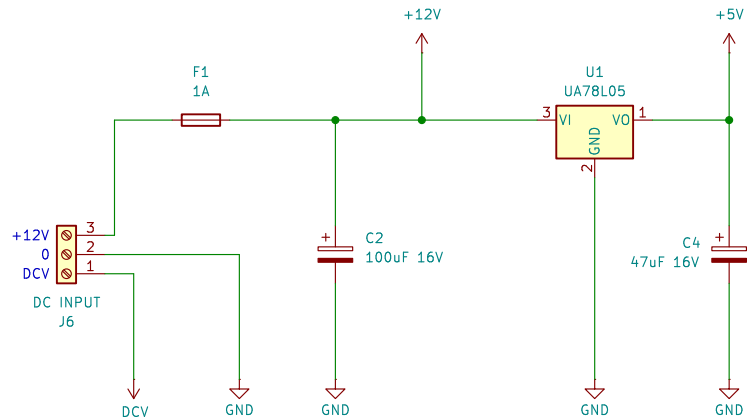


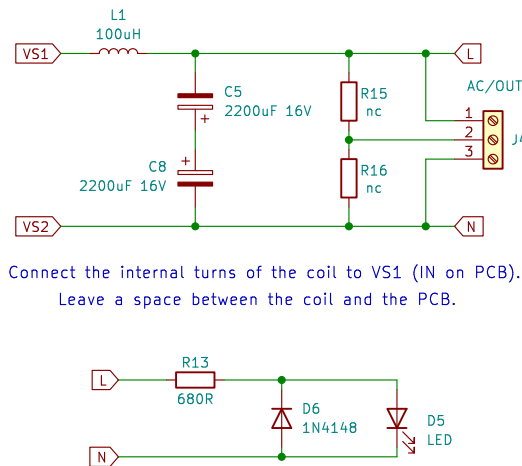
## INPUT



**Preferred DC module input: 15Vdc**

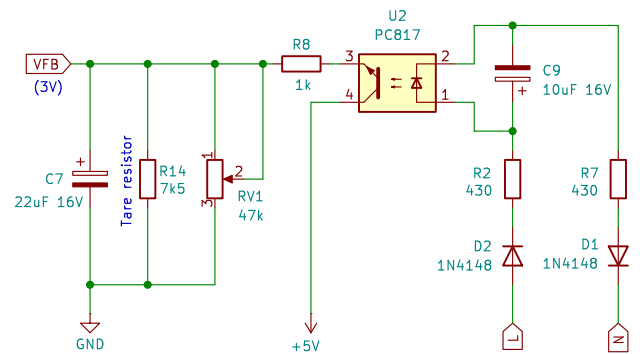
DC module input (3): absolute values 11–18V

## OUTPUT



## VOLTAGE AC FEEDBACK

Range: 4V – 8V



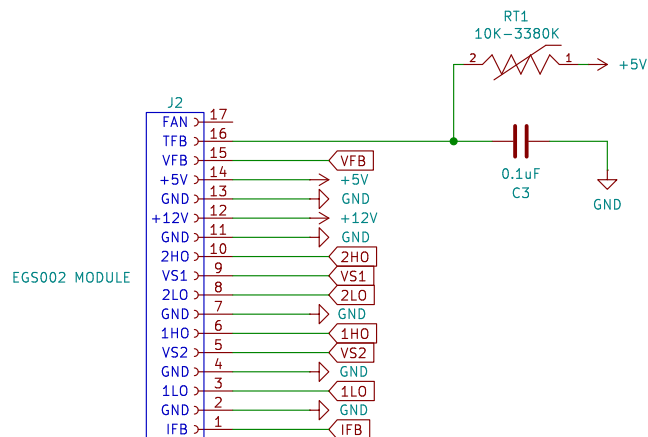
RV1: Preset the potentiometer to 29K before soldering it (1–2).

Overvoltage protection is set at 3.15V with 300mS delay.

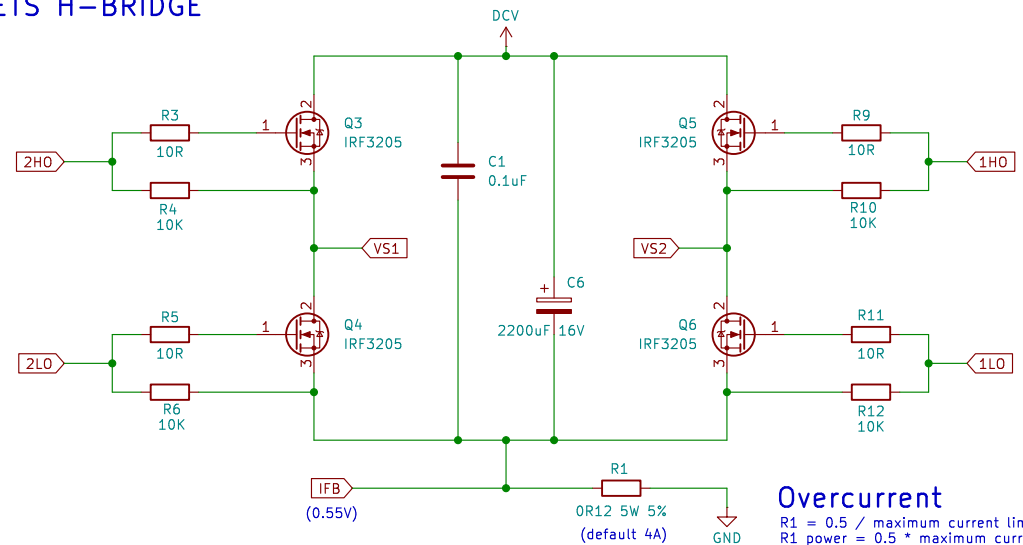
Undervoltage protection is set at 2.75V with 3S delay.

## EGS002 MODULE

Headers receptacle for ESG002 module: 1x17 Harwin M20–7821746 (855–M20–7821746)



## MOSFETS H-BRIDGE



## Overcurrent

R1 = 0.5 / maximum current limit  
R1 power = 0.5 \* maximum current limit

## FILTER COMPONENTS

C5 and C8: two polarized polymer capacitors connected in series, plus to plus.  
2200uF = Mouser 647–RNL1C222MDS1PH – 560uF = Mouser 80–A755MS567M1CAAE13

**Coils: Mundorf F2625, L2510 and L3020 body fits on the PCB.**

Basic tube heating config (<1.5A): L1 = Mundorf BL71 0.1mH 0R23 – C8/C5: 2200uF (962uF) – f: 510Hz

For 5U4G (3A): L1 = Mundorf BL100 0.1mH 0R14 – C8/C5: 2200uF (962uF) – f: 510Hz

**Direct heated triodes config (up to 1.5A)**

For 300B (1.1A): L1 = Mundorf (B)H71 3.3mH 0R50 – C8/C5: 560uF (288uF) – f: 170Hz

For 300B (1.1A): L1 = Mundorf (B)H71 1.2mH 0R25 – C8/C5: 1500uF (720uF) – f: 170Hz

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File: LVPS–DC–AC–Inverter–EGS.kicad\_sch

**Title: LVPS DC–AC 4V–8V 50Hz Inverter**

Size: A4

Date: 2025–02–27

Rev: 1.0.1b22

KiCad E.D.A. 8.0.8

Id: 1/1