

SPECIFICATIONS:

NUMBER OF PHASES: 4	ROTOR INERTIA: 750 g-cm^2 (4.09 oz-in ²) NOM
STEPS PER REVOLUTION: 200	DETENT TORQUE: 120 mN-m (16.99 oz-in) MIN
STEP ANGLE: 1.8°	INSULATION CLASS: B
STEP TO STEP ACCURACY: 0.09°	BEARINGS: ABEC 3, DOUBLE SHIELDED
POSITION ACCURACY: 0.09°	TEMP. RISE: 80°C MAX. 9
HYSERESIS: 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: 1500 G (3.3 LB) APPROXIMATE

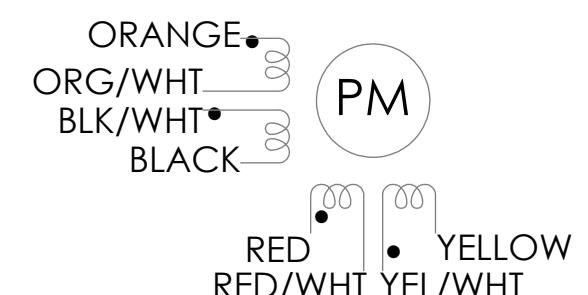
CONNECTION	RESISTANCE PER PHASE (ohm ±10%) 7	INDUCTANCE PER PHASE (mH ±20%) 8	RATED CURRENT (Amp)	HOLDING TORQUE (Nm MIN) 1	HOLDING TORQUE (oz-in) 1
BI-POLAR SERIES	2.0	8.8	3.0	2.5	354
BI-POLAR PARALLEL	0.5	2.2	6.0	2.5	354
UNI-POLAR	1.0	2.2	4.24	1.77	250.6

NOTES, UNLESS OTHERWISE 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. 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.
13. MOTOR LABEL TO INCLUDE AMP LOGO, AMP WEBSITE ADDRESS, "RoHS" COMPLIANCE LOGO, AMP P/N, "MADE IN (COUNTRY)", AND DATE CODE.

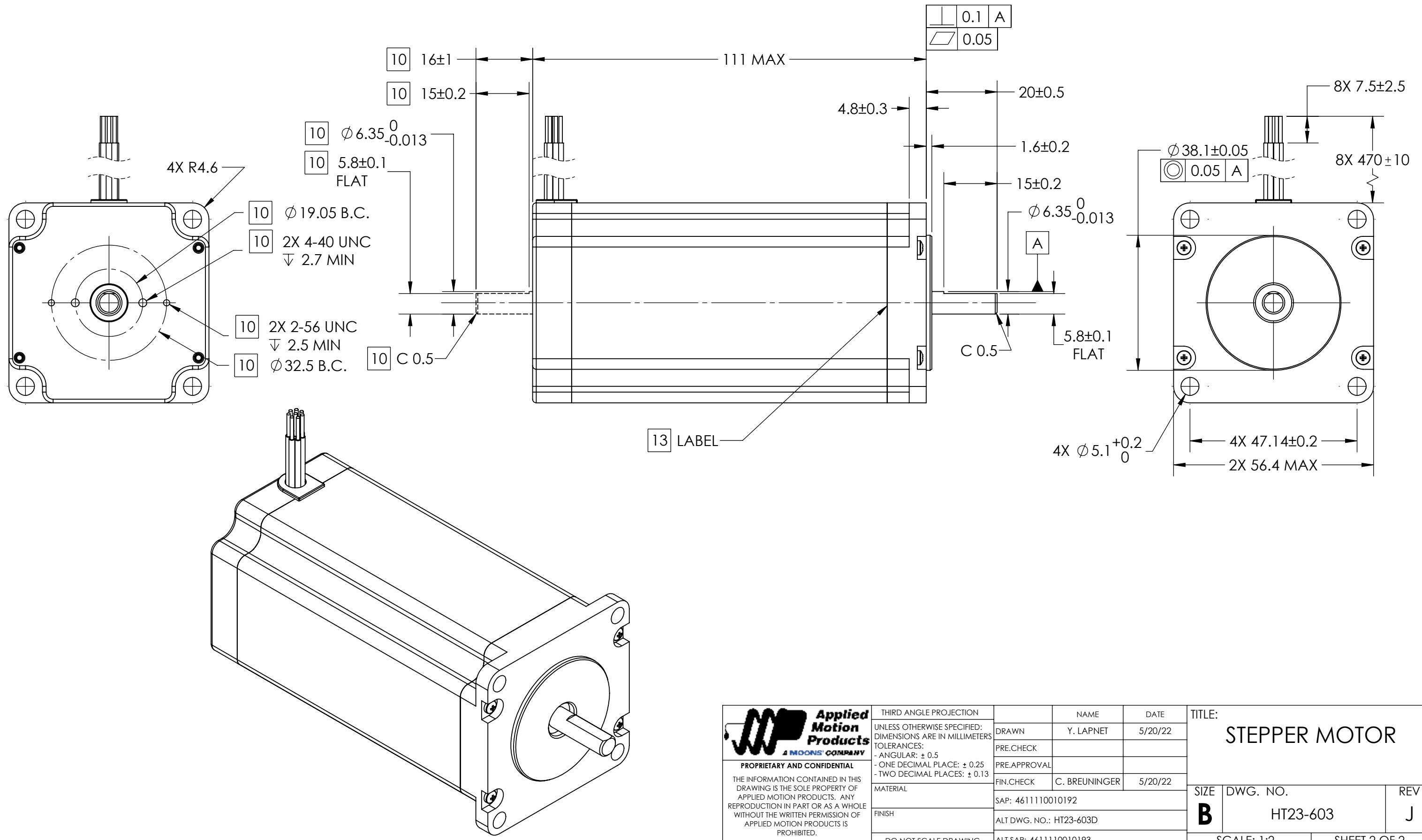
 Proprietary and Confidential <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APPLIED MOTION PRODUCTS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF APPLIED MOTION PRODUCTS IS PROHIBITED.</small>	REVISIONS																																		
	ECO #	REV.	DESCRIPTION	DATE	APPROVED																														
	6517	A	INITIAL RELEASE	5/8/12	J. KORDIK																														
	6636	B	SPECS REVISED	11/13/12	B. LOYZIM																														
	6807	C	REVISE FLANGE THICKNESS	9/9/13	J. KORDIK																														
	7445	D	REVISE NOTE 10	6/6/16	J. KORDIK																														
	7944	E	ADD UL TO LABEL	5/3/18	J. KORDIK																														
	8306	F	REVISE MTG FLANGE, SPECS	8/14/19	J. KORDIK																														
	8544	G	REMOVE UL FROM LABEL	10/1/20	J. KORDIK																														
	8705	H	REDRAWN IN SOLIDWORKS	8/24/21	L. LIU																														
	8787	J	REVISED MODEL & UPDATED SHEET FORMAT	5/20/22	L. LIU																														
	WIRING DIAGRAM																																		
																																			
DRIVE SEQUENCE MODEL BI-POLAR PARALLEL FULL STEP																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>STEP</th> <th>(A+) ORG & BKL/WHT</th> <th>(A-) BLK & ORG/WHT</th> <th>(B+) RED & YEL/WHT</th> <th>(B-) YEL & RED/WHT</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>+</td> <td>-</td> <td>+</td> <td>-</td> </tr> <tr> <td>2</td> <td>-</td> <td>+</td> <td>+</td> <td>-</td> </tr> <tr> <td>3</td> <td>-</td> <td>+</td> <td>-</td> <td>+</td> </tr> <tr> <td>4</td> <td>+</td> <td>-</td> <td>-</td> <td>+</td> </tr> <tr> <td>1</td> <td>+</td> <td>-</td> <td>+</td> <td>-</td> </tr> </tbody> </table>						STEP	(A+) ORG & BKL/WHT	(A-) BLK & ORG/WHT	(B+) RED & YEL/WHT	(B-) YEL & RED/WHT	1	+	-	+	-	2	-	+	+	-	3	-	+	-	+	4	+	-	-	+	1	+	-	+	-
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1	+	-	+	-																															
2	-	+	+	-																															
3	-	+	-	+																															
4	+	-	-	+																															
1	+	-	+	-																															
CW (CLOCKWISE) AND CCW (COUNTER-CLOCKWISE) ROTATION WHEN SEEN FROM THE MOUNTING FACE END OF THE MOTOR																																			
TITLE: STEPPER MOTOR																																			
SIZE	DWG. NO.	REV																																	
		B	HT23-603																																
SCALE: 1:1																																			
SHEET 1 OF 2																																			

4

3

2

1



4

3

2

1