

MOTOR DATA @ 230 VAC (SINE)

MOTOR PARAMETERS	UNITS	VALUE
HORSEPOWER	HP	2.1
KILOWATTS	KW	1.6
MAX. OPERATING SPEED	N MAX	4200
SPEED @ RATED TORQUE	RPM	3000
* CONTINUOUS RATED TORQUE @ 3000 RPM	N-RATED RPM	45,015.1
* CONTINUOUS STALL TORQUE	IN-LBS[Nm]	54.016.1
CONTINUOUS LINE CURRENT	AMPS(RMS/φ)	6.2
PEAK TORQUE	IN-LBS[Nm]	189.121.3
PEAK CURRENT	AMPS(RMS/φ)	21.6
MAX. THEORETICAL ACCEL.	RAD/SEC ²	54,029
TORQUE SENSITIVITY	Kt [N-LBS/AMP(RMS/φ)] [Nm/AMP(RMS/φ)]	8.811.01
BACK EMF (LINE TO LINE)	Vrms/krpm	55.0
D.C. RESISTANCE (P-P)	OHMS	.82
INDUCTANCE (P-P)	MILLIHENRIES	6.1
ROTOR INERTIA	Jm [N-LBS-SEC ²] [Kg-M ²]	.00351,0003391
STATIC FRICTION	Tf [N-LBS] [Nm]	1.0[.11]

*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: 17.8 LBS. [8.1 Kg]
5. MOTOR FINISH: BLACK EPOXY
6. MOTOR OUTPUT SHAFT: STAINLESS STEEL
7. MILLIMETERS (INCHES)

ENCODER: (290-00052)
OH48-2000P6-L6-5V

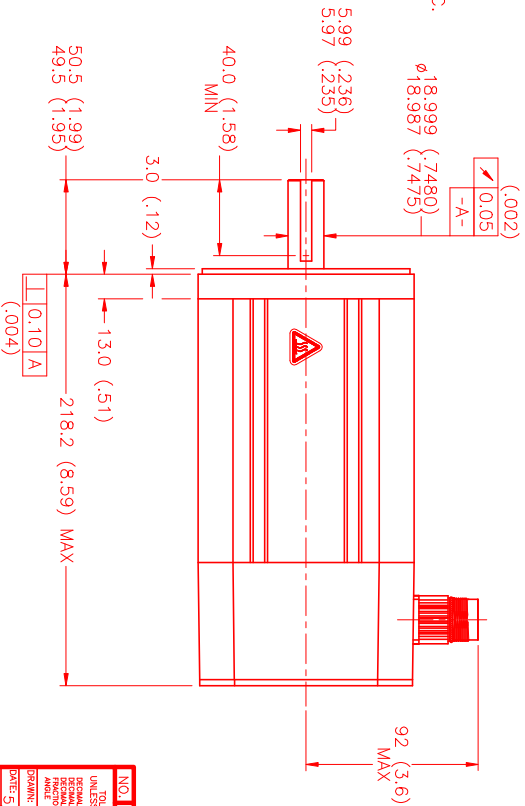
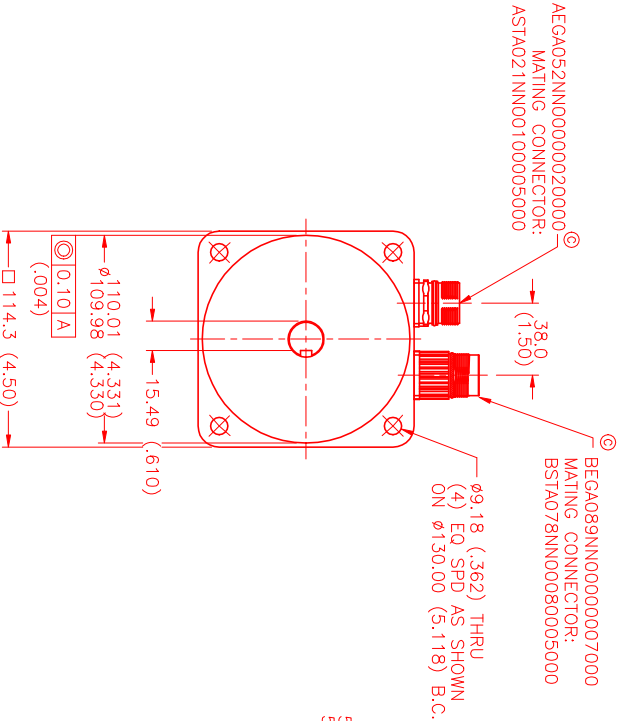
CONNECTION CHART

ENCODER CONNECTOR:
@AEGA052NN00000020000
(270-00257)

MOTOR/THERM CONNECTOR:
@BEGA089NN00000007000
(270-00256)

PIN	WIRE FUNCTION	WIRE COLOR
1	CH A(A)	BLUE/BLK
2	CH A(A)	BLUE
3	CH B(B)	GREEN
4	CH B(B)	GRN/BLK
5	CH Z(Z)	YELLOW
6	CH Z(Z)	YEL/BLK
7	+5V(+5V)	RED
8	+5V(+5V)	RED
9	—	—
10	CH UR(U)	BROWN
11	CH VR(V)	GRAY
12	CH WR(W)	WHITE

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



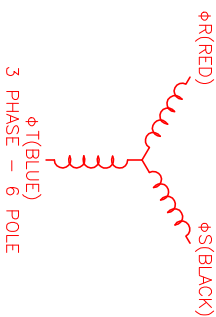
HALL LEADS	BROWN	GRAY	WHITE
MOTOR LEADS	BLACK respect to RED	RED respect to BLUE	BLUE respect to BLACK

MOTOR & HALL POSITION CHART

MOTOR ROTATION CCW (COUNTER CLOCKWISE)
(LOOKING AT THE FACE OF THE MOTOR)



WAVE REPRESENTING STATOR OUTPUT
WAVE REPRESENTING HALL SENSOR



REV.	DESCRIPTION	DATE	APPD.
A	PRELIMINARY	5/21/99	MVS
B	E.C.O. - 547	11/4/99	MVS
A	E.C.O. - 572	5/25/00	AJS
C	E.C.O. - 620	4/10/01	AJS

NO.	PART NUMBER	DESCRIPTION	QTY.
UNLESS SPECIFIED			
DETAILS: 30X & 40X			
ISOMETRIC: 3X & 40X			
TECHNICAL: 3X & 40X			
ASSEMBLY: 3X & 40X			
DATE: 5/21/99			
DESIGNED BY: MVS			
CHECKED BY:			
TITLE: "A" SINE/230/ME/TZ/IN/ER			
SCALE: 1/2:1			
APPROVED BY:			
DRAWING NUMBER: MPM1141ASG7JN2N			

MTS
Automation Division

RESISTANCE TO SOLVENTS: RESISTANT TO MOST COMMON INDUSTRIAL SOLVENTS. RESISTANT TO OILS AND GREASES. RESISTANT TO CORROSION.

REV: C