

SPECIFICATIONS:

NUMBER OF PHASES: 2	ROTOR INERTIA: 135 g-cm ² (0.74 oz-in ²) NOM
STEPS PER REVOLUTION: 400	DETENT TORQUE: 25 mNm (3.54 oz-in) MIN
STEP ANGLE: 0.9°	BEARINGS: 608ZZ
STEP TO STEP ACCURACY: ±0.045°	INSULATION CLASS: B
POSITIONAL ACCURACY: ±5%	HYSERESIS: N/A%
SHAFT RUNOUT: 0.03 mm T.I.R. MAX	TEMP. RISE: 80 °C MAX.
RADIAL PLAY: 0.02 mm MAX (.5KG RADIAL LOAD)	OPERATING TEMP. RANGE: -20 TO +50 °C
END PLAY: 0.08 mm MAX (.5KG AXIAL LOAD)	STORAGE TEMP. RANGE: -30 TO +70 °C
MAXIMUM RADIAL LOAD: 71N (15.96lb)	RELATIVE HUMIDITY RANGE: 15 TO 85 %
MAXIMUM AXIAL LOAD: 15N (3.37lb)	WEIGHT: 0.42 kg (0.93 lb)

7 8 1 1

SPECIFICATION CONNECTION	RESISTANCE PER PHASE (ohm ±10%)	INDUCTANCE PER PHASE (mH ±20%)	RATED CURRENT (amp)	HOLDING TORQUE (Nm MIN)	HOLDING TORQUE (oz-in Min)
BI-POLAR SERIES	2.0	6.6	1.5	0.48	67.97

NOTES, UNLESS OTHERWISE SPECIFIED:

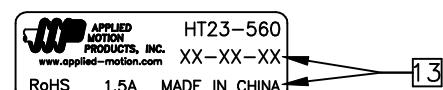
1. MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
2. BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
3. MAXIMUM ERROR IN 360°.
4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
5. LEADS: 4, AWG 22, 7 STRAND MIN., UL AND CSA APPROVED, UL 1007
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
7. AS MEASURED ACROSS EACH PHASE.
8. AS MEASURED ACROSS EACH PHASE USING AN A.C. INDUCTANCE BRIDGE AT 1 KHz.
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. ENCODER HOLES INCLUDED WITH REAR SHAFT VERSION ONLY.
11. ROTOR & STATOR LAMINATED CONSTRUCTION.
12. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH THE CURRENT EU RoHS DIRECTIVE.
13. MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, AMP P/N, 'MADE IN (COUNTRY OF ORIGIN)', AND DATE CODE.
14. HIGH TORQUE MOTOR DESIGN

HT23-560

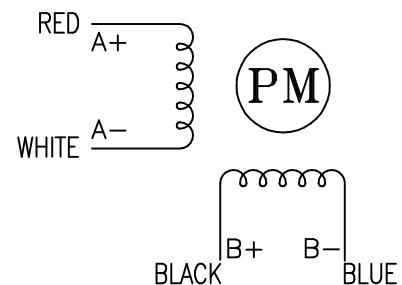
REVISIONS

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
6947	A	PRELIMINARY RELEASE	4/11/14	D.MACLEOD
7048	B	ERROR CORRECTION	8/11/14	D.MACLEOD
7069	C	MANU. SPEC. CHANGES	9/23/14	D.MACLEOD
7243	D	ERROR CORRECTION	7/1/15	D.MACLEOD
7445	E	REVISE NOTE 12	6/6/16	J KORDIK
7614	F	NO FLAT; REAR SHAFT	4/19/17	J KORDIK
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—

LABEL DETAIL



PHASE DETAIL



FULL STEP SWITCHING SEQUENCE
BI-POLAR, FACING MOUNTING END

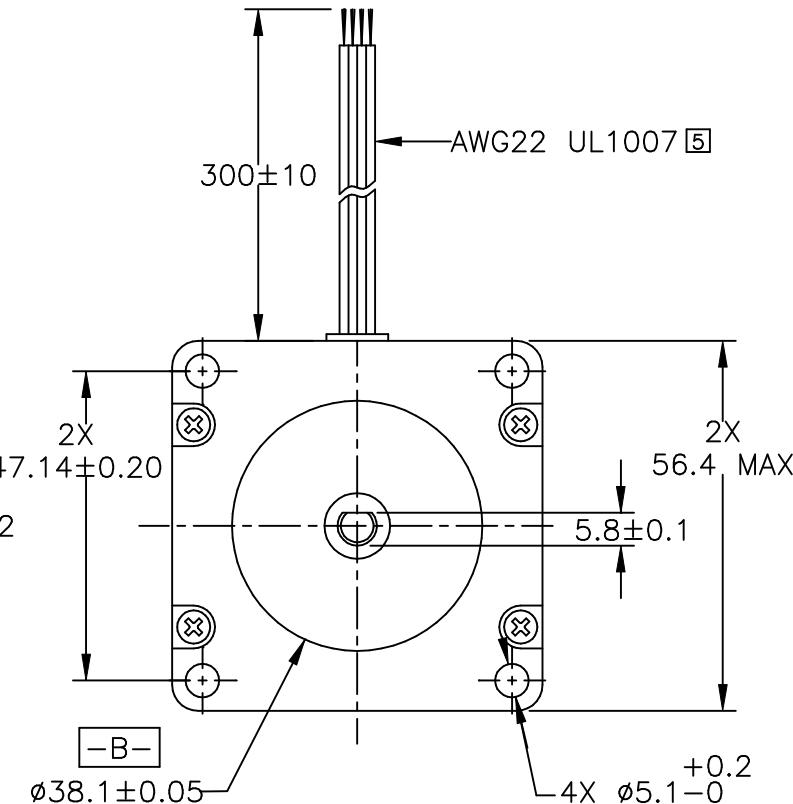
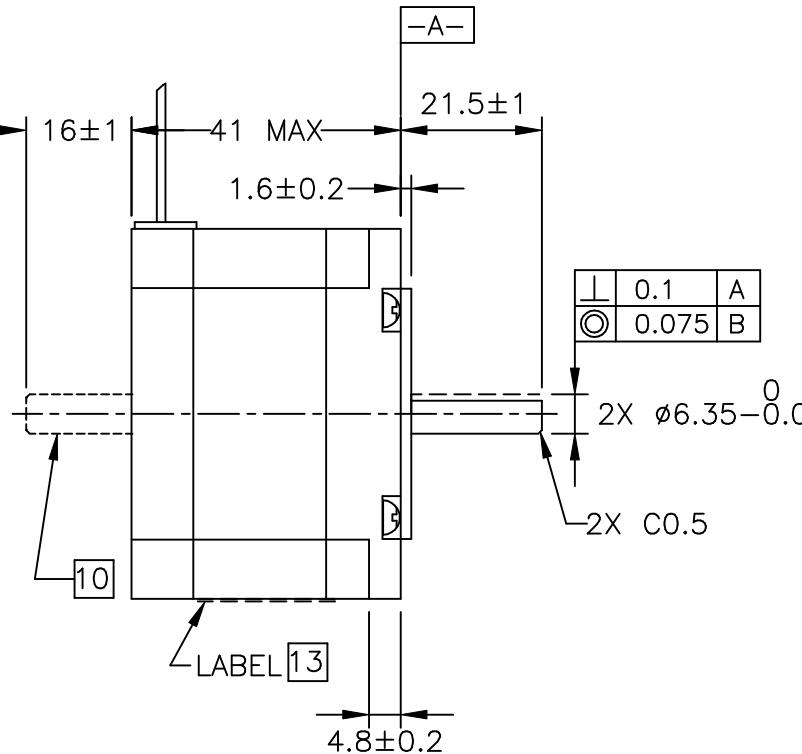
STEP	A+	A-	B+	B-
0	+	—	+	—
1	—	+	+	—
2	—	+	—	+
3	+	—	—	+
4	+	—	+	—

CCW
CW

CONTRACT NO.		APPLIED MOTION PRODUCTS, INC.		STEP MOTOR OUTLINE		
APPROVALS	DATE	B COMPUTER DATA BASE DRAWING			DWG NO.	REV
DRAWN K.KESLER	7/1/2015	B COMPUTER DATA BASE DRAWING			HT23-560	F
CHECKED —	—	B COMPUTER DATA BASE DRAWING			—	—
APPROVED —	—	B COMPUTER DATA BASE DRAWING			—	—
APPROVED —	—	B COMPUTER DATA BASE DRAWING			—	—
SCALE: NONE	—	B COMPUTER DATA BASE DRAWING			—	—
SHEET 1 OF 2						—

2X #2-56 UNC
TAP 2.5 MIN EQ.SP. 10
ON $\phi 32.5 \pm 0.1$ B.C.

2X #2-56 UNC
TAP 2.5 MIN EQ.SP.
ON $\phi 19.05 \pm 0.1$ B.C.



TOLERANCES		THIRD ANGLE PROJECTION		APPROVALS		DATE	
*ALL DIMENSIONS IN MM							
DECIMALS: MM							
X.XX = ± 0.13							
X.X = ± 0.25							
ANGLES:							
MACH. = $\pm 0.5^\circ$							
CHAM. = $\pm 5^\circ$							
COMPUTER DATA BASE DRAWING							
APPROVED							

APPLIED MOTION PRODUCTS, INC.

STEP MOTOR OUTLINE

B DWG NO. HT23-560 REV F

SCALE: NONE SHEET 2 OF 2