SPECIFICATION	
NUMBER OF PHASES: 4	ROTOR INERTIA: 38 g-cm^2 (0.20 oz-in^2) NOM
STEPS PER REVOLUTION: 200	DETENT TORQUE: 122.3 g-cm (1.69 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: 210 g (7.3 oz) APPROXIMATE

CONNECTION	RESISTANCE PER PHASE [7] (ohm ±10%)	INDUCTANCE PER PHASE [8] (mH ±20%)	RATED CURRENT (Amp)	HOLDING TORQUE [1] (Nm MIN)	HOLDING TORQUE [1] (oz-in)
BI-POLAR SERIES	8.4	10	0.67	0.22	31.15
BI-POLAR PARALLEL	2.1	2.5	1.34	0.22	31.15
UNI-POLAR	4.2	2.5	0.95	0.16	22.66

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, 26 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 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.
[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
7710	A	INITIAL RELEASE	9/27/17	JEFF. K
7877	B	DIMENSION MISSING	3/8/18	JEFF. K
8675	C	RE-DRAW IN SOLIDWORKS, MATCH 3D MODEL	6/15/20	LEO. L

DRIVE SEQUENCE MODEL
BI-POLAR PARALLEL FULL STEP

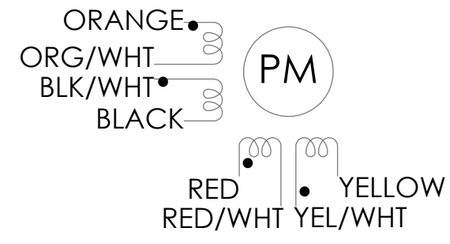
CW ↓

STEP	ORG & BLK/WHT	BLK & ORG/WHT	RED & YEL/WHT	YEL & RED/WHT
1	+	-	+	-
2	-	+	+	-
3	-	+	-	+
4	+	-	-	+
1	+	-	+	-

↑ CCW

CW (CLOCKWISE) AND CCW (COUNTER-CLOCKWISE) ROTATION
WHEN SEEN FROM THE FLANGE SIDE OF THE MOTOR

WIRING DIAGRAM



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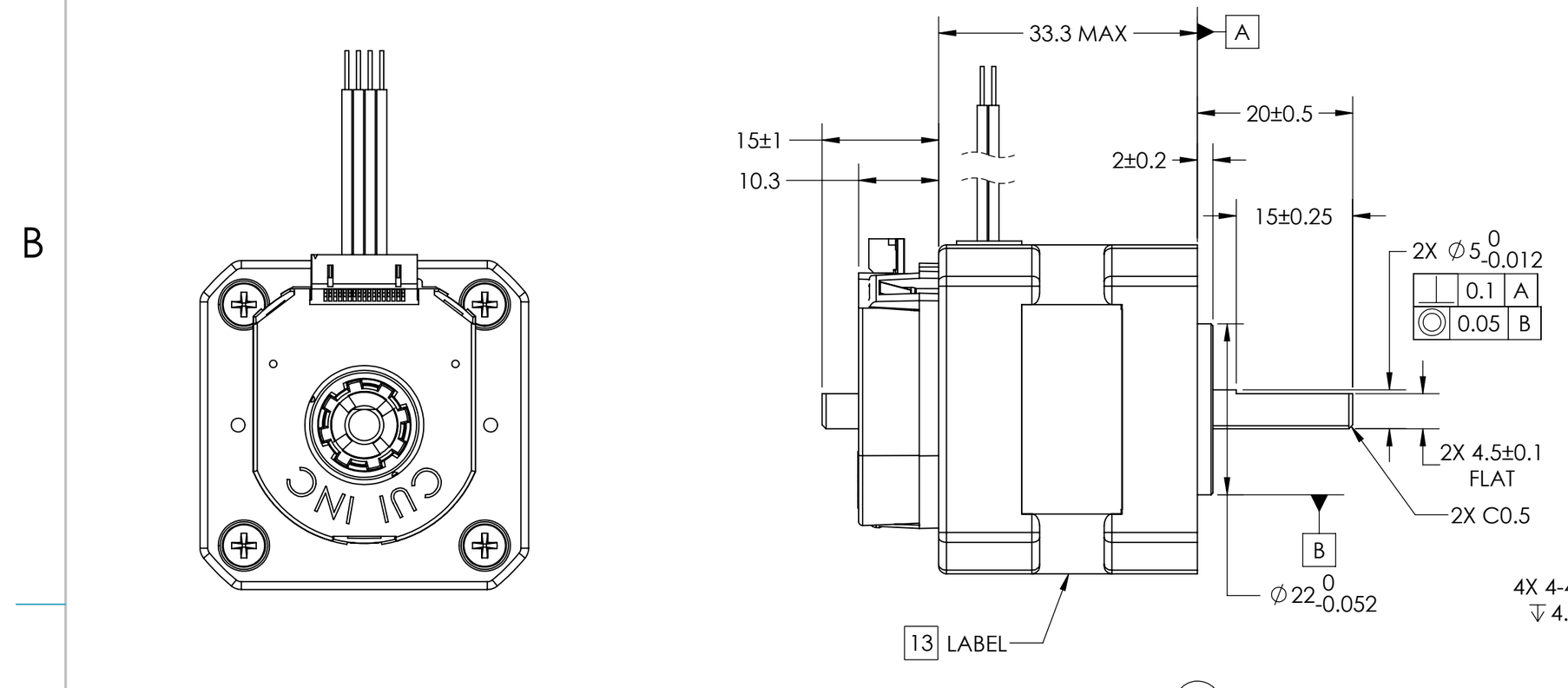
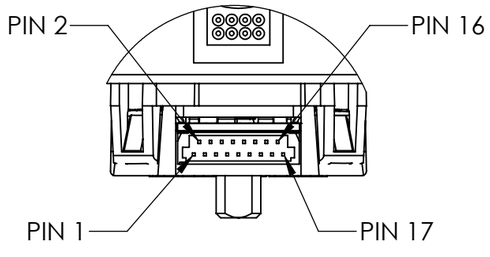
UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES:
ANGULAR: ± 0.5
ONE PLACE DECIMAL ± 0.25
TWO PLACE DECIMAL ± 0.13
THIRD ANGLE PROJECTION
MATERIAL
FINISH
DO NOT SCALE DRAWING

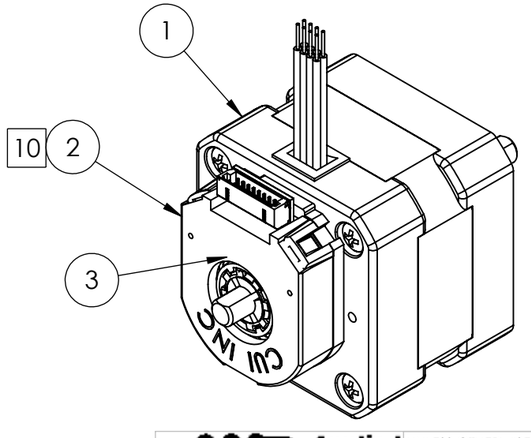
	NAME	DATE
DRAWN	ALAN. N	6/15/21
CHECKED	YANN. L	6/15/21
COMMENTS:		

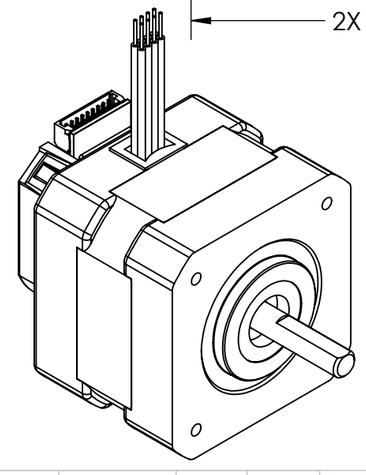
TITLE:
STEPPER MOTOR OUTLINE

SIZE	DWG. NO.	REV
B	HT17-268D-CAA	C
SCALE: 1:1	WEIGHT:	SHEET 1 OF 2









CONNECTOR	
PIN #	**SIGNAL**
1	TX_ENC+
2	RX_ENC+
3	N/A
4	GND
5	N/A
6	+5 V
7	N/A
8	B+
9	B-
10	A+
11	A-
12	Z+
13	Z-
14	MCLRB
15	N/A
16	N/A
17	N/A

ITEM NO.	PART NUMBER	QTY.
1	HT17-268D	1
2	ENCODER 970-1024	1
3	SCREW 2-56 X .1875 W-TOOTH LOCK WASHER (90403A077) OR EQUIVALENT	2

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ANGULAR: ± 0.5
ONE PLACE DECIMAL ± 0.25
TWO PLACE DECIMAL ± 0.13
THIRD ANGLE PROJECTION
MATERIAL
FINISH
DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	ALAN. N	6/15/21
CHECKED	YANN. L	6/15/21
COMMENTS:		

TITLE:

STEPPER MOTOR OUTLINE

SIZE	DWG. NO.	REV
B	HT17-268D-CAA	C
SCALE: 1:2	WEIGHT:	SHEET 2 OF 2