

SPECIFICATIONS:

NUMBER OF PHASES: 4	ROTOR INERTIA: 460 g-cm ² (2.515 oz-in ²) 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°	BEARINGS: ABEC 3, DOUBLE SHIELDED
POSITION ACCURACY: 0.09°	TEMP. RISE: 80°C MAX.
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: 1000 G (35.2 oz) APPROXIMATE

CONNECTION	RESISTANCE PER PHASE (ohm $\pm 10\%$)	INDUCTANCE PER PHASE (mH $\pm 20\%$)	RATED CURRENT (Amp)	HOLDING TORQUE (Nm MIN)	HOLDING TORQUE (oz-in)
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

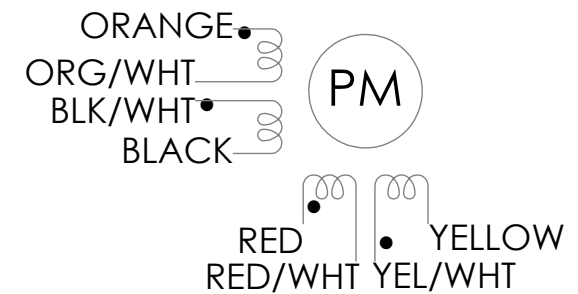
NOTES, UNLESS OTHER WISE SPECIFIED:

- 1 MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- 2 BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
- 3 MAXIMUM ERROR IN 360°.
4. 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.

REVISIONS

ECO #	REV.	DESCRIPTION	DATE	APPROVED
5978	A	INITIAL RELEASE	8/11/09	J. KORDIK
5980	B	REVISED HOLE DIMENSION	8/18/09	J. KORDIK
5976	C	REVISED HOLE SIZE	8/27/09	J. KORDIK
6082	D	AD #4 HOLES	3/3/10	J. KORDIK
6345	E	DRAWING CLEANUP	9/20/11	E. RICE
6394	F	REVISED NOTE 5	11/7/11	E. RICE
6807	G	FRVISED FLANGE THICKNESS	9/9/13	J. KORDIK
7247	H	ADD UL TO LABEL	1/26/16	J. KORDIK
7445	J	REVISED NOTE 10	6/6/16	J. KORDIK
8250	K	REVISED SPECS	6/5/19	J. KORDIK
8306	L	REVISED FLANGE THICKNESS	8/14/19	J. KORDIK
8705	M	SHAFT TOLERANCE FROM +0/-0.012 TO +0/-0.013	8/23/21	L. LIU
8787	N	REVISED MODEL & UPDATED SHEET FORMAT	5/20/22	L. LIU

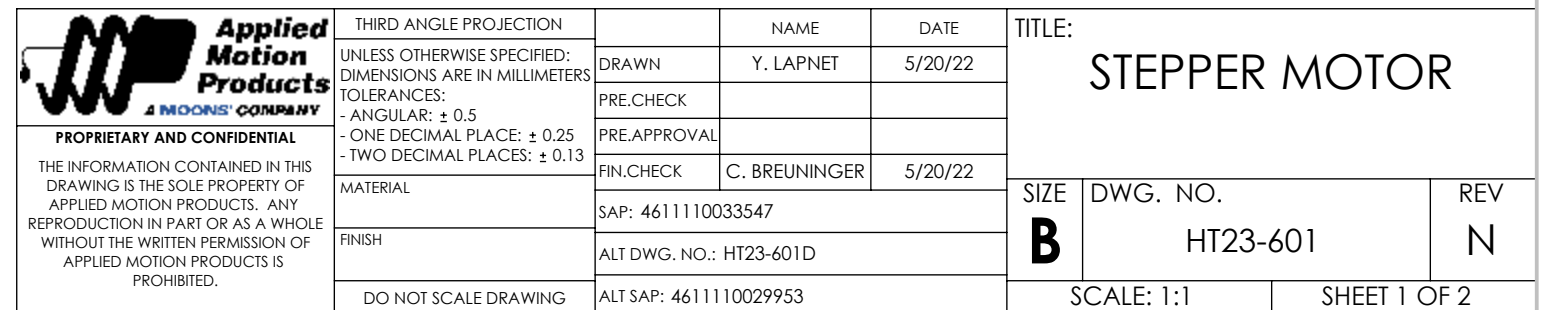
WIRING DIAGRAM



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



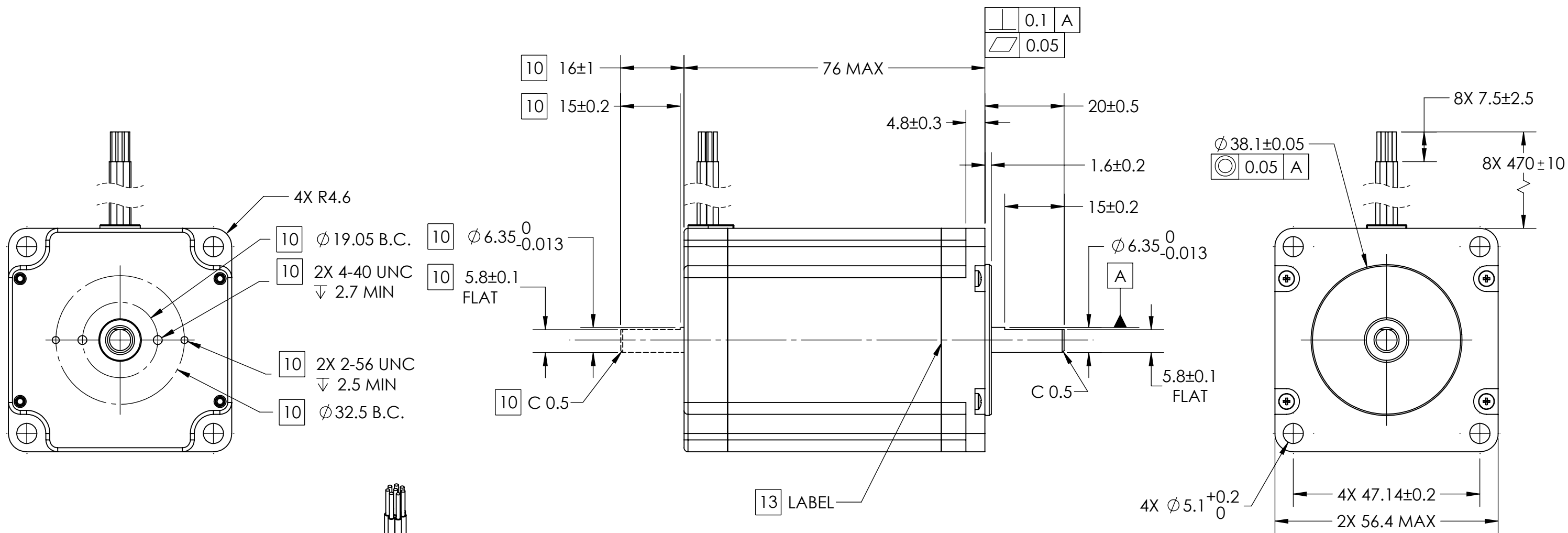
4

3

2

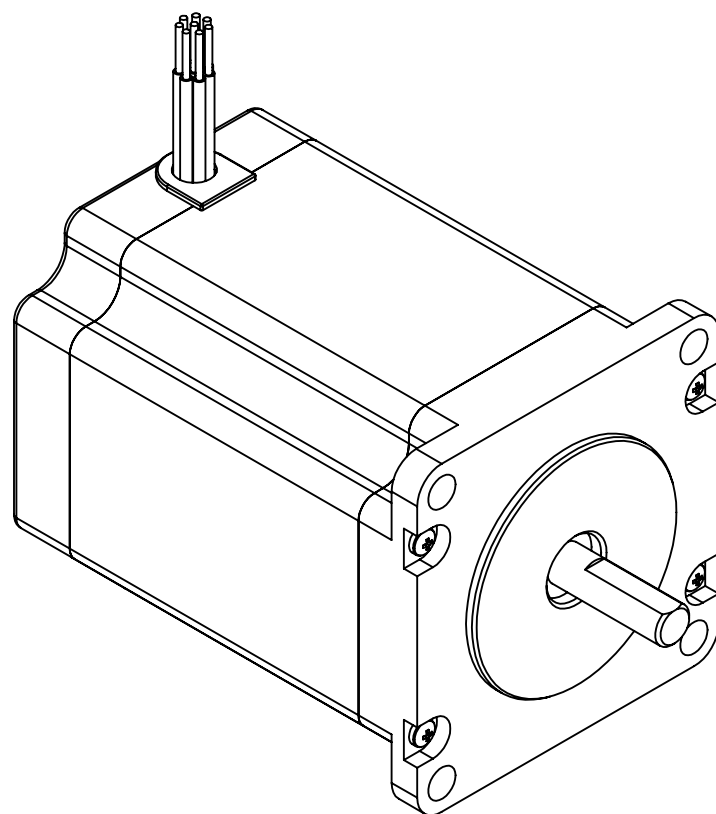
1

B



B

A



A

4

3

2

1

 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	Y. LAPNET	5/20/22			
			PRE.CHECK					
			PRE.APPROVAL					
				FIN.CHECK	C. BREUNINGER			
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: 4611110033547			SIZE B	DWG. NO. HT23-601	REV N
	FINISH		ALT DWG. NO.: HT23-601D					
	DO NOT SCALE DRAWING		ALT SAP: 4611110029953					
							SCALE: 1:2	