

SPECIFICATIONS:

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 300 G-CM ² (1.64 OZ-IN ²)NOM
STEP ANGLE: 1.8°	HOLDING TORQUE: 9.0 KG-CM (125 OZ-IN)MIN ¹
STEP TO STEP ACCURACY: ± 5 % ¹ , ²	DETENT TORQUE: 500 G-CM (6.94 OZ-IN)MIN
POSITIONAL ACCURACY: ± 5 % ¹ , ³	
HYSTERESIS: %	INSULATION CLASS: B
WINDING RESISTANCE: 7.2 OHM ±10% AT 25° ⁷	BEARINGS: ABEC 3, DOUBLE SHIELDED
WINDING INDUCTANCE: 11 mH ± 20% ⁸	WEIGHT: 0.7 KG (1.54 LB)
PHASE VOLTAGE: 7.2 VDC	TEMP. RISE: 80 °C MAX. ⁹
PHASE CURRENT: 1.0 AMP [(RATED) UNIPOLAR]	OPERATING TEMP. RANGE: -20 TO +50 °C
	STORAGE TEMP. RANGE: -40 TO 70 °C
SHAFT RUNOUT: 0.05 T.I.R.	RELATIVE HUMIDITY RANGE: 5 TO 95 %
RADIAL PLAY: 0.025 MAX W/A .5KG RADIAL LOAD.	
END PLAY: 0.075 MAX W/A 1KG AXIAL LOAD.	

HT23-396

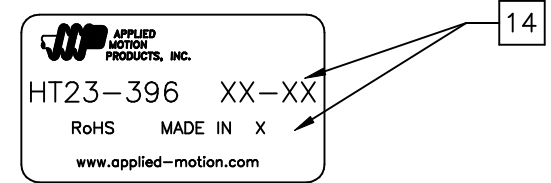
REVISIONS

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
3987	A	INITIAL RELEASE	8/13/96	<i>K. Kordik</i>
5006	B	ADD "23HT54D" DBL SFT REQD		
5235	C	ADD EU COMPLIANCE NOTES	8/25/05	<i>R. Hazelwood</i>
6006	D	ADD ENV DRAWING/ ENC HOLES	10/20/09	J KORDIK
6082	E	ADD #4 HOLES	3/3/10	J KORDIK

NOTES, UNLESS OTHERWISE SPECIFIED:

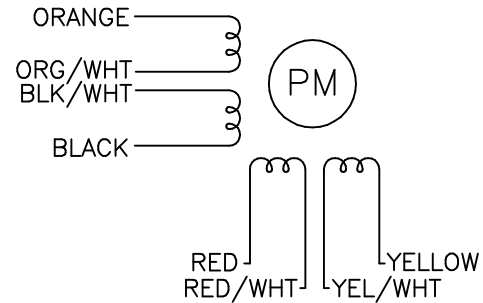
- ¹ MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- ² BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- ³ MAXIMUM ERROR IN 360°.
- 4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
- ⁵ LEADS: 8 AWG 22,7 STRAND MIN., UL AND CSA APPROVED, UL 3265.
- 6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- ⁷ AS MEASURED ACROSS ANY WINDING. RESISTANCE IS DOUBLED WITH BOTH WINDINGS IN SERIES.
- ⁸ AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz. INDUCTANCE IS FOUR TIMES VALUE WITH WINDINGS IN SERIES.
- ⁹ AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED VOLTAGE APPLIED TO 2 PHASES; WITH MOTOR AT REST.
- 10. HIGH TORQUE MOTOR DESIGN, MICROSTEP LAMINATION.
- 11. ROTOR & STATOR LAMINATION MATERIAL: 0.5mm thk, SEE AMP STD SPEC #1500-062.
- ¹² SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER. DOUBLE SHAFT REQUIRES ADDED HOLES FOR ENCODER OPTIONS.
- 13. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- ¹⁴ MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.

LABEL DETAIL



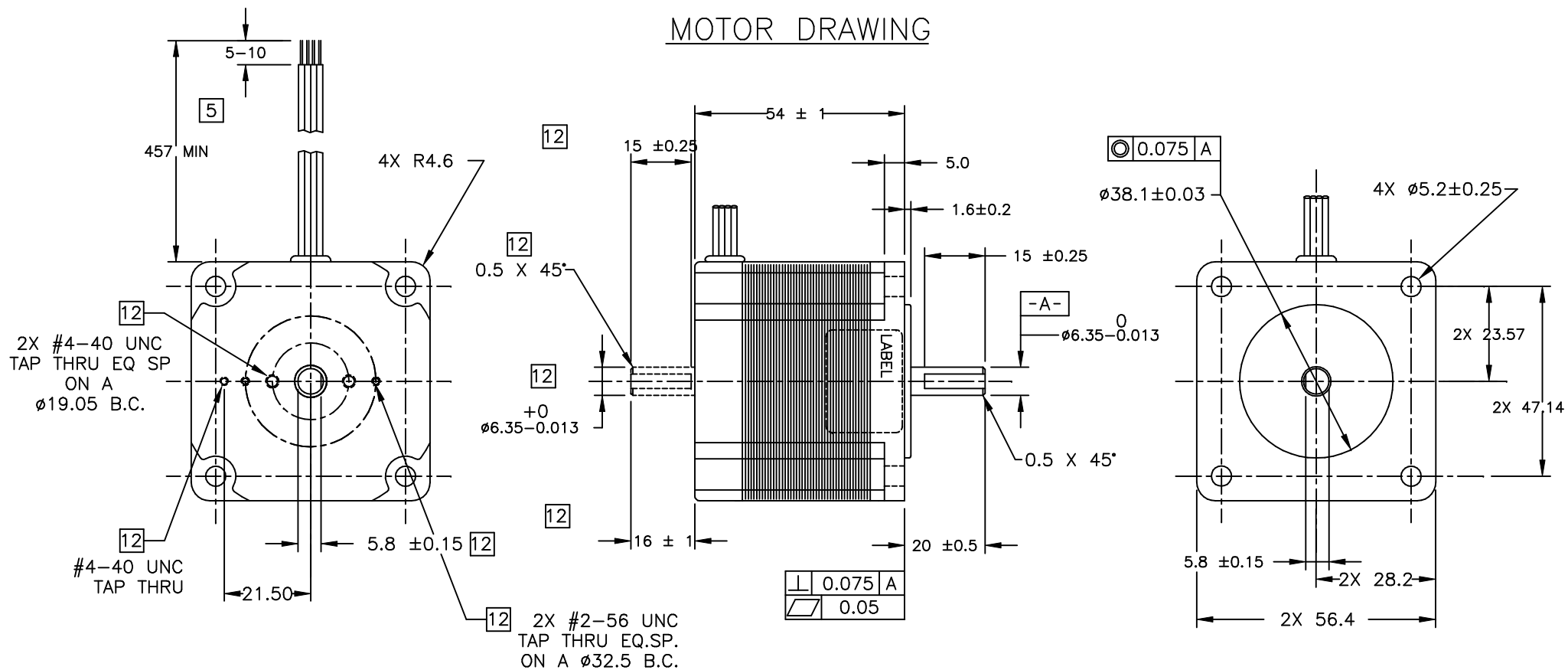
SWITCHING SEQUENCE FOR CW ROTATION FACING MOUNTING END

STEP	ORANGE	BLACK	RED	YELLOW
0	+	-	+	-
1	-	+	+	-
2	-	+	-	+
3	+	-	-	+
4	+	-	+	-



CONTRACT NO. CAT TS3653N2E4		APPLIED MOTION PRODUCTS, INC.			
APPROVALS	DATE	STEP MOTOR OUTLINE			
DRAWN <i>R. BARRICK</i>	<i>8/13/96</i>				
CHECKED					
APPROVED					
APPROVED		B	COMPUTER DATA BASE DRAWING	DWG NO. HT23-396	REV E
SCALE: 1=1		SHEET 1 OF 2			

MOTOR DRAWING



TOLERANCES		THIRD ANGLE PROJECTION		APPLIED MOTION PRODUCTS, INC.	
DECIMALS: MM (INCH) X.XXX = \pm (.005) X.XX = ± 0.13 (.010) X.X = ± 0.25 (.020) ANGLES: MACH. = $\pm 5^\circ$ CHAM. = $\pm 5^\circ$				STEP MOTOR OUTLINE	
COMPUTER DATA BASE DRAWING		APPROVALS DRAWN R.BARRICK	DATE 12/12/02		
		APPROVED		SCALE: NONE	SHEET 2 OF 2