

SPECIFICATIONS:	
STEPS PER REVOLUTION: 200	ROTOR INERTIA: 120 G-CM ² (0.66 OZ-IN ²) NOM
STEP ANGLE: 1.8°	HOLDING TORQUE: 3.9 KG-CM (54.2 OZ-IN) MIN [1]
STEP TO STEP ACCURACY: ± 5 % [1], [2]	DETENT TORQUE: 200 G-CM (2.78 OZ-IN) MIN
POSITIONAL ACCURACY: ± 5 % [1], [3]	
HYSTERESIS: %	INSULATION CLASS: B
WINDING RESISTANCE: 0.63 OHM ±10% AT 25° [7]	BEARINGS: ABEC 3, DOUBLE SHIELDED
WINDING INDUCTANCE: 0.6 mH ± 20% [8]	WEIGHT: 0.45KG (1 LB)
PHASE VOLTAGE: 1.9 VDC	TEMP. RISE: 80 °C MAX. [9]
PHASE CURRENT: 3.0 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.	

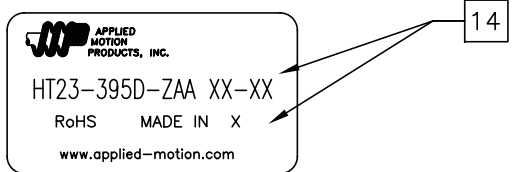
HT23-395D-ZAA

REVISIONS				
ECO NO.	REV	DESCRIPTION	DATE	APPROVED
6941	A	INITIAL RELEASE	6/16/14	J KORDIK
8034	B	CHG REAR SHAFT LENGTH/TYPO	8/28/18	M.Maroney

NOTES, UNLESS OTHERWISE SPECIFIED:

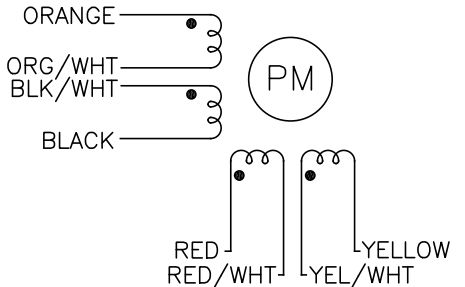
- [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- [2] BETWEEN ANY TWO ADJACENT STEP POSITIONS.
- [3] MAXIMUM ERROR IN 360°.
- 4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
- [5] LEADS: 8 AWG 22,7 STRAND MIN., UL AND CSA APPROVED, UL 3265.
- 6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] AS MEASURED ACROSS ANY WINDING. RESISTANCE IS DOUBLE W/BOTH WINDINGS IN SERIES.
- [8] AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz. INDUCTANCE IS FOUR TIMES VALUE W/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] ENCODER 970-1001 INSTALLED PER AMP ASSEMBLY PRACTICES. ENCODER CABLE SOLD SEPARATELY.
- 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.
- 15. OTHER TAPPED HOLES MAY BE PRESENT ON REAR OF MOTOR.

LABEL DETAIL

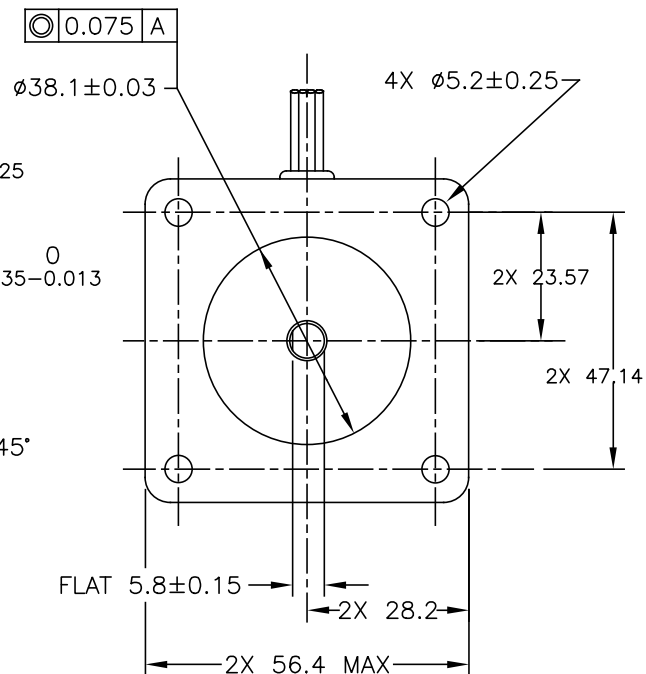
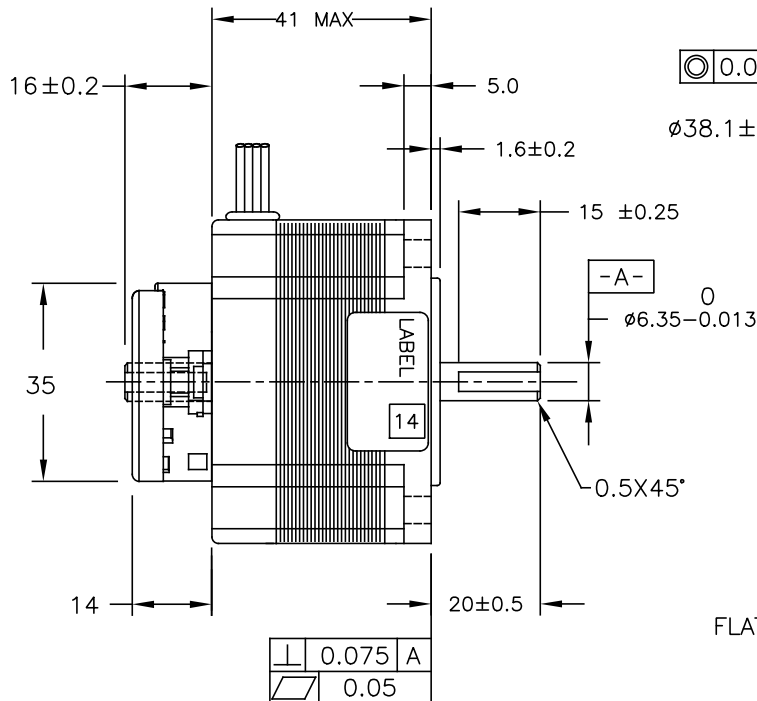
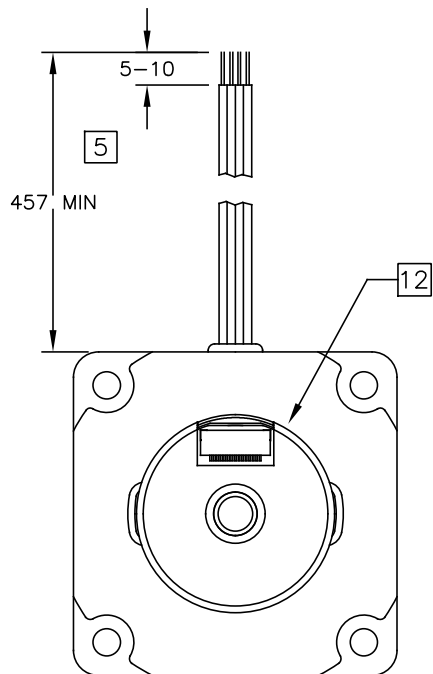


SWITCHING SEQUENCE FOR CW ROTATION FACING MOUNTING END

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



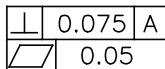
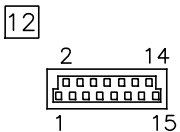
CONTRACT NO. -		APPLIED MOTION PRODUCTS, INC.			
APPROVALS	DATE	<h1>STEP MOTOR OUTLINE</h1>			
DRAWN R. JONEZ	3/14/14				
CHECKED					
APPROVED		B	COMPUTER DATA BASE DRAWING	DWG. NO. HT23-395D-ZAA	REV B
APPROVED			SCALE: NONE	SHEET 1 OF 2	



ENCODER RESOLUTION: 2000 cpr
WITH MARKER PULSE.

ENCODER PINOUTS

PIN	SIGNAL
1	CH A
2	CH A-
3	CH B
4	CH B-
5	INDEX
6	INDEX-
7	N/C
8	N/C
9	N/C
10	N/C
11	N/C
12	N/C
13	+Vcc
14	GND
15	N/C



TOLERANCES		THIRD ANGLE PROJECTION		APPLIED MOTION PRODUCTS, INC.	
DECIMALS: MM (INCH) X.XXX = ± (.005) X.XX = ±0.13 (.010) X.X = ±0.25 (.020) ANGLES: MACH. = ±.5° CHAM. = ±5°					
COMPUTER DATA BASE DRAWING		APPROVALS DRAWN <i>R. JONEZ</i> CHECKED	DATE 3/14/14		
		APPROVED		SCALE: NONE	SHEET 2 OF 2