

## Wireless actuator

### Time relay for card switch or smoke alarm FZK61NP-230V

1+1 NO contacts not potential free 10A/250V AC, incandescent lamps 2000 watts. Only 0.7 watt standby loss. Off-delay and response lag are adjustable for one contact. Bidirectional wireless and with repeater function.

For installation.

45 mm long, 55 mm wide, 33 mm deep.

Supply voltage and switching voltage 230V.

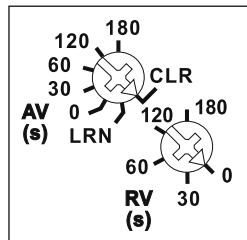
**This wireless actuator features state-of-the-art hybrid technology that we developed: we combined the wear-free receiver and evaluation electronics and two bistable relays with zero passage switching.**

By using a bistable relay coil power loss and heating is avoided even in the on mode. An automatic short synchronisation takes place after installation.

Maximum current as the sum of both contacts 16A at 230V.

Starting in production week 27/2011 with **bidirectional wireless**; in addition, a **repeater function** can be switched in. Every status change and incoming central control telegrams are confirmed by a wireless telegram. This wireless telegram can be taught-in in other actuators, in the FVS software and in FUA55 universal displays.

#### Function rotary switches



The upper rotary switch AV is required for teach-in. Then set here the response lag time AV between 0 and 180 seconds for Contact L-2.

Use the bottom rotary switch RV to set the time delay time RV between 0 and 180 seconds for Contact L-2.

The AV and RV times permit the simple control of air conditioning systems with the wireless card switches FKF and FKC.

The response lag AV starts as soon as the hotel card/key card is inserted in the wireless card switch FKF and the time delay RV starts after the card is removed.

**In addition to the wireless card switch FKF, wireless window/door contacts FTK and Hoppe window handles can also be taught in.**

Opening a monitored window also starts the RV time. When the RV time expires, Contact L-2 opens. Closing all monitored windows starts the AV time. When the AV time expires, Contact L-2 closes.

Contact L-1 is provided for light switching and always switches immediately without AV/RV.

To increase the switching capacity for one channel, outputs 1 and 2 can be bridged, provided no air conditioning control is required. Then AV and RV must be set to 0.

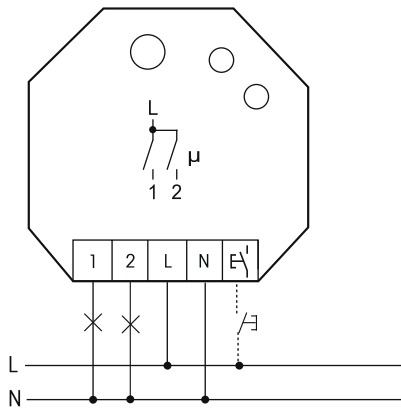
When motion detectors are taught in, the two channels switch on immediately motion is detected. If no motion is detected for 15 minutes, the two channels are switched off.

Several wireless smoke alarms FRW-ws are logically linked with this switch actuator time relay so that the RV time only starts after all FRW-ws devices have signalled alarm end.

**Card switches and smoke alarms can not be operated together with an FZK device.**

The LED performs during the teach-in process. It shows control commands by short flickering during operation.

#### Typical connection



#### Teaching-in wireless sensors in wireless actuators

**All sensors must be taught-in in actuators so that they can detect and execute their commands**

#### Teaching-in actuator FZK61NP

The teach-in memory is empty on delivery from the factory. If you are unsure whether the teach-in memory contains something or not, **you must first clear the memory contents completely:**

Set the top rotary switch to CLR. The LED flashes at a high rate. Within the next 10 seconds, turn the bottom rotary switch three times to the right stop (turn clockwise) and then turn back away from the stop. The LED stops flashing and goes out after 2 seconds. All taught-in sensors are cleared.

**Clear individual taught-in sensors** in the same way as in the teach-in procedure, except that you set the top rotary switch to CLR instead of LRN, and operate the sensor. The LED previously flashing at a high rate goes out.

#### Teaching-in sensors

- Set the top rotary switch to LRN.  
The LED flashes at a low rate.  
The flashing of the LED as soon as a new setting range has been reached when turning the rotary switch helps to find the desired position reliably.
- Select the operating mode with the bottom rotary switch.  
180 = AUTO1  
0 = AUTO2  
AUTO1: The relay switch position remains unchanged in case of a power failure.  
AUTO2: The relay switches off in a defined state after a power failure.
- Operate the sensor to be taught-in.  
The LED goes out.

If more sensors require teach-in, turn the upper rotary switch briefly away from the LRN position and then back again.

**After teaching-in with the top rotary switch** set the response lag AV. Function dependent on sensor type:

#### Wireless card switch FKF and FKC:

After the hotel card/key card is inserted, Contact L-1 closes immediately and the AV starts. When the AV expires, Contact L-2 closes.

#### Wireless window/door contact FTK and/or Hoppe window handles:

After all windows are closed, the AV starts. At the end of the AV, the contact L-2 closes.

#### Motion detector/brightness sensor FBH:

If "motion" is sent, both contacts close immediately.

Use the bottom rotary switch to set the time delay RV. Function dependent on sensor type:

#### Wireless card switch FKF and FKC:

After the hotel card/key card is removed, Contact L-1 opens immediately and the RV starts. When the RV expires, Contact L-2 opens.

#### Wireless window/door contact FTK and/or Hoppe window handles:

After a window is opened, the RV starts. At the end of the RV, the contact L-2 opens.

#### Motion detector/brightness sensor FBH:

If "no motion" is sent, a fixed time delay of 15 minutes starts. At the end of the time delay, both contacts open.

#### Teach-in confirmation telegrams of this actuator in other actuators or FVS software:

Use test probe to apply a voltage of 230V to the right-hand terminal to switch the contacts on and off one after the other (K1 on - K1 off - K2 on - K2 off, etc.) and send the corresponding confirmation telegram.

#### Switching on/off repeater:

If the supply voltage is also applied to the right-hand terminal when the power supply is connected, the repeater is switched on/off. When the power supply is switched on, the LED lights up for 2 seconds = repeater off (as-delivered state) or 5 seconds = repeater on to indicate the state.



When an actuator is ready for teach-in (the LED flashes at a low rate), the very next incoming signal is taught-in. Therefore, make absolutely sure that you do not activate any other sensors during the teach-in phase.

## Important note!

**Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock.**