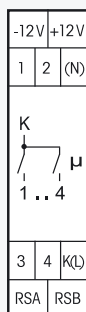


**F4L12-12V DC**



**RS485**



**4-channel switching actuator, 1 NO contact per channel 4A/250V AC, potential free from the power supply, with DX technology. Only 0.2 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 3 relays of the F4L12 are switched on, 0.7 watt are required.

**The top rotary switch** is required for teach-in.

**Middle rotary switch** for operating modes:

**AUTO1:** The 4 contact surfaces are assigned 'exclusively' when a wireless pushbutton with double rocker is taught-in as follows: top left closes Contact 1; bottom left closes Contact 2; top right closes Contact 3; bottom right closes Contact 4 (switch-off function). All other contacts are opened. Wireless window/door contact FTK or Hoppe window handles closes Contact 4 'exclusively' when a window is opened. A wireless transmitter module can also be taught-in to close Contact 4 'exclusively'.

**AUTO2:** Same as AUTO1, but a wireless pushbutton with double rocker is assigned 'adding': top left closes Contact 1; bottom left closes Contacts 1 and 2; top right closes Contacts 1, 2 and 3; bottom right closes Contact 4 (switch-off function). All other contacts are opened.

**AUTO3:** Activating with wireless CO<sub>2</sub> sensor. The contacts close 'exclusively'.

**AUTO4:** Same as AUTO3, but activated by the wireless humidity sensor.

**AUTO5:** Same as AUTO3, but activated by the wireless temperature sensor.

**AUTO6:** Same as AUTO3, but the contacts close 'adding'.

**AUTO7:** Same as AUTO4, but the contacts close 'adding'.

**AUTO8:** Same as AUTO5, but the contacts close 'adding'.

**The bottom and top rotary switches** are used when sensor activation AUTO3 to AUTO8 are in operation to set the switch-on threshold for Contact 1 and to set the additional value at which Contacts 2 and/or 3 close.

**Overview of switch-on thresholds** (lower rotary switch):

**CO<sub>2</sub> (ppm):** 1 = 700ppm; 2 = 800ppm; 3 = 900ppm; 4 = 1000ppm; 5 = 1200ppm; 6 = 1400ppm; 7 = 1600ppm; 8 = 1800ppm, 9 = 2000ppm and 10 = 2200ppm.

**Humidity (%):** 1 = 10%, 2 = 20%, ... 10 = 100%.

**Temperature (°C):** 1 = 20°C, 2 = 22°C, 3 = 24°C, ... 10 = 38°C.

**Overview of addition values** (upper rotary switch):

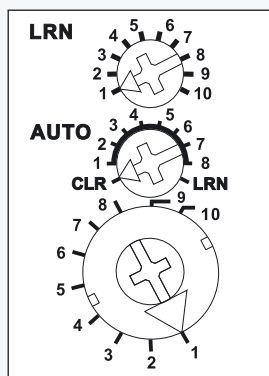
**CO<sub>2</sub> difference:** 1 = 50ppm, 2 = 100ppm, 3 = 150ppm, ... 10 = 500ppm. Fixed hysteresis: 50ppm.

**Humidity difference:** 1 = 5%, 2 = 10%, 3 = 15%, ... 10 = 50%. Fixed hysteresis: 5%.

**Temperature difference (K):** 1 = 1K, 2 = 2K, 3 = 3K, ... 10 = 10K. Fixed hysteresis: 1K.

**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.

### Function rotary switches



Standard setting ex works.