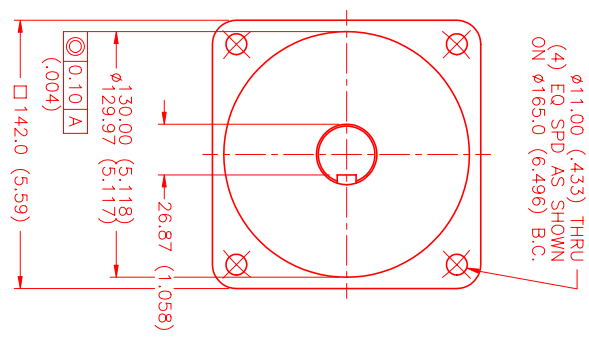
### CONNECTION CHART

TERMINAL FUNCTION	WIRE COLOR	WIRE FUNCTION	WIRE COLOR
1	RED	REF GND	YEL/WHI
2	BLACK	REF	RED/WHI
3	BLUE	SIN	YELLOW
4	GRN/YEL	COS	RED

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



SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER



3 PHASE - 6 POLE

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MPM1424CTUG3N	Brushless Resolver	1

REV.	DESCRIPTION	DATE	APP.
PRELIMINARY		8/4/99	MVS

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MPM1424CTUG3N	Brushless Resolver	1

UNLESS SPECIFIED OTHERWISE, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS. DIMENSIONS IN PARENTHESES ARE NOT TO SCALE. DIMENSIONS IN PARENTHESES ARE NOT TO SCALE. DIMENSIONS IN PARENTHESES ARE NOT TO SCALE. DIMENSIONS IN PARENTHESES ARE NOT TO SCALE.

DATE: 8/4/99  
 CHECKED: MVS  
 APPROVED: MVS

SCALE: 1/2=1