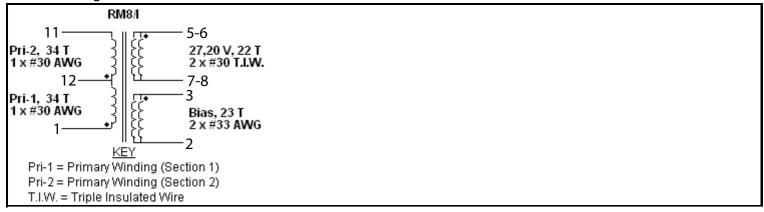
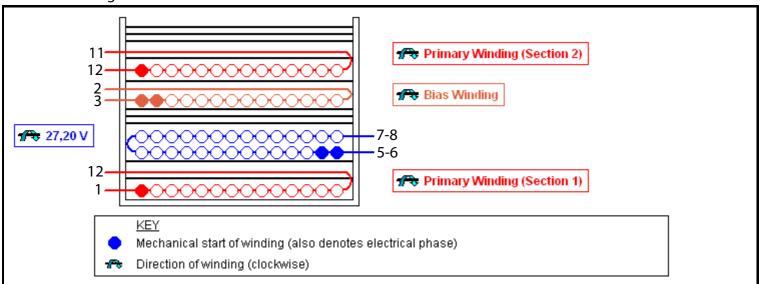
# **Electrical Diagram**





## Mechanical Diagram



## Winding Instruction

#### Primary Winding (Section 1)

Start on pin(s) 3 and wind 34 turns (x 1 filar) of item [7] in 1 layer(s) from left to right. Add 1 la yer of tape, item [4], in between each primary wind ing layer. On the final layer, spread the winding evenly acros s entire bobbin. Finish this winding on pin(s) 2.

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

### Secondary Winding

Start on pin(s) 7 and wind 22 turns (x 2 filar) of item [8]. Spread the winding evenly across entire b obbin. Wind in same rotational direction as primary winding. Finish this winding on pin(s) 6.

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

## **Bias Winding**

Start on pin(s) 5 and wind 23 turns (x 2 filar) of item [9]. Wind in same rotational direction as prim ary winding. Spread the winding evenly across entir e bobbin. Finish this winding on pin(s) 4.

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

#### Primary Winding (Section 2)

Start on pin(s) 2 and wind 34 turns (x 1 filar) of item [7] in 1 layer(s) from left to right. Add 1 la yer of tape, item [4], in between each primary wind ing layer. On the final layer, spread the winding evenly acros s 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 [5] 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 [6]. Do not vacuum im pregnate

## Comments

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

## **Materials**

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Item	Description
[1]	Core: RM8/I, NC-2H (Nicera) or Equivalent, gapped for ALG of 245 nH/T <sup>2</sup>
[2]	Bobbin: Generic, 5 pri. + 2 sec.
[3]	Barrier Tape: Polyester film [1 mil (25 μm) base thickness], 10,00 mm wide
[4]	Separation Tape: Polyester film [1 mil (25 µm) base thickness], 10,0 mm wide
[5]	Copper Tape: 2 mil thick
[6]	Varnish
[7]	Magnet Wire: 30 AWG, Solderable Double Coated
[8]	Triple Insulated Wire: 30 AWG
[9]	Magnet Wire: 33 AWG, Solderable Double Coated

# **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
Nominal Primary Inductance, μH	Measured at 1 V pk-pk, typical switching frequency, between pin 1 to pin 3, with all other Windings open.	1117
Tolerance, ±%	Tolerance of Primary Inductance	10,0
Maximum Primary Leakage, μΗ	Measured between Pin 1 to Pin 3, with all other Windings shorted.	27,92

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.

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