

SPECIFICATIONS:			
NUMBER OF PHASES: 4	ROTOR INERTIA: 460 g-cm <sup>2</sup> (2.515 oz-in <sup>2</sup> ) NOM		
STEPS PER REVOLUTION: 200	DETENT TORQUE: 713.8 g-cm (9.91 oz-in) MIN		
STEP ANGLE: 1.8°	INSULATION CLASS: B		
STEP TO STEP ACCURACY: 0.09°	1	,	2
POSITION ACCURACY: 0.09°	1	,	3
BEARINGS: ABEC 3, DOUBLE SHIELDED	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: 1470 G (51.85 oz ) APPROXIMATE		

CONNECTION	RESISTANCE PER PHASE (ohm $\pm 10\%$ ) <span>7</span>	INDUCTANCE PER PHASE (mH $\pm 20\%$ ) <span>8</span>	RATED CURRENT (Amp)	HOLDING TORQUE (Nm MIN) <span>1</span>	HOLDING TORQUE (oz-in) <span>1</span>
BI-POLAR SERIES	2.0	6.8	2.12	1.90	269
BI-POLAR PARALLEL	0.5	1.75	4.24	1.90	269
UNI-POLAR	1.0	1.75	3.00	1.35	191

NOTES, UNLESS OTHER WISE SPECIFIED:

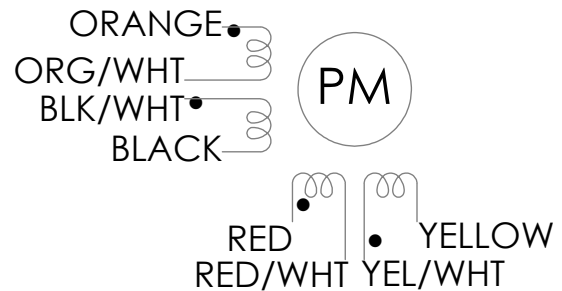
1. MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
2. BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
3. MAXIMUM ERROR IN 360°.
4. HIPO 500 VAC, 60Hz FOR ONE MINUTE.
5. LEADS: 8, 22 AWG, 7 STRAND MIN. UL AND CSA APPROVED. UL 1430 OR UL 3265
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
7. AS 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. BRAKE ATTACHED TO REAR END OF MOTOR. TWO BREAK LEADS ARE 24 AWG, UL1332, RED="+".
11. ROTOR AND STATOR LAMINATED CONSTRUCTION.
12. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH CURRENT EU RoHS DIRECTIVE.
13. MOTOR LABEL TO INCLUDE AMP LOGO, AMP WEBSITE ADDRESS, "RoHS" COMPLIANCE LOGO, AMP P/N, "MADE IN (COUNTRY)", AND DATE CODE.

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BRAKE SPECIFICATIONS							
VOLTAGE	CURRENT	POWER	TORQUE	MAX. SPEED	ENGAGE DELAY	DISENGAGE DELAY	INSULATION CLASS
24 VDC	167 mA	4 W	1.5 Nm	1000 RPM	50 ms	50 ms	B

REVISIONS				
ECO #	REV.	DESCRIPTION	DATE	APPROVED
7462	A	INITIAL RELEASE	8/9/16	J. KORDIK
7852	B	REVISED MOTOR WEIGHT	3/1/18	J. KORDIK
8705	C	UPDATED SHAFT RUNOUT, WIRE GAUGE & END BELL THK	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

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

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

<div></div> <div><b>Applied Motion Products</b> A MOONS' COMPANY</div>	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	Y. LAPNET	5/20/22			
		PRE.CHECK					
		PRE.APPROVAL					
		FIN.CHECK	C. BREUNINGER	5/20/22			
	MATERIAL	SAP: 4611110060885			SIZE	DWG. NO.	REV
	FINISH	ALT DWG. NO.:			<b>B</b>	HT23-601B	<b>D</b>
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.	DO NOT SCALE DRAWING	ALT SAP:			SCALE: 1:1		SHEET 1 OF 2

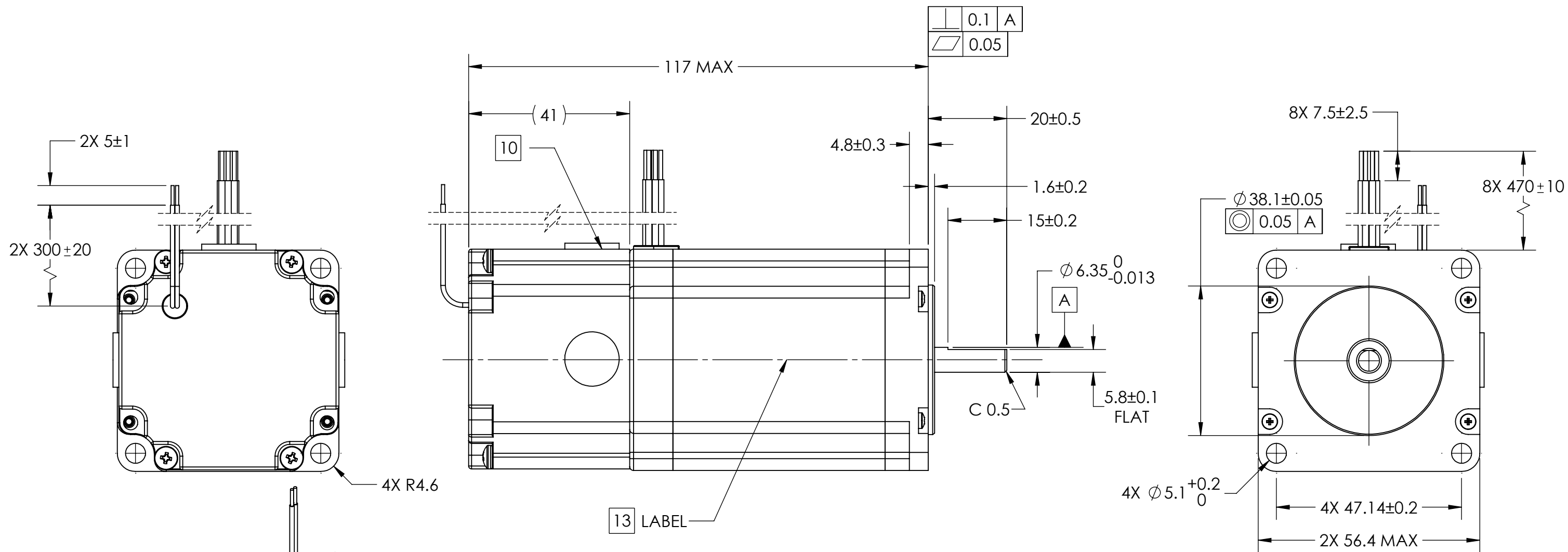
4

3

2

1

B



B

A


A

4

3

2

1

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			PRE.CHECK					
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	DO NOT SCALE DRAWING		ALT SAP:			SCALE: 1:2		SHEET 2 OF 2

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