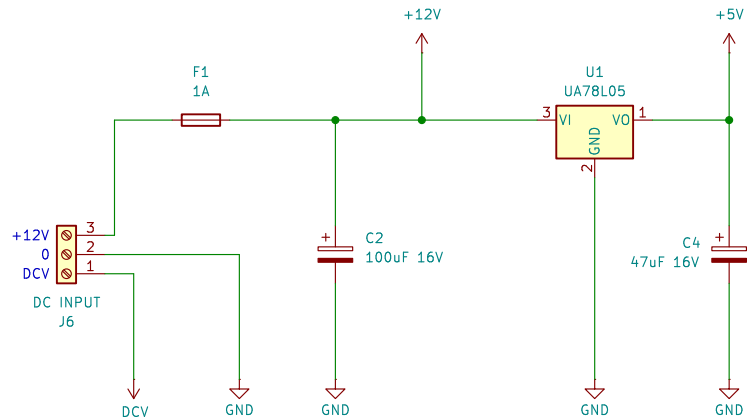
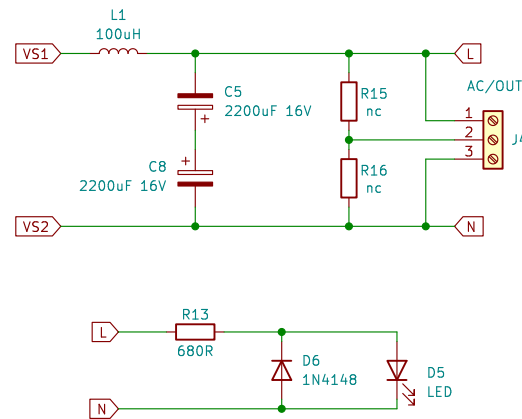


INPUT

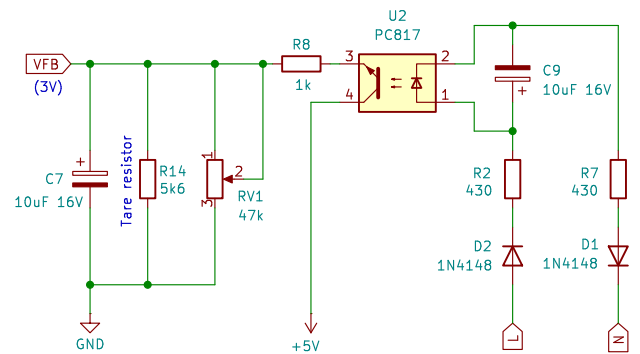


OUTPUT



VOLTAGE AC FEEDBACK

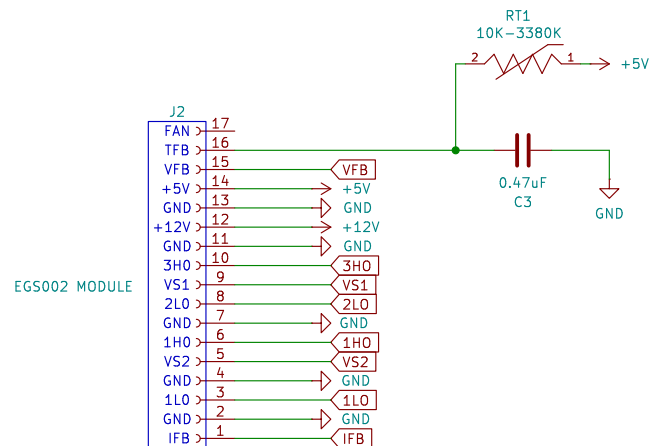
Range: 4V – 8V



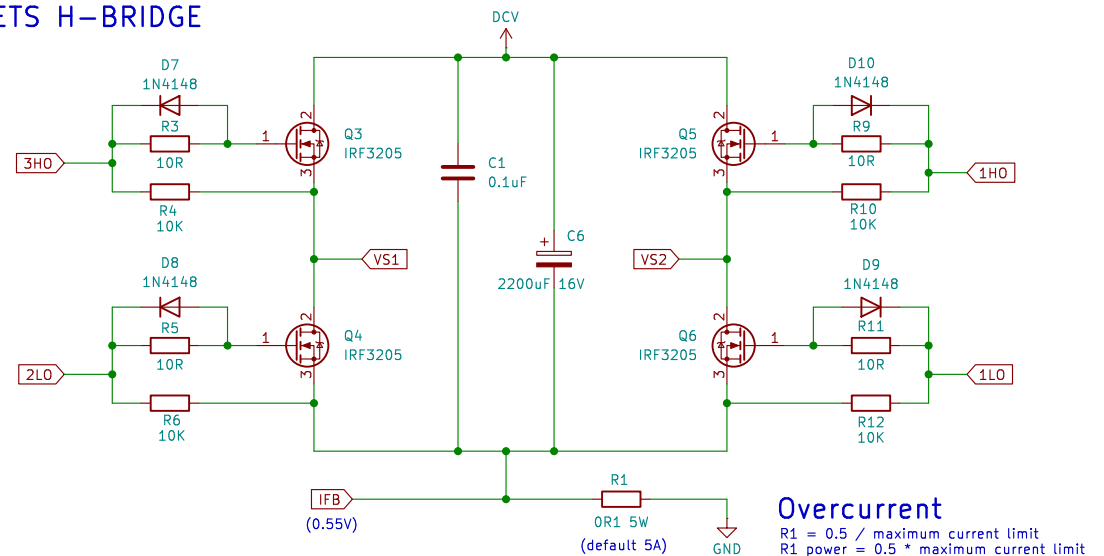
Overvoltage protection is set at 3.15V with 300mS delay.
Undervoltage protection is set at 2.75V with 3S delay.

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

COMPONENTS

C5 and C8: two polarized polymer capacitors connected in series, plus to plus.

Coils: Mundorf F2625, L2510 and L3020 body.

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

For 5U4G (3A): L1 = Mundorf L71 0.33mH 0R47 – C8/C5: xxxuF (xxxuF) – f: xxxHz

For 5U4G (3A): L1 = Mundorf BL100 0.1mH 0R14 – C8/C5: xxxuF (xxxuF) – f: xxxHz

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

By stef

Sheet: /

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

Title: LVPS DC-AC 4V-8V 50Hz Inverter

Size: A4

Date: 2025-02-20

KiCad E.D.A. 8.0.8

Rev: 1.0.1b16

Id: 1/1