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ECO # REV.		DESCRIPTION	DATE	APPROVED
5976	Α	INITIAL RELEASE	08/28/09	J. KORDIK
6090	В	STANDARDIZE ENCODER HOLES	03/11/10	J. KORDIK
6807	С	REVISE FLANGE THICKNESS	09/09/13	J. KORDIK
7445			06/06/16	J. KORDIK
8768			04/01/22	K.KESLER

REVISIONS

SPECIFICATIONS: ROTOR INERTIA: 460 g-cm² (2.51 oz-in²) NOM NUMBER OF PHASES: 4 STEPS PER REVOLUTION: 200 DETENT TORQUE: 714 g-cm (9.91 oz-in) MIN STEP ANGLE: 1.8° INSULATION CLASS: B STEP TO STEP ACCURACY: ±0.09° BEARINGS: ABEC 3, DOUBLE SHIELDED 3 9 POSITION ACCURACY: ±0.09° TEMP. RISE: 80°C MAX. HYSTERESIS: N/A% OPERATING TEMP. RANGE: -20 TO +50 °C SHAFT RUNOUT: 0.05 mm T.I.R. MAX STORAGE TEMP. RANGE: -30 TO +70°C RADIAL PLAY: 0.02 mm MAX (0.5 kg RADIAL LOAD) RELATIVE HUMIDITY RANGE: 15 TO 85% END PLAY: 0.08 mm MAX (0.5 kg AXIAL LOAD) WEIGHT: 1 kg (35.3 oz) APPROXIMATE

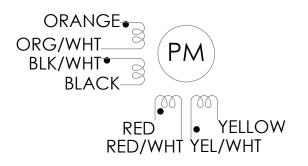
RESISTANCE INDUCTANCE RATED HOLDING HOLDING 8 CONNECTION PER PHASE PER PHASE CURRENT TORQUE 1 TORQUE $(ohm \pm 10\%)$ $(mH \pm 20\%)$ (Nm MIN) (Amp) (oz-in) **BI-POLAR SERIES** 4.5 15.6 1.41 1.87 264.8 **BI-POLAR PARALLEL** 3.9 2.83 1.87 1.1 264.8 UNI-POLAR 2.3 3.9 2.00 1.32 186.9

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, 22 AWG, 7 STRAND MIN. UL AND CSA APPROVED. UL 1430 OR UL 3265
- 6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- 7 AS MEASURED ACROSS EACH PHASE.
- 8 AS MEASURED ACROSS EACH PHASE USING AN A.C. INDUCTANCE BRIDGE AT 1KHz.
- 9 AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED CURRENT APPLIED TO 2 PHASES: WITH MOTOR AT REST.
- ADD "D" TO END OF PART NUMBER IF DOUBLE SHAFT IS REQUIRED.

 DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTION.
- 11. ROTOR AND STATOR LAMINATED CONSTRUCTION.
- 12. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH CURRENT EU ROHS DIRECTIVE.
- MOTOR LABEL TO INCLUDE AMP LOGO, AMP WEBSITE ADDRESS, "RoHS" COMPLIANCE LOGO, AMP P/N, "MADE IN (COUNTRY)", AND DATE CODE.

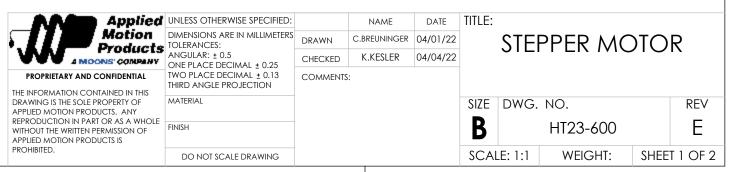
WIRING DIAGRAM



DRIVE SEQUENCE MODEL BI-POLAR PARALLEL FULL STEP

	STEP	(A+) ORG & BKL/WHT	(A-) BLK & ORG/WHT	(B+) RED & YEL/WHT	(B-) YEL & RED/WHT	CCW
	1	+	1	+	-	A
	2	-	+	+	-	
	3	-	+	-	+	
V	4	+	-	-	+	
CW	1	+	-	+	-	

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



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