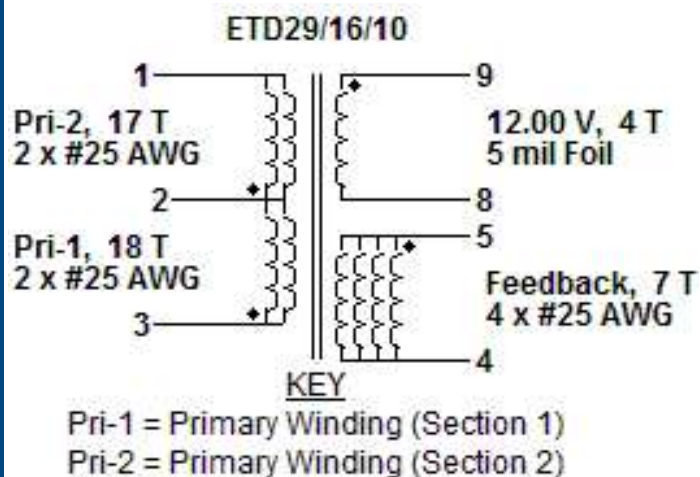
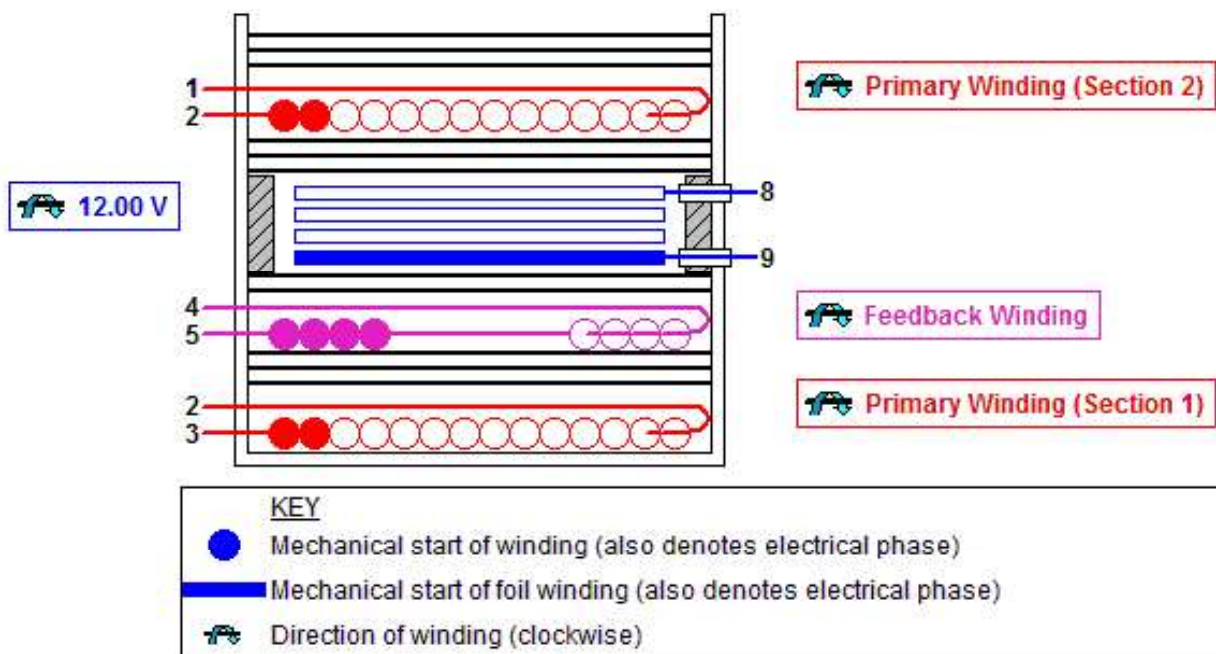


Electrical Diagram



Mechanical Diagram



Winding Instruction

Primary Winding (Section 1)

Start on pin(s) 3 and wind 18 turns (x 2 filar) of item [5], in 1 layer(s) from left to right. On the final layer, spread the winding evenly across entire bobbin. Finish this winding on pin(s) 2.

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

Feedback Winding

Start on any (temp) pin on the secondary side and wind 7 turns (x 4 filar) of item [5]. Wind in same rotational direction as primary winding. Spread the winding evenly across entire bobbin. Finish this winding on pin(s) 4. Move end of wire from temp pin and terminate it on pin 5.

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

Secondary Winding

Use 3 mm margin (item [7]) on the left side and 3 mm margin on the right side (to meet safety). Start on pin(s) 9 and wind 4 turns of item [6]. Wind in same rotational direction as primary winding. Finish this winding on pin(s) 8.

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

Primary Winding (Section 2)

Start on pin(s) 2 and wind 17 turns (x 2 filar) of item [5], in 1 layer(s) 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].

Varnish

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

Comments

1. Use of a grounded flux-band around the core may improve the EMI performance.
2. For non margin wound transformers use triple insulated wire for all secondary windings.

Materials

Item	Description
[1]	Core: ETD29/16/10, NC-2H (Nicera) or Equivalent, gapped for ALG of 195 nH/T ²
[2]	Bobbin: Generic, 7 pri. + 7 sec.
[3]	Barrier Tape: Polyester film [1 mil (25 µm) base thickness], 19.40 mm wide
[4]	Varnish
[5]	Magnet Wire: 25 AWG, Solderable Double Coated
[6]	Copper Foil: 5 mil thick, 13.40 mm wide, covered with 1 layer of lapped tape. Terminations to foil: 2 x 23 AWG magnet wire with sleeving
[7]	Tape: Polyester web 3 mm wide

Electrical Test Specifications

Parameter	Condition	Spec
Electrical Strength, VAC	60 Hz 1 second, from pins 1,2,3,4,5 to pins 8,9.	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.	236
Tolerance, ±%	Tolerance of Primary Inductance	10.0
Maximum Primary Leakage, µH	Measured between Pin 1 to Pin 3, with all other Windings shorted.	4.72

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.