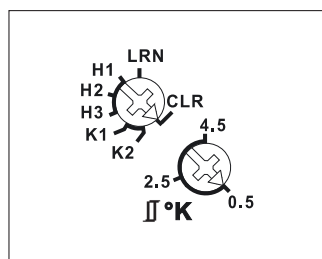
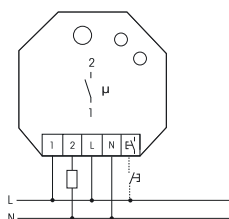


Function rotary switches



Standard setting ex works.

Typical connection



Manuals and documents in further languages:
<https://eltako.com/redirect/FHK61-230V>

FHK61-230V

1 NO contact potential free 10 A/250 V AC. Only 0.8 watt standby loss.

Encrypted wireless, bidirectional wireless and repeater function are switchable.

For installation. 45 mm long, 45 mm wide, 33 mm deep.

Supply voltage 230 V.

If a power failure occurs, the switching state is retained.

If a power failure occurs repeatedly, the device is switched off in a defined sequence.

After installation, wait for short automatic synchronisation before the switched consumer is connected to the mains.

This heating/cooling relay evaluates the information from wireless temperature controllers or sensors. Possibly supplemented by window/door contacts, motion detector, window handle sensor FFG7B and wireless pushbuttons.

Valves will be controlled with the potential-free contact.

You can teach in encrypted sensors.

You can switch on **bidirectional wireless** and/or a **repeater** function.

Each function change by a wireless temperature controller (normal mode, setback, off) is confirmed by a wireless telegram. This wireless telegram can be taught-in into controllers.

Upper rotary switch for operating modes:

H1: Heating operation with PWM control at T = 4 minutes (PWM = pulse width modulation).

(suitable for valves with thermoelectric valve drive)

H2: Heating operation with PWM control at T = 15 minutes.

(suitable for valves with motor-driven valve drive)

H3: Operating mode with 2-point control.

K1: Cooling operation with PWM control at T = 15 minutes.

K2: Cooling mode with 2-point control.

Switchover is visualised by LEDs flashing.

Lower rotary switch for adjustable hysteresis and PWM influence:

Left stop: lowest hysteresis 0.5°. **Middle position:** hysteresis 2.5°. **Right stop:** largest hysteresis 4.5°.

Inbetween, divisions in steps of 0.5° visualised by LEDs flashing.

Two-point control mode: The hysteresis rotary switch sets the required difference between the switch-on and switch-off temperatures.

When the 'actual temperature $\geq$ reference temperature', the device is switched off.

When the 'actual temperature $\leq$ (reference temperature - hysteresis)', the device is switched on.

The signs are the opposite in cooling mode.

PWM control mode: The hysteresis rotary switch set the required temperature difference at which the device is switched on at 100%. When the 'actual temperature $\geq$ reference temperature', the device is switched off. When the 'actual temperature $\leq$ (reference temperature - hysteresis)', the device is switched on at 100%. If the 'actual temperature' lies between the 'reference temperature - hysteresis' and the 'reference temperature', the device is switched on and off with a PWM in steps of 10% depending on the temperature difference. The lower the temperature difference, the shorter the switch-on time. As a result of the settable of the 100% value, the PWM can be adapted to the heater size and inertia. The signs are the opposite in cooling mode.

In heating mode, the **frost protection function** is always enabled. As soon as the actual temperature drops below 8°C, the temperature is controlled in the selected operating mode to 8°C.

If one or several windows are open, the output remains off **provided the window/door contacts FTK or window handle sensors FFG7B** are taught-in. In heating mode, however, the frost protection remains enabled.

As long as all taught-in **motion detectors FBH** detect no motion, the device is switched to setback mode.

In heating mode, the reference temperature is set back by 2°; in cooling mode, it is raised by 2°. As soon as a motion detector signals movement again, the device is switched to normal mode.

When a **wireless pushbutton FT4** is taught-in, the assignment of the 4 keys is assigned with the following fixed functions:

Top right: Normal mode (can also be enabled by timer). Bottom right: Night setback mode by 4°; in cooling mode, raised by 4° (can also be enabled by timer). Top left: Setback mode by 2°, in cooling mode, raised by 2°. Bottom left: Off (in heating mode, frost protection enabled; in cooling mode permanent off). If the motion detector and wireless pushbutton are taught-in at the same time, the last telegram received is always the one that is valid. A motion detector therefore switches off a setback mode selected by wireless pushbutton when a movement is detected.

The LED performs during the teach-in process according to the operating instructions. It shows wireless control commands by short flickering during operation.

FHK61-230V	Wireless actuator Heating/cooling relay	Art. No. 30100045	83,03 €/pc.
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