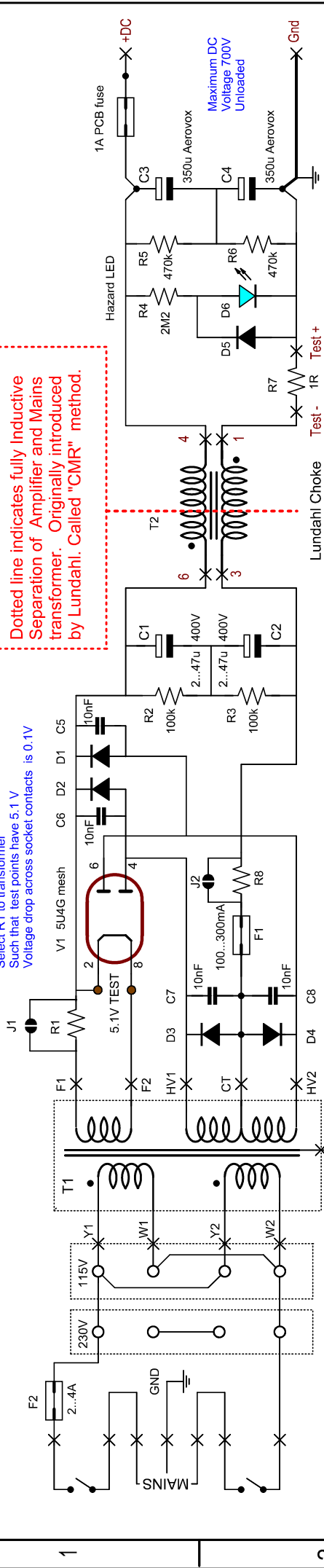


Dotted line indicates fully Inductive Separation of Amplifier and Mains transformer. Originally introduced by Lundahl. Called "CMR" method.



Select R1 to transformer  
Such that test points have 5.1 V  
Voltage drop across socket contacts is 0.1V

1) Diodes D1+D2 can replace the tube rectifier. Use D1+D2, OR a tube.  
Diodes D3-D4 create an artificial center tap, in case the transformer has none. ONLY insert these diodes, if there is a no center tap. Read the website for detailed explanation of this possibility to replace a missing center tap

Diodes D1+D2 can replace the tube rectifier.

Touch Test Points with VOLTMETER. 100mV equals 100mA. Such a simple provision, but you will like it very much. Test pads have almost no voltage to ground, and if shorted by mistake, there will be no damage.

This small power supply uses the Lundahl Chokes the original intended way. No more explaining, no more ground loops. Just connect the PCB and you can not go wrong.

For regular, one coil Chokes, connect the Choke to 1-3 and add a wire piece from 4-6. This grounds the choke for better safety, and function is the same.

Serial connection for improved common mode rejection

From Lundahl Data Sheet

(Use any Lundahl Choke of your choice)

R5 +R6 are for balancing C3, C4  
R2 +R3 are for balancing C1, C2, and discharge of all capacitors.  
D5 is to protect LED, against whatever mistake.  
C5...C8 are optional, to reduce sharp switching of the diodes, these must have sufficient voltage capability,

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(Use any Lundahl Choke of your choice)

The board EE40 is also a connection board for the primary part, though of course the primary can be wired any other way. The PCB just reduces loose wiring if the mains part is used.

MULTIPLE RECTIFIER CHOICE:

1) Diodes D1+D2 can replace the tube rectifier. Use D1+D2, OR a tube.  
Diodes D3-D4 create an artificial center tap, in case the transformer has none. ONLY insert these diodes, if there is a no center tap. Read the website for detailed explanation of this possibility to replace a missing center tap

Diodes D1+D2 can replace the tube rectifier.

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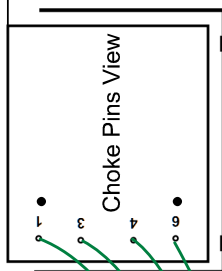
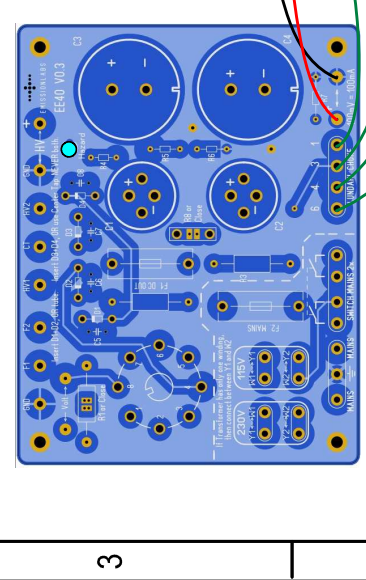
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		Date	Name	Date	Name
07-May-2024	1.0	12 Dec 2022	JW	Drawing Nr.: 1 of 1	
		Dipl. Ing. Jac van de Walle			



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