

SPECIFICATIONS:

NUMBER OF PHASES: 4	ROTOR INERTIA: 300 g-cm ² (1.64 oz-in ²) NOM
STEPS PER REVOLUTION: 200	BEARINGS: ABEC 3, DOUBLE SHIELDED
STEP ANGLE: 1.8°	INSULATION CLASS: B
STEP TO STEP ACCURACY: ±0.09°	TEMP. RISE: 80°C MAX.
POSITION ACCURACY: ±0.09°	OPERATING TEMP. RANGE: -20 TO +50°C
SHAFT RUNOUT: 0.05 mm T.I.R. MAX	STORAGE TEMP. RANGE: -40 TO +70°C
RADIAL PLAY: 0.02mm MAX (450g LOAD)	RELATIVE HUMIDITY RANGE: 5 TO 95%
AXIAL PLAY: 0.08mm MAX (1 kg LOAD)	WEIGHT: 0.7 kg (1.54 lbf) APPROXIMATE

CONNECTION	NUMBER OF PHASES	RESISTANCE PER PHASE (ohm $\pm 10\%$) 7	INDUCTANCE PER PHASE (mH $\pm 20\%$) 8	RATED CURRENT (Amp)	HOLDING TORQUE (Nm) Min. 1	HOLDING TORQUE (ozf-in.) Min. 1
BI-POLAR SERIES	2	14.4	51.2	0.71	1.05	148
BI-POLAR PARALLEL	2	3.6	14.3	1.41	1.05	148
UNIPOLAR	4	7.2	14.3	1.0	0.83	117

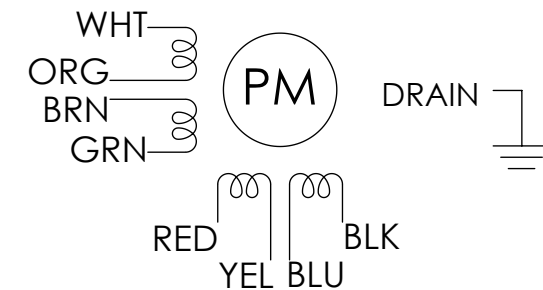
NOTES, UNLESS OTHER WISE SPECIFIED:

- 1 MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- 2 BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
- 3 MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC, 60Hz FOR ONE MINUTE.
- 5 LEADS: 8, 24 AWG, 7 STRAND MIN. UL AND CSA APPROVED. UL 1430 OR UL 3265. CABLE, 8 COND. W/DRAIN. CABLE 666-2107
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- 7 MEASUREMENTS MADE WITHOUT CABLE.
- 8 AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE AT 1KHz.
- MEASUREMENTS MADE WITHOUT CABLE.
- 9 AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED CURRENT APPLIED TO 2 PHASES WITH MOTOR AT REST.
- 10 DRAIN WIRE TO BE CONNECTED TO INSIDE OF REAR END BELL. LOCATION MAY VARY
11. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH CURRENT EU RoHS DIRECTIVE.
- 12 MOTOR LABEL TO INCLUDE AMP LOGO, AMP WEBSITE ADDRESS, "RoHS" COMPLIANCE LOGO, AMP P/N, "MADE IN (COUNTRY)", AND DATE CODE.
- 13 ADD "D" TO END OF PART NUMBER IF DOUBLE SHAFT IS REQUIRED.
- DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTIONS.

REVISIONS

ECO #	REV.	DESCRIPTION	DATE	APPROVED
5349	A	INITIAL RELEASE	11/07/06	J.KORDIK
5462	B	REVISE NOTE 12, ADD LABEL	04/04/07	J.KORDIK
5891	C	REMOVE D FROM PN, DASH SHFT OPTN	03/09/09	J.KORDIK
6165	D	REMOVE CONN, BOOT	09/10/10	J.KORDIK
6197	E	REVISE CABLE P/N	10/27/10	J.AMOS
6203	F	REVISE SPECS	12/21/10	J.KORDIK
7445	G	REVISE NOTE 13	06/06/16	J.KORDIK
8221	H	ADD ENCODER MOUNTING HOLES	05/03/19	J.KORDIK
8854	J	REDRAWN IN SOLIDWORKS, REVISE SPECS	10/18/22	L.LIU
8857	K	CORRECTED HOLDING TORQUE AND UL SPEC	10/24/22	K.KESLER

WIRING DIAGRAM



DRIVE SEQUENCE MODEL BI-POLAR SERIES FULL STEP

The diagram shows a 5x2 grid of cells. On the left side, a vertical arrow points downwards, labeled 'CW'. On the right side, a vertical arrow points upwards, labeled 'CCW'. The grid contains the following values:

STEP	(A+) WHT	(A-) GRN	(B+) RED	(B-) BLK
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+
1	+	-	+	-

CW (CLOCKWISE) AND CCW (COUNTER-CLOCKWISE) ROTATION
WHEN SEEN FROM THE MOUNTING FACE END OF THE MOTOR



 Applied Motion Products A MOONS' COMPANY	THIRD ANGLE PROJECTION		NAME	DATE	TITLE: STEPPER MOTOR		
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: - ANGULAR: ± 0.5 - ONE DECIMAL PLACE: ± 0.25 - TWO DECIMAL PLACES: ± 0.13	DRAWN	C.BREUNINGER	10/24/22			
		PRE.CHECK					
		PRE.APPROVAL					
		FIN.CHECK	K.KESLER	10/24/22			
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APPLIED MOTION PRODUCTS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF APPLIED MOTION PRODUCTS IS PROHIBITED.	MATERIAL	SAP: 4611110060774			SIZE	DWG. NO.	REV
	FINISH	ALT DWG. NO.: HT23-553D			B	HT23-553	K
	DO NOT SCALE DRAWING	ALT SAP: 4611110060778					
				SCALE: 1:1		SHEET 1 OF 2	

