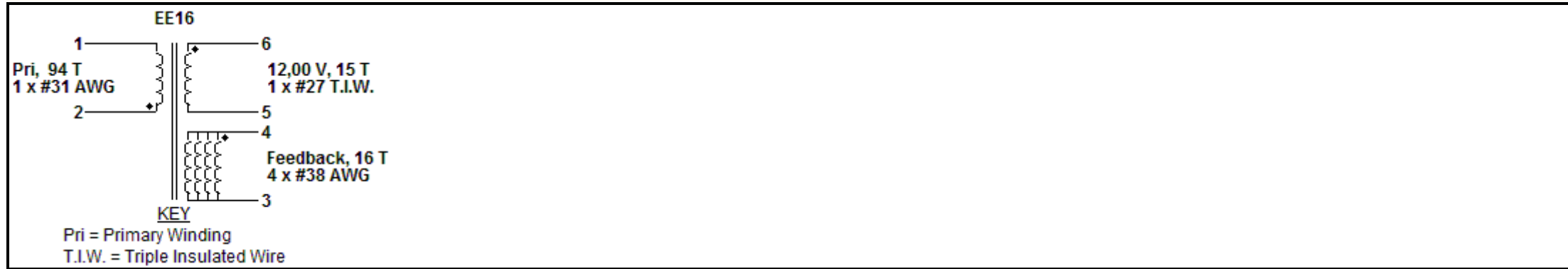
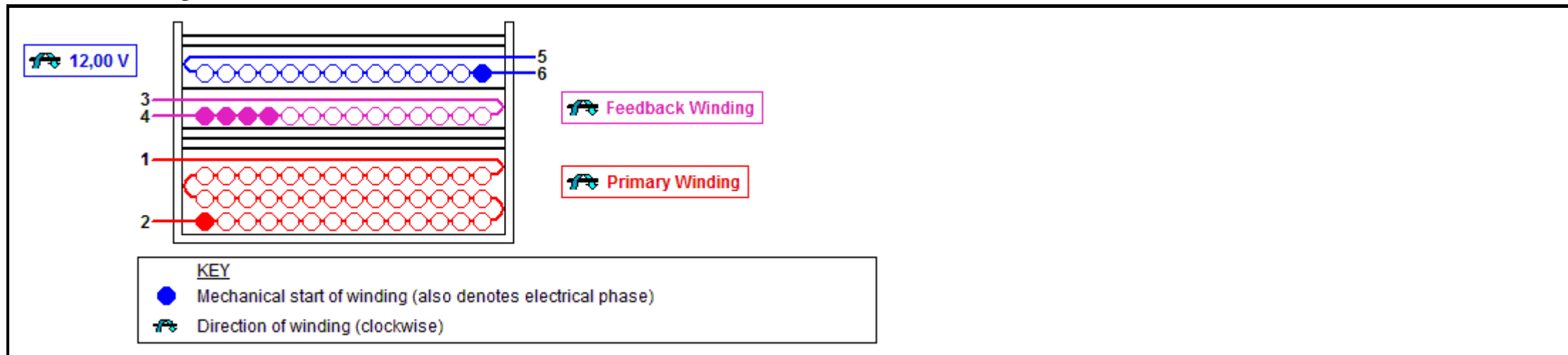


Electrical Diagram



Mechanical Diagram



Winding Instruction

Primary Winding

Start on pin(s) 2 and wind 94 turns (x 1 filar) of item [5] 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.

Feedback Winding

Start on any (temp) pin on the secondary side and wind 16 turns (x 4 filar) of item [6]. Wind in same rotational direction as primary winding. Spread the winding evenly across entire bobbin. Finish this winding on pin(s) 3. Move end of wire from temp pin and terminate it on pin 4.

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

Secondary Winding

Start on pin(s) 6 and wind 15 turns (x 1 filar) of item [7]. Spread the winding evenly across entire bobbin. Wind in same rotational direction as primary winding. Finish this winding on pin(s) 5.

Add 2 layers of tape, item [3], for insulation.

Core Assembly

Assemble and secure core halves. Item [1].

Varnish

Dip varnish uniformly in item [4]. Do not vacuum impregnate.

Comments

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

2. For lowest EMI place diode in return leg of the secondary (diode cathode connected to finish / termination pin side of secondary winding).

Materials

<i>Item</i>	<i>Description</i>
[1]	Core: EE16, NC-2H (Nicera) or Equivalent, gapped for ALG of 102 nH/T ²
[2]	Bobbin: Generic, 4 pri. + 4 sec.
[3]	Barrier Tape: Polyester film [1 mil (25 µm) base thickness], 8,50 mm wide
[4]	Varnish
[5]	Magnet Wire: 31 AWG, Solderable Double Coated
[6]	Magnet Wire: 38 AWG, Solderable Double Coated
[7]	Triple Insulated Wire: 27 AWG

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 5,6.	3000
Nominal Primary Inductance, µH	Measured at 1 V pk-pk, typical switching frequency, between pin 1 to pin 2, with all other Windings open.	985
Tolerance, ±%	Tolerance of Primary Inductance	10,0
Maximum Primary Leakage, µH	Measured between Pin 1 to Pin 2, with all other Windings shorted.	39,41

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.powerint.com.