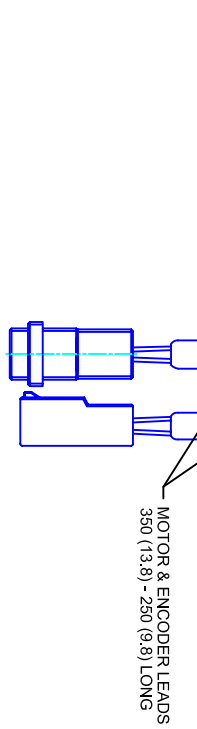
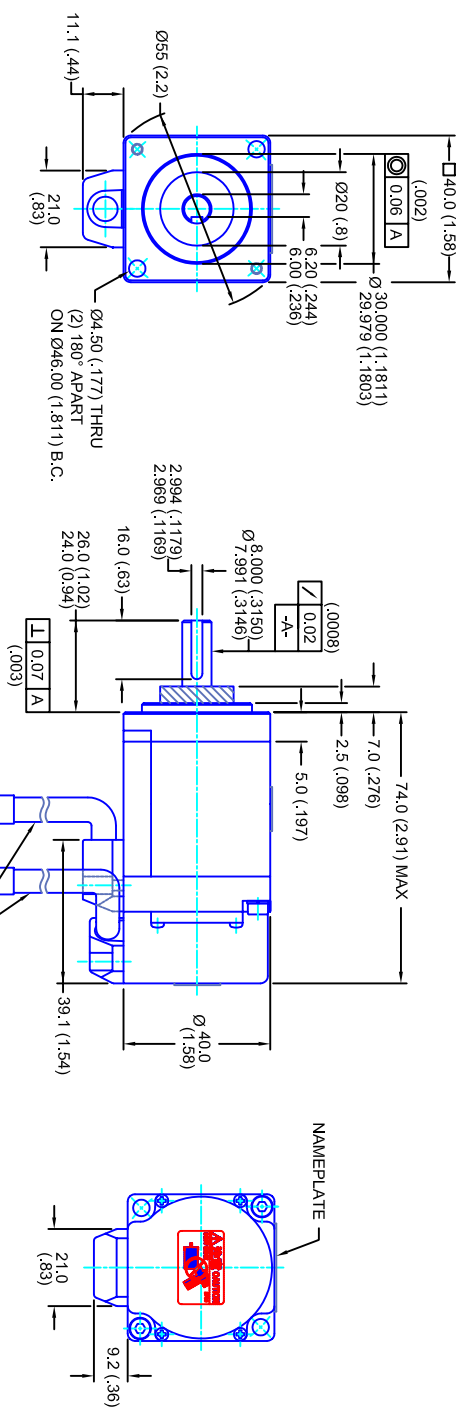


REVISIONS			
REV	DESCRIPTION	DATE	APPD
1	RELEASE DRAWING	11/29/03	
2	REMOVE THERM/UPDATE GEO	1/24/04	



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

- MOTOR NOTES:**
1. MILLIMETERS (INCHES)
  2. AXIAL LOAD: 4 KG [8.8 LBS ] MAX
  3. RADIAL LOAD: 8 KG [17.6 LBS ] MAX @ 20MM [.787] FROM FACE
  4. MOTOR SEALED TO IP65
  5. MOTOR SHAFT: S45C STEEL
  6. MOTOR FINISH: SEMI GLOSS BLACK
  7. MOTOR WEIGHT: .4 KG [ .88 LBS ]

**ELECTRICAL DATA**

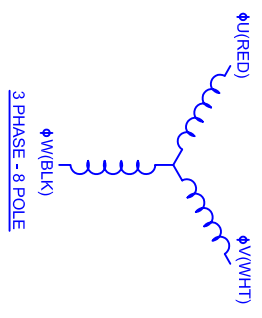
MOTOR PARAMETERS	UNITS/MEASURE	VALUES
VOLTAGE	VOLTS-AC	230
AMP TYPE		SINE
HORSEPOWER	HP	.13
KILOWATTS	KW	.10
MAX OPERATING SPEED	RPM	5000
SPEED @ RATED TORQUE	RPM	3000
*CONTINUOUS RATED TORQUE @ 3000 RPM	IN-LBS(INM)	2.81[.318]
*CONTINUOUS STALL TORQUE	IN-LBS(INM)	3.10[.350]
CONTINUOUS LINE CURRENT	AMPS(RMS) (A)	1.0
PEAK TORQUE	IN-LBS(INM)	8.4[.95]
PEAK CURRENT	AMPS(RMS) (A)	3.0
MAX THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	311,111
TORQUE SENSITIVITY	KI	2.81[.318]
BACK EMF (LINE TO LINE)	Vrms/Krpm	17.6
D.C. RESISTANCE (P-P)	OHMS	20.3
INDUCTANCE (P-P)	MLLHENRIES	32
ROTOR INERTIA	Jm	.000027[.0000020]
STATIC FRICTION	Tf	.18[.020]

**CONNECTION CHART**

AMP -> 178964-3 HSG  
175289-2 CONTACT

PIN	WIRE FUNCTION	WIRE COLOR
A1	CH A	BLU
A2	CH B	GRN
A3	CH Z	YEL
A4	-	-
A5	CH UE	BRN
A6	CH VE	GRY
A7	CH WE	WHT
A8	+5Vdc	RED
A9	-	-
A10	-	-
B1	CH AI	BLU/BLK
B2	CH BI	GRN/BLK
B3	CH ZI	YEL/BLK
B4	-	-
B5	CH UEI	BRN/BLK
B6	CH VEI	GRY/BLK
B7	CH WEI	WHT/BLK
B8	0V	BLK
B9	-	-
B10	SHLD	SHLD

PIN	WIRE FUNCTION	WIRE COLOR
A1	Φ U	RED
A2	Φ V	WHT
A3	Φ W	BLK
B1	PE GND	GRN/YEL
B2	-	-
B3	-	-



40MM - 3 STK  
230V/KE=17.6M/ET/2048

TOLERANCES UNLESS SPECIFIED			
BORING	= H12	✓	
DECIMAL .xxx	= .12 (.005)		
DECIMAL .xx	= .25 (.010)		
DECIMAL .x	= .51 (.020)		
ANGLE (MM INCHES)	= .40 (.016)		
ANGLE	= 0.50		

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

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CUSTOMER: TS4603N1407E200 DRAWN: DFLA SHEET: 1 OF 1

SCALE: 1:1 DATE: 11/29/03 DRAWING NO: CM403Q17.6MK2048CT REV: 2

\*40°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON THE MOTOR.  
MOTOR MOUNTED ON A 200 X 200 X 12MM ALUMINUM HEAT SINK.