

SPECIFICATIONS:

STEPS PER REVOLUTION: 200	ROTOR INERTIA: 2.68 G-CM ² (14.6OZ-IN ²)NOM
STEP ANGLE: 1.8°	HOLDING TORQUE: 80.0 Kg-cm (1110 OZ-IN)MIN [1]
STEP TO STEP ACCURACY: ±5 % [1], [2]	DETENT TORQUE: 0.8 Kg-cm (11.1 OZ-IN) MIN
POSITIONAL ACCURACY: ±5 % [1], [3]	
HYSTERESIS: 5 %	INSULATION CLASS: B
WINDING RESISTANCE: 1.08 OHM ±10% AT 25° [7]	BEARINGS: ABEC 3 , DOUBLE SHIELDED
WINDING INDUCTANCE: 8.8 mH± 20% [7][8]	
PHASE VOLTAGE: 4.4 VDC [7]	TEMP. RISE: 80 °C MAX. [9]
PHASE CURRENT: 4.1 AMP [(RATED) SERIES] [12]	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: 0.025 MAX W/A .5KG RADIAL LOAD	
END PLAY: 0.075 MAX W/A 1KG AXIAL LOAD	WEIGHT: 3.81 KG (8.4 LB)

HT34-489

REVISIONS

ECO NO.	REV	DESCRIPTION	DATE	APPROVED
5194	A	INITIAL RELEASE	2/25/05	R. HAZELWOOD
5205	B	Cable assy changed	4/5/05	R. HAZELWOOD
5208	C	NOTE 5 AND 16 CHANGE		
5219	D	SPEC CHANGES	6-9-05	R. HAZELWOOD
5221	E	SPEC CHANGES	8-12-05	R. HAZELWOOD
5235	F	ADD EU COMPLIANCE NOTES	8-25-05	R. HAZELWOOD
5242	G	CORRECT SPEC REF ECO	9-22-05	R. HAZELWOOD

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] CABLE ASSY: 3004 196 (8 CORE, 22 AWG)
- 6. INSULATION RESISTANCE: 100 MEGOHMS MIN AT 500 VDC.
- [7] AS MEASURED ACROSS ANY WINDINGS CONNECTED IN SERIES, WITHOUT CABLE. (WITH CABLE = 1.7 OHM)
- [8] AS MEASURED ACROSS ANY WINDING USING AN A.C. INDUCTANCE BRIDGE, AT 1KHz, 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.
- 11. ROTOR & STATOR LAMINATED CONSTRUCTION.
- [12] POWER SUPPLY VOLTAGE TO AMPLIFIER 80V OR LESS. IF GREATER THAN 80 VOLTS RATED CURRENT IS 4.1 AMPS, SERIES CONNECTED, W/50% DUTY CYCLE. (MOTOR MAY BE LEFT ENERGIZED AT 50% CURRENT BETWEEN CYCLES.) CURRENT SETTING WITH STAC-6 = 5.1 AMP
- [13] ADD "D" TO END OF PART NUMBER IF DOUBLE SHAFT IS REQUIRED.
- [14] SHIELD WIRE TO BE CONNECTED TO INSIDE OF REAR ENDBELL
- [15] RUBBER GROMMET & STRAIN RELIEF MOUNT ON LEAD EXIT. AFTER INSTALATION OF STRAIN RELIEF, SLIDE HEAT SHRINK OVER GROMMET & APPLY HEAT.

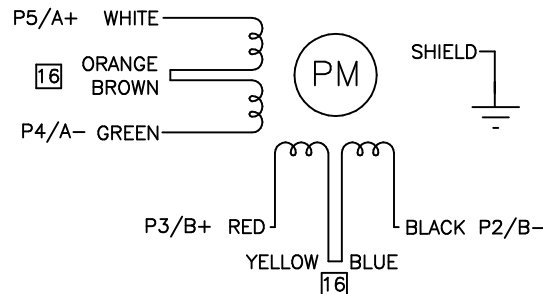
- [16] SOLDER CENTER TAP WIRES TOGETHER, WRAP WITH HEAT SHRINK AND CONCEAL WITHIN BOOT.


- 17. THIS MOTOR TO BE MANUFACTURED IN COMPLIANCE WITH EU DIRECTIVE "ROHS 2002/95/EC".
- 18. MOTOR LABEL TO INCLUDE "ROHS" COMPLIANT.

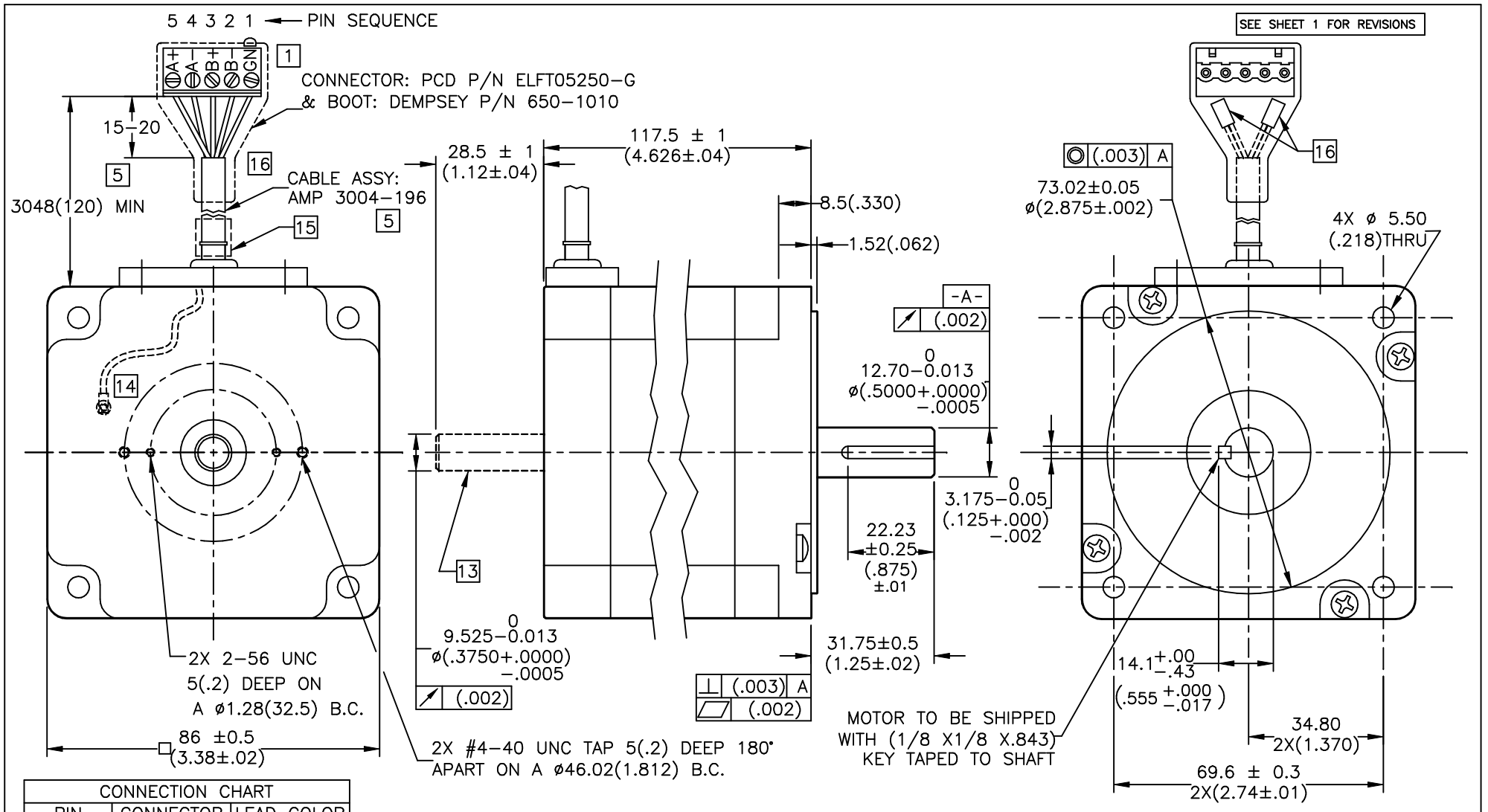
SERIES CONNECTION

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>	2/25/05				
CHECKED <i>R. HAZELWOOD</i>	2/25/05				
APPROVED <i>R. HAZELWOOD</i>	2/25/05				
APPROVED		B	COMPUTER DATA BASE DRAWING	DWG. NO. HT34-489	REV G
SCALE: NTS		SHEET 1 OF 2			



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

YELLOW/ BLUE	SEE NOTE 16	ORANGE/ BROWN
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SINGLE/DOUBLE SHAFT VERSION

TOLERANCES	THIRD ANGLE PROJECTION	
DECIMALS: MM (INCH) X.XXX = ±0.01 (.005) X.XX = ±0.10 (.010) X.X = ±0.20 (.020)		
ANGLES: MACH. = ±5° CHAM. = ±5°	APPROVALS	DATE
COMPUTER DATA BASE DRAWING	DRAWN S.ARNOLD	2/25/05
	CHECKED D. MAGREYWOODS	2/25/05
	APPROVED D. MAGREYWOODS	2/25/05

STEP MOTOR OUTLINE		
B	DWG NO. HT34-489	REV G
SCALE: FULL	SHEET 2 OF 2	