

**SPECIFICATIONS:**

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 135 G-CM <sup>2</sup> (0.73 OZ-IN <sup>2</sup> ) NOM
STEP ANGLE: 1.8°	DETENT TORQUE: 224 G-CM ( 3.11 OZ-IN) MIN
STEP TO STEP ACCURACY: ±5 % [1], [2]	INSULATION CLASS: B
POSITIONAL ACCURACY: ±5 % [1], [3]	BEARINGS: ABEC 3, DOUBLE SHIELDED
HYSTERESIS: - %	WEIGHT: 0.42 KG (0.92 LB) APPX.
SHAFT RUNOUT: 0.05 T.I.R.	TEMP. RISE: 80 °C MAX. [8]
RADIAL PLAY: 0.02 MAX W/A .5KG RADIAL LOAD	OPERATING TEMP. RANGE: -20 TO +50 °C
END PLAY: 0.08 MAX W/A .5KG AXIAL LOAD	STORAGE TEMP. RANGE: -30 TO +70 °C
	RELATIVE HUMIDITY RANGE: 15 TO 85 %

HT23-593

**REVISIONS**

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
5976	A	INITIAL RELEASE	8/28/09	J KORDIK
6090	B	STANDARDIZE ENCODER HOLES	3/29/10	J KORDIK
6807	C	REVISE FLANGE THICKNESS	9/9/13	J KORDIK

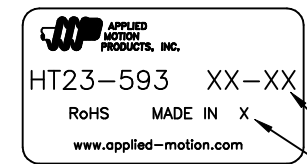
[7]

CONNECTION	SPECIFICATION	NUMBER OF PHASE	RESISTANCE PER PHASE OHM ±10%	INDUCTANCE PER PHASE mH ±20%	RATED CURRENT Amp	RATED VOLTAGE V	HOLDING TORQUE Nm Min
BI-POLAR SERIES		2	10.4	26.1	0.71	7.4	0.56
BI-POLAR PARALLEL		2	2.6	6.6	1.41	3.7	0.56
UNI-POLAR		4	5.2	6.6	1.00	5.2	0.42

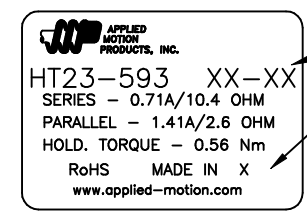
[1]

**NOTES, UNLESS OTHERWISE SPECIFIED:**

- [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- [2] BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- [3] MAXIMUM ERROR IN 360°.
- 4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
- 5. LEADS: 8, 22AWG, 7 STRAND MIN., UL AND CSA APPROVED, UL 1430 OR UL 3265.
- 6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] AS MEASURED USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz.
- [8] AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE APPLIED TO 2 PHASES; WITH MOTOR AT REST.
- [9] SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTIONS.
- 10. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- [1] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.

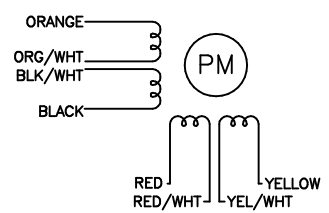


**LABEL DETAIL**  
BOTH OPTIONS ACCEPTABLE



[1]

**WIRING DIAGRAM**



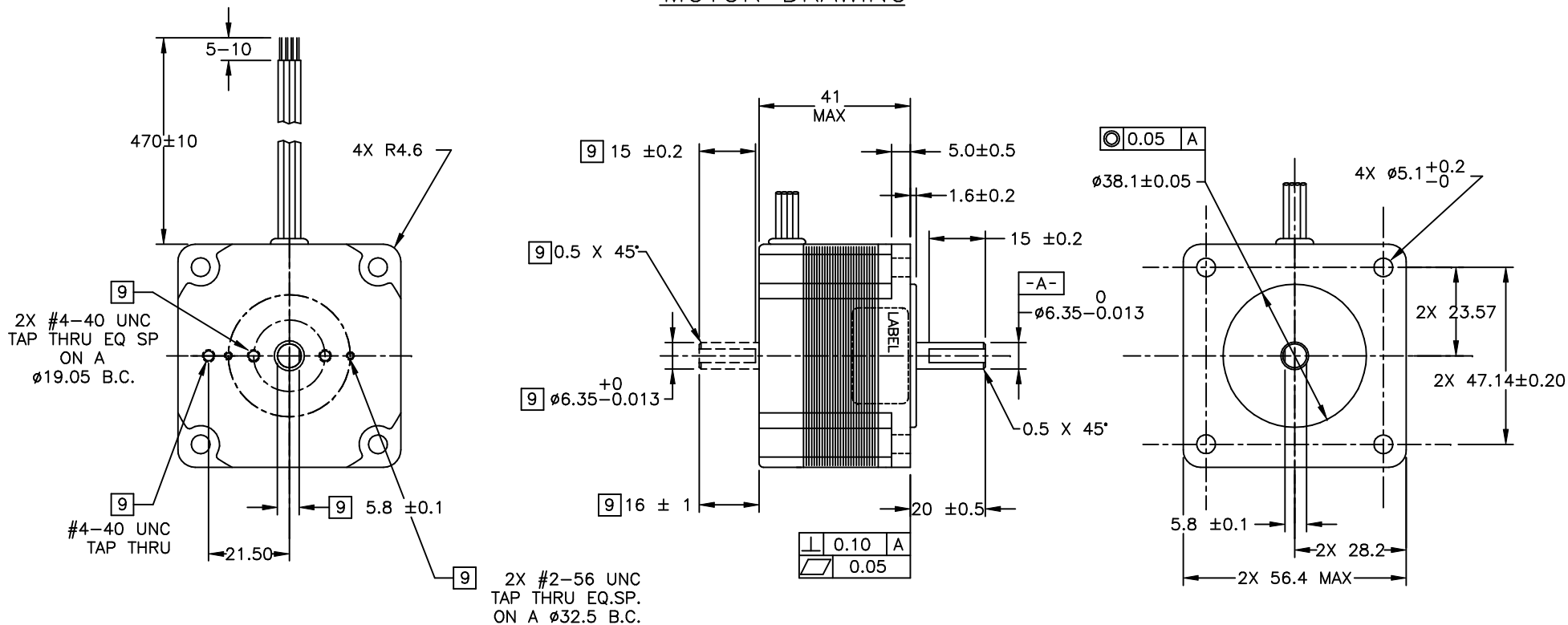
**DRIVE SEQUENCE MODEL**  
BI-POLAR FULL STEP

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

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

CONTRACT NO. -					
APPROVALS	DATE	<b>STEP MOTOR OUTLINE</b>			
DRAWN <i>R.JONEZ</i>	<i>8/18/09</i>				
CHECKED		<b>B</b>	COMPUTER DATA BASE DRAWING	DWG NO. <b>HT23-593</b>	REV <b>C</b>
APPROVED			SCALE: NONE	SHEET 1 OF 2	

# MOTOR DRAWING



TOLERANCES	THIRD ANGLE PROJECTION	APPLIED MOTION PRODUCTS, INC.		
DECIMALS: MM (INCH) X.XXX = $\pm$ (.005) X.XX = $\pm$ 0.13 (.010) X.X = $\pm$ 0.25 (.020) ANGLES: MACH. = $\pm 5^\circ$ CHAM. = $\pm 5^\circ$		<b>STEP MOTOR OUTLINE</b>		
COMPUTER DATA BASE DRAWING	APPROVALS DRAWN R. JONEZ CHECKED			DATE 8/18/09
	APPROVED	B	DWG NO. HT23-593	SCALE: NONE SHEET 2 OF 2