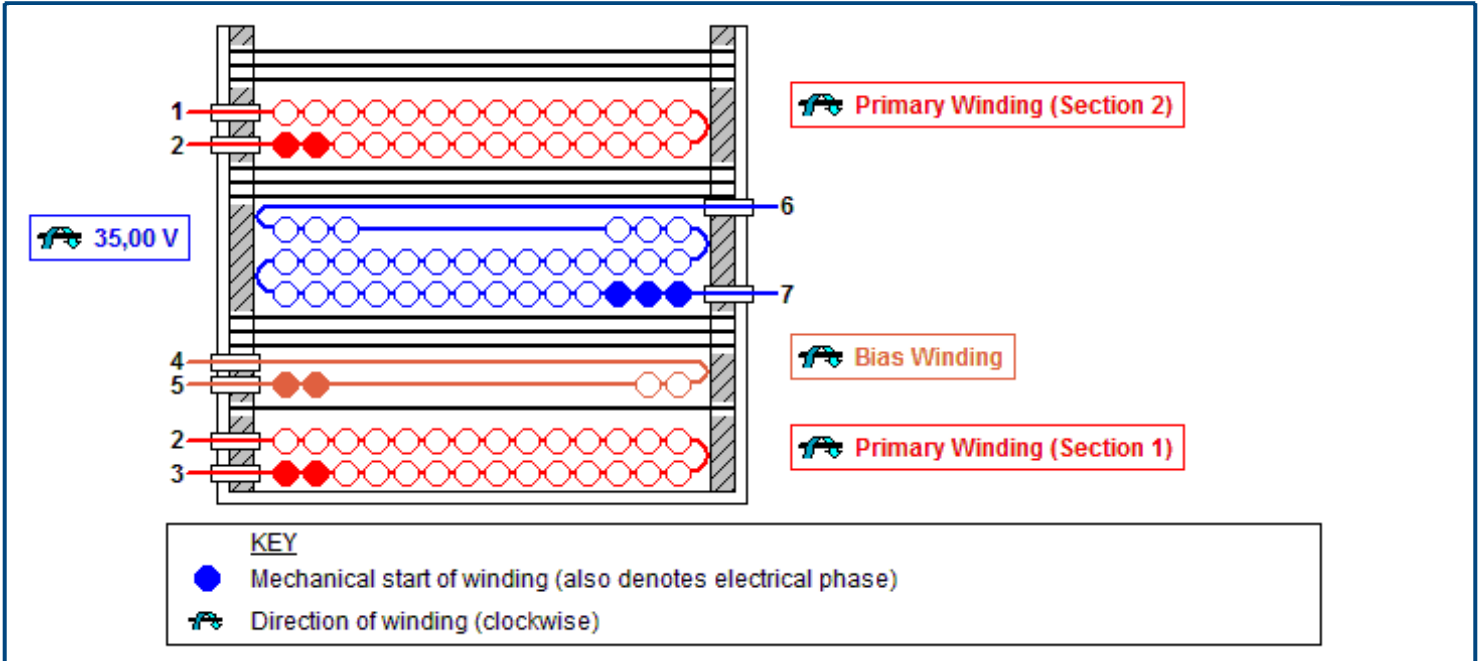




Mechanical Diagram



Winding Instruction

Use 3.20 mm margin (item [3]) on the left side. Use 3.20 mm margin (item [3]) on the right side.

Primary Winding (Section 1)
 Start on pin(s) 3 using item [5] at the start leads and wind 31 turns (x 2 filar) of item [8]. 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) 2 using item [5] at the finish leads.
 Add 1 layer of tape, item [4], for insulation.

Bias Winding
 Start on pin(s) 5 using item [5] at the start leads and wind 12 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) 4 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 20 turns (x 3 filar) of item [9]. 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 3 layers of tape, item [4], for insulation.

Primary Winding (Section 2)
 Start on pin(s) 2 using item [5] at the start leads and wind 31 turns (x 2 filar) of item [8]. 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 3 layers of tape, item [4], for insulation.

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

Flux-Band
 Construct a flux band by wrapping a single shorted turn of item [6] around the outside of windings and core halves with tight tension. Make an electrical connection to pin(s) 1 using wire.
 Add 3 layers of tape, item [4], for insulation.

Varnish
 Dip varnish uniformly in item [7]. Do not vacuum impregnate.

Materials

Item	Description
[1]	Core: ETD29, NC-2H (Nicera) or Equivalent, gapped for ALG of 91 nH/T²
[2]	Bobbin: Generic, 5 pri. + 2 sec.
[3]	Tape: Polyester web 3,20 mm wide
[4]	Barrier Tape: Polyester film [1 mil (25 µm) base thickness], 19,40 mm wide
[5]	Teflon Tubing # 22
[6]	Copper Tape: 2 mil thick

[7]	Varnish
[8]	Magnet Wire: 27 AWG, Solderable Double Coated
[9]	Magnet Wire: 26 AWG, Solderable Double Coated

Electrical Test Specifications

Parameter	Condition	Spec
Electrical Strength, VAC	50 Hz 60 second, from pins 1,2,3,4,5 to pins 6,7.	4000
Nominal Primary Inductance, μ H	Measured at 1 V pk-pk, typical switching frequency, between pin 1 to pin 3, with all other Windings open.	348
Tolerance, \pm %	Tolerance of Primary Inductance	10,0
Maximum Primary Leakage, μ H	Measured between Pin 1 to Pin 3, with all other Windings shorted.	5,22

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.