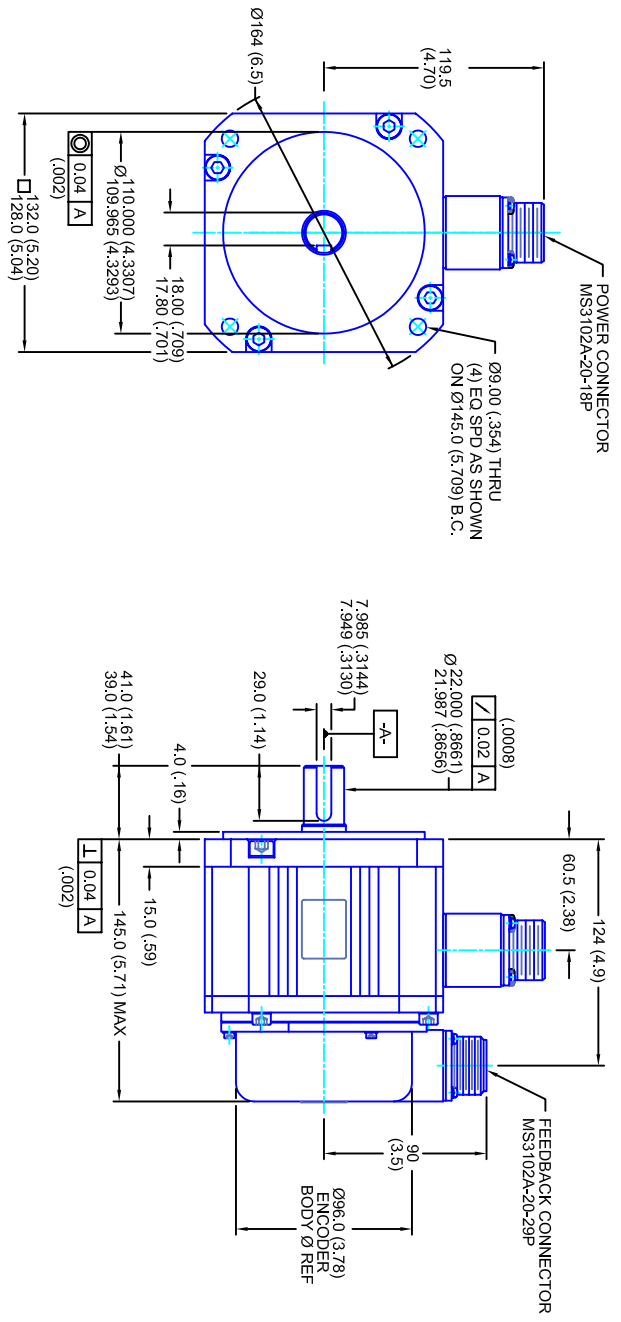


REVISIONS			
REV	DESCRIPTION	DATE	APPD
1	RELEASE DRAWING	4/8/04	

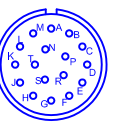


- MOTOR NOTES:**
1. MILLIMETERS (INCHES)
 2. AXIAL LOAD: 10 KG [22 LBS] MAX
 3. RADIAL LOAD: 50 KG [110 LBS] MAX @ 20MM [7/8] FROM FACE
 4. MOTOR SEALED TO IP65; EXCEPT THE PART WITH CONN & OIL SEAL
 5. MOTOR SHAFT: SCM440H STEEL
 6. OIL SEAL: 024 (.95) PROTRUDES FROM FEC 4.0 (.16)
 7. MOTOR FINISH: SEMI GLOSS BLACK
 8. MOTOR WEIGHT 4.8 KG [10.6 LBS]

ELECTRICAL DATA

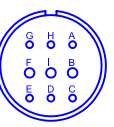
MOTOR PARAMETERS	UNITS/MEASURE	VALUES
VOLTAGE	VOLTS-AC	460
AMP TYPE	SINE	
HORSEPOWER	HP	2.5
KILOWATTS	KW	1.8
MAX OPERATING SPEED	RPM	4500
SPEED @ RATED TORQUE	RPM	3450
*CONTINUOUS RATED TORQUE @ 3450 RPM	IN-LBS(IN) [N]	45.0(15.69)
*CONTINUOUS STALL TORQUE	IN-LBS(IN) [N]	49.5(15.59)
*CONTINUOUS LINE CURRENT	AMPS(RMS) [A]	4.9
PEAK TORQUE	IN-LBS(IN) [N]	135.1(115.3)
PEAK CURRENT	AMPS(RMS) [A]	24.7
MAX THEORETICAL ACCEL.	RAD/SEC ²	25.539
TORQUE SENSITIVITY	KI [N-SS/AMP/RMS] @ [IN/AMP/RMS] [N]	9.2(1.04)
BACK EMF (LINE TO LINE)	Vrms/Krpm	57.8
D.C. RESISTANCE (P-P)	OHMS	3.7
INDUCTANCE (P-P)	MILLIHENRIES	20.1
ROTOR INERTIA	IN-LBS-SEC ² [KG-M ²]	.0053(0.0060)
STATIC FRICTION	TT	1.5(1.17)

ENCODER INFO:
5V - 2048L COMMUTATING



CONNECTION CHART
MS3102A-20-29P

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
I	CH U	BRN/BLK
J	CH V	GRY
K	CH V	GRY
L	CH W	GRY/BLK
M	CH W	WHT
N	CASE GND	-
P	-	-
R	GND	BLK
S	+5VDC	RED
T	CH W	WHT/BLK



MOTOR WIRE LEADS
MS3102A-20-18P

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	-
L	WHT	-

TOLERANCES UNLESS SPECIFIED

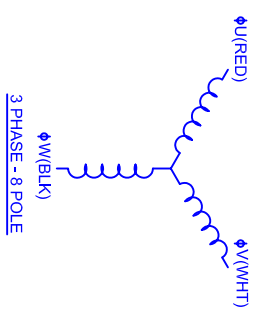
- BORER: = 63 Ra ✓
- DRILL: = H12
- DECIMAL .xxx = ±.012 (0.05)
- DECIMAL .xx = ±.025 (0.10)
- DECIMAL .x = ±.051 (0.20)
- ANGLE: = ±.01 (0.16)
- ANGLE: = ±.03 (0.76)

REMOVE ALL BURRS/BREAK SHARP EDGES AS SHOWN (0.10")



130MM - 1 STK
460V/KE-58/MET/2048/CONN

CUSTOMER: T54833N1227E435	DRAWING NO. CM1301R58MK2048CT	DATE: 1/26/04	SCALE: 1/2:1
DRAWN: DFLA	SHEET: 1 OF 1	REV: 1	



*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.