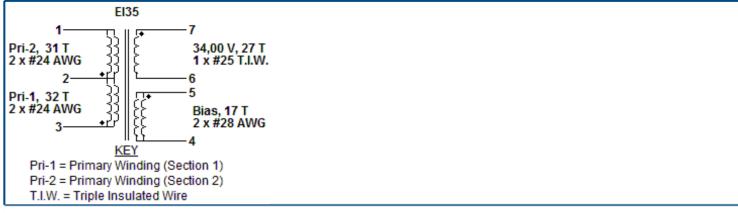
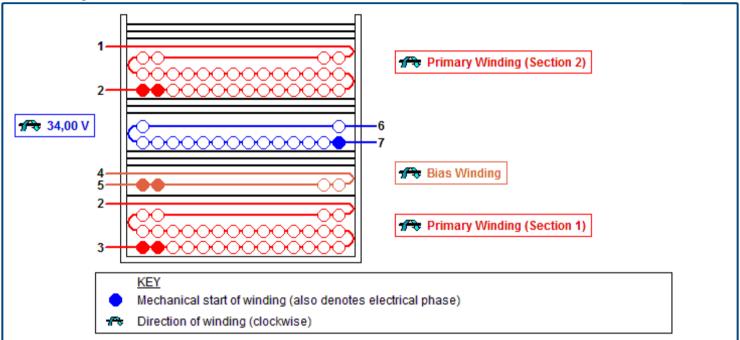
Electrical Diagram Electrical Diagram



Mechanical Diagram



Winding Instruction

Primary Winding (Section 1)

Start on pin(s) 3 and wind 32 turns (x 2 filar) of item [6]. in 3 layer(s) from left to right. At the end of 1st layer, continue to wind the next layer from right to left. At the end of 2nd layer, continue to wind the next layer from left to right. On the final layer, spread the winding evenly across entire bobbin. Finish this winding on pin(s) 2.

Add 1 layer of tape, item [3], for insulation.

Bias Winding

Start on pin(s) 5 and wind 17 turns (x 2 filar) of item [7]. Wind in same rotational direction as primary winding. Spread the winding evenly across entire bobbin. Finish this winding on pin(s) 4.

Add 3 layers of tape, item [3], for insulation

Secondary Winding

Start on pin(s) 7 and wind 27 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.

Add 3 layers of tape, item [3], for insulation.

Primary Winding (Section 2)

Start on pin(s) 2 and wind 31 turns (x 2 filar) of item [6]. in 3 layer(s) from left to right. At the end of 1st layer, continue to wind the next layer from right to left. At the end of 2nd layer, continue to wind the next layer from left to right. On the final layer, spread the winding evenly across entire bobbin. Finish this winding on pin(s) 1.

Add 3 layers of tape, item [3], 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 [4] 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 [3], for insulation.

Varnish

Dip varnish uniformly in item [5]. Do not vacuum impregnate.

Comments

1. For non margin wound transformers use triple insulated wire for all secondary windings.

Materials

Item	Description
[1]	Core: El35, NC-2H (Nicera) or Equivalent, gapped for ALG of 372 nH/T²
[2]	Bobbin: Generic, 5 pri. + 2 sec.
[3]	Barrier Tape: Polyester film [1 mil (25 μm) base thickness], 15,70 mm wide
[4]	Copper Tape: 2 mil thick

[5]	Varnish
[6]	Magnet Wire: 24 AWG, Solderable Double Coated
[7]	Magnet Wire: 28 AWG, Solderable Double Coated
[8]	Triple Insulated Wire: 25 AWG

Electrical Test Specifications

Parameter	Condition	Spec
Electrical Strength, VAC	60 Hz 1 second, from pins 1,2,3,4,5 to pins 6,7.	3000
	Measured at 1 V pk-pk, typical switching frequency, between pin 1 to pin 3, with all other Windings open.	1458
Tolerance, ±%	Tolerance of Primary Inductance	10,0
Maximum Primary Leakage, μΗ	Measured between Pin 1 to Pin 3, with all other Windings shorted.	36,46

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.