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PERFORMANCE DATA	UNITS	VALUE
PEAK TORQUE (Tp)	OZ-IN	100
MOTOR CONSTANT (K <sub>m</sub> )	OZ-IN/√WATT	7.95
POWER AT Tp (Pp)	WATT	15.8
THERMAL RESISTANCE	°C/W	4.69
MAX ALLOWABLE WINDING TEMP	°C	155
ELECT TIME CONSTANT	MILLISEC	.72
MOMENT OF INERTIA (Jm)	OZ-IN-SEC <sup>2</sup>	.0006
WEIGHT	OZ	16
POLES		4
PHASES		3
MAX SPEED, MOTOR	RPM	7,000
MAX SPEED, ENCODER *	RPM	6,000

WINDING DATA	UNITS	TOLERANCE	-01	-02	-03
RESISTANCE	OHMS	±12.5%	6.3	4.4	18.0
TORQUE SENSITIVITY	OZ-IN/AMP	±1.0%	5.8	20.0	38.4
BACK EMF	VOLTS/RAD/SEC	±10%	.041	.146	.271
INDUCTANCE	MILLIHENRY	±30%	.38	5.4	13.1
CURRENT @ Tp	AMP	REF	17.3	4.85	2.60
VOLTAGE @ Tp	VOLT	REF	9.2	24.3	46.9

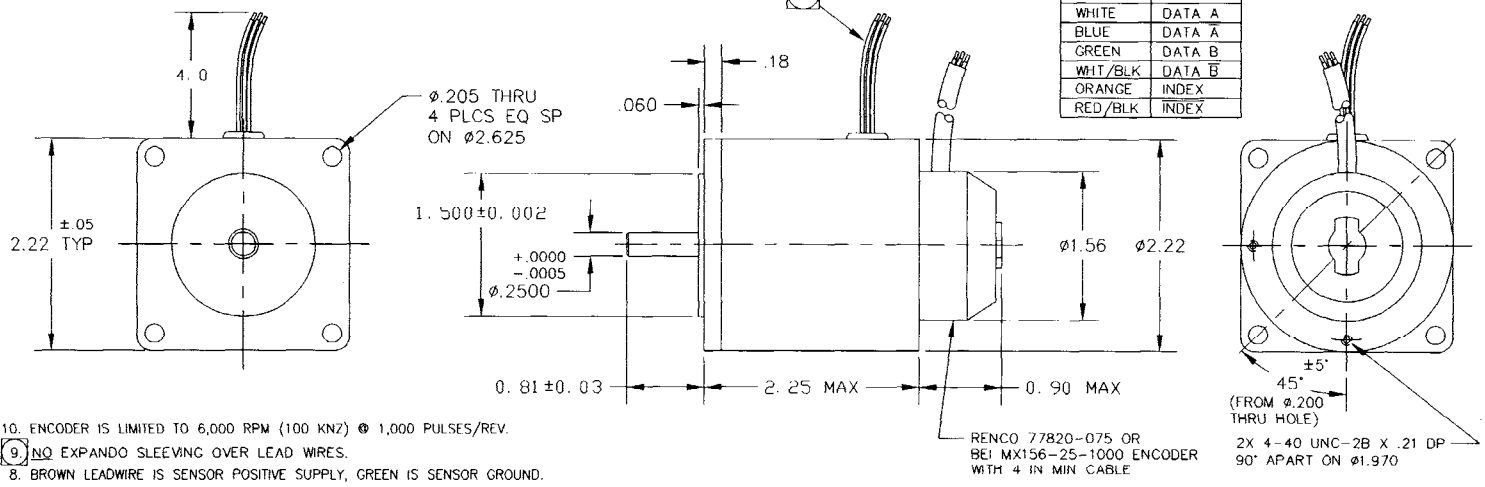
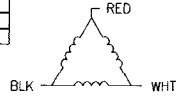
MOTOR PHASE	COLOR	1	2	3	4	5	6
A	RED	+	+	-	-	-	-
D	BLK	-	-	+	+	-	-
C	WHT	-	-	-	-	+	+

SENSOR	1	2	3	4	5	6
1	YEL	1	1	0	0	1
2	ORN	0	1	1	1	0
3	BLU	0	0	0	1	1
+	BRN					
-	GRN					

13683	DATE
C 06-11-96	13567
E 7-26-95	13071
A 9/22/95	
C.C.N. NO.	
REV	

ENCODER COLOR	CABLE FUNCTION
RED	+5 VDC
BLACK	GROUND
WHITE	DATA A
BLUE	DATA A
GREEN	DATA B
WHT/BLK	DATA B
ORANGE	INDEX
RED/BLK	INDEX



- \* 10. ENCODER IS LIMITED TO 6,000 RPM (100 KNZ) @ 1,000 PULSES/REV.
  - 9. NO EXPANDO SLEEVING OVER LEAD WIRES.
  - 8. BROWN LEADWIRE IS SENSOR POSITIVE SUPPLY, GREEN IS SENSOR GROUND.
  - 7. INSULATION RESISTANCE IS 100 MEGOHMS MIN AT 500 VDC, WINDING TO CASE.
  - 6. ROTATION CW, FROM LEAD END, ENERGIZED PER COMMUTATION TABLE.
  - 5. SENSOR LEADS: 26 AWG PER MIL-W-16878/4 TYPE E, 4 INCHES MIN.
  - 4. MOTOR LEADS: 22 AWG PER MIL-W-16878/4 TYPE E, 4 INCHES MIN.
  - 3. LABEL DATA TO INCLUDE RAPIDSYN PART NO., DATE CODE, VOLTAGE, CURRENT AND SERIAL NO.
  - 2. HOUSING: CAST ALUM WITH BLK WRINKLE FINISH.
  - 1. PERFORMANCE AND WINDING DATA ARE AT 25°C WINDING TEMP.
- NOTES: UNLESS OTHERWISE SPECIFIED.

RENCO 77820-075 OR  
BEI MX156-25-1000 ENCODER  
WITH 4 IN MIN CABLE

TOLERANCE UNLESS OTHERWISE SPECIFIED FRACTIONS 1/32 (.794 mm)	DRAWN THOMPSON	DATE 01-20-93	 
DECIMALS: XX ± .01 (.254 mm) XXX ± .005 (.127 mm) XXXX ± .0005 (.0127 mm)	CHECKED <i>[Signature]</i>	DATE 6-12-96	
ANGLES: ±1/2 DEGREE	DATE HSA 01-21-93	TITLE DC BRUSHLESS MOTOR	SUB B FROM NO 23BLS-02I- REV C SCALE NONE SHEET 1 of 1
SURFACE FINISH 100/V DO NOT SCALE	<small>* THIS DRAWING IS THE PROPERTY OF API INC. IT IS LOANED TO YOU FOR CONFIDENTIAL INFORMATION PURPOSES ONLY AND IS NOT TO BE REPRODUCED OR USED FOR MANUFACTURING PURPOSES WITHOUT THE EXPRESS WRITTEN PERMISSION OF API INC. *</small>		