SPECIFICATIONS:				
STEPS PER REVOLUTION: 200	ROTOR INERTIA: 460 G-CM <sup>2</sup> (6.51E-03 oz-in-sec <sup>2</sup> )NOM			
STEP ANGLE: 1.8°	DETENT TORQUE: 0.070 N-m (9.91 oz-in) MIN			
STEP TO STEP ACCURACY: ±.09 DEGREES 1, 2	INSULATION CLASS: B			
RADIAL PLAY: 0.02 mm MAX W/.5KG RADIAL LOAD	WEIGHT: 1.0 KG (2.2 LB)			
END PLAY: 0.08 MAX W/1.0 KG AXIAL LOAD	OPERATING TEMP. RANGE: -20 TO +50 °C			
SHAFT RUNOUT: 0.05 T.I.R.	STORAGE TEMP. RANGE: -30 TO +70 °C			
TEMP. RISE: 80 °C MAX.	RELATIVE HUMIDITY RANGE: 15 TO 99 %			

	3	7		1	1
SPECIFICATION	RESISTANCE PER PHASE	INDUCTANCE PER PHASE	RATED CURRENT	HOLDING TORQUE	HOLDING TORQUE
CONNECTION	OHM ±10%	mH ±20%	Amp	N-m Min	oz—in Min
BI-POLAR SERIES	2.2	6.8	2.12	1.90	269
BI-POLAR PARALLEL	0.7	1.7	4.24	1.90	269
UNI-POLAR	1.1	1.7	3.00	1.35	191

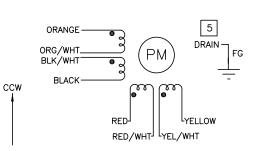
## NOTES, UNLESS OTHERWISE SPECIFIED:

- 1 MEASUREMENTS MADE AT RATED CURRENT IN BOTH PHASES.
- 2 BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
- 3 MEASUREMENTS MADE AT LEAD ENDS.
- 4. HIPOT 500 VAC, 60 Hz FOR ONE MINUTE.
- [5] LEADS: 8, 22 AWG, 7 STRAND MIN., UL AND CSA APPROVED, 105°C RATED SHIELDED CABLE 666-2126, 8 COND W/DRAIN. DRAIN WIRE TO BE CONNECTED TO INSIDE OF REAR ENDBELL.
- 6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- 7 MEASURED USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz AT LEAD ENDS.
- 8 AS MEASURED BY THE CHANGE IN RESISTANCE METHOD, WITH RATED CURRENT APPLIED TO 2 PHASES; WITH MOTOR AT REST.
- HIGH TORQUE MOTOR DESIGN, MICROSTEP LAMINATION, INTENDED FOR USE WITH 80VDC DRIVES WHEN WINDINGS CONNECTED IN PARALLEL AND WITH 160VDC DRIVES WHEN WINDINGS CONNECTED IN SERIES.
- 10. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, 'MADE IN (COUNTRY OF ORIGIN)' AND DATE CODE.
- 12 CABLE GLAND TO BE NICKEL-PLATED BRASS, ASI P/N 3012215 OR EQUIVALENT.
- Sencoder 970-1001 Installed per amp assembly practices. Encoder cable sold separately.
- 14. OTHER TAPPED HOLES MAY BE PRESENT ON REAR OF MOTOR.

## BIPOLAR, FULL STEP, 2 PHASE ON PARALLEL CONNECTED

SWITCHING SEQUENCE FOR CW ROTATION FACING MOUNTING END

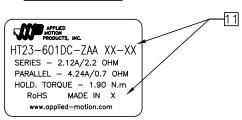
	STEP	ORANGE & BLK/WHT	BLACK & ORN/WHT	RED & YEL/WHT	YELLOW & RED/WHT
	0	+	-	+	_
	1	_	+	+	_
	2	_	+	_	+
1	3	+	-	_	+
CW	4	+	1	+	_



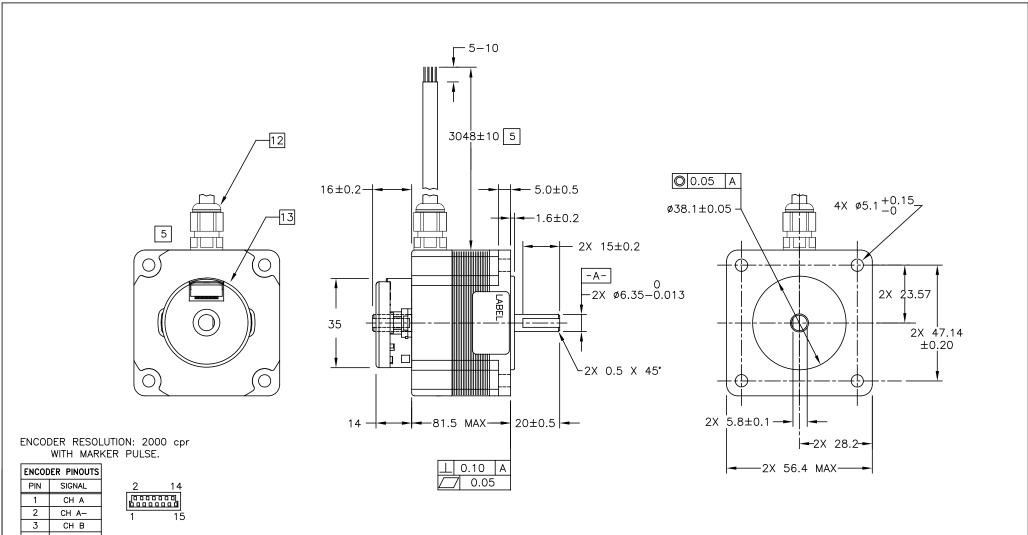
HT23-601DC-ZAA

		REVISIONS		
ECO NO.	REV	DATE	APPROVED	
6860	Α	INITIAL RELEASE	10/16/13	J KORDIK
8034	В	CHG REAR SHAFT LENGTH/TYPO	8/28/18	M.Maroney





CONTRACT NO.				W	APPLIED MOTION PRODUCTS,	INC.	
APPROVALS	DATE						
DRAWN R.JONEZ	10/10/13	$\mid S \mid$	TE	<sup>o</sup> MO	TOR	OUTLINE	
CHECKED							
		J	COMPL	ITER DATA	DWG NO.	RE	ĒV.
APPROVED		R		DRAWING		-601DC-ZAA  [	В
APPROVED		SCALE:	NONE			SHEET 1 OF 2	



ENCOR	ER 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 P	ROJECTION	
DECIMALS: MM (INCH) $X.XXX = \pm$ (.005)	<del></del>		
$X.XX = \pm 0.13 (.010)$	$\Box$		
X.X = ±0.25 (.020)   ANGLES:	APPROVALS	DATE	;
MACH. = $\pm .5^{\circ}$	DRAWN R.JONEZ	10/10/13	
CHAM. = $\pm 5^{\circ}$	CHECKED	10,10,10	E
COMPUTER DATA BASE DRAWING	APPROVED		SC



STEP MOTOR OUTLINE

$\overline{}$	DWG NO.	REV
В	HT23-601DC-ZAA	В
		-

SCALE: NONE SHEET 2 OF 2