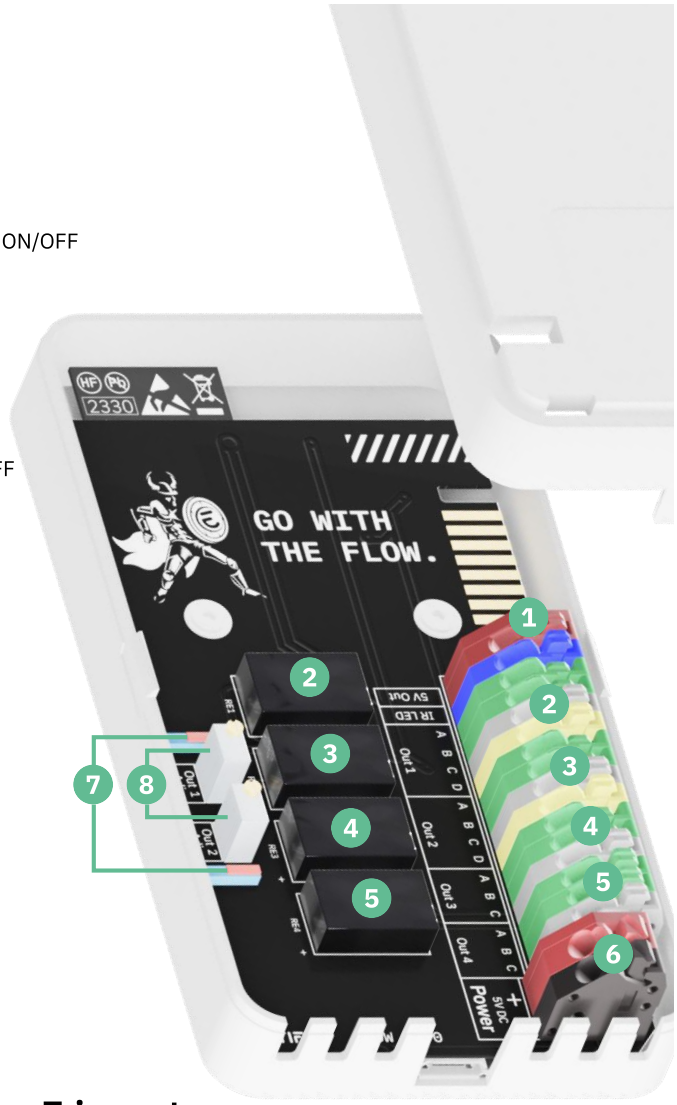
Perific Flow Use Cases

Perific Flow can be installed in several ways to control various types of heating systems using its four relays. The most common installation involves potential-free switching directly to the external inputs of the heat pump.

Flow can also be used to manipulate the heat pump's temperature sensor inputs to turn off heating or hot water production. Additionally, Flow can control external relays with a 5V DC power supply or an already powered external relay.

The functions are controlled through the Perific App, allowing for optimized EV charging, utilization of self-produced solar power, custom schedules and price-based operating times.



1 5V DC Output

2 Relay Out 1

A & B: Output ON/OFF
A & C: Inverted Output ON/OFF
(A 5V Out) & OUT1:C: External Relay 5V DC Output ON/OFF
MAX: 125VAC/110VDC | MAX: 1 A

3 Relay Out 2

A & B: Potential-free Output ON/OFF
A & C: Inverted Potential-free Output ON/OFF
(A 5V Out) & OUT2:C: External Relay Output ON/OFF
MAX: 125VAC/110VDC | MAX: 1 A

4 Relay Out 3

A & B: Potential-free Output ON/OFF
A & C: Inverted Potential-free Output ON/OFF
MAX: 125VAC/110VDC | MAX: 1 A

5 Relay Out 4

A & B: Output ON/OFF
A & C: Inverted Output ON/OFF
MAX: 125VAC/110VDC | MAX: 1 A

6 Main Power Supply

5V DC / AC

7 Trim-pots Switches

OUT 1 Resistance Adjustment ON/OFF
OUT 2 Resistance Adjustment ON/OFF

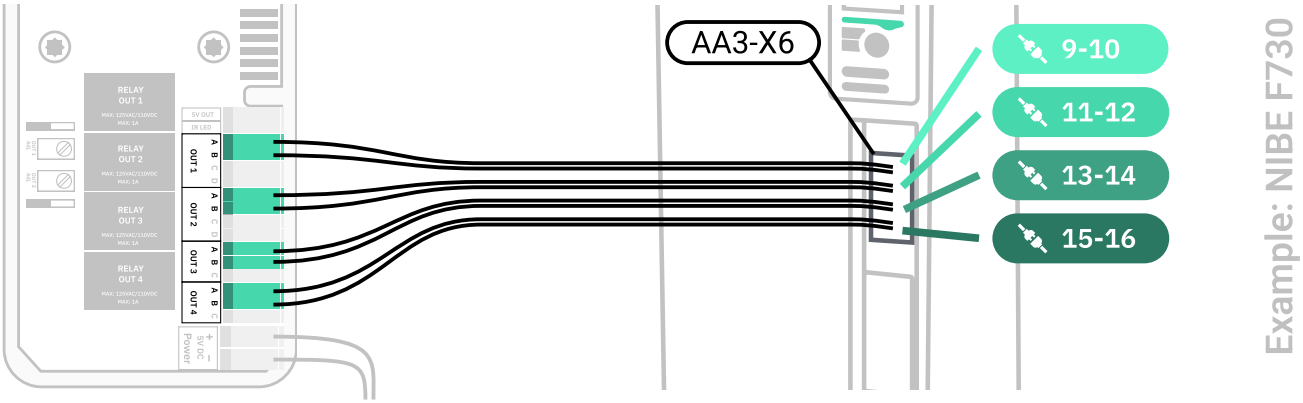
8 Trim-pots

Resistance Adjustment for OUT 1:A&B, 0-50 kΩ
Resistance Adjustment for OUT 2:A&B, 0-50 kΩ

PERIFIC flow

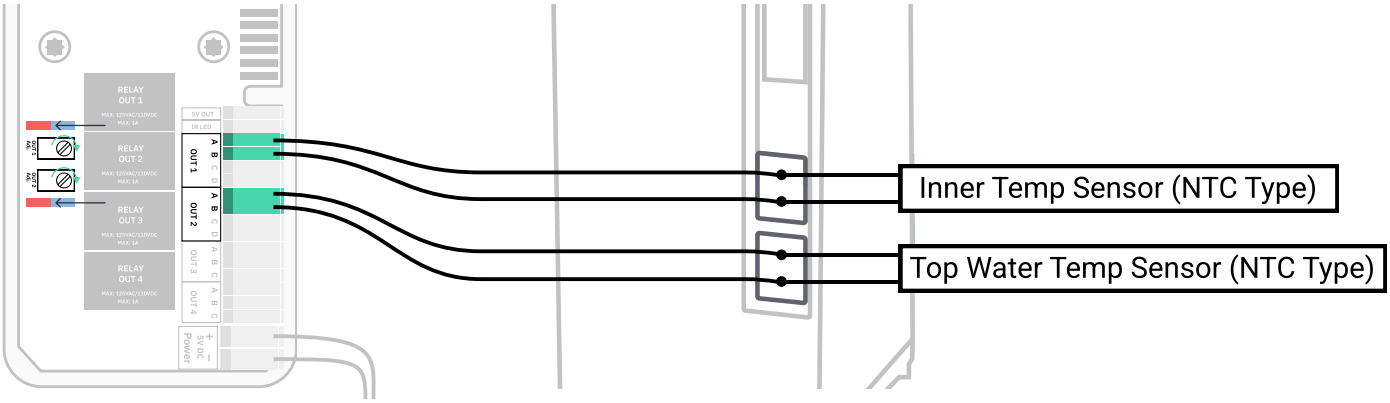
Use Case 1- Heat Pumps with External Inputs

Perific Flow is connected to the heat pump's external inputs for ON/OFF using **OUT 1-4:A & B**.



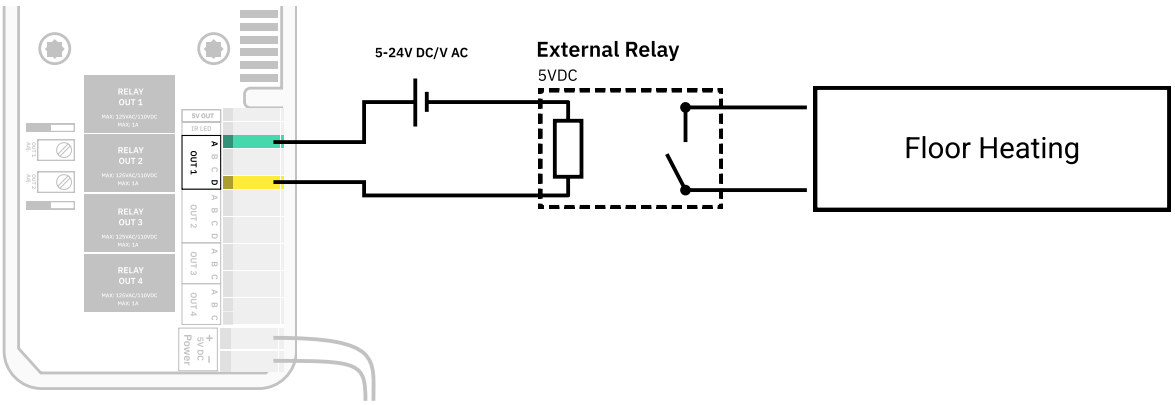
Use Case 2 - Temperature Control (Old Heat Pumps)

Perific Flow is connected to the heat pump's temperature sensor input(s) using **OUT1** and/or **OUT2:A & B**. The **Trim-pots** switched on and set to trick the actual temperature reading to a higher value. This results in inactivating the heating.



Use Case 3 - External Relay with External Power Source (E.g Floor Heating)

Perific Flow is connected to an external relay with external power source using **OUT1-2:A** and **OUT1-2:D**. As a safety feature, when the Flow relay(s) are inactive the external relay(s) are turned on. This setup is ideal for temporarily pausing heating appliances that are normally active.



Use Case 4 - External Relay Control

Perific Flow is connected to an external relay. The Flow outputs are used for easy control of external relays. Connect the external relay to **5V DC** & **OUT 1-4:C**. This setup can be used for all situations where you want to control 230V appliances from a Flow unit.

The recommended coil voltages for external relays are 5-24V DC or 5-24V AC, keep in mind that the maximum current through the Flow relays is 1A. For example, you could use a DIN-mounted relay with 24-280V and a maximum of 6A from Schneider Electric (SSM1A16BD), or a DIN-mounted relay with 24-280V and a maximum of 12A from Sensata-Crydom (DR24D12R).