

SPECIFICATIONS:

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 280 G-CM ² (1.53 OZ-IN ²) NOM
STEP ANGLE: 1.8°	HOLDING TORQUE: 8.5 KG-CM (118 OZ-IN) MIN 1
STEP TO STEP ACCURACY: ± 5 % 1 , 2	DETENT TORQUE: N/A G-CM (N/A OZ-IN)
POSITIONAL ACCURACY: ± 5 % 1 , 3	
HYSTERESIS: %	INSULATION CLASS: B
WINDING RESISTANCE: 1.8 OHM ±10% AT 25° 7	BEARINGS: ABEC 3, DOUBLE SHIELDED
WINDING INDUCTANCE: 3.2 mH ± 20% 8	WEIGHT: 0.7 KG (1.54 LB)
PHASE VOLTAGE: 3.6 VDC	TEMP. RISE: 80 °C MAX. 9
PHASE CURRENT: 2.0 AMP [(RATED)UNIPOLAR] 15	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: 0.02 MAX W/0.45 KG RADIAL LOAD	
END PLAY: 0.08 MAX W/0.45 KG AXIAL LOAD	

HT23-549

REVISIONS

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
5197	A	INITIAL RELEASE	3/14/05	R. HAZELWOOD
5219	B	SPEC CHANGES	6-9-05	R. HAZELWOOD
5235	C	ADD EU COMPLIANCE NOTES	8/25/05	R. Hazelwood
5273	D	REMOVE CABLE CALLOUT	2/6/06	R. Hazelwood
5587	E	REMOVE 'D' IN BASE P/N	8/20/07	J. Kordik
6203	F	REVISE SPECS	12/21/10	J. Amos
6515	G	REVISE NOTE 5	6/11/12	J. Georgiana
7445	H	REVISE NOTE 16	6/6/16	J. Kordik

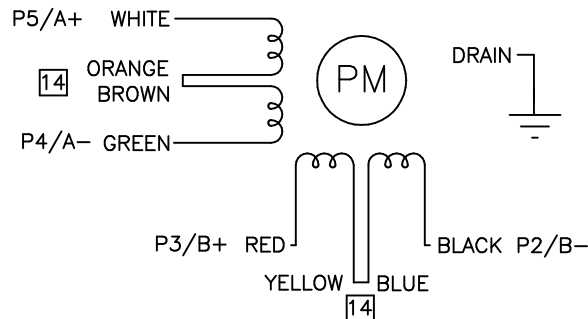
NOTES, UNLESS OTHERWISE SPECIFIED:


- 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 24,7 STRAND MIN.,UL AND CSA APPROVED, UL 1430 OR UL 3265, CABLE, 8 COND. W/DRAIN, P/N 666-2107.
6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- 7** AS MEASURED ACROSS ANY WINDING. RESISTANCE IS DOUBLED WITH BOTH WINDINGS IN SERIES. MEASUREMENTS MADE WITHOUT CABLE.
- 8** AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz. INDUCTANCE IS FOUR TIMES VALUE WITH WINDINGS IN SERIES. MEASUREMENTS MADE WITHOUT CABLE.
- 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 LAMINATED CONSTRUCTION.
- 12** LABEL TO INCLUDE AMPS/PHASE, MOTOR RESISTANCE, VOLTAGE, DATE CODE AND MADE IN TAIWAN.
- 13** DRAIN WIRE TO BE CONNECTED TO INSIDE OF REAR ENDBELL.
- 14** SOLDER CENTER TAP WIRES TOGETHER, WRAP IN SHRINK TUBING AND CONCEAL WITHIN BOOT.
- 15** CURRENT SETTING WHEN USED WITH STAC-6 = 1.5 A
16. THIS MOTOR IS MANUFACTURED IN COMPLIANCE WITH THE CURRENT EU RoHS DIRECTIVE.
17. MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT.
- 18** SHAFT OPTION: IF DOUBLE SHAFT REQUIRED ADD "D" TO END OF PART NUMBER.

BIPOLAR, FULL STEP, 2 PHASE ON SERIES CONNECTED

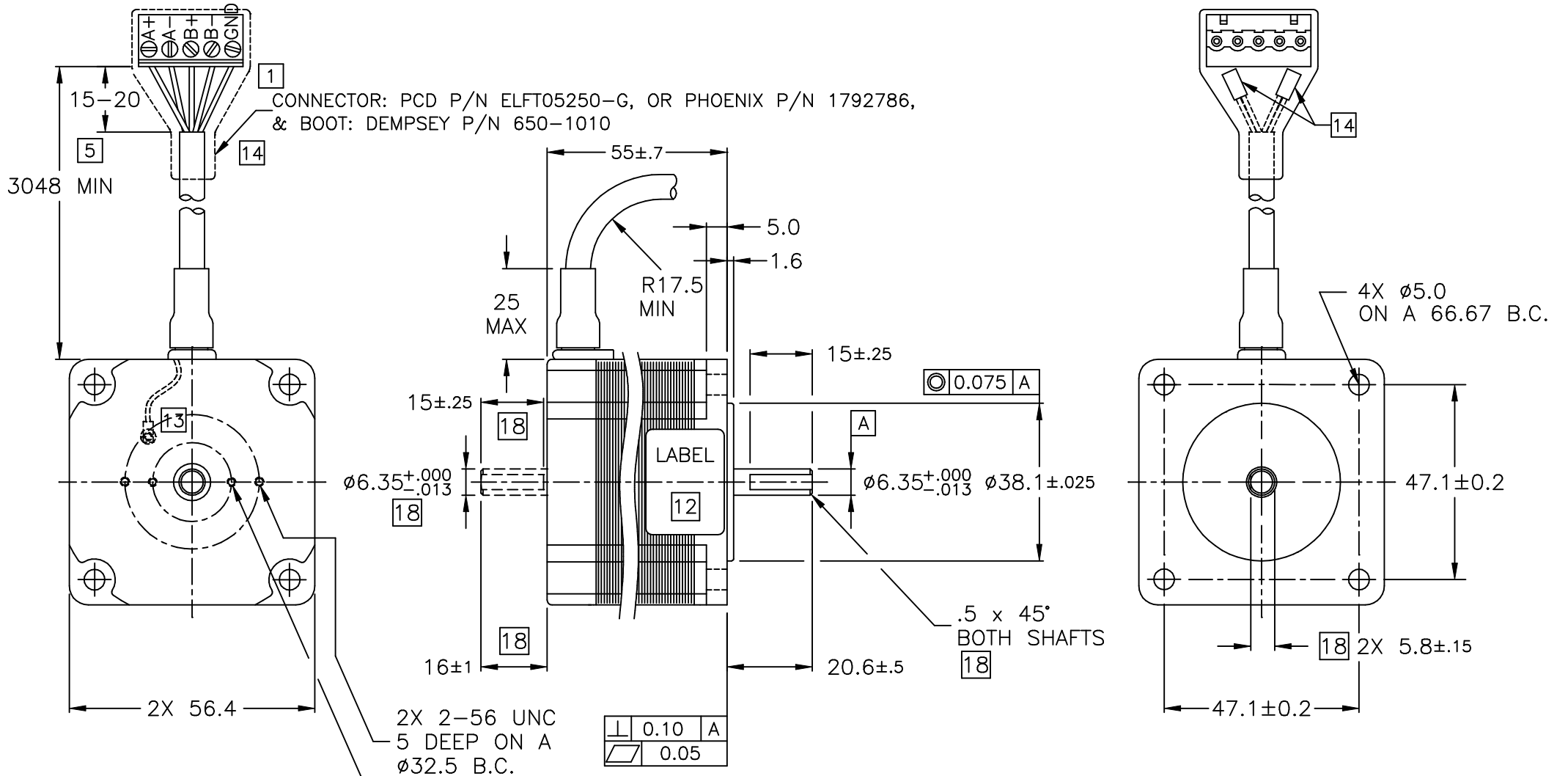
SWITCHING SEQUENCE FOR CW ROTATION FACING MOUNTING END

STEP	WHITE/A+	GREEN/A-	RED/B+	BLACK/B-
0	+	-	+	-
1	-	+	+	-
2	-	+	-	+
3	+	-	-	+
4	+	-	+	-



CONTRACT NO.		 APPLIED MOTION PRODUCTS, INC.			
APPROVALS	DATE	<h1>STEP MOTOR OUTLINE</h1>			
DRAWN <i>S. ARNOLD</i>	3/5/2005				
CHECKED <i>R. Barrick</i>	3/9/05	B	COMPUTER DATA BASE DRAWING	DWG NO. HT23-549	REV H
APPROVED <i>R. HAZELWOOD</i>	3/14/05		SCALE: 1=1	SHEET 1 OF 2	

5 4 3 2 1 ← PIN SEQUENCE



CONNECTION CHART		
PIN	CONNECTOR	LEAD COLOR
1	GND	SHIELD
2	B-	BLACK
3	B+	RED
4	A-	GREEN
5	A+	WHITE

YELLOW/ BLUE	SEE NOTE 14	ORANGE/ BROWN
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2X 2-56 UNC TAP
THRU 180° APART
ON A Ø19.05 B.C.

ALL DIMENSIONS ARE IN MILLIMETERS

TOLERANCES	THIRD ANGLE PROJECTION	
DECIMALS: MM (INCH) X.XXX = ± .005 X.XX = ±0.13 (.010) X.X = ±0.25 (.020)		
ANGLES: MACH. = ±.5° CHAM. = ±5°	APPROVALS	DATE
COMPUTER DATA BASE DRAWING	DRAWN S. ARNOLD	3/5/2005
	CHECKED K. Barrick	3/9/05
	APPROVED R. HARRIS	3/14/05

APPLIED MOTION PRODUCTS, INC.

STEP MOTOR OUTLINE

B	DWG NO.	HT23-549	REV	H
SCALE: FULL		SHEET 2 OF 2		