

SPECIFICATIONS:

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 220 G-CM ² (3.12X10 ⁻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 %

[7] [8] [1] [1]

SPECIFICATION CONNECTION	RESISTANCE PER PHASE OHM ±10%	INDUCTANCE PER PHASE mH ±20%	RATED CURRENT Amp	HOLDING TORQUE N-m Min	HOLDING TORQUE oz-in Min
BI-POLAR SERIES	14.0	51.2	0.71	1.08	153
BI-POLAR PARALLEL	3.5	12.8	1.41	1.08	153
UNI-POLAR	7.0	12.8	1.00	0.83	117

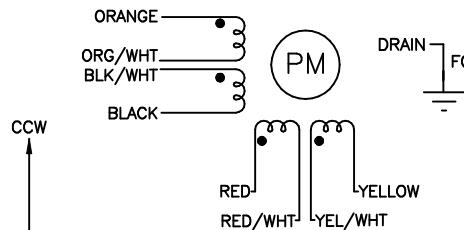
NOTES, UNLESS OTHERWISE SPECIFIED:

- [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. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- [12] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, DATE CODE AND "MADE IN (COUNTRY OF ORIGIN)".
- [13] MOTOR TO MEET IP65 STANDARDS. CABLE GLAND TO BE NICKEL-PLATED BRASS, ASI P/N 3012215 OR EQUIVALENT.
- [14] 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 & ORG/WHT	RED & YEL/WHT	YELLOW & RED/WHT
0	+	-	+	-
1	-	+	+	-
2	-	+	-	+
3	+	-	-	+
4	+	-	+	-



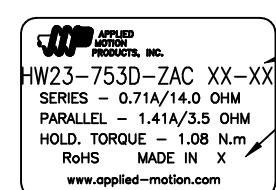
CW

HW23-753D-ZAC

REVISIONS

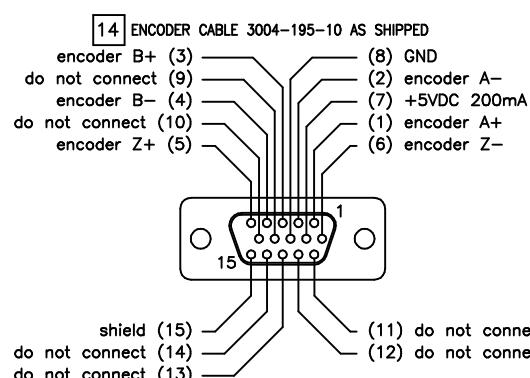
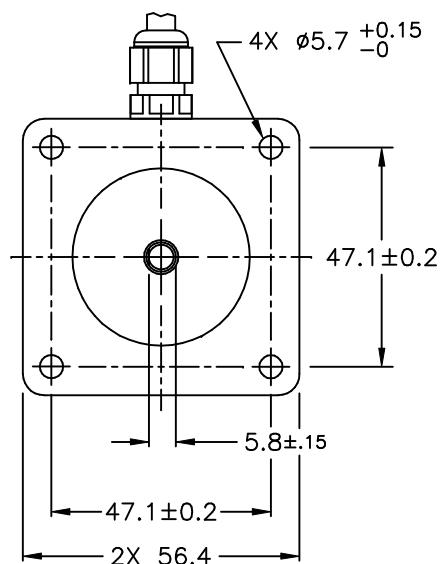
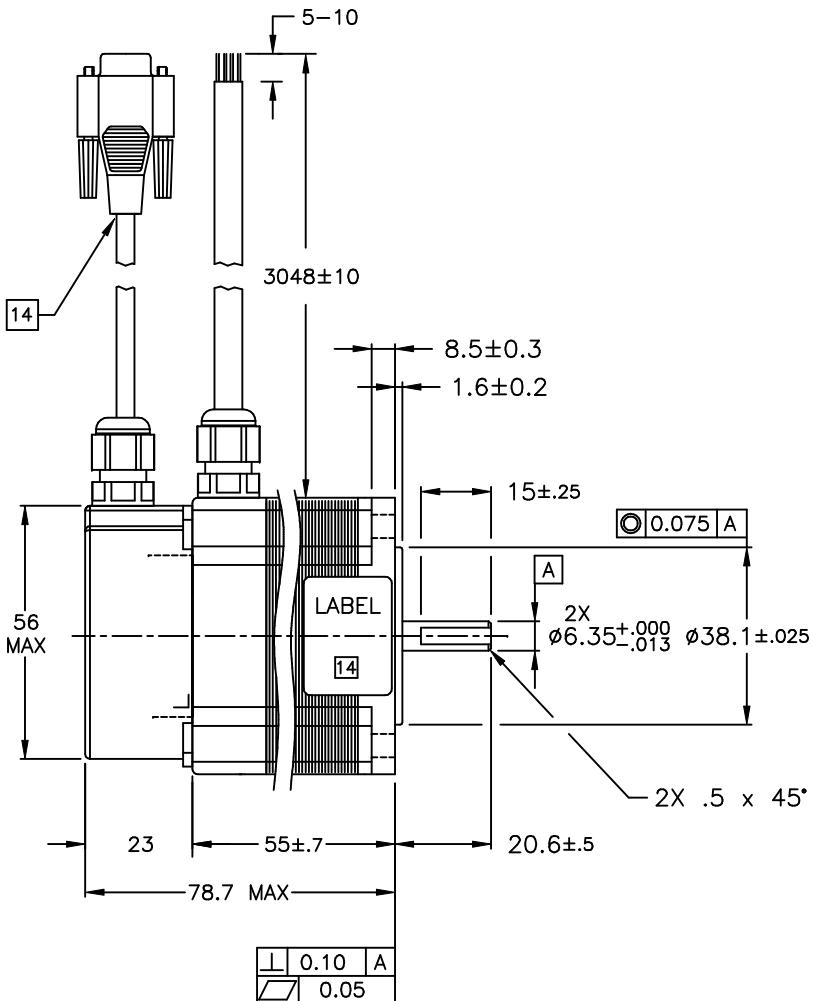
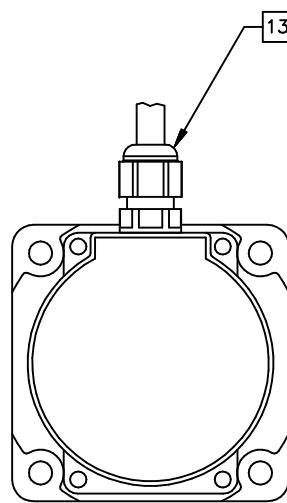
ECO NO.	REV	DESCRIPTION	DATE	APPROVED
6449	A	INITIAL RELEASE	3/7/12	J KORDIK
6564	B	WAS -ZAA, DRAWING CLEANUP	7/25/12	J KORDIK
6578	C	105°C CABLE/DRAWING CLEANUP	8/22/12	J KORDIK

LABEL DETAIL



CONTRACT NO.		APPLIED MOTION PRODUCTS, INC.	
APPROVALS	DATE	STEP MOTOR OUTLINE	
DRAWN R.JONEZ	3/7/12		
CHECKED			
APPROVED		B COMPUTER DATA BASE DRAWING	DWG NO. HW23-753D-ZAC REV C
APPROVED		SCALE: NONE	SHEET 1 OF 2

MOTOR DRAWING



ALL DIMENSIONS ARE IN MILLIMETERS

TOLERANCES		THIRD ANGLE PROJECTION		APPROVALS		DATE	
DECIMALS: MM (INCH)							
X.XXX = \pm (.005)							
X.XX = \pm 0.13 (.010)							
X.X = \pm 0.25 (.020)							
ANGLES:							
MACH. = \pm 5°							
CHAM. = \pm 5°							
COMPUTER DATA BASE DRAWING		APPROVED		B		DWG NO. HW23-753D-ZAC	
		SCALE: NONE		REV C		SHEET 2 OF 2	

 APPLIED
MOTION
PRODUCTS, INC.

STEP MOTOR OUTLINE