

**SPECIFICATIONS:**

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 460 G-CM <sup>2</sup> (2.51 OZ-IN <sup>2</sup> ) NOM
STEP ANGLE: 1.8°	DETENT TORQUE: 714 G-CM (9.91 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: 1.0 KG (2.2 LB)
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 %

HT23-600

**REVISIONS**

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
5976	A	INITIAL RELEASE	8/28/09	J KORDIK

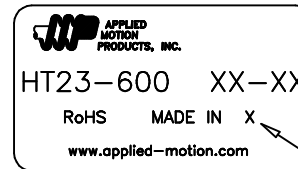
[7]

SPECIFICATION CONNECTION	NUMBER OF PHASE	RESISTANCE PER PHASE OHM ±10%	INDUCTANCE PER PHASE mH ±20%	RATED CURRENT Amp	RATED VOLTAGE V	HOLDING TORQUE N.m Min
BI-POLAR SERIES	2	4.5	15.6	1.41	6.4	1.87
BI-POLAR PARALLEL	2	1.1	3.9	2.83	3.2	1.87
UNI-POLAR	4	2.3	3.9	2.00	4.6	1.32

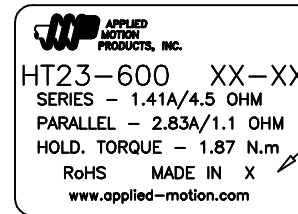
[1]

**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 3265, UL1430.
- 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: ADD "D" TO END OF PART NUMBER ONLY IF DOUBLE SHAFT REQUIRED. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTIONS.
- 10. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- [11] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.

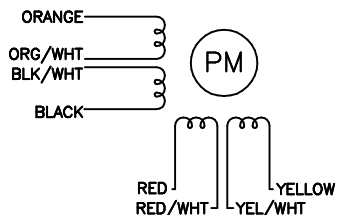


**LABEL DETAIL**  
BOTH OPTIONS ACCEPTABLE



[11]

**WIRING DIAGRAM**



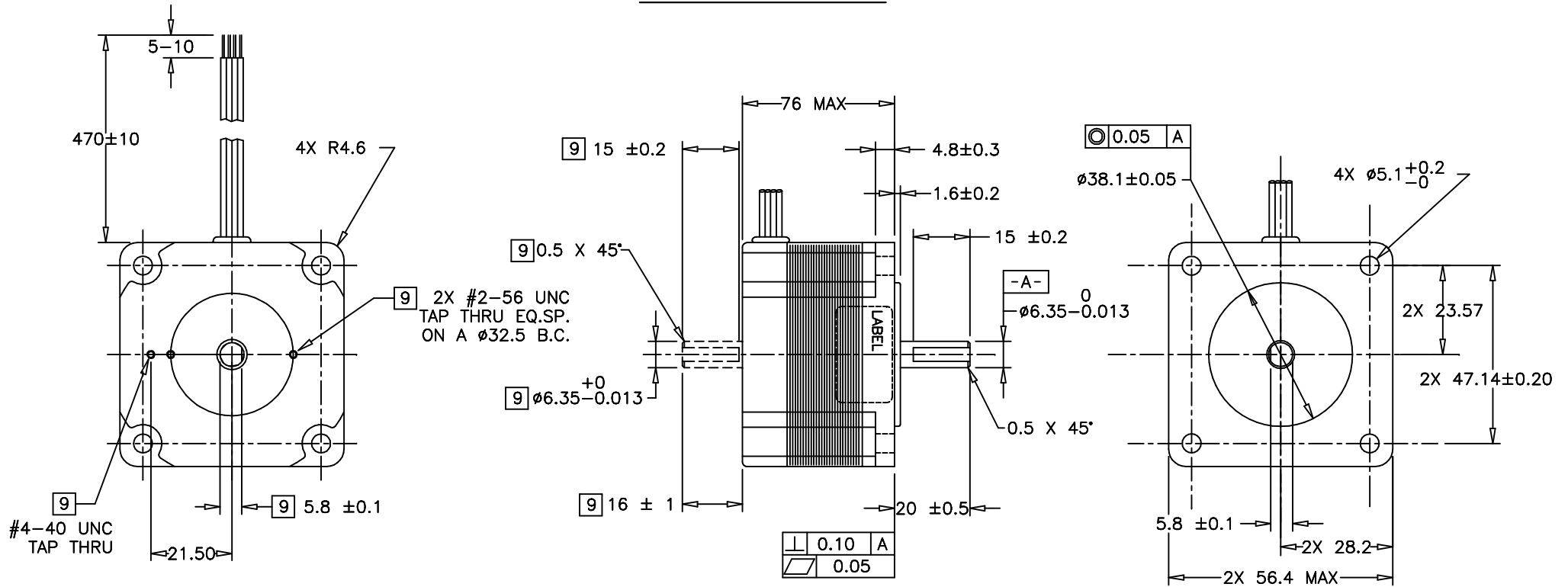
**DRIVE SEQUENCE MODEL  
BI-POLAR FULL STEP**

STEP	ORANGE & BLK/WHT	BLACK & ORG/WHT	RED & YEL/WHT	YELLOW & RED/WHT
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>	1/27/09				
CHECKED					
APPROVED					
APPROVED		B	COMPUTER DATA BASE DRAWING	DWG NO. <b>HT23-600</b>	REV <b>A</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>	
APPROVALS DRAWN <b>R. JONEZ</b> CHECKED APPROVED		DATE <b>8/17/09</b>		<b>B</b> DWG NO. <b>HT23-600</b> <b>A</b> REV	
COMPUTER DATA BASE DRAWING		APPROVED		SCALE: NONE SHEET 2 OF 2	