SPECIFICATIONS:

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 2.7KG–CM^2(0.0387 OZ–IN–SEC^2)NOM
STEP ANGLE: 1.8°	DETENT TORQUE: 0.8KG–CM (11.8 OZ–IN) MIN
STEP TO STEP ACCURACY:±.09 DEGREES [1], [2]	INSULATION CLASS: B
POSITIONAL ACCURACY:±.09 DEGREES [1], [3]	WEIGHT: 3.8 KG (8.4 LBS)
SHAFT RUNOUT: 0.05 mm T.I.R. MAX	TEMP. RISE: 80 °C MAX. [9]
RADIAL PLAY: 0.025mm MAX W/A .5KG RADIAL LOAD	OPERATING TEMP. RANGE: –20 TO +50 °C
END PLAY: 0.075mm MAX W/A 1KG AXIAL LOAD	STORAGE TEMP. RANGE: –40 TO +70 °C
BEARINGS: ABEC 3, DOUBLE SHIELDED	RELATIVE HUMIDITY RANGE: 5 TO 99 %

SPECIFICATION / CONNECTION	RESISTANCE PER PHASE OHM ±10% [7]	INDUCTANCE PER PHASE mH ±20% [8]	RATED CURRENT Amp	HOLDING TORQUE Nm Min [1]	HOLDING TORQUE oz–in Min. [1]
BI–POLAR SERIES	4.8	43.2	2.03	7.5	1062
BI–POLAR PARALLEL	1.2	10.8	4.06	7.5	1062
UNI–POLAR	2.4	10.8	2.9	5.5	778

HW34–696

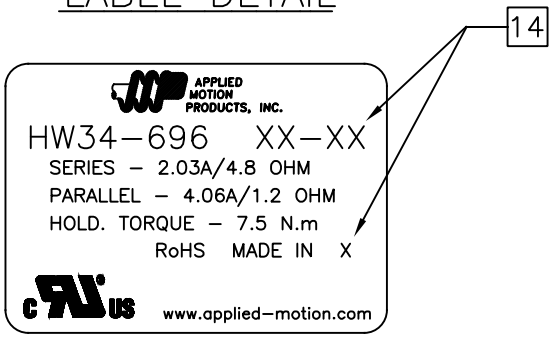
REVISIONS

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
6449	A	INITIAL RELEASE	3/7/12	J KORDIK
6470	B	REVISE MOTOR LENGTH, MTG HOLES	3/13/12	J KORDIK
6578	C	REVISE SPECS/CLEANUP	8/14/12	J KORDIK
6677	D	ADD P/N FOR LABEL SEAL	1/24/13	J KORDIK
6718	E	ADD BLACK COATING NOTE	3/15/13	J KORDIK
7373	F	END BELL SEALING OPTIONS	2/12/16	J KORDIK
7393	G	REVISED CALLOUT TYPO	3/3/16	J KORDIK
7447	H	REVISED NOTE 13	6/7/16	J KORDIK
7767	I	ADD UL TO LABEL	11/27/17	J KORDIK

NOTES, UNLESS OTHERWISE SPECIFIED:

[1] MEASUREMENTS MADE AT RATED CURRENT IN EACH PHASE.
[2] BETWEEN ANY TWO ADJACENT FULL STEP POSITIONS.
[3] MAXIMUM ERROR IN 360°.
4. HIPOT 1150 VAC, 60 Hz FOR ONE MINUTE.
[5] LEADS: 8, 22AWG, 7 STRAND MIN.,UL AND CSA APPROVED, 105°C. SHIELDED CABLE, 8 COND. W/DRAIN, P/N 666–2126.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
[7] MEASUREMENTS MADE WITH CABLE.
[8] MEASURED USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz, WITH CABLE.
[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] DRAIN WIRE TO BE CONNECTED TO INSIDE OF REAR ENDBELL.
13. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH THE CURRENT EU RoHS DIRECTIVE.
[14] MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT, DATE CODE AND "MADE IN (COUNTRY OF ORIGIN)".
[15] MOTOR TO MEET IP65 STANDARDS. REAR END BELL OPTIONS INCLUDE A SOLID END BELL OR A BRASS PLUG COVERING THE SHAFT BEARING, A 3M LABEL MUST COVER THE BRASS PLUG. CABLE GLAND TO BE NICKEL–PLATED BRASS, ASI P/N 3012215 OR EQUIVALENT.
16. END BELLS TO BE PROTECTED WITH BLACK COATING.

LABEL DETAIL

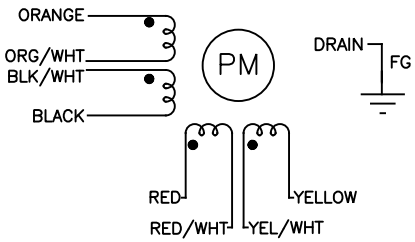


BIPOLAR, FULL STEP, 2 PHASE ON PARALLEL CONNECTED

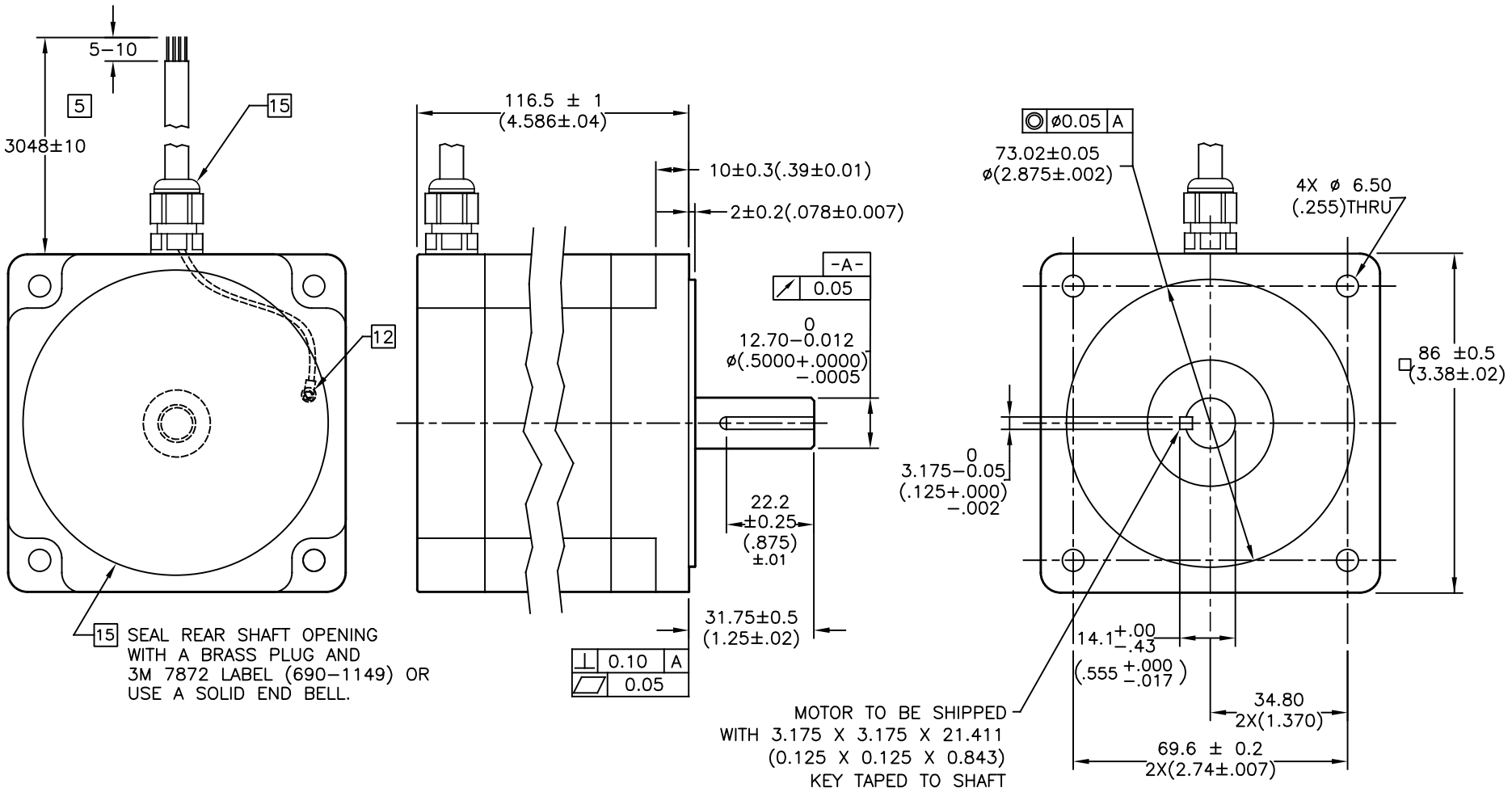
SWITCHING SEQUENCE FOR CW ROTATION FACING MOUNTING END

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

CW ↓ CCW ↑



CONTRACT NO. –		APPLIED MOTION PRODUCTS, INC.	
APPROVALS	DATE	STEP MOTOR OUTLINE	
DRAWN N.DEY	11/8/17		
CHECKED		B COMPUTER DATA BASE DRAWING	DWG NO. HW34–696 REV I
APPROVED			
APPROVED		SCALE: NONE	SHEET 1 OF 2



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°			STEP MOTOR OUTLINE	
	APPROVALS	DATE	B	DWG NO. HW34–696 REV I
	DRAWN N.DEY	11/8/17		
	CHECKED		SCALE: NONE	SHEET 2 OF 2
COMPUTER DATA BASE DRAWING	APPROVED			