

SPECIFICATIONS:	
STEPS PER REVOLUTION: 200	ROTOR INERTIA: 460 G-CM ² (6.51X10 ⁻³ oz-in-sec ²)NOM
STEP ANGLE: 1.8°	INSULATION CLASS: B
STEP TO STEP ACCURACY:±.09 DEGREE [1],[2]	WEIGHT: 0.55 KG (1.21 LB)
RADIAL PLAY:0.02 mm MAX W/.5KG RADIAL LOAD	OPERATING TEMP. RANGE: -20 TO +50 °C
END PLAY: 0.08 MAX W/1.0 KG AXIAL LOAD	STORAGE TEMP. RANGE: -30 TO +70 °C
SHAFT RUNOUT: 0.05 T.I.R.	TEMP. RISE: 80 °C MAX. [9]
	RELATIVE HUMIDITY RANGE: 15 TO 99 %

SPECIFICATION CONNECTION	[3]	[7]	[1]	[1]
	RESISTANCE PER PHASE OHM ±10%	INDUCTANCE PER PHASE mH ±20%	RATED CURRENT Amp	HOLDING TORQUE N-m Min oz-in Min
BI-POLAR SERIES	16.6	60.8	0.71	1.6 227
BI-POLAR PARALLEL	4.15	15.2	1.41	1.6 227
UNI-POLAR	8.3	15.2	1.00	1.3 184

NOTES, UNLESS OTHERWISE SPECIFIED:

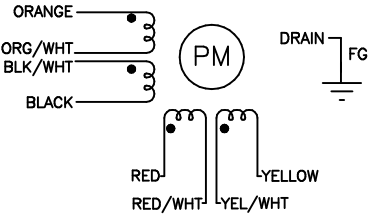
- [1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
- [2] BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
3. ASSEMBLE PER AMP SPEC 960-0082.
4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
- [5] LEADS: 8, 22 AWG, 7 STRAND MIN., UL AND CSA APPROVED, 105°C RATED CABLE 666-2126, 8 COND W/DRAIN.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] MEASUREMENTS MADE AT LEAD ENDS.
- [8] AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz. MEASUREMENTS MADE AT LEAD ENDS.
- [9] AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED CURRENT APPLIED TO 2 PHASES; WITH MOTOR AT REST.
10. HIGH TORQUE MOTOR DESIGN, MICROSTEP LAMINATION, INTENDED FOR USE WITH 120V DRIVES WHEN WINDINGS CONNECTED IN PARALLEL AND WITH 220V DRIVES WHEN WINDINGS CONNECTED IN SERIES.
11. ROTOR & STATOR LAMINATED CONSTRUCTION.
12. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- [13] MOTOR LABEL SHOWN IN DETAIL. MARK DATE CODE, MOTOR DATA, PART NUMBER AND MADE IN CHINA.
- [14] MOTOR TO MEET IP65 STANDARDS. CABLE GLAND TO BE NICKEL-PLATED BRASS, ASI P/N 3012215 OR EQUIVALENT.
- [15] ENCODER CABLE 3004-195-10 TO BE INCLUDED WITH MOTOR. PLEASE REFER TO CABLE DRAWING, AVAILABLE ON WEBSITE, FOR FULL DETAILS. ENCODER VOLTAGE: +5V ±5%, ENCODER CURRENT: 160ma.

BIPOLAR, FULL STEP, 2 PHASE ON PARALLEL CONNECTED

SWITCHING SEQUENCE FOR CW ROTATION FACING MOUNTING END

STEP	ORANGE & BLK/WHT	BLACK & ORN/WHT	RED & YEL/WHT	YELLOW & RED/WHT
0	+	-	+	-
1	-	+	+	-
2	-	+	-	+
3	+	-	-	+
4	+	-	+	-

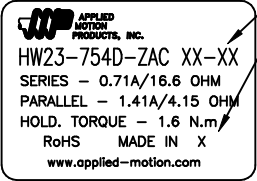
CW ↑



HW23-754D-ZAC

REVISIONS				
ECO NO.	REV	DESCRIPTION	DATE	APPROVED
6449	A	INITIAL RELEASE	3/7/12	J KORDIK
6564	B	WAS -ZAA	7/25/12	J KORDIK
6578	C	105°C CABLE/DRAWING CLEANUP	8/22/12	J KORDIK
7228	D	REVISE TYPO - ROTOR INERTIA	6/22/15	J KORDIK

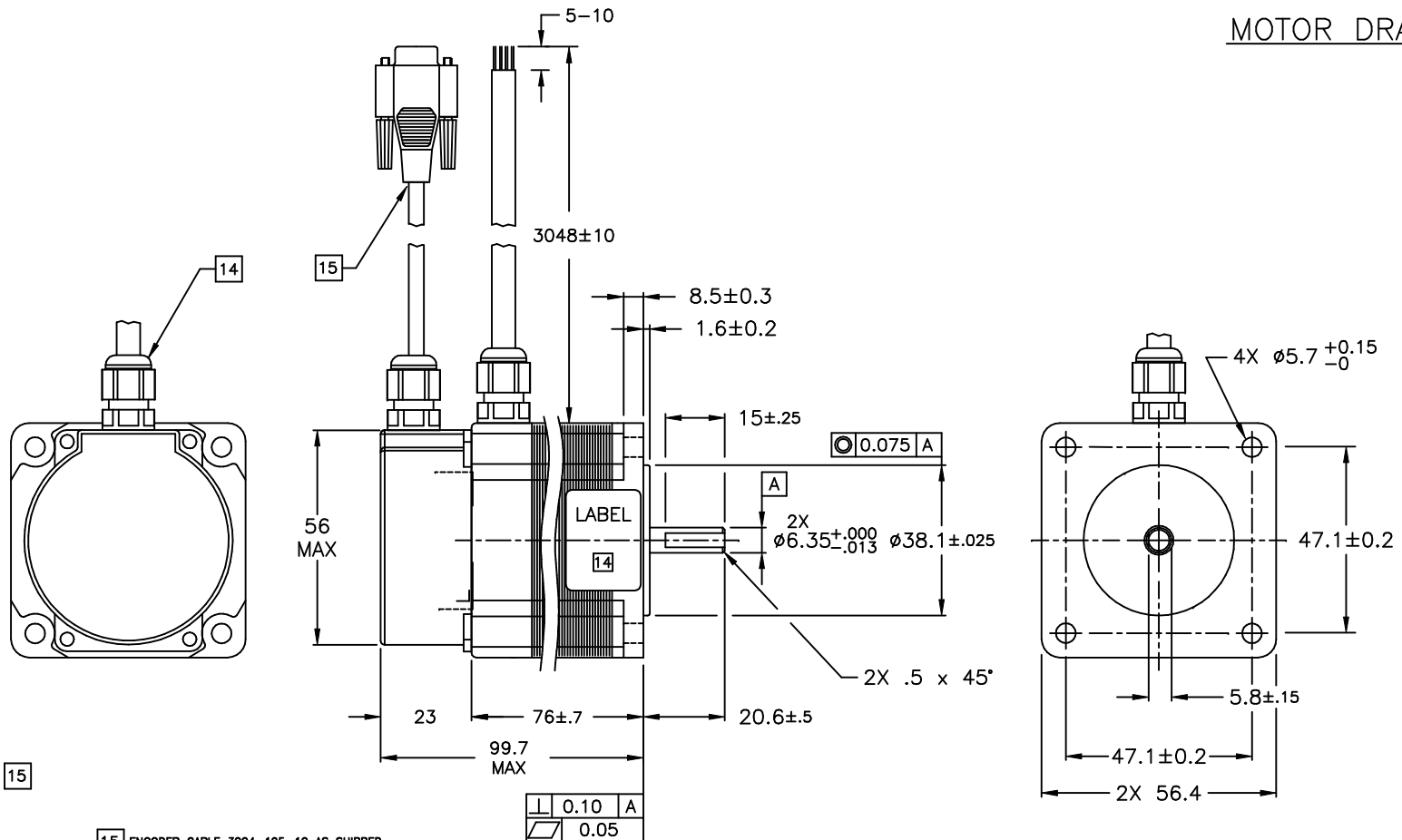
LABEL DETAIL



CONTRACT NO. —		 APPLIED MOTION PRODUCTS, INC.				
APPROVALS		DATE		STEP MOTOR OUTLINE		
DRAWN R.JONEZ		3/7/12				
CHECKED				B		
APPROVED						
APPROVED				COMPUTER DATA BASE DRAWING	DWG NO. HW23—754D—ZAC	REV D
		SCALE: NONE				SHEET 1 OF 2

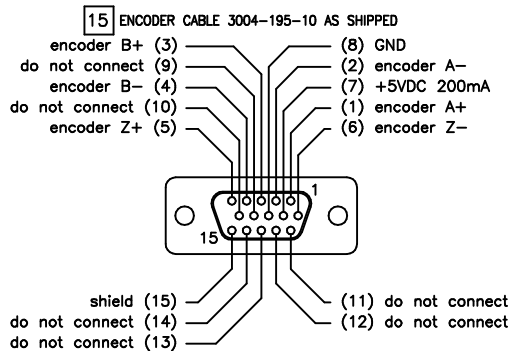
SEE SHEET 1 FOR REVISIONS

MOTOR DRAWING



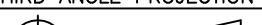
CONNECTION TABLE		CONN (REF)
LEAD COLOR	SIGNAL	PIN
BLUE	CH A	1
BLUE/WHITE	CH A-	2
YELLOW	CH B	3
YELL/WHITE	CH B-	4
ORANGE	INDEX	5
ORN/WHITE	INDEX-	6
-	N/A	9
-	N/A	10
-	N/A	13
-	N/A	14
-	N/A	11
-	N/A	12
RED	+Vcc	7
BLK	GND	8
DRAIN	SHIELD	15

15



$\perp$	0.10	A
∇	0.05	

ALL DIMENSIONS ARE IN MILLIMETERS

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°						
		APPROVALS	DATE	STEP MOTOR OUTLINE		
		DRAWN <i>R. JONEZ</i>	<i>3/7/12</i>			
		CHECKED		B	DWG NO. HW23-754D-ZAC	REV D
COMPUTER DATA BASE DRAWING		APPROVED		SCALE: NONE		SHEET 2 OF 2



STEP MOTOR OUTLINE

B DWG NO. HW23-754D-ZAC REV D