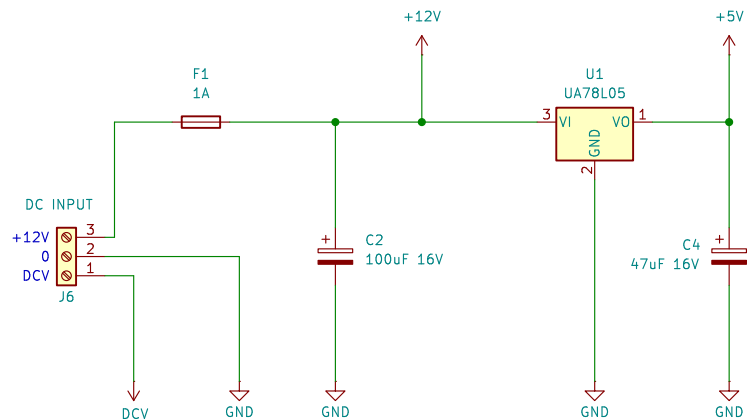


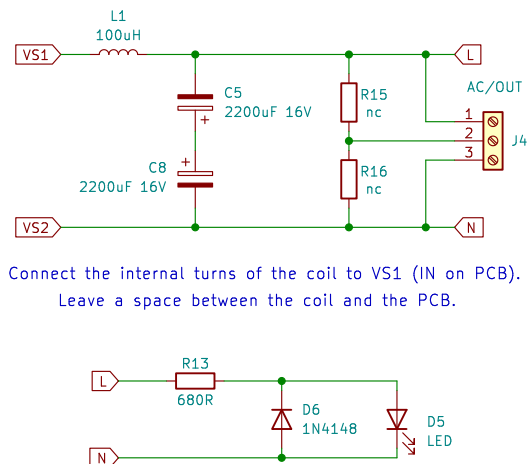
INPUT



Preferred DC module input: 15Vdc

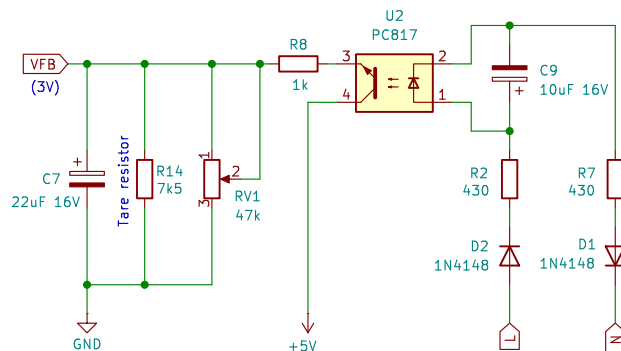
DC module input (3): absolute values 11–18V

OUTPUT



VOLTAGE AC FEEDBACK

Range: 4V – 8V



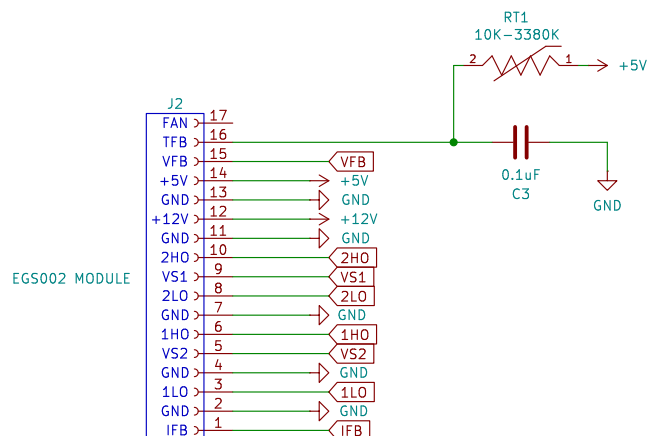
RV1: Preset the potentiometer to 29K before soldering it (1–2).

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

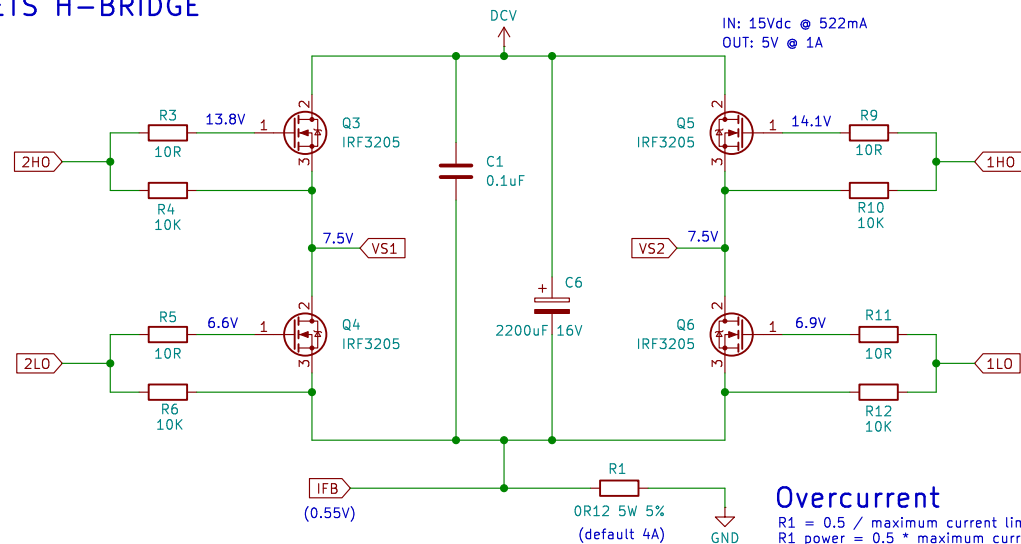
Undervoltage protection is set at 2.75V with 3S delay.

EGS002 MODULE

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



MOSFETS H-BRIDGE



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

Idle consumption: 100 mA
Distorsion: 1%

By stef

Sheet: /

File: LVPS–DC–AC–Inverter–EGS.kicad_sch

Title: LVPS DC–AC 4V–8V 50Hz Inverter

Size: A4 Date: 2025–02–27

KiCad E.D.A. 8.0.8

Rev: 1.0.2b1

Id: 1/1