SPECIFICATIONS:

NUMBER OF PHASES: 2	ROTOR INERTIA: 900 g-cm^2 (4.91 oz-in^2) NOM
STEPS PER REVOLUTION: 200	DETENT TORQUE: 100 mNm (14.1 oz-in) MIN
STEP ANGLE: 1.8°	INSULATION CLASS: B
STEP TO STEP ACCURACY: ±5% [1] , [2]	BEARINGS: ABEC 3, DOUBLE SHIELDED
POSITION ACCURACY: ±5% [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)	MAX. DYNAMIC AXIAL LOAD: 15N
WEIGHT: 1.4 kg (3.1 Lbs) APPROXIMATE	MAX. DYNAMIC RADIAL LOAD: 75N

CONNECTION	RESISTANCE PER PHASE [7] (ohm ±10%)	INDUCTANCE PER PHASE [8] (mH ±20%)	RATED CURRENT (Amp)	HOLDING TORQUE [1] (Nm TYP.)	HOLDING TORQUE [1] (oz-in TYP.)
BI-POLAR	0.65	2.0	4	3.2	453

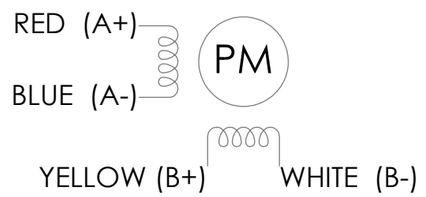
NOTES, UNLESS OTHER WISE SPECIFIED:

[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: 4, 22 AWG, 7 STRAND MIN. UL AND CSA APPROVED. UL 1430
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. ROTOR AND STATOR LAMINATED CONSTRUCTION.
11. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH CURRENT EU RoHS DIRECTIVE.
[12] MOTOR LABEL TO INCLUDE AMP LOGO, AMP WEBSITE ADDRESS, "RoHS" COMPLIANCE LOGO, AMP P/N, "MADE IN (COUNTRY)", AND DATE CODE.
13. THE MOTOR IS UL RECOGNIZED IN THE US AND CANADA, FILE NO. E472271.
[14] ADD "D" TO END OF PART NUMBER IF DOUBLE SHAFT IS REQUIRED. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTION.

REVISIONS

ECO #	REV.	DESCRIPTION	DATE	APPROVED
5896	A	INITIAL RELEASE	02/17/09	J. KORDIK
5961	B	REV'D SPECS, HOLES, WIRE COLORS	09/04/09	J. KORDIK
6022	C	CONN CHG, TOLERANCE CHG	11/04/09	J. KORDIK
6303	D	CONN ORIENTATION CHG	05/12/11	J. AMOS
7172	E	SPEC CLEANUP	04/15/15	J. KORDIK
7238	F	SPECS/CONN REVISED	06/22/15	J. KORDIK
7247	G	ADD UL TO LABEL	01/26/16	J. KORDIK
7447	H	REVISE NOTE 10	06/07/16	J. KORDIK
7867	J	REVISE SPECS, MOUNTING HOLES	02/26/18	J. KORDIK
8366	K	REVISE SPECS	10/30/19	J. KORDIK
8768	L	UPDATE LAM STACK AND END BELL SHAPE	04/18/22	K.KESLER

WIRING DIAGRAM



DRIVE SEQUENCE MODEL
BI-POLAR FULL STEP

STEP	A+	A-	B+	B-
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+
1	+	-	+	-

CW ↓ (STEP 1 → 2 → 3 → 4 → 1)
CCW ↑ (STEP 1 → 4 → 3 → 2 → 1)

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

Applied Motion Products
A MOONS' COMPANY

THIRD ANGLE PROJECTION
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
- ANGULAR: ± 0.5
- ONE DECIMAL PLACE: ± 0.25
- TWO DECIMAL PLACES: ± 0.13
MATERIAL
FINISH
DO NOT SCALE DRAWING

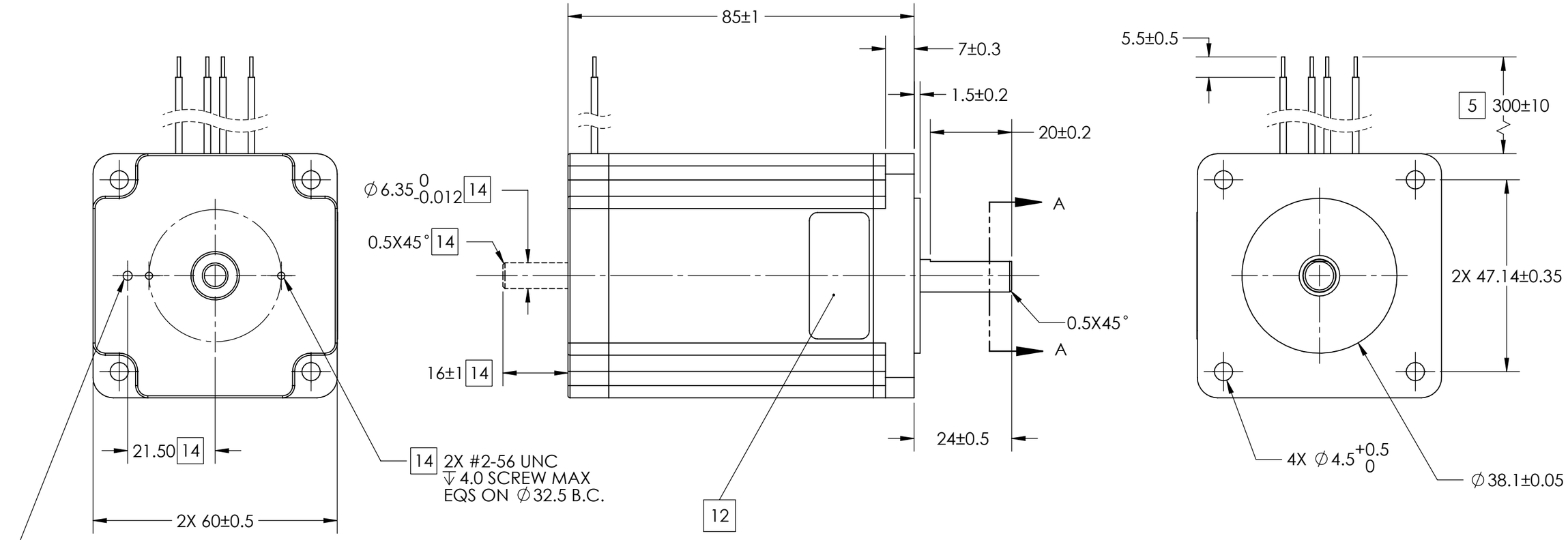
	NAME	DATE
DRAWN	C.BREUNINGER	04/11/22
PRE.CHECK	K.KESLER	04/12/22
PRE.APPROVAL		
FIN.CHECK	K.KESLER	04/18/22

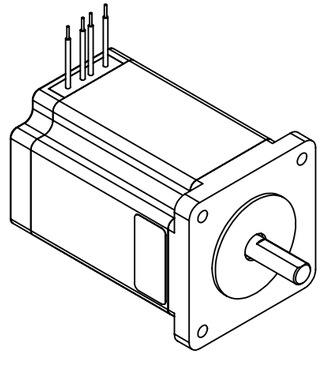
SAP: 4611110029103
ALT DWG. NO.: HT24-108D
ALT SAP: 4611110029104

TITLE: STEPPER MOTOR

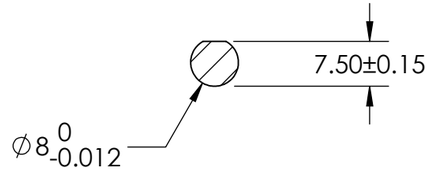
SIZE	DWG. NO.	REV
B	HT24-108	L

SCALE: 1:1 | SHEET 1 OF 2





SECTION A-A



Applied Motion Products — A MOONS' COMPANY	THIRD ANGLE PROJECTION		
PROPRIETARY AND CONFIDENTIAL	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: - ANGULAR: ± 0.5 - ONE DECIMAL PLACE: ± 0.25 - TWO DECIMAL PLACES: ± 0.13	DRAWN	C.BREUNINGER 04/11/22
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.		PRE.CHECK	K.KESLER 04/12/22
		PRE.APPROVAL	
		FIN.CHECK	K.KESLER 04/18/22
	MATERIAL	SAP: 4611110029103	
	FINISH	ALT DWG. NO.: HT24-108D	
	DO NOT SCALE DRAWING	ALT SAP: 4611110029104	

TITLE: STEPPER MOTOR

SIZE	DWG. NO.	REV
B	HT24-108	L

SCALE: 1:1 | SHEET 2 OF 2