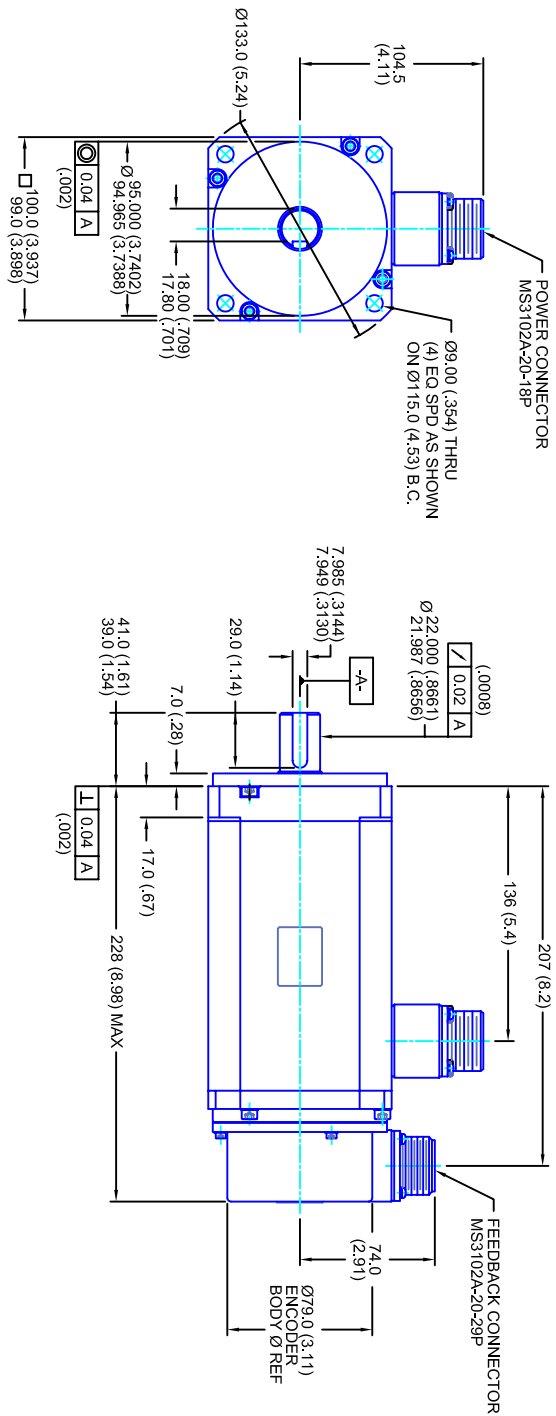


REVISIONS			
REV	DESCRIPTION	DATE	APPD
1	RELEASE DRAWING	4/8/04	



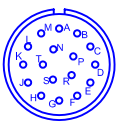
**MOTOR NOTES:**

1. MILLIMETERS (INCHES)
2. AXIAL LOAD: 10 KG [ 22 LBS ] MAX
3. RADIAL LOAD: 50 KG [ 110 LBS ] MAX @ 20MM [ .79 ] FROM FACE
4. MOTOR SEALED TO IP65; EXCEPT THE PART WITH CONN & OIL SEAL
5. MOTOR SHAFT: SCM440H STEEL
6. OIL SEAL: Ø24 (.95) PROTRUDES FROM FEC 1.10 (.04)
7. MOTOR FINISH: SEMI-GLOSS BLACK
8. MOTOR WEIGHT 8.2 LBS [ 18.1 KJ]

**ELECTRICAL DATA**

MOTOR PARAMETERS	UNITS/MEASURE	VALUES
VOLTAGE	VOLTS-AC	460
AMP TYPE	-	SINE
HORSEPOWER	HP	3.3
KILOWATTS	KW	2.5
MAX OPERATING SPEED	RPM	4500
SPEED @ RATED TORQUE	RPM	2.5
*CONTINUOUS RATED TORQUE @ 3450 RPM	IN-LBS[INM]	60.2[6.8]
*CONTINUOUS STALL TORQUE	IN-LBS[INM]	66.2[7.5]
*CONTINUOUS LINE CURRENT	AMPS[RMS] (Φ)	5.5
PEAK TORQUE	IN-LBS[INM]	169.9[19.2]
PEAK CURRENT	AMPS[RMS] (Φ)	16.5
MAX THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	29,293
TORQUE SENSITIVITY	KI [N-SS/AMP/RMS] (Φ) [IN/AMP/RMS] (Φ)	11.0[1.24]
BACK EMF (LINE TO LINE)	Vrms/Krpm	68.8
D.C. RESISTANCE (P-P)	OHMS	3.0
INDUCTANCE (P-P)	MILLIHENRIES	13.8
ROTOR INERTIA	IN-LBS-SEC <sup>2</sup> [KG-M <sup>2</sup> ]	.0058[.00065]
STATIC FRICTION	TT	1.5[.17]

**ENCODER INFO:**  
5V - 2048L COMMUTATING



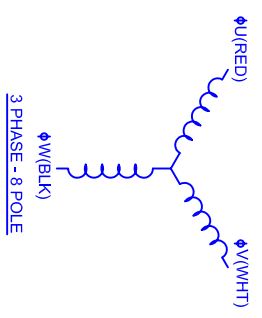
**CONNECTION CHART**

FEEDBACK WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
A	CH A	BLU
B	CH A/	BLU/BLK
C	CH B	GRN
D	CH B/	GRN/BLK
E	-	-
F	CH Z	YEL
G	CH Z/	YEL/BLK
H	CH U	BRN
J	CH V/	BRN/BLK
K	CH V	GRY
L	CH W/	GRY/BLK
M	CH W	WHT
N	CH W/	WHT
P	CASE GND	-
R	GND	BLK
S	+5VDC	RED
T	CH W/	WHT/BLK

MOTOR WIRE LEADS		
PIN	WIRE FUNCTION	WIRE COLOR
A	THERM	-
B	Φ W	BLK
C	THERM	-
D	-	-
E	PE GND	GRN/YEL
F	Φ U	RED
G	BRK	-
H	BRK	-
I	Φ V	WHT

**BRAKE INFO:**

- INPUT VOLTAGE: 24 VDC
- HOLDING FORCE: 9.3 Nm [ 82 IN-LBS ]
- CURRENT DRAW: .75 AMPS
- RELEASING TIME: 20 ms MAX



**TOLERANCES UNLESS SPECIFIED**

BORE: = H7 ✓  
 BORE: = H12 ✓  
 DECIMAL .xxx ±.12 (.005)  
 DECIMAL .xx ±.25 (.010)  
 DECIMAL .x ±.51 (.020)  
 ANGLES: ±.08  
 ANGLE: ±.08

REMOVE ALL BURRS/BREAK SHARP EDGES AS SHOWN

PROPRIETARY RIGHTS OF CUSTOM MOTORS ARE INCLUDED IN THE INFORMATION DISCLOSED HEREIN. THIS INFORMATION IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

CUSTOMER: TS4817N6227E435 DRAWING NO. CM1003R69MK2048CTB

SCALE: 1/2:1 DATE: 1/18/04

100MM - 3 STK

460V/KE=69/MET/2048/CONN/BRK

CUSTOM MOTORS INC

1/2:1 1/18/04 CM1003R69MK2048CTB 1