SPECIFICATIONS:							
NUMBER OF PHASES: 4				ROTOR INERTIA: 260 g-cm <sup>2</sup> (1.422 oz-in <sup>2</sup> ) NOM			
STEPS PER REVOLUTION: 200				DETENT TORQUE: 407.9 g-cm (5.66 oz-in) MIN			
STEP ANGLE: 1.8°				INSULATION CLASS: B			
STEP TO STEP ACCURACY: 0.09° 1 , 2			BEARINGS: ABEC 3, DOUBLE SHIELDED				
POSITION ACCURACY: 0.09°	1	, [	3		TEMP. RISE: 80°C MAX.	9	
HYSTERESIS: N/A%					OPERATING TEMP. RANGE: -20 TO +50°C		
SHAFT RUNOUT: 0.03 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: 600 G (21.16 oz ) APPROXIMATE			

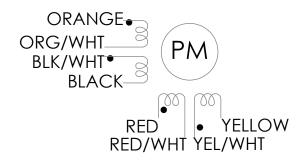
	CONNECTION	RESISTANCE PER PHASE (ohm ±10%)	INDUCTANCE PER PHASE (mH ±20%)	RATED CURRENT (Amp)	HOLDING TORQUE (Nm MIN)	HOLDING TORQUE 1 (oz-in)
	BI-POLAR SERIES	1.7	5.7	2.12	1.12	158.6
ſ	BI-POLAR PARALLEL	0.4	1.4	4.24	1.12	158.6
	UNI-POLAR	0.9	1.4	3.00	0.85	120.4

## 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.
- 10 ENCODER 970-1028 INSTALLED PER AMP ASSEMBLY PRACTICES. ENCODER CABLE SOLD SEPARATELY.
- 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.
- 14. OTHER TAPPED HOLES MAY BE PRESENT ON REAR OF MOTOR.

REVISIONS						
ECO#	REV.	DESCRIPTION	DATE	APPROVED		
7710	А	INITIAL RELEASE	12/20/17	J. KORDIK		
7877	В	DIMENSION MISSING	3/8/18/21	J. KORDIK		
8705	С	FRONT END BELL THICKNESS FROM 5+/-0.5 TO 4.8+/-0.3	8/23/21	L. LIU		
8787	D	revised model & updated sheet format	5/20/22	L. LIU		

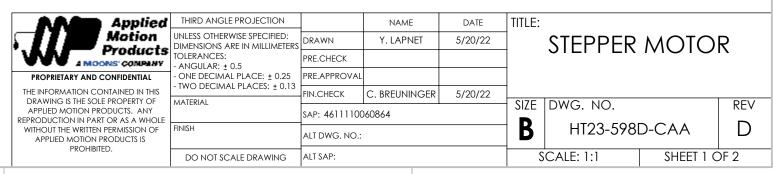
## WIRING DIAGRAM



## DRIVE SEQUENCE MODEL BI-POLAR PARALLEL FULL STEP

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

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



4

3

2

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