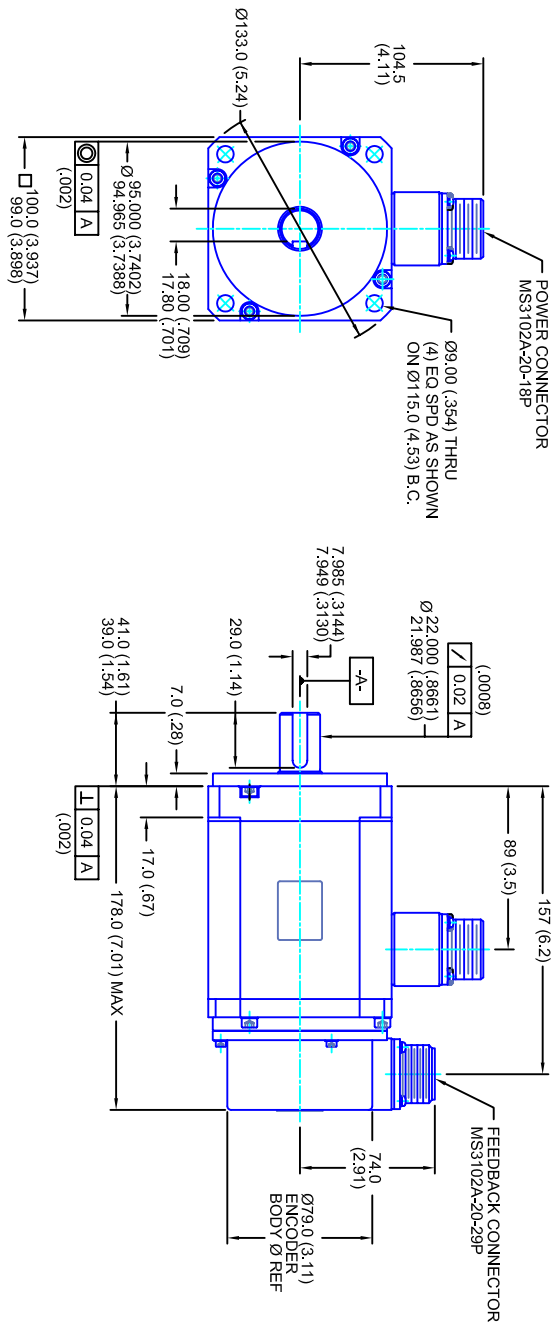


REVISIONS			
REV	DESCRIPTION	DATE	APPD
1	RELEASE DRAWING	4/8/04	



- 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 1.0 (.04)
  7. MOTOR FINISH: SEMI GLOSS BLACK
  8. MOTOR WEIGHT 5.7 KG [ 12.6 LBS ]

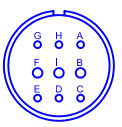
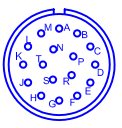
**ELECTRICAL DATA**

MOTOR PARAMETERS	UNITS/MEASURE	VALUES
VOLTAGE	VOLTS-AC	460
AMP TYPE	-	SINE
HORSEPOWER	HP	2.3
KILOWATTS	KW	1.7
MAX OPERATING SPEED	RPM	4500
SPEED @ RATED TORQUE	RPM	3450
*CONTINUOUS RATED TORQUE @ 3450 RPM	IN-LBS[INm]	42.5[4.8]
*CONTINUOUS STALL TORQUE	IN-LBS[INm]	46.8[5.3]
*CONTINUOUS LINE CURRENT	AMPS[RMS] (Φ)	4.2
PEAK TORQUE	IN-LBS[INm]	126.6[14.3]
PEAK CURRENT	AMPS[RMS] (Φ)	12.6
MAX THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	28,773
TORQUE SENSITIVITY	KI [N-SS/AMP/RMS] (Φ) [IN-AMP/RMS] (Φ)	10.3[1.16]
BACK EMF (LINE TO LINE)	Vrms/Krpm	64.4
D.C. RESISTANCE (P-P)	OHMS	4.1
INDUCTANCE (P-P)	MILLIHENRIES	18.9
ROTOR INERTIA	IN-LBS-SEC <sup>2</sup> [KG-M <sup>2</sup> ]	.0044[.00050]
STATIC FRICTION	TT	1.5[.17]

\*40°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON THE MOTOR. THERMOSTAT IN STATOR WILL OPEN IF STATOR TEMPERATURE EXCEEDS 135°C. THIS WILL GIVE YOU ~10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS. MOTOR MOUNTED ON A 450 X 450 X 25MM ALUMINUM HEATSINK.

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

**CONNECTION CHART**  
MS3102A-20-29P



PIN	WIRE FUNCTION	WIRE COLOR
A	CH A	BLU
B	CH A/1	BLU/BLK
C	CH B	GRN
D	CH B/1	GRN/BLK
E	-	-
F	CH Z	YEL
G	CH Z/1	YEL/BLK
H	CH U	BRN
J	CH V/1	BRN/BLK
K	CH V	GRY
L	CH W/1	GRY/BLK
M	CH W	WHT
N	CASE GND	-
P	-	-
R	GND	BLK
S	+5VDC	RED
T	CH W/1	WHT/BLK

PIN	WIRE FUNCTION	WIRE COLOR
A	THERM	BLK
B	ΦW	BLK
C	THERM	-
D	-	-
E	PE GND	GRN/YEL
F	ΦU	RED
G	-	-
H	-	-
I	ΦV	WHT

**TOLERANCES UNLESS SPECIFIED**

SURFACE FINISH:	= 63 Ra ✓
BORE:	= H12
DECIMAL .xxx	± .12 (.005)
DECIMAL .xx	± .25 (.010)
DECIMAL .x	± .51 (.020)
ANGLE	± .03
ANGLE (MM (INCHES))	± .03

**REMOVE ALL BURRS/BREAK SHARP EDGES AS SHOWN**

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CUSTOMER: TS4815N1227E435 DRAWING NO. CM1002R64MK2048CT

SCALE: 1/2:1 DATE: 1/18/04 DRAWING NO. CM1002R64MK2048CT

100MM - 2 STK

460V/KE-64/MET/2048/CONN

CUSTOM MOTORS INC

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