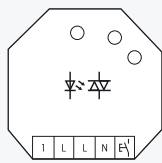


FHK61SSR-230V



Noiseless single room control, 400 W. Solid state relay not potential free. 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, switching voltage and control voltage local 230V.
With a load < 1W a GLE must be switched parallel to the load.

This heating/cooling relay evaluates the information from wireless temperature controllers or sensors. As required, supplemented by window/door contacts, motion detectors, window handle sensor FFG7B-rw and wireless pushbuttons.

Starting in production week 11/14, you can teach in encrypted sensors. You can switch on **bidirectional wireless** and/or a **repeater** function.

Each function change (normal mode, decrease mode, off) is confirmed by a wireless telegram. This wireless telegram can be taught-in in the GFVS software.

Upper rotary switch for operating modes:

H1: Heating operation with PWM control at T = 4 minutes.
(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: Heating operation with 2-point control.

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

K2: Cooling mode with 2-point control.

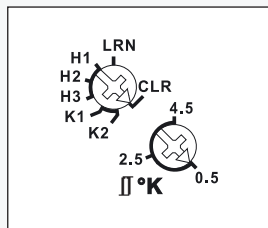
Switchover is visualised by LEDs flashing.

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.

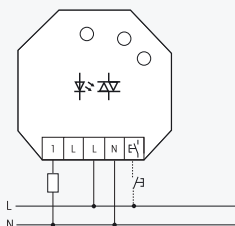
Two-point control mode: The hysteresis rotary switch sets the required difference between the switch-on and switch-off temperatures. When the 'actual temperature \geq reference temperature', the device is switched off. When the 'actual temperature \leq (reference temperature - hysteresis)', the device is switched on. The signs are the opposite in cooling mode.

Function rotary switches



Standard setting ex works.

Typical connection



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 settability 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-rw 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** 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.

When bidirectional wireless is switched on, the FHK61 sends a confirmation telegram containing its own ID and current operating mode to the Eltako wireless network.

PWM setpoint function: When a PWM data telegram is taught-in, the control function selected at the rotary switch is switched off. Only PWM commands are executed. When bidirectional wireless is switched on, the FHK61 sends a received PWM data telegram as confirmation telegram containing its own ID to the Eltako wireless network.

The 230V control input acts as a dew signalling input. When a voltage of 230V is applied, the solid state relay is switched off. Every change in state of the control input is immediately sent as a button telegram cyclically every 15 minutes.

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

Technical data page T-3.