


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE ECO 3552	1-2-91	<i>K. Kordik</i>
B	SEE ECO 3662	8-30-91	<i>K. Kordik</i>
C	CHG'D HLD TRQ, SEE 3696	2-10-92	<i>K. Kordik</i>
D	SEE ECO 3933	4-21-93	<i>R. Kordik</i>

1. THIS SPEC NOT COMPLETE WITHOUT: DRAWING NO. 171846  
 NOTES, UNLESS OTHERWISE SPECIFIED:

CONTRACT NO. CAT		 APPLIED MOTION PRODUCTS, INC.		
APPROVALS	DATE	<h1>MOTOR SPECIFICATION</h1>		
DRAWN <i>R. BARRICK</i>	9/11/90			
CHECKED <i>B. Corser</i>	4/21/95	<h2>A</h2>	COMPUTER DATA BASE DRAWING	
APPROVED <i>B. Corser</i>	12/23/90		DWG NO. 5017-014	REV D
APPROVED <i>K. Kordik</i>	1/2/91		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 3265 AND CSA APPROVED, "L" = 305mm 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. ROTOR: LAMINATED CONSTRUCTION.



TITLE  
MOTOR SPECIFICATION

SPEC NO. 5017-014

REV  
D

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: 30 OHMS±10% AT 25°C	7
WINDING INDUCTANCE: 26 mH ± 20%	8
PHASE VOLTAGE: 12.0 VDC	
PHASE CURRENT: 0.4 AMP (RATED)	
SHAFT RUNOUT: .013 T.I.R.	
RADIAL PLAY: 0.03 MAX WITH 2 KG RADIAL LOAD	
END PLAY: 0.03 MAX WITH A 3 KG AXIAL LOAD	
ROTOR INERTIA: 35 G-CM <sup>2</sup> REF	
HOLDING TORQUE: 2.16 KG-CM MIN	1
DETENT TORQUE: 65 G-CM MIN	
INSULATION CLASS: B	
BEARINGS: ABEC 3, DOUBLE SHIELDED	
TEMPERATURE RISE: 80°C MAX	9
OPERATING TEMPERATURE RANGE: -20 TO 50°C	
STORAGE TEMPERATURE RANGE: -40 TO 70°C	
RELATIVE HUMIDITY RANGE: 5 TO 95%	



TITLE  
MOTOR SPECIFICATION

SPEC NO. 5017-014

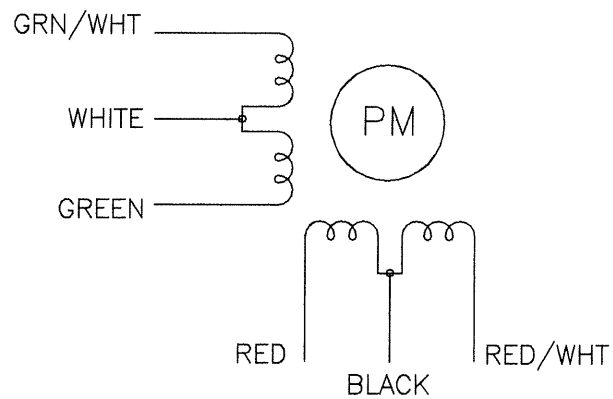
REV  
D

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



TITLE  
MOTOR SPECIFICATION

SPEC NO. 5017-014

REV  
D

COMPUTER DATA BASE DRAWING

SHEET 4 OF 4