Subject: Dual bobbin choke as L's in LCLC supply?
Posted by Norris Wilson on Sat, 26 Nov 2005 19:15:52 GMT
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Is it possible to use a dual bobbin choke like the Ludahl 1638 as two seperate choke in an LCLC power supply?If so, would there be any problems with mutual magnetic induction or excessive fields between these chokes since they are on the same core?There are not to many low DCR chokes available, but what is available is fairly expensive.Any input will be appreciatedNorris Wilson
http://www.lundahl.se/pdfs/datash/1638.pdf

Subject: Re: Dual bobbin choke as L's in LCLC supply?
Posted by PakProtector on Sat, 26 Nov 2005 22:55:15 GMT
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I think that you'd have to run them as the same choke. Coil 1 would have a fair AC voltage across it. The coil 2 would be treated as a secondary, and have the same AC across it. Caps would make things a bit more complicated, but for 2 chokes, you'll need two cores.cheers,Douglas

Subject: Re: Dual bobbin choke as L's in LCLC supply?
Posted by Norris Wilson on Sat, 26 Nov 2005 23:14:45 GMT
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Douglas,Could this same dual bobbin choke be used parallel on the positive and negative rail of LCLC power supply in a differential configuration?If so, what would be the benifits, if any?Norris WIlson

Subject: Re: Dual bobbin choke as L's in LCLC supply?
Posted by PakProtector on Sun, 27 Nov 2005 00:58:18 GMT
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Hey-Hey!!!,I can't think of any benefit. The same current going through both windigs in what would effectively be a series connection(If I understand your description).I would rather not complicate things unless there were a good reason(think Bob Carver; just as complicated as is required and not one bit more).I have seen good results with the big Hammond. 10 Hy at 500 mA as the first in a L-C filter. Putting a smaller choke in series will offer better high frequency filtering in general. The smaller choke will have lower shunt capacitance, or can be made so, or perhaps made with a

good electrostatic shield(to capacitively bleed to ground instead of end-to-end). I need two chokes to deliver `~350 mA of DC with up to 800vac input. That is no small choke, and I will probably get a well shielded one made to put in series. No HF getting through this one!cheers,Douglas

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Subject: Re: Dual bobbin choke as L's in LCLC supply?
Posted by Damir on Sun, 27 Nov 2005 08:36:05 GMT
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Did you see this solution - six chambers choke by "AE-Europe" (Netherlands) company?
http://www.ae-europe.nl/smoorspoelen_engels.htm
