


REVISIONS				
ECO	REV	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE	9/9/78	G. SMITH
	B	SEE ECO 3528	2/20/90	<i>B. Corser</i>
	C	SEE ECO 3652	8-6-91	<i>K. Kordik</i>
	D	SEE ECO 3733	6-22-92	<i>K. Kordik</i>
	E	ADD'D 105°C [5] ECO 3763	10-16-92	<i>K. Kordik</i>
	F	ADD PINION DWG NO, 3938		
5235	G	ADD EU COMPLIANCE NOTES	8/25/05	<i>R. Hazelwood</i>
6302	H	REVISE PINION NOTE	5/23/11	<i>J Amos</i>

IF PINION IS REQUIRED THIS SPEC IS NOT COMPLETE
WITHOUT DWG NO. 5023-820P

1. THIS SPEC NOT COMPLETE WITHOUT: DWG. NO. 231851
NOTES, UNLESS OTHERWISE SPECIFIED:

CONTRACT NO.		CAT		 APPLIED MOTION PRODUCTS, INC.	
APPROVALS		DATE		<h1>MOTOR SPECIFICATION</h1>	
DRAWN	<i>R. BARRICK</i>	<i>2/2/90</i>			
CHECKED	<i>B. Corser</i>	<i>6-22-92</i>			
APPROVED	<i>G.R. SMITH</i>	<i>6-19-78</i>			
APPROVED	<i>B. Corser</i>	<i>2/20/90</i>			
		A	COMPUTER DATA BASE DRAWING	DWG NO. 4023-820	REV H
				SHEET 1 OF 4	

NOTES, UNLESS OTHERWISE SPECIFIED:

- 1 MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- 2 BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- 3 MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC FOR ONE MINUTE.
- 5 LEADS: 6, AWG 22, 7 STRAND MINIMUM. UL AND CSA APPROVED, 105°C, "L" = 457mm MINIMUM.
6. INSULATION RESISTANCE: 100 MEGOHMS MINIMUM AT 500 VDC.
- 7 AS MEASURED ACROSS ANY WINDING.
- 8 AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE (1 KHz).
- 9 AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE APPLIED TO 2 PHASES WITH MOTOR AT REST.
- 10 SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER.
11. LAMINATION MATERIAL: 0.5mm thk, SEE AMP SPEC #1500-062.
12. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
13. MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT.



TITLE **MOTOR SPECIFICATION**

SPEC NO. **4023-820**

REV
H

COMPUTER DATA BASE DRAWING

SHEET 2 OF 4

SPECIFICATIONS:	NOTES
STEPS PER REVOLUTION: 200	
STEP ANGLE: 1.8°	
STEP TO STEP ACCURACY: ±5%	1 2
POSITIONAL ACCURACY: ±5%	1 3
HYSTERESIS:	
WINDING RESISTANCE: 0.33 OHMS ±10% AT 25°	7
WINDING INDUCTANCE: 0.35 mH ± 20%	8
PHASE VOLTAGE: 1.3 VDC	
PHASE CURRENT: 3.9 AMP (RATED)	
SHAFT RUNOUT: .025 T.I.R.	
RADIAL PLAY: .025 WITH .45 Kg RADIAL LOAD	
END PLAY: .025 MAX WITH A 4.1 KG AXIAL LOAD	
ROTOR INERTIA: 110 G-CM ²	
HOLDING TORQUE; 3.8 KG-CM MIN.	1
DETENT TORQUE: 360 G-CM MIN.	
INSULATION CLASS: B	
BEARINGS: ABEC 3, DOUBLE SHIELDED	
TEMPERATURE RISE: 80°C MAX	9
OPERATING TEMPERATURE RANGE: -10 TO 40°C	
STORAGE TEMPERATURE RANGE: -40 TO 70°C	
RELATIVE HUMIDITY RANGE: 5 TO 95%	
MAX OVERHANG LOAD: 6.79 KG	
MAX THRUST LOAD: 11.32 KG	
WEIGHT: .57 KG REF	



TITLE **MOTOR SPECIFICATION**

SPEC NO. **4023-820**

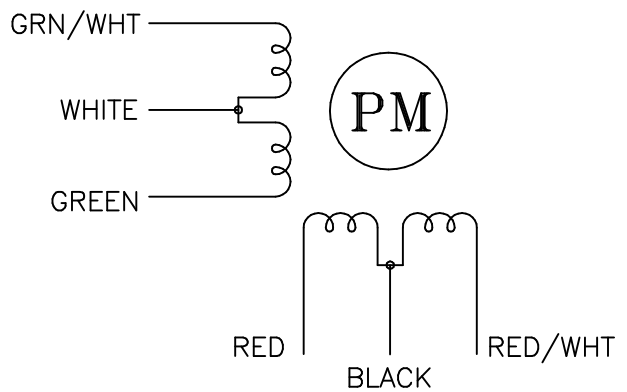
REV **H**

COMPUTER DATA BASE DRAWING

SHEET 3 OF 4

SWITCHING SEQUENCE FOR CW ROTATION
FACING MOUNTING END

STEP	RED	RED/WHT	GREEN	GRN/WHT
0	ON	OFF	ON	OFF
1	OFF	ON	ON	OFF
2	OFF	ON	OFF	ON
3	ON	OFF	OFF	ON
4	ON	OFF	ON	OFF



APPLIED
MOTION
PRODUCTS, INC.

TITLE **MOTOR SPECIFICATION**

SPEC NO. **4023-820**

REV
H

COMPUTER DATA BASE DRAWING

SHEET 4 OF 4