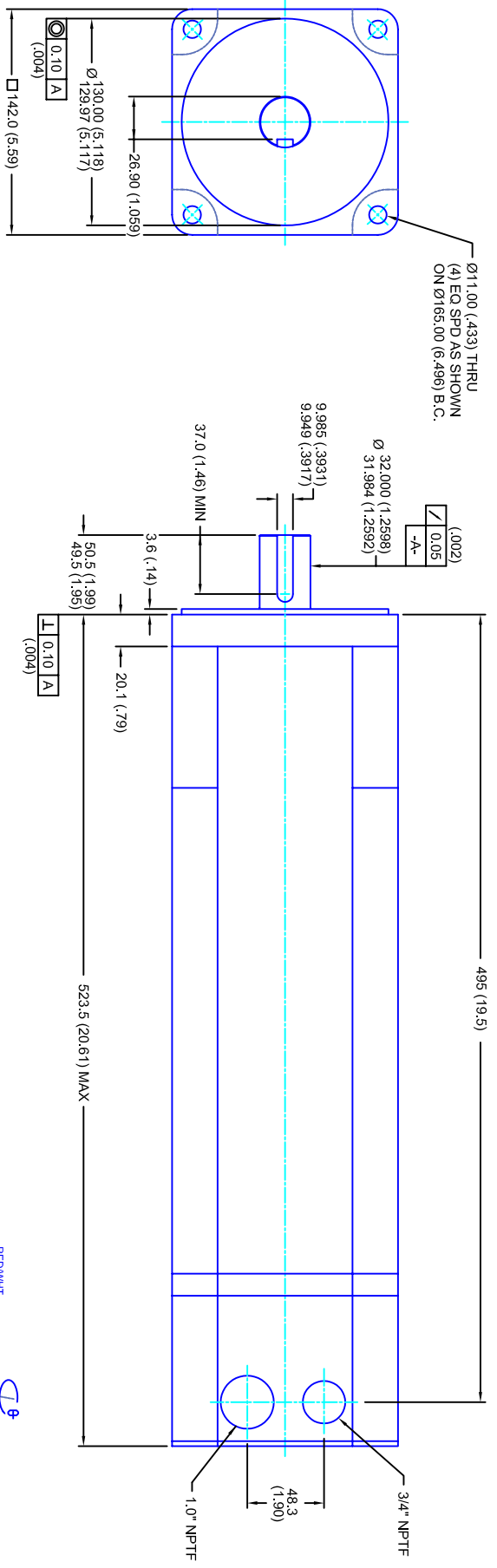


REVISIONS			
REV	DESCRIPTION	DATE	APPD
1	QUOTE DRAWING	3/17/05	



- NOTES:**
1. MILLIMETERS (INCHES)
  2. AXIAL LOAD: 23 KG [ 50 LBS ] MAX
  3. RADIAL LOAD: 68 KG [ 150 LBS ] MAX @ 25.4MM [ 1.00 ] FROM FACE
  4. MOTOR SEALED TO IP65
  5. MOTOR SHAFT: 416 STAINLESS STEEL
  6. MOTOR FINISH: BLACK MATT FINISH
  7. MOTOR WEIGHT: 36.3 KG [ 80 LBS ]

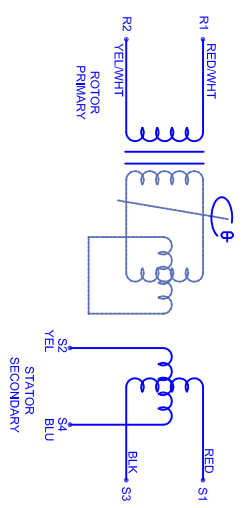
**ELECTRICAL DATA**

MOTOR PARAMETERS	UNITS/MEASURE	VALUES
VOLTAGE	VOLTS-AC	230
AMP TYPE	-	SINE
HORSEPOWER	Hp	9.1
KILOWATTS	KW	6.8
MAX OPERATING SPEED	RPM	2700
SPEED @ RATED TORQUE	RPM	2400
*CONTINUOUS RATED TORQUE @ 2400 RPM	IN-LBS(INM)	238(26.9)
*CONTINUOUS LINE CURRENT	AMPS(RMS/Φ)	22.0
PEAK TORQUE	IN-LBS(INM)	840(94.9)
PEAK CURRENT	AMPS(RMS/Φ)	66.1
MAX THEORETICAL ACCEL.	RAD/SEC <sup>2</sup>	28.866
TORQUE SENSITIVITY	KI [N-LBS/AMP/RMS/Φ]/(N-AMP/RMS/Φ)	12.7(1.44)
BACK EMF (LINE TO LINE)	Vrms/Krpm	80
D.C. RESISTANCE (P-P)	OHMS	.17
INDUCTANCE (P-P)	MILLIHENRIES	1.5
ROTOR INERTIA	Jm	.029(1.00329) w/ Bk
STATIC FRICTION	TT	3.6(0.41)

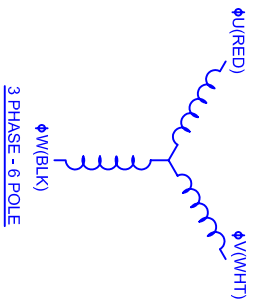
**CONNECTION CHART**

RES/THERM WIRE LEADS	WIRE FUNCTION	WIRE COLOR
R1	GND/SHLD	WHT/BLK
R2	THERM	WHT
R3	THERM	WHT
R4	SIN GND	YEL
R5	COS GND	BLK
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: 40.7 Nm [ 360 IN-LBS ] MAX  
 CURRENT DRAW: 1.13 AMPS  
 RELEASING TIME: 100 ms  
 INERTIA: .00041 IN-LBS-SEC<sup>2</sup>



**SCHEMATIC FOR BRUSHLESS RESOLVER**



**TOLERANCES UNLESS SPECIFIED**

BORER: = H12 ✓  
 DECIMAL .xxx ±.12 (.005)  
 DECIMAL .xx ±.25 (.010)  
 DECIMAL .x ±.51 (.020)  
 FRACTION ±.01 (.005)  
 ANGLE (MM/INCHES) ±.08

REMOVE ALL BURRS, BREAK SHARP EDGES, AND DEBURR. USE THE SHARPENING TOOL TO REMOVE BURRS AND SHARPEN THE CHAMFER.

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CUSTOMER: - DATE: 6/17/04 DRAWING NO: CM1423Q80MKRNPBT DRAWM: DFLA SHEET: 1 OF 1 SCALE: 1/2:1

**142MM - 3 STK**  
**230V/KE=80/METRES/NPTBRK**

**CUSTOM MOTORS INC**

\*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 305 X 305 X 12.7MM ALUMINUM HEATSINK.