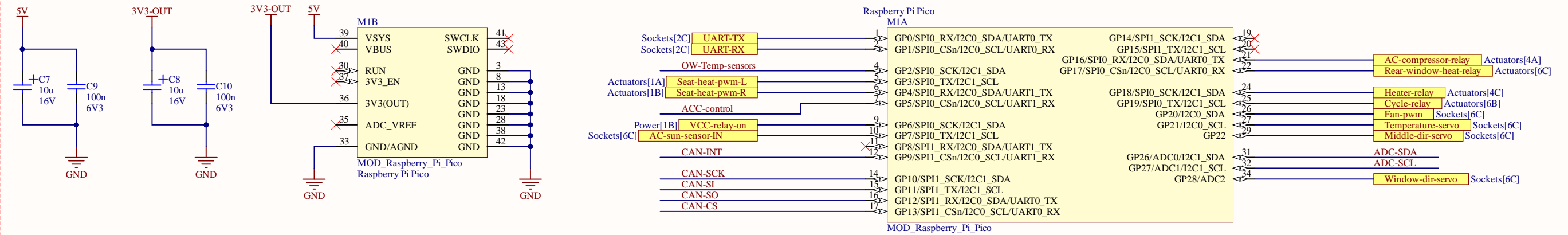
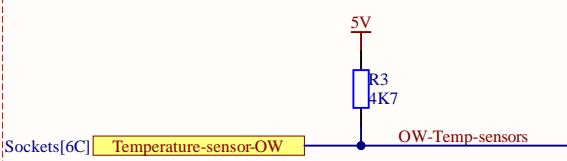


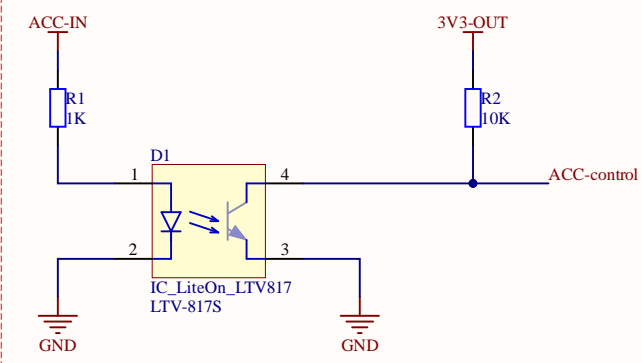
Raspberry Pi Pico



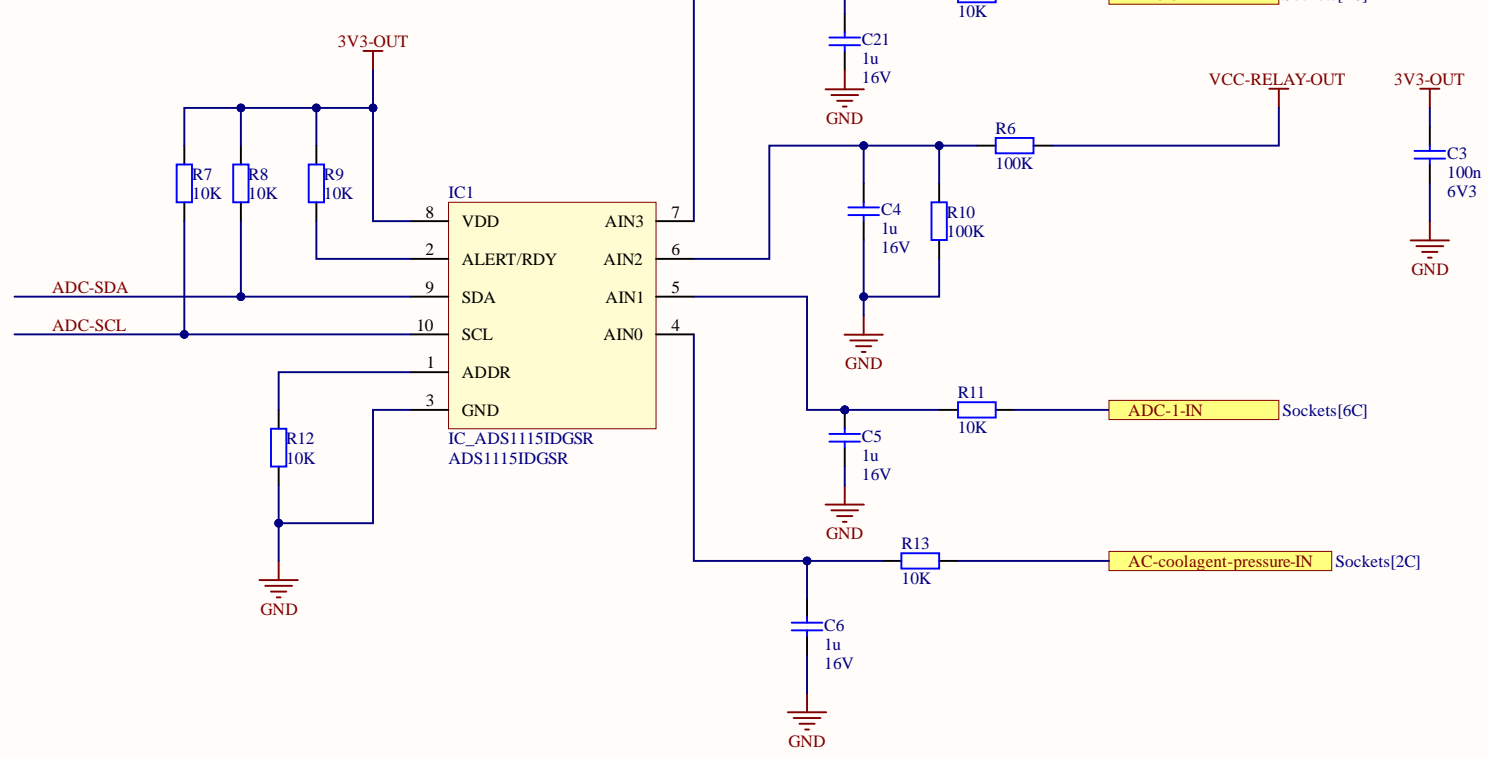
Temperature Sensors



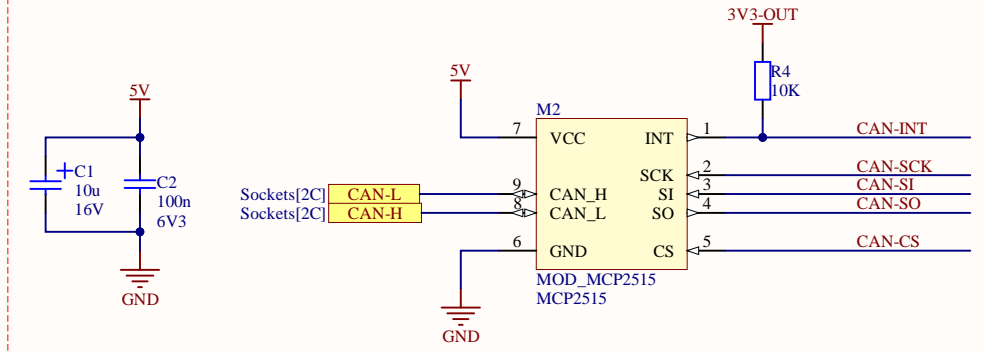
ACC Voltage control



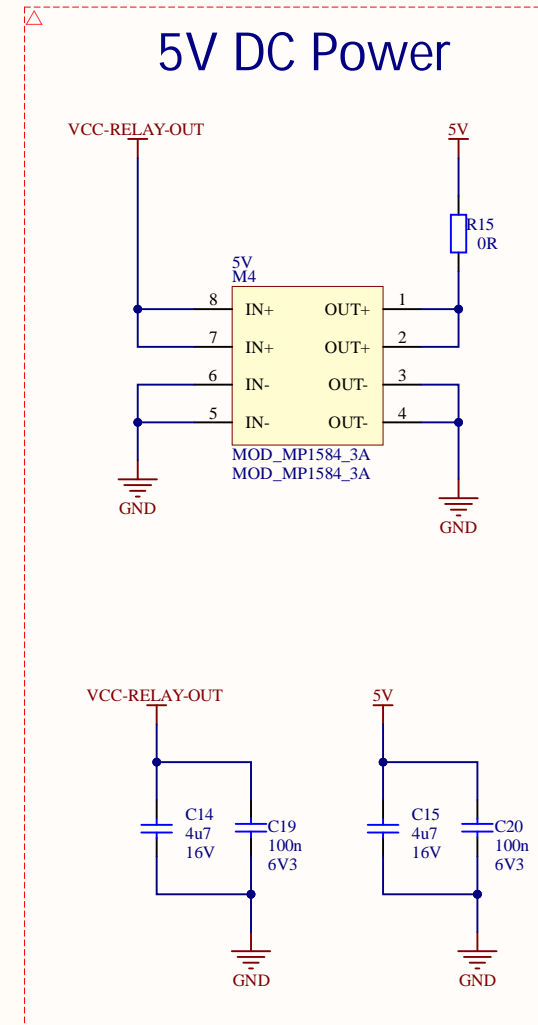
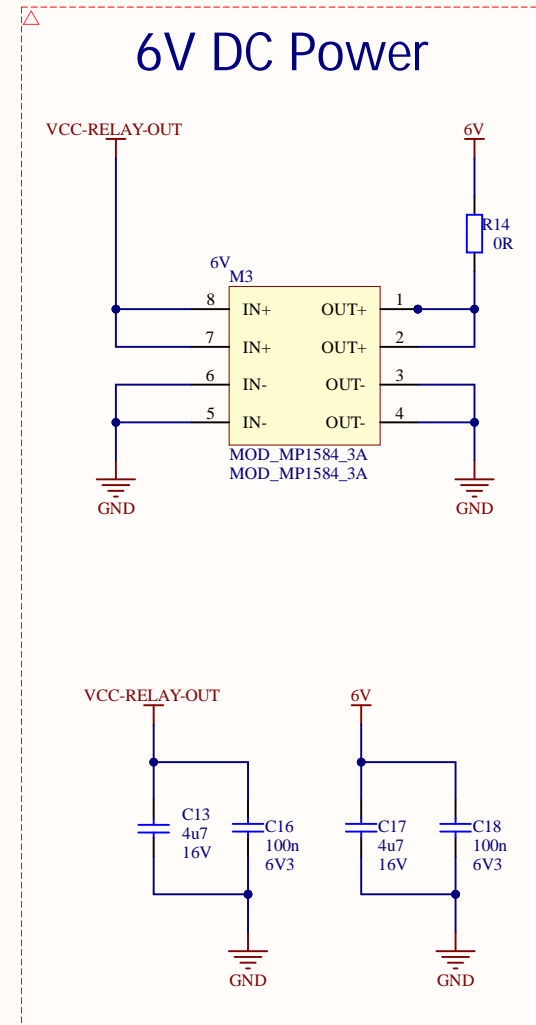
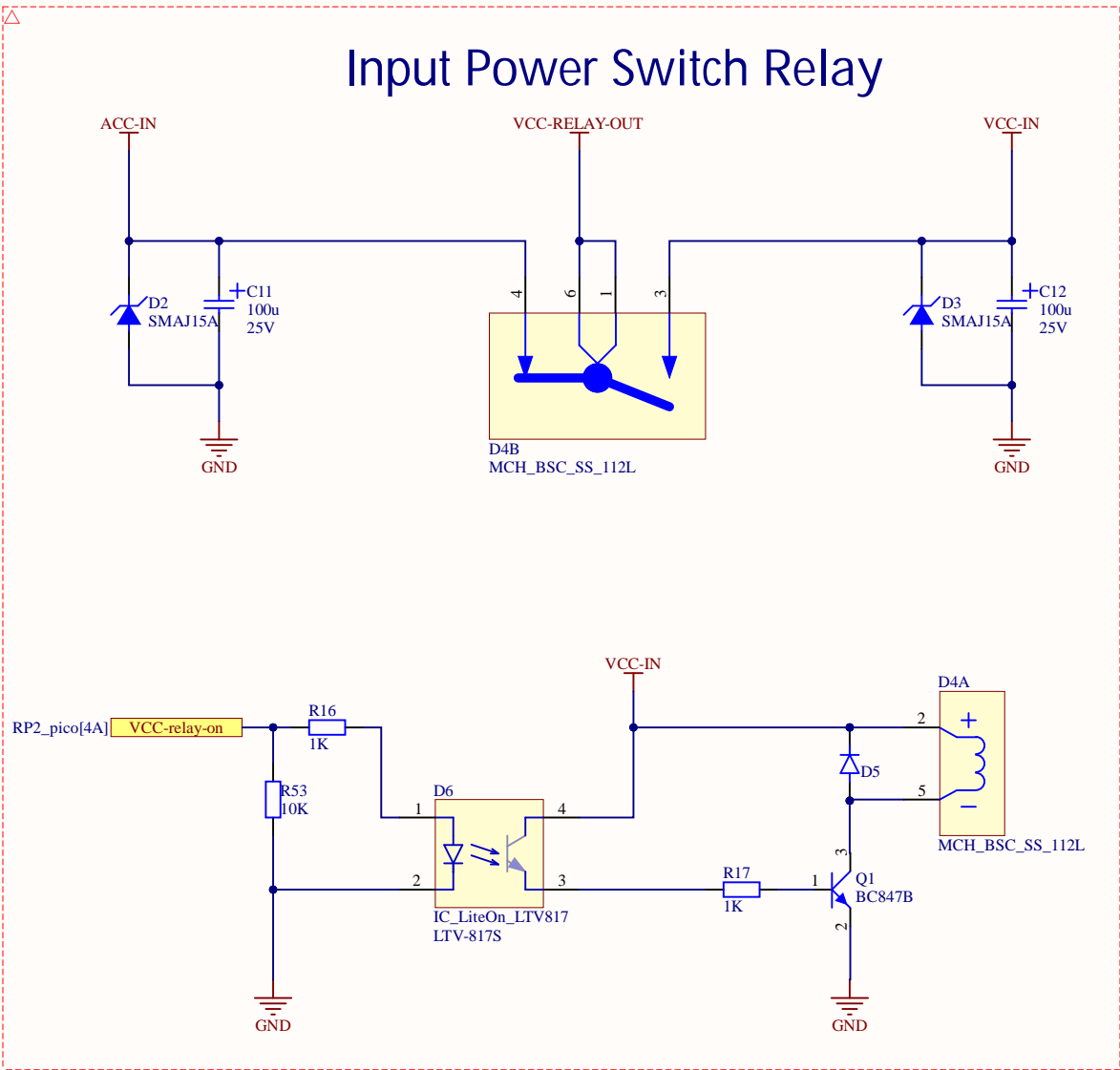
Sun, Coolagent pressure, DC voltage sensors



CAN Module



| Title |                                   |           |
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| Size  | Number                            | Revision  |
| A3    |                                   |           |
| Date: | 1/03/2025                         | Sheet of  |
| File: | D:\MyProjects\...\RP2_pico.SchDoc | Drawn By: |



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| File:      | D:\MyProjects\...\Power.SchDoc | Drawn By: |

[illegible]

# AC Compressor Relay

The diagram illustrates the electrical control of an AC compressor relay. The top section shows the relay's internal switch mechanism with pins 1, 2, 3, 4, and 5. Pin 1 is connected to GND, pin 2 to VCC-IN, and pin 3 to the relay's output. The bottom section shows the control circuit: a microcontroller (RP2\_pico[7A]) drives a relay coil (R23, 1K) through a diode (D10, 1N4007) and a transistor (Q4, BC847B). The transistor's base is connected to the microcontroller through a resistor (R24, 1K). The relay's output is connected to the AC compressor (MCH\_BSC\_SS\_112L).

[illegible]

# Passanger Seat Heating

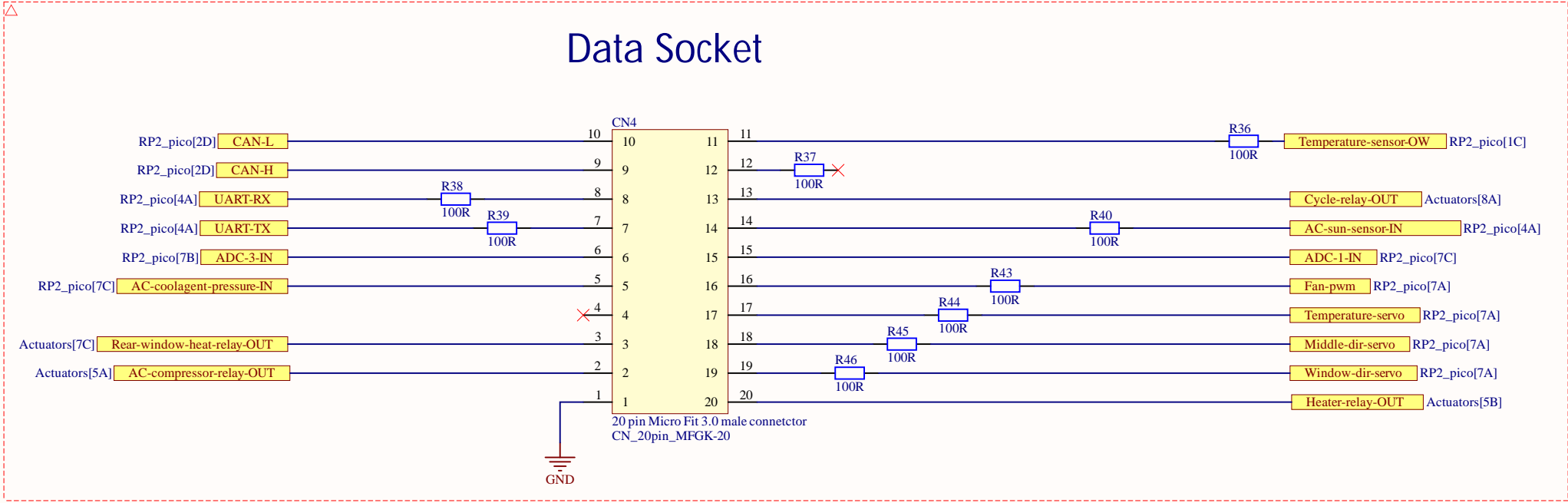
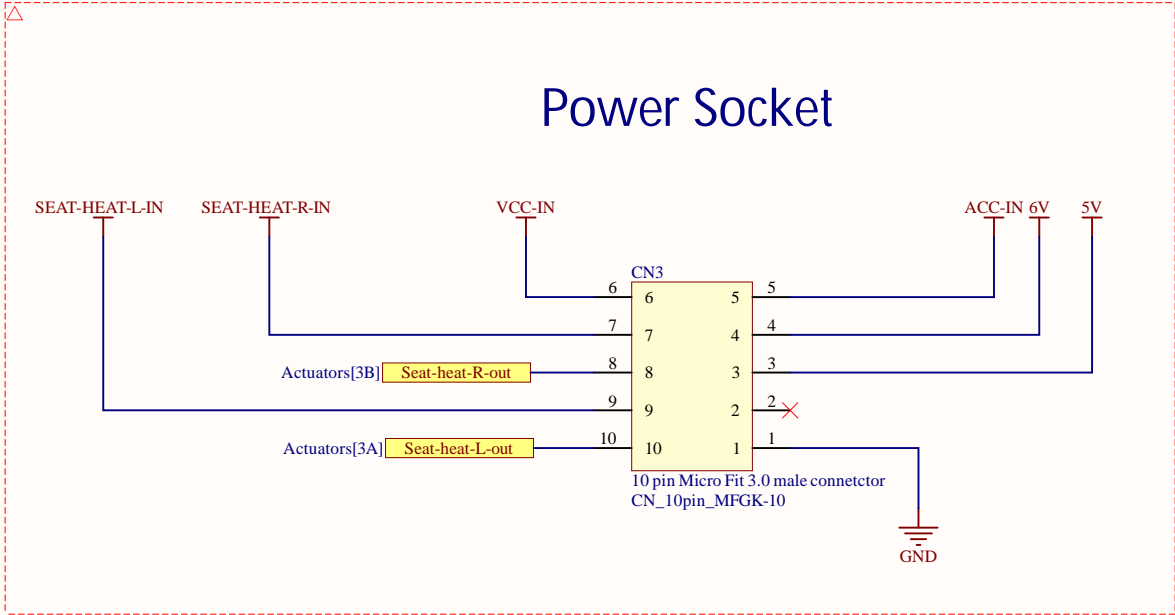
The diagram illustrates a circuit for passenger seat heating. It features a microcontroller (RP2\_PICO[4A]) connected to a relay (D12) and a temperature sensor (S0). The relay controls a heater (H0) and a fan (F0). The temperature sensor is connected to the microcontroller and the heater. The heater is connected to a 12V supply (V12) through a fuse (F0). The fan is connected to the 12V supply through a fuse (F0). The microcontroller is connected to a 5V supply (V5) through a resistor (R26). The temperature sensor is connected to the 5V supply through a resistor (R50). The relay is connected to the 5V supply through a resistor (R27). The heater is connected to the 12V supply through a resistor (R29). The fan is connected to the 12V supply through a resistor (R31).

# Heater Valve Relay

The diagram illustrates the electrical control of a heater valve relay. It features a microcontroller (RP2\_pico[7A]) connected to a relay coil (Heater-relay) via a 1K resistor (R32). A 10K resistor (R51) is connected between the microcontroller and ground. The relay assembly (D15B) is connected to a 6C socket (Heater-relay-OUT). The relay is controlled by a transistor (Q8, BC847B) which is driven by a 1N4007 diode (D16) and a 1K resistor (R33). The relay is powered by VCC-IN and grounded.

[illegible]

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| Size<br>A2 | Number                             | Revision  |
| Date:      | 1/03/2025                          | Sheet of  |
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| Title                                  |           |          |
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| Size<br>A3                             | Number    | Revision |
| Date: 1/03/2025                        | Sheet of  |          |
| File: D:\MyProjects\...\Sockets.SchDoc | Drawn By: |          |