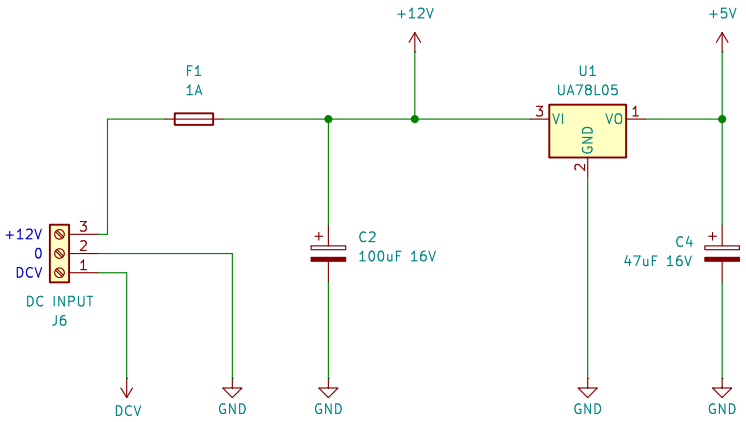
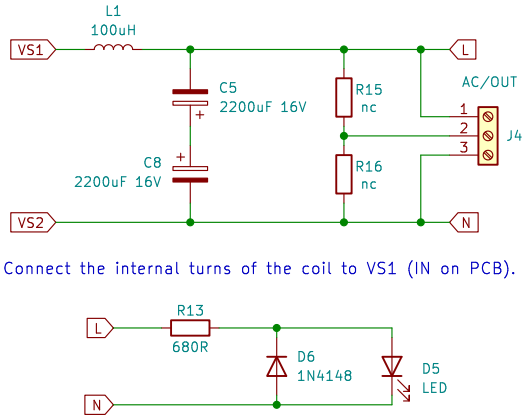
INPUT



Prefered DC module input: 15Vdc

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

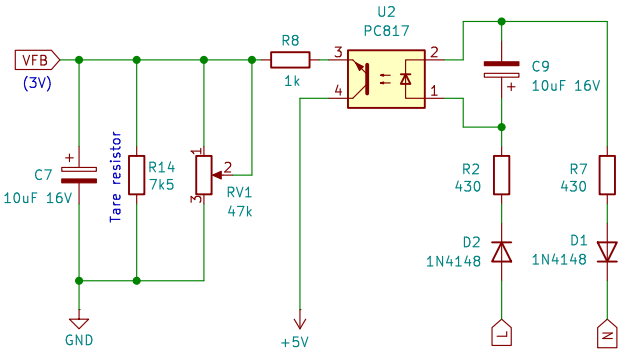
OUTPUT



Connect the internal turns of the coil to VS1 (IN on PCB).

VOLTAGE AC FEEDBACK

Range: 4V – 10V



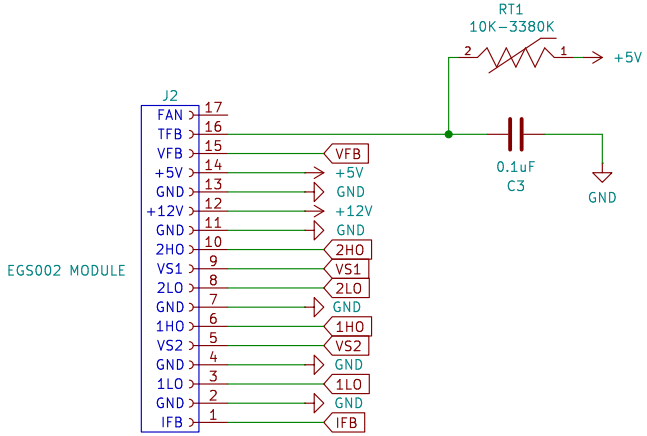
RV1: Preset the potentiometer to 29K before soldering it (1–2).

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

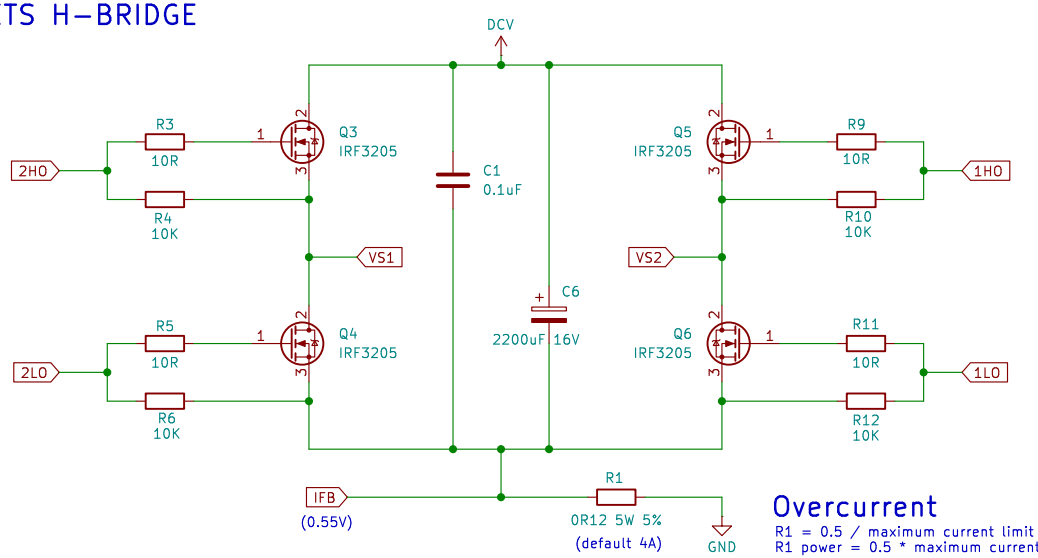
Undervoltage protection is set at 2.75V with 3S delay.

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.

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 H71 3.3mH 0R50 – C8/C5: 560uF (288uF) – f: 170Hz

For 300B (1.1A): L1 = Mundorf 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: 2025–02–25	**Rev: 1.0.1b21**
KiCad E.D.A. 8.0.8		Id: 1/1