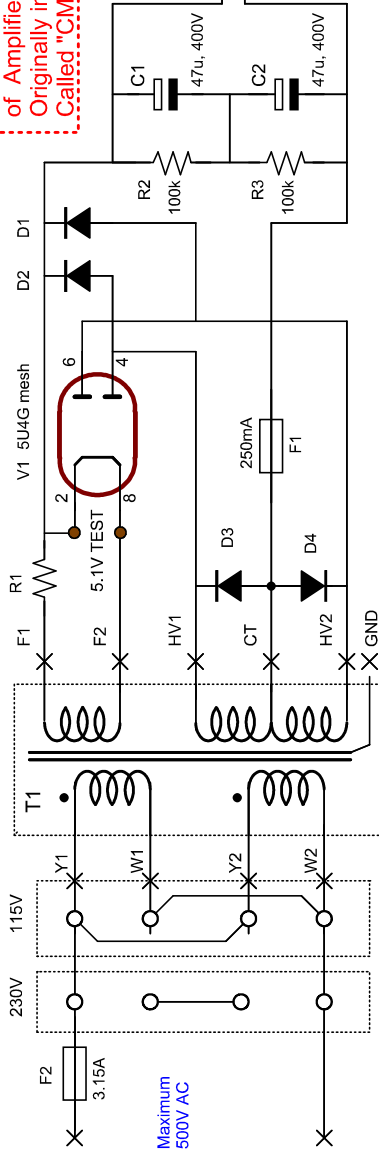


Select R1 to transformer
Such that test points have 5.1 V
Voltage drop across socket contacts is 0.1V



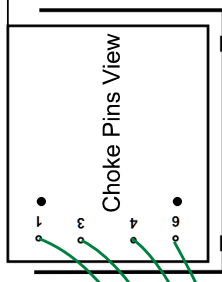
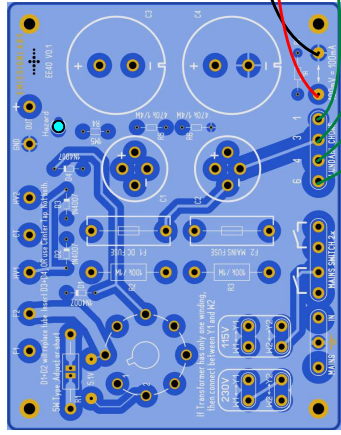
Diodes D3+D4 create an artificial center tap, in case the transformer has none. ONLY insert these diodes, if there is a no center tap. They have no influence on the tube functioning, because always one diode conducts, and the other is open. Like this, it grounds either D3 or D4 to the fuse F1, in that way acting as the artificial center tap.

Diodes D1+D2 can replace the tube rectifier.

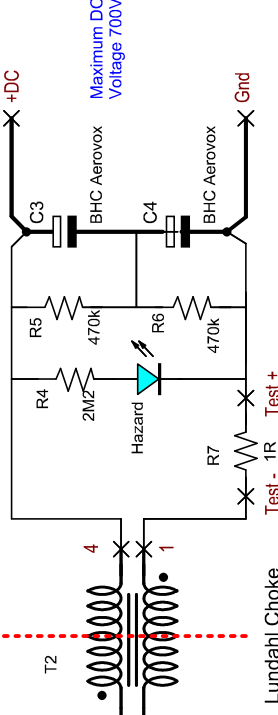
So silicon rectification is also possible, with two diodes (D3 +D4) if there is a center tap. Or, if there is no center tap, use all four diodes, and they will become a bridge rectifier.

The board is also a connection switch board. Transformer, Mains switch, mains cable and fuse is connected to the EE40 board. This reduces loose cabling to a minimum.

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.



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



Lundahl Choke

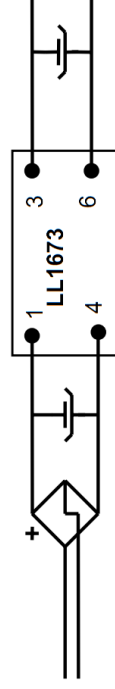
This small power supply uses the Lundahl Chokes the original intended way. No more explaining, no more ground loops. Just connect the PCB and you can not go wrong. Double Sided, ground plane PCB, is the best method to prevent hum radiation.

Blue Hazard LED is optional, but recommended.

The 1 Ohms resistor acts also as an additional fuse, with emergency function.

The board is also a connection switch board, so it recudes loose cables to a minimum.

Serial connection for improved common mode rejection



From Lundahl Data Sheet

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Revisions

Date	Name
12 Dec 2022	JW

Name

Drawn

Dipl. Ing. Jac van de Walle



Name:

Lundahl Universal Power Supply EE40
With Inductive Separation (CMR Connected)

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