


SPECIFICATIONS:	NOTES		
STEPS PER REVOLUTION: 200			
STEP ANGLE: 1.8°			
STEP TO STEP ACCURACY: ±3%	1	2	
POSITIONAL ACCURACY: ±.0833°	1	3	
HYSTERESIS: .0334°			
WINDING RESISTANCE: .64 OHMS ±10% @ 25° (W/CABLE .9)	7		
WINDING INDUCTANCE: 2.5 mH ± 20%	8		
PHASE VOLTAGE: 1.26 VDC	7		
PHASE CURRENT: 1.4 AMPS (OPERATING)	20		
SHAFT RUNOUT: .025mm T.I.R.			
RADIAL PLAY: .025mm WITH .45 Kg RADIAL LOAD			
END PLAY: .025mm MAX WITH A 6.8 Kg AXIAL LOAD			
ROTOR INERTIA: 670 G-CM ² REF			
HOLDING TORQUE: 8.0 KG-CM MIN (● OPERATING CURRENT)	1		
DETENT TORQUE: 140 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: 11.32 KG			
MAX THRUST LOAD: 22.64 KG			
MAX CASE TEMPERATURE: 100°C			
WEIGHT: 1.54 KG (3.4 LB)			
			
TITLE	MOTOR SPECIFICATION	SPEC NO.	5034-231
	COMPUTER DATA BASE DRAWING	SHEET	3
		REV	G

DETAIL A
SCALE:NONE

PIN NO.	COLOR
1	JUMPER*
2	YELLOW & BLUE
3	RED
4	BLACK
5	SHIELD
6	WHITE
7	GREEN
8	ORANGE & BROWN
9	JUMPER*

* JUMPER: 22 AWG, 19 STRAND, YELLOW WIRE

DETAIL B
SCALE:NONE

SWITCHING SEQUENCE FOR CW ROTATION
FACING MOUNTING END

STEP	RED	BLACK	WHITE	GREEN
0	+	-	-	+
1	-	+	-	+
2	-	+	+	-
3	+	-	+	-
4	+	-	-	+

APPLIED
MOTION
PRODUCTS, INC.

TITLE

MOTOR SPECIFICATION


SPEC NO.

5034-231

REV
G


COMPUTER DATA BASE DRAWING

SHEET 4

NOTES, UNLESS OTHERWISE SPECIFIED:			
1	MEASUREMENTS MADE 2 PHASE ON SERIES CONNECTED.		
2	BETWEEN ANY TWO ADJACENT STEP POSITIONS.		
3	MAXIMUM ERROR IN 360°.		
4	HIPOT 1150 VAC FOR ONE MINUTE.		
5	SEE NOTE 18 <input type="checkbox"/>		
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: REAR SHAFT REQUIRED.		
11	MATERIAL: LAMINATION, 0.35tk, SEE AMP STANDARD SPEC # 1500-049.		
12	MICROSTEP LAMINATION, (7.5° TOOTH CONSTRUCTION).		
13	PAINT MOTOR BODY PER MOTOR MANUFACTURER SPECIFICATION. END BELLS DO NOT REQUIRE PAINTING.		
14	STAMP FRONT END BELL MOUNTING SURFACE, WITH DATE (WEEK/YEAR), "AMP", "MADE IN JAPAN" AND AMP MOTOR NUMBER USING PERMANENT INK. LABEL NOT REQUIRED.		
15	TERMINATE DRAIN WIRE IN A RING LUG, AND ATTACH TO UNPAINTED SURFACE OF MOTOR CASE IN A GAS TIGHT (COMPRESSION) SEAL. THE MEANS OF ATTACHMENT IS NOT TO EXTEND BEYOND THE OUTER SURFACE OF THE CASE, END BELL OR REAR PLATE. SEE DETAIL B SHEET 4.		
16	CABLE IS TO BE INTERNALLY STRAIN RELIEVED TO WITHSTAND A PULLOUT FORCE OF 13.6 KG (30 LBS) WITHOUT EXPOSING UNJACKETED LEADS.		
17	CABLE EXIT FROM MOTOR TO BE SEALED TO PREVENT OIL AND DIRT INTRUSION.		
18	CABLE SPECIFICATION: PER AMP DWG 3004-106.		
19	WINDING INFORMATION, REFER TO AMP SPEC # 1500-048.		
20	AS MEASURED ACROSS TWO WINDINGS IN SERIES.		
21	ROTOR & STATOR LAMINATIONS TO BE PAINTED WITH H-5 YELLOW PRIMER.		
22	MOTOR POWER LOSS MAX SPEC, SEE AMP STD SPEC #1500-065.		
23	THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".		
24	MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT.		
			
TITLE	MOTOR SPECIFICATION	SPEC NO.	5034-231
	COMPUTER DATA BASE DRAWING	SHEET	2
		REV	G

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE 3489	6/22/89	M.SALTER
B	SEE ECO 3495	8/16/89	M.SALTER
C	NEW FORMAT ECO 3509	1/11/90	B. CORSE
D	SEE ECO 3573	8/9/90	K.K.
E	SEE ECO 3634	4/24/91	K. Kordik
F	SEE ECO 3683		
G	SEE ECO 5235	9/29/05	B.H.

1. THIS SPEC NOT COMPLETE WITHOUT: DWG. NO. 341864
NOTES, UNLESS OTHERWISE SPECIFIED:

CUSTOMER PART NO. S/SX 83-62 CMP P/N 71-011646-02		 APPLIED MOTION PRODUCTS, INC.					
APPROVALS	DATE	MOTOR SPECIFICATION					
DRAWN R. BARRICK	5/1/89						
CHECKED							
APPROVED B. Corser	1/11/90						
APPROVED		A	COMPUTER DATA BASE DRAWING	DWG NO.	5034-231	REV	G
				SHEET 1 OF 4			