

Re: Combining dual secondaries of a toroidal transformer

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On Sun, 18 Feb 2007 05:00:19 GMT, "Homer J Simpson"
<nobody@xxxxxxxxxxx> wrote:

<furtherside@xxxxxxxx> wrote in message
news:1171770731.461084.227630@xx

Hi, I have a fairly good sized toroidal transformer that has two pairs of primaries and two pairs of secondaries. The inputs are both 115V and the outputs are both 33V, at 7A. I'd like to combine the outputs in parallel, to give me 33V at 14A.

Connect the two secondary commons together. Now check across the other two leads with an ammeter for difference current. If it's only a few mA you are probably OK.

Absolutely, positively, definitely NOT.

You're a licensed electrician, where???

In the first place, the secondaries don't have "commons", they only have starts and ends. Two leads from the secondaries should be twisted together and one of the primaries energized (with the leads of the other kept separate and, preferably, taped up to avoid danger of shock or short) then the voltage across the unconnected secondaries should be measured with a _voltmeter_. If the reading on the voltmeter is 66 volts, then the start of one secondary winding is connected to the end of the other and they're wired in series. In order to connect them in parallel they should be disconnected and each connected to the other secondary lead.

Once that's done, the primary leads should be twisted together in pairs and those pairs connected to the mains while monitoring the

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secondary voltage. If the voltage is zero the primaries are wired out of phase and should be connected in reverse. That should cause the secondary voltage to rise to 16V.

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JF