

**MOTOR DATA @ 230 VAC (TRAP)**

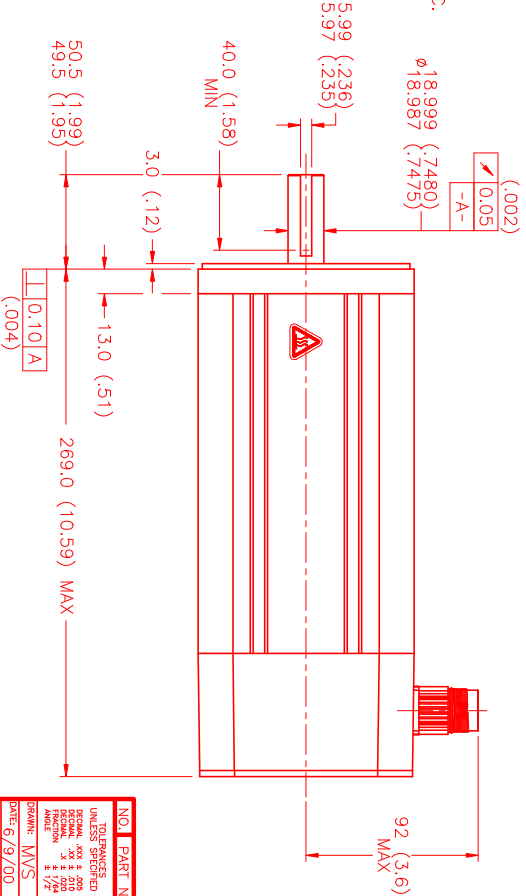
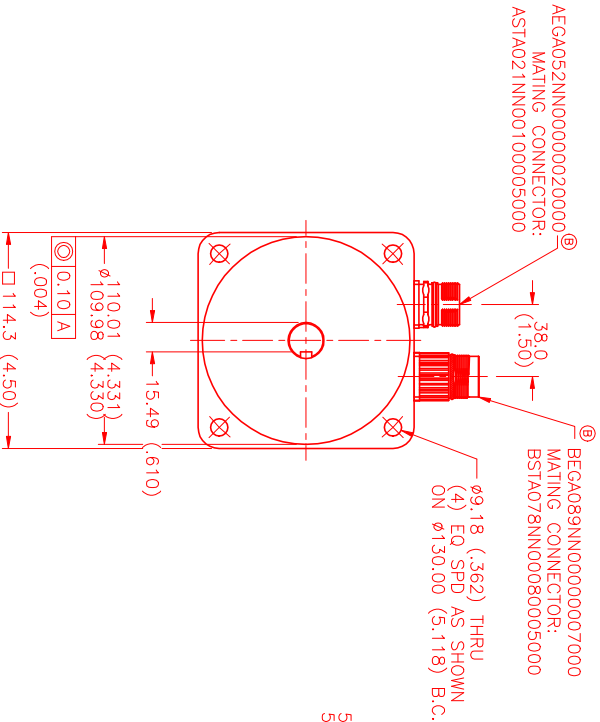
MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	2.1
KILOWATTS	KW	1.6
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	N RATED	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	IN-LBS[Nm]	45.0[5.1]
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	54.0[6.1]
CONTINUOUS LINE CURRENT	AMPS	8.7
PEAK CURRENT	AMPS	189.1[21.3]
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	30.5
TORQUE SENSITIVITY	Kt IN-LBS/AWPI[Nm/AMP]	48.487
BACK EMF (LINE TO LINE)	Vrms/Krpm	6.2[0.71]
D.C. RESISTANCE (P-P)	OHMS	55.0
INDUCTANCE (P-P)	MILLIHENRIES	.82
ROTOR INERTIA W/BRAKE	Jm [IN-LBS-SEC <sup>2</sup> ][Kg-M <sup>2</sup> ]	6.1
STATIC FRICTION	Tf	.0039[.00044]

\*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:**
1. AXIAL LOAD: 50 LBS MAX
  2. RADIAL LOAD: 100 LBS MAX @ 1" FROM FACE
  3. MOTOR SEALED TO IP65.
  4. MOTOR WEIGHT: 23.1 LBS. [ 10.5 Kg ]
  5. MOTOR FINISH: BLACK EPOXY
  6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
  7. MILLIMETERS (INCHES)

**ENCODER: (290-00052)**  
OH48-200096-L6-5V

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



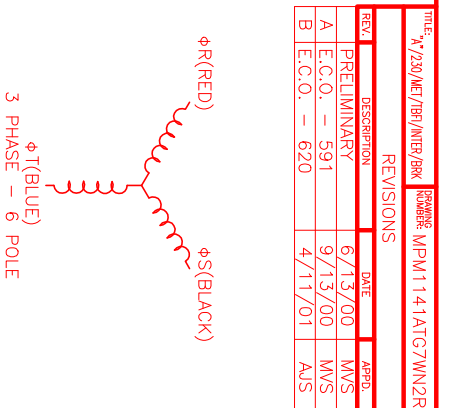
**CONNECTION CHART**

ENCODER CONNECTOR:  
@ BEGA052NN00000200000  
(270-00257)

PIN	WIRE FUNCTION	WIRE COLOR
1	GND(OV)	BLACK
2	CH A(A)	BLUE/BLK
3	CH A(A)	BLUE
4	CH B(B)	GREEN
5	CH B(B)	GRN/BLK
6	CH Z(Z)	YELLOW
7	CH Z(Z)	YEL/BLK
8	+5V(+5V)	RED
9	-	-
10	CH U(RG U)	BROWN
11	CH V(RLG V)	GRAY
12	CH W(RLG W)	WHITE

MOTOR/BRK/THERM CONNECTOR:  
@ BEGA089NN0000007000  
(270-00256)

PIN	WIRE FUNCTION	WIRE COLOR
1	ΦR(U1)	RED
2	PE GND	GRN/YEL
3	ΦS(W1)	BLACK
4	ΦT(V1)	BLUE
A	BRK (+)	DIODE
B	BRK (-)	1N4007
C	THERM	BLACK
D	THERM	BLACK



**MOTOR & HALL POSITION CHART (GERMAN - TBF\*)**

HALL LEADS	WHITE	BROWN	GRAY
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

VIEW ON THE OSCILLOSCOPE

\*MOTOR ROTATION C/W (COUNTER CLOCKWISE) (LOOKING AT THE FACE OF THE MOTOR)

WAVE REPRESENTING STATOR OUTPUT  
WAVE REPRESENTING HALL SENSOR

DATE: 6/13/00  
REV: PRELIMINARY  
A E.C.O. - 591  
B E.C.O. - 620

REV.	DESCRIPTION	DATE	APPD.
6/13/00	MWS		
9/13/00	MWS		
4/11/01	AJS		

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DETAIL: 30x4x200			
DRILL: 3/8			
DRILL: 1/2			
DRILL: 3/4			
DRILL: 1			
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