

**SPECIFICATIONS:**

NUMBER OF PHASES: 2	ROTOR INERTIA: 4.2 g-cm <sup>2</sup> ( 0.02 oz-in <sup>2</sup> ) NOM
STEPS PER REVOLUTION: 200	DETENT TORQUE: 4 mNm ( 0.57 oz-in) MIN
STEP ANGLE: 1.8°	BEARINGS: L-940ZZ
STEP TO STEP ACCURACY: ±0.09°	INSULATION CLASS: B
POSITIONAL ACCURACY: ±0.09°	HYSTERESIS: 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: 8 N ( 1.80 lb)	RELATIVE HUMIDITY RANGE: 15 TO 85 %
MAXIMUM AXIAL LOAD: 3 N ( 0.67 lb)	WEIGHT: 0.09 kg ( 0.20 lb)

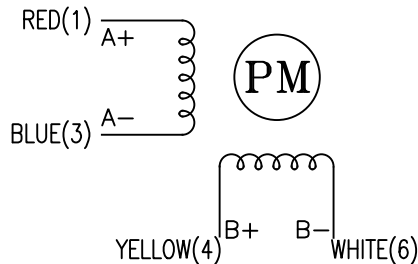
	[7]	[8]	[1]	[1]	[1]
SPECIFICATION	RESISTANCE PER PHASE (ohm ±10%)	INDUCTANCE PER PHASE (mH ±20%)	RATED CURRENT (amp)	HOLDING TORQUE (Nm MIN)	HOLDING TORQUE (oz-in Min)
CONNECTION					
BI-POLAR	20.3	7.9	0.35	0.032	4.53

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 26, 7 STRAND MIN., UL AND CSA APPROVED, UL 1061
- 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.
- 11. ROTOR & STATOR LAMINATED CONSTRUCTION.
- 12. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- [13] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, AMP P/N, 'MADE IN (COUNTRY OF ORIGIN)', AND DATE CODE.
- 14. HIGH TORQUE MOTOR DESIGN.
- [15] CONNECTOR: JST S6B-ZR(LF)(SN) HOUSING: JST ZHR-6 TERMINAL: JST SZH-002T-P0.5

SWITCHING SEQUENCE FOR CW ROTATION  
FACING MOUNTING END

STEP	A+	A-	B+	B-	CW
0	+	-	+	-	↓
1	-	+	+	-	
2	-	+	-	+	
3	+	-	-	+	
4	+	-	+	-	

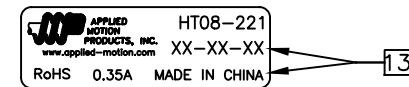


HT08-221

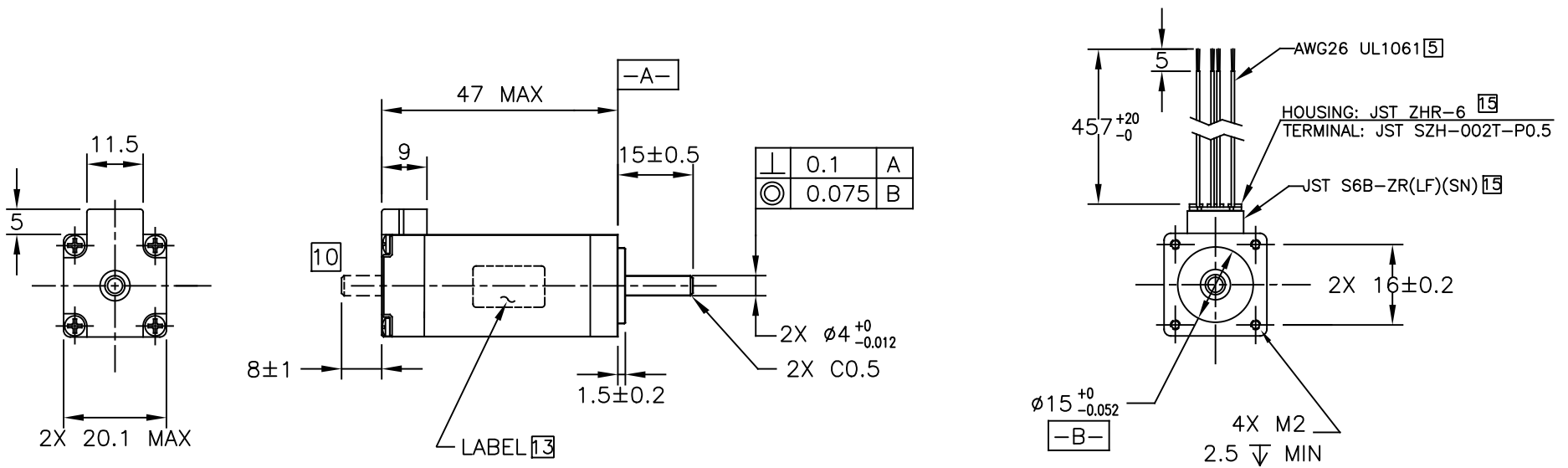
**REVISIONS**

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
6914	B	PRELIMINARY RELEASE	2/26/14	D.MACLEOD
6944	C	MANU. SPEC CHANGES	3/14/14	J.KORDIK
7000	D	MANU. SPEC CHANGES	5/29/14	J.KORDIK
7197	E	MANU. SPEC CHANGES	4/17/15	J.KORDIK
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

**LABEL DETAIL**



CONTRACT NO. -		APPLIED MOTION PRODUCTS, INC.			
APPROVALS	DATE	<b>STEP MOTOR OUTLINE</b>			
DRAWN K.KESLER	4/17/15				
CHECKED -	-	B	COMPUTER DATA BASE DRAWING	DWG NO. HT08-221	REV E
APPROVED -	-		SCALE: NONE	SHEET 1 OF 2	



TOLERANCES		THIRD ANGLE PROJECTION		APPLIED MOTION PRODUCTS, INC.	
*ALL DIMENSIONS IN MM				<b>STEP MOTOR OUTLINE</b>	
DECIMALS: MM X.XX = ±0.13 X.X = ±0.25 ANGLES: MACH. = ±0.5° CHAM. = ±5°					
COMPUTER DATA BASE DRAWING		APPROVALS	DATE	B	DWG NO. HT08-221
		DRAWN KESLER	4/17/15		REV E
		CHECKED	-		
		APPROVED	-	SCALE: NONE	SHEET 2 OF 2