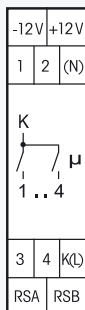


**F4H12-12V DC**



**RS485**



**4-channel switching actuator, 1 NO contact per channel 4A/250V AC, potential free from the power supply, with DX technology. Only 0.1 watt standby loss.**

Modular device for DIN-EN 60715 TH35 rail mounting. 1 module = 18mm wide, 58mm deep. State-of-the-art hybrid technology combines advantages of nonwearing electronic control with high capacity of special relays.

**Connection to the Eltako RS485 bus, terminals RSA and RSB. Up to a total of 128 actuators can be added in this way.**

**Patented Eltako Duplex technology (DX) allows you to switch normally potential free contacts in zero passage switching when 230V A/C voltage 50Hz is switched. This drastically reduces wear. To achieve this, simply connect the N conductor to the terminal (N) and L to K(L). This results in an additional standby consumption of only 0.1 watt.**

The 12V DC supply voltage of the complete RS485 bus is mainly powered at 6W, 12W or 24W by a switch mode power supply unit SNT12-12V DC that is only 1 or 2 pitch units wide. When all 4 relays of the F4H12 are switched on, 1 watt is required.

This heating relay evaluates the information of each wireless temperature controller via a wireless antenna module FAM12-12V DC for each channel. If required, this information may be supplemented by a window/door contact or a Hoppe window handle.

**Top rotary switch for adjustable hysteresis:**

**Left stop:** lowest hysteresis 0.5°. **Right stop:** largest hysteresis 4.5°. Inbetween, divisions in steps of 0.5°.

**Middle rotary switch for regulation types:**

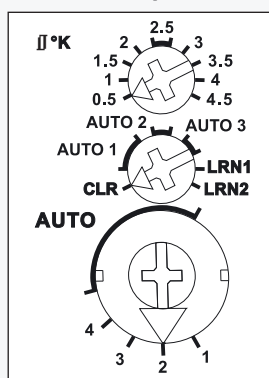
**AUTO 1:** With PWM control at T = 4 minutes. (PWM = pulse width modulation). (suitable for valves with thermoelectric valve drive)

**AUTO 2:** With PWM control at T = 15 minutes. (suitable for valves with motor-driven valve drive)

**AUTO 3:** With 2-point control.

**The bottom rotary switch LRN is required for teach-in and is set to AUTO in operating mode.**

### Function rotary switches



Standard setting ex works.

**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.

**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 **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 a window/door contact FTK or a Hoppe window handle was taught-in to a channel,** the channel is switched off as long as the window is open. However, the frost protection remains enabled.

**Wireless switches FT4 can be taught-in for each channel or for many channels in a group.** 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°. Top left: Setback mode by 2°. Bottom left: Off (frost protection stays enabled).

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

Connection example page 4-0. Technical data, see page T-0. Housing for operating instructions GBA12 page Z-4.

**F4H12-12V DC**

RS485 bus switching actuator

EAN 4010312304280

**51,90 €/pc.**

Recommended retail prices excluding VAT.