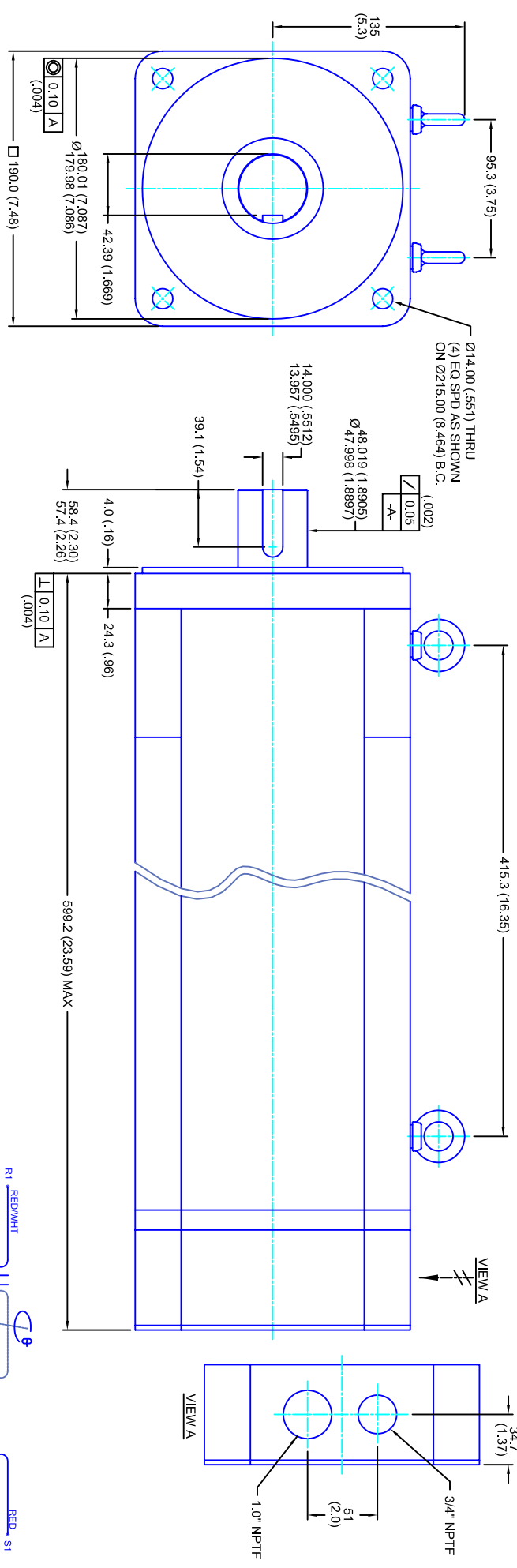


REVISIONS			
REV	DESCRIPTION	DATE	APPD
1	RELEASED DRAWING	11/3/05	



- NOTES:**
1. MILLIMETERS (INCHES)
  2. AXIAL LOAD: 45 KG [100 LBS ] MAX
  3. RADIAL LOAD: 113 KG [250 LBS ] MAX @ 25.4MM [1.00] FROM FACE
  4. MOTOR SEALED TO IP65
  5. MOTOR SHAFT: G&P STEEL, GRADE 1144
  6. MOTOR FINISH: BLACK MATT FINISH
  7. MOTOR WEIGHT 84 KG [185 LBS ]

**ELECTRICAL DATA**

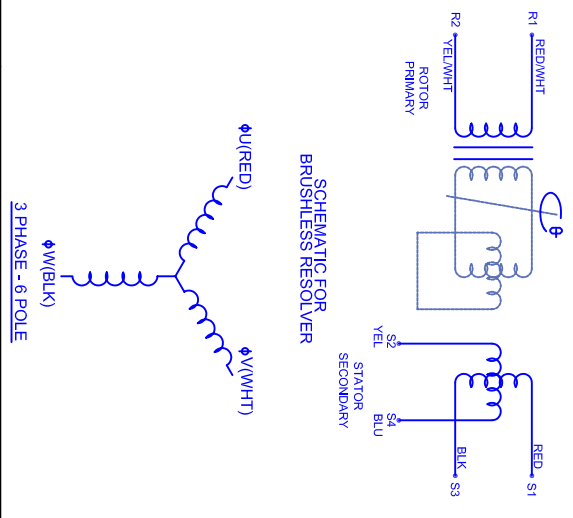
MOTOR PARAMETERS	UNITS/MEASURE	VALUES
VOLTAGE	VOLTS-AC	230
AMP TYPE	-	SINE
HORSEPOWER	HP	18.0
KILOWATTS	KW	13.4
MAX OPERATING SPEED	RPM	1400
SPEED @ RATED TORQUE	RPM	1200
*CONTINUOUS RATED TORQUE @ 1200 RPM	N·M	9391.06 [1]
*CONTINUOUS LINE CURRENT	AMP(S)/RMS(Φ)	43.0
PEAK TORQUE	AMP(S)/RMS(Φ)	3276370.2
PEAK CURRENT	AMP(S)/RMS(Φ)	127.5
MAX THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	23.201
TORQUE SENSITIVITY	KI [N·M/AMP/RMS(Φ)]/M[A/AMP/RMS(Φ)]	25.7 [2.91]
BACK EMF (LINE TO LINE)	Vrms/Krpm	162
D.C. RESISTANCE (P-P)	OHMS	.14
INDUCTANCE (P-P)	MILLIHENRIES	1.9
ROTOR INERTIA	Jm	.1412 [0.1595] w/ Brk
STATIC FRICTION	TT	13.0 [1.5]

**CONNECTION CHART**

RES/THERM/BRK WIRE LEADS	WIRE FUNCTION	WIRE COLOR	TERMINAL FUNCTION	WIRE COLOR
R1	SHLD	WHT/BLK	1	RED
R2	THERM	WHT	2	Φ V
R3	THERM	WHT	3	Φ W
R4	SIN GND	YEL		BLK
R5	COS GND	YEL		GRN/YEL
R6	COS	RED		
R7	SIN	BLU		
R8	REF	RED/WHT		
R9	REF GND	YEL/WHT		
R10	BRK (-)	BLK		
R11	BRK (+)	RED		

**BRAKE INFO:**  
 INPUT VOLTAGE: 24 VDC  
 HOLDING FORCE: 122 Nm [ 90 FT-LBS ] MAX  
 CURRENT DRAW: 2.31 AMPS  
 RELEASE TIME: 100 ms  
 INERTIA: .00150 IN-LBS-SEC

**SCHEMATIC FOR BRUSHLESS RESOLVER**



\*25°C AMBIENT WITH A MAXIMUM CASE TEMPERATURE OF 100°C ON THE MOTOR. THERMOSTAT IN STATOR WILL OPEN IF STATOR TEMPERATURE EXCEEDS 155°C. THIS WILL GIVE YOU ~10% HEADROOM IN THE CONTINUOUS TORQUE RATING BEFORE THERMOSTAT OPENS. MOTOR MOUNTED ON A 356 X 356 X 19MM ALUMINUM HEATSINK.

**TOLERANCES UNLESS SPECIFIED**

BORER:	= H7	✓
DECIMAL .xxx	± .12 (0.05)	
DECIMAL .xx	± .25 (0.10)	
DECIMAL .x	± .51 (0.20)	
ANGLE	± .40 (0.6)	
ANGLE (MM INCHES)	± .09	

REMOVE ALL BURRS/BREAK SHARP EDGES, ZAMPER (0.10°)

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**CUSTOM MOTORS INC**

**230V/KE=162MMET/RES/NPT/BRK**

190MM - 4 STK

CUSTOMER: DRAWN: DFLA SHEET: 1 OF 1

SCALE: 1/2:1 DATE: 9/8/04 DRAWING NO.: CM1904Q.162MKRNPBT REV.: 1