

RS485 BUS ACTUATOR SINGLE ROOM CONTROL, HEATING/COOLING FOR 2 ZONES WITH SOLID STATE RELAY FAE14SSR



FAE14SSR



Noiseless 2-channel single room control, 400 W. 2 solid state relays not potential free. Bidirectional. Only 0.1 watt standby loss.

Modular device for DIN-EN 60715 TH35 rail mounting. 1 module = 18 mm wide, 58 mm deep.

Connection to the ELTAKO RS485 bus. Bus cross wiring and power supply with jumper.

If both relays are switched on, a power of 0.4 watts is required.

The rated switching capacity of 400 W is applied for one contact and also for the sum of the two contacts.

From production week 35/16 with automatic electronic over temperature shutdown.

With a load < 1W a GLE must be switched parallel to the load.

First teach in the sensors **using the rotary switches.**

The channels can be taught-in together at the same time. Use the lower rotary switch in positions 1+2.

Alternatively, they can be taught-in separately in position 1 or 2.

Then set the operating mode using the middle rotary switch:

PWM 1 for valves with thermoelectric actuator, T = 4 minutes.

PWM 2 for valves with motor-driven actuator, T = 15 minutes.

2-Pt for 2-point control.

PWM control mode: The upper rotary switch sets 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%.

When the actual temperature is between (reference temperature - hysteresis) and the reference temperature, the device is switched on and off by 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 radiator 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.

Two-point control mode: The upper 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.

The type of connected actuators will be selected with **the lower rotary switch. SA NC** for actuator NC (normally closed) or **SA NO** for actuator NO (normally open).

When **wireless window/door contacts FTK** or **window handle sensors FFG7B** are taught-in, they are OR linked. If one or more windows are open, the output remains off. In heating mode, however, the frost protection remains enabled.

When **motion detectors FBH** are taught-in, they are AND linked. If all FBHs signal 'No motion', the device switches to standby 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 the **FBHs and wireless pushbuttons** are taught-in, the last telegram received is always the one that is valid. An FBH therefore switches off a setback mode selected by means of the wireless pushbutton when motion is detected.

When a **wireless pushbutton** is taught-in, the 4 keys are assigned the following functions:

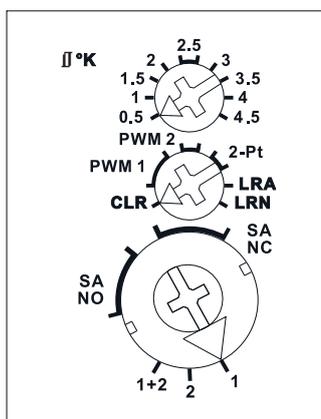
Top right: Normal mode (can also be enabled by timer with the function 'ON'). Bottom right: Night setback mode by 4°; in cooling mode: increase by 4° (can also be enabled by timer with the function 'OFF'). Top left: Standby setback mode by 2°, in cooling mode, increase by 2°. Bottom left: Off (in heating mode, frost protection enabled; in cooling mode permanent off).

Malfunction mode: If no wireless telegram will be received from a temperature sensor for more than 1 hour, the LED lights up and it will be switched to **fault mode:** in heating mode it will be switched on for 1.2 minutes and switched off for 2.8 minutes at PWM 1. At PWM 2 and 2-Pt the times are 4,5 minutes 'on' and 10.5 minutes 'off'.

The device is switched off in cooling mode. When a wireless telegram is again received, the LED goes out and the device switches back to normal mode.

The LED below the upper function rotary switch performs during the teach-in process according to the operating instructions. It shows control commands by short flickering during operation.

Function rotary switches



Further settings can be made using the PC Tool PCT14 (see page 1-5).



Manuals and documents in further languages:
<https://eltako.com/redirect/FAE14SSR>

Housing for operating instructions GBA14 page 1-50.

FAE14SSR	RS485 bus actuator single room control, heating/cooling for 2 zones with solid state relay	Art. No. 30014029	67,90 € /pc.
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Recommended retail prices excluding VAT.