

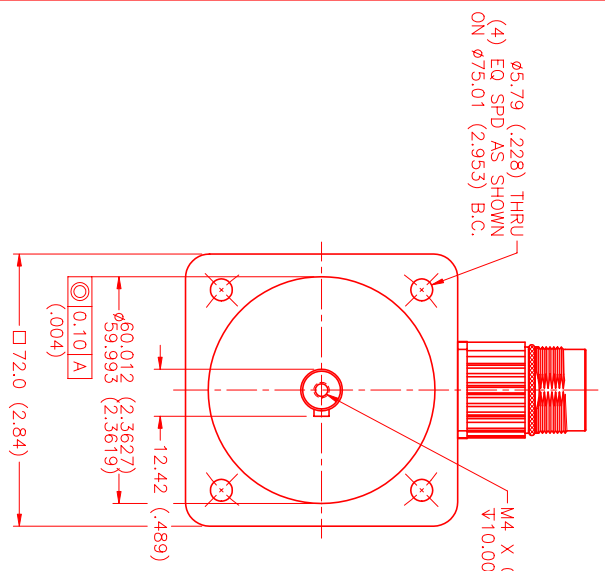
### MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	0.91
KILOWATTS	KW	0.68
MAX. OPERATING SPEED	N. MAX RPM	6300
SPEED @ RATED TORQUE	N RATED RPM	4500
* CONTINUOUS RATED TORQUE @ 4500 RPM	N-LSB1 [Nm]	12.81 [4.7]
* CONTINUOUS STALL TORQUE	N-LSB1 [Nm]	15.01 [6.9]
CONTINUOUS LINE CURRENT	AMPS/(RMS/φ)	3.6
PEAK TORQUE	N-LSB1 [Nm]	45.0 [5.1]
PEAK CURRENT	AMPS/(RMS/φ)	10.8
MAX. THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	120,000
TORQUE SENSITIVITY	Kt [N-LSB/AMP/(RMS/φ)]/[Nm/AMP/(RMS/φ)]	4.18 [0.472]
BACK EMF (LINE TO LINE)	Vrms/Krpm	26.3
D.C. RESISTANCE (P-P)	OHMS	2.2
INDUCTANCE (P-P)	MILLIHENRIES	4.9
ROTOR INERTIA	Jm [N-LSB-SEC <sup>2</sup> ] / Kg-M <sup>2</sup>	0.00038 [0.000043]
STATIC FRICTION	Tf [N-LSB] / Nm	1.0 [0.11]

\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 85°C ON MOTOR. MOTOR MOUNTED ON A 1/2" X 1/2" 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:

- AXIAL LOAD: 20 LBS MAX
- RADIAL LOAD: 35 LBS MAX @ 1" FROM FACE
- MOTOR SEALED TO IP65.
- MOTOR WEIGHT: 5.3 LBS. [ 2.4 Kg]
- MOTOR FINISH: BLACK EPOXY
- MOTOR OUTPUT SHAFT: STAINLESS STEEL
- MILLIMETERS (INCHES)
- THIS MOTOR'S OUTPUT KEY IS A PRESS FIT.



#### CONNECTION CHART

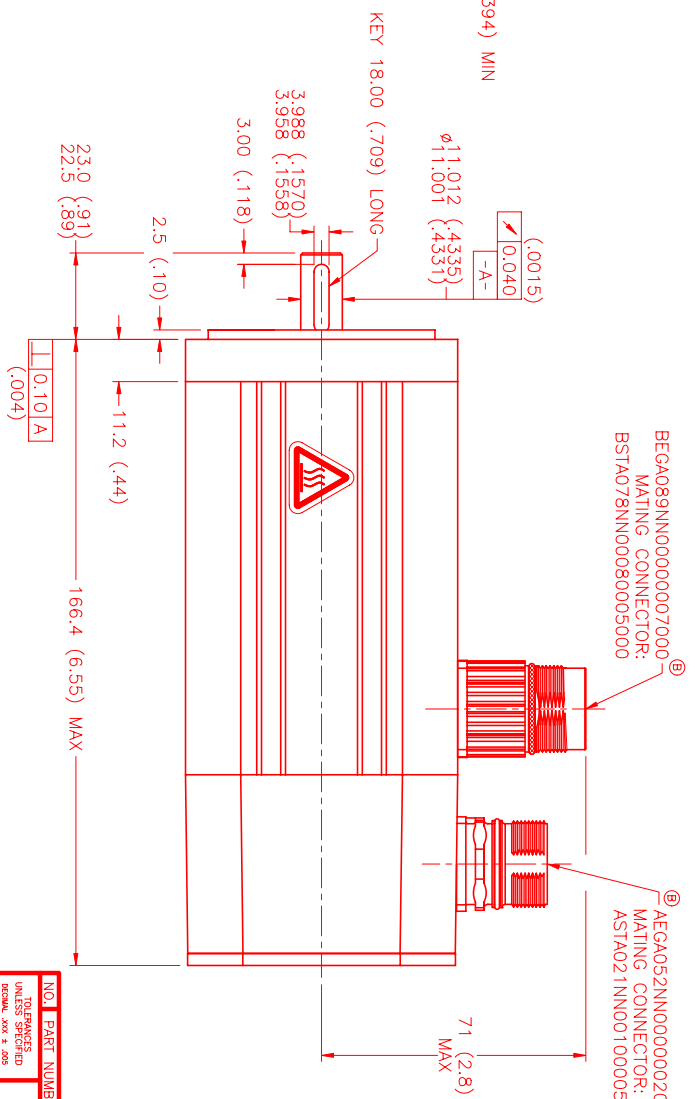
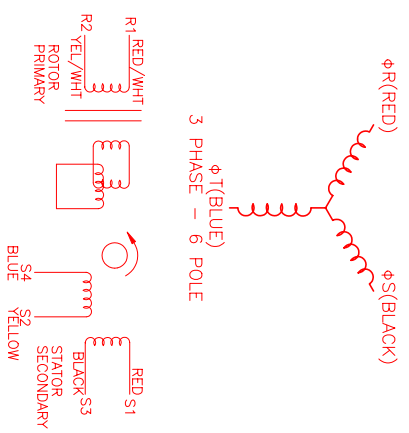
MOTOR/THERM CONNECTOR:  
@BEGA089NN0000007000  
(270-00256)

MOTOR/THERM	WIRE	WIRE LEADS
PIN	FUNCTION	COLOR
1	φR(U1)	RED
2	PE GND	GRN/YEL
3	φT(W1)	BLUE
4	φS(V1)	BLACK
A	-	-
B	-	-
C	THERM	BLACK
D	THERM	BLACK

RESOLVER CONNECTOR:  
@AEGA052NN000000200000  
(270-00257)

RESOLVER	WIRE	WIRE LEADS
PIN	FUNCTION	COLOR
1	-	-
2	REF(R1)	RED/WHIT
3	REF GND(R2)	YEL/WHIT
4	COS GND(S1)	BLACK
5	COS(S3)	RED
6	SIN(S2)	YELLOW
7	SIN GND(S4)	BLUE
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-

#### SCHEMATIC DRAWING FOR BRUSHLESS RESOLVER/RESOLVER IS SET FOR A 1BF/R AMPIFIER



BEGA089NN0000007000  
MATING CONNECTOR:  
BSTA078NN00098005000

AEGA052NN000000200000  
MATING CONNECTOR:  
ASTA021NN00100005000

NO.	PART NUMBER	DESCRIPTION	QTY.
1	MTS	MTS Systems Corporation Automation Division	
2	DATE: 1/26/00	REV: B	
3	DATE: 1/26/00	REV: B	
4	DATE: 1/26/00	REV: B	
5	DATE: 1/26/00	REV: B	
6	DATE: 1/26/00	REV: B	
7	DATE: 1/26/00	REV: B	
8	DATE: 1/26/00	REV: B	
9	DATE: 1/26/00	REV: B	
10	DATE: 1/26/00	REV: B	
11	DATE: 1/26/00	REV: B	
12	DATE: 1/26/00	REV: B	
13	DATE: 1/26/00	REV: B	
14	DATE: 1/26/00	REV: B	
15	DATE: 1/26/00	REV: B	
16	DATE: 1/26/00	REV: B	
17	DATE: 1/26/00	REV: B	
18	DATE: 1/26/00	REV: B	
19	DATE: 1/26/00	REV: B	
20	DATE: 1/26/00	REV: B	
21	DATE: 1/26/00	REV: B	
22	DATE: 1/26/00	REV: B	
23	DATE: 1/26/00	REV: B	
24	DATE: 1/26/00	REV: B	
25	DATE: 1/26/00	REV: B	
26	DATE: 1/26/00	REV: B	
27	DATE: 1/26/00	REV: B	
28	DATE: 1/26/00	REV: B	
29	DATE: 1/26/00	REV: B	
30	DATE: 1/26/00	REV: B	
31	DATE: 1/26/00	REV: B	
32	DATE: 1/26/00	REV: B	
33	DATE: 1/26/00	REV: B	
34	DATE: 1/26/00	REV: B	
35	DATE: 1/26/00	REV: B	
36	DATE: 1/26/00	REV: B	
37	DATE: 1/26/00	REV: B	
38	DATE: 1/26/00	REV: B	
39	DATE: 1/26/00	REV: B	
40	DATE: 1/26/00	REV: B	
41	DATE: 1/26/00	REV: B	
42	DATE: 1/26/00	REV: B	
43	DATE: 1/26/00	REV: B	
44	DATE: 1/26/00	REV: B	
45	DATE: 1/26/00	REV: B	
46	DATE: 1/26/00	REV: B	
47	DATE: 1/26/00	REV: B	
48	DATE: 1/26/00	REV: B	
49	DATE: 1/26/00	REV: B	
50	DATE: 1/26/00	REV: B	
51	DATE: 1/26/00	REV: B	
52	DATE: 1/26/00	REV: B	
53	DATE: 1/26/00	REV: B	
54	DATE: 1/26/00	REV: B	
55	DATE: 1/26/00	REV: B	
56	DATE: 1/26/00	REV: B	
57	DATE: 1/26/00	REV: B	
58	DATE: 1/26/00	REV: B	
59	DATE: 1/26/00	REV: B	
60	DATE: 1/26/00	REV: B	
61	DATE: 1/26/00	REV: B	
62	DATE: 1/26/00	REV: B	
63	DATE: 1/26/00	REV: B	
64	DATE: 1/26/00	REV: B	
65	DATE: 1/26/00	REV: B	
66	DATE: 1/26/00	REV: B	
67	DATE: 1/26/00	REV: B	
68	DATE: 1/26/00	REV: B	
69	DATE: 1/26/00	REV: B	
70	DATE: 1/26/00	REV: B	
71	DATE: 1/26/00	REV: B	
72	DATE: 1/26/00	REV: B	
73	DATE: 1/26/00	REV: B	
74	DATE: 1/26/00	REV: B	
75	DATE: 1/26/00	REV: B	
76	DATE: 1/26/00	REV: B	
77	DATE: 1/26/00	REV: B	
78	DATE: 1/26/00	REV: B	
79	DATE: 1/26/00	REV: B	
80	DATE: 1/26/00	REV: B	
81	DATE: 1/26/00	REV: B	
82	DATE: 1/26/00	REV: B	
83	DATE: 1/26/00	REV: B	
84	DATE: 1/26/00	REV: B	
85	DATE: 1/26/00	REV: B	
86	DATE: 1/26/00	REV: B	
87	DATE: 1/26/00	REV: B	
88	DATE: 1/26/00	REV: B	
89	DATE: 1/26/00	REV: B	
90	DATE: 1/26/00	REV: B	
91	DATE: 1/26/00	REV: B	
92	DATE: 1/26/00	REV: B	
93	DATE: 1/26/00	REV: B	
94	DATE: 1/26/00	REV: B	
95	DATE: 1/26/00	REV: B	
96	DATE: 1/26/00	REV: B	
97	DATE: 1/26/00	REV: B	
98	DATE: 1/26/00	REV: B	
99	DATE: 1/26/00	REV: B	
100	DATE: 1/26/00	REV: B	