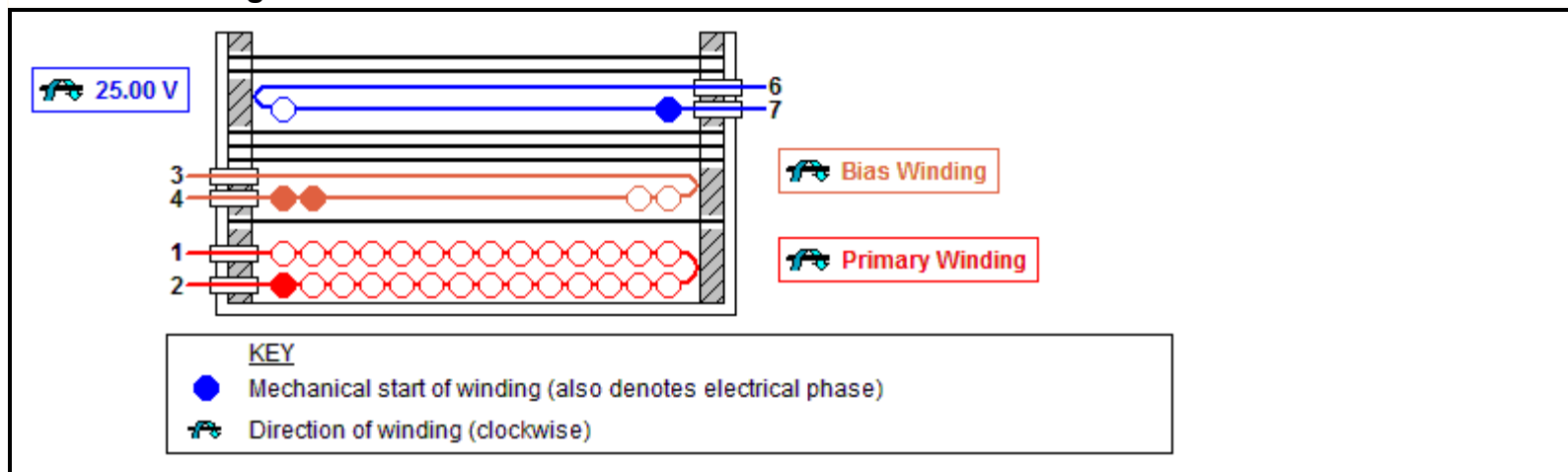


## Electrical Diagram



## Mechanical Diagram



## Winding Instruction

Use 2.20 mm margin (item [3]) on the left side. Use 2.20 mm margin (item [3]) on the right side.

**Primary Winding**  
 Start on pin(s) 2 using item [5] at the start leads and wind 63 turns (x 1 filar) of item [7]. in 2 layer(s) from left to right. At the end of 1st layer, continue to wind the next layer from right to left. On the final layer, spread the winding evenly across entire bobbin. Finish this winding on pin(s) 1 using item [5] at the finish leads.  
 Add 1 layer of tape, item [4], for insulation.

**Bias Winding**  
 Start on pin(s) 4 using item [5] at the start leads and wind 7 turns (x 2 filar) of item [8]. Wind in same rotational direction as primary winding. Spread the winding evenly across entire bobbin. Finish this winding on pin(s) 3 using item [5] at the finish leads.  
 Add 3 layers of tape, item [4], for insulation.

**Secondary Winding**  
 Start on pin(s) 7 using item [5] at the start leads and wind 12 turns (x 1 filar) of item [8]. Spread the winding evenly across entire bobbin. Wind in same rotational direction as primary winding. Finish this winding on pin(s) 6 using item [5] at the finish leads.  
 Add 2 layers of tape, item [4], for insulation.

**Core Assembly**  
 Assemble and secure core halves. Item [1].

**Varnish**  
 Dip varnish uniformly in item [6]. Do not vacuum impregnate.

## Materials

Item	Description
[1]	Core: EFD25/13/9, NC-2H (Nicera) or Equivalent, gapped for ALG of 230 nH/T <sup>2</sup>
[2]	Bobbin: Generic, 5 pri. + 5 sec.
[3]	Tape: Polyester web 2.20 mm wide
[4]	Barrier Tape: Polyester film [1 mil (25 µm) base thickness], 16.40 mm wide
[5]	Teflon Tubing # 22
[6]	Varnish
[7]	Magnet Wire: 28 AWG, Solderable Double Coated

[8]	Magnet Wire: 25 AWG, Solderable Double Coated
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### Electrical Test Specifications

<i>Parameter</i>	<i>Condition</i>	<i>Spec</i>
Electrical Strength, VAC	60 Hz 1 second, from pins 1,2,3,4 to pins 6,7.	3000
Nominal Primary Inductance, $\mu$ H	Measured at 1 V pk-pk, typical switching frequency, between pin 1 to pin 2, with all other Windings open.	997
Tolerance, $\pm\%$	Tolerance of Primary Inductance	10.0
Maximum Primary Leakage, $\mu$ H	Measured between Pin 1 to Pin 2, with all other Windings shorted.	29.91

Although the design of the software considered safety guidelines, it is the user's responsibility to ensure that the user's power supply design meets all applicable safety requirements of user's product.

The products and applications illustrated herein (including circuits external to the products and transformer construction) may be covered by one or more U.S. and foreign patents or potentially by pending U.S. and foreign patent applications assigned to Power Integrations. A complete list of Power Integrations' patents may be found at [www.power.com](http://www.power.com).