

Wireless actuator



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

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

Temperature at mounting location:
-20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity:
annual average value <75%.

valid for devices from production week 11/14 (see bottom side of housing)

1+1 NO contacts not potential free
10A/250V AC, incandescent lamps
2000 watts. Only 0.8 watt standby loss.
Off-delay and response lag are adjustable
for one contact. Encrypted wireless,
bidirectional wireless and repeater
function are switchable.

For installation.
45 mm long, 45 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.

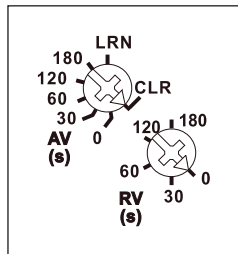
After installation, wait for short automatic
synchronisation before the switched
consumer is connected to the mains.
Maximum current as the sum of both
contacts 16A at 230V.

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

Every status change and incoming

central control telegrams are then
confirmed by a wireless telegram.
This wireless telegram can be taught-in
in other actuators, in the GFVS 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.

If motion detectors are taught-in, both
channels switch on immediately in
motion, if the hotel card is inserted.
If no movement has been detected for
15 minutes, both channels are switched
off, even if the hotel card is inserted.

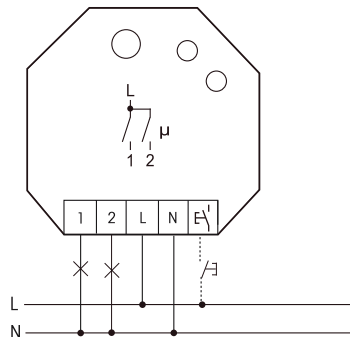
Several wireless smoke alarms FRW-ws
are logically linked with this switch

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



Technical data

Rated switching capacity	10A/250V AC
Standby loss (active power)	0.8W

Teaching-in wireless sensors in wire-less 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. To ensure that
a device was not previously taught-in,
clear the memory completely:

Turn the upper rotary switch to CLR.
The LED flashes at a high rate. Within
10 seconds, turn the lower rotary switch
three times to right stop (turn clockwise)
and back again. The LED stops flashing
and goes out after 2 seconds. All taught-
in sensors are cleared; the repeater and
the confirmation telegrams are switched
off.

Clear single taught-in sensors:

Turn the upper rotary switch to CLR. The
LED flashes at a high rate. Operate the
sensor. The LED goes out.

If all the functions of an encrypted sensor
are cleared, teach-in must be repeated
as described under *Teach-in encrypted
sensors*.

Teaching-in sensors:

1. Setting of the lower rotary switch to
the desired teaching-in function:
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.

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.

2. Set the top rotary switch to LRN.
The LED flashes at a low rate.
3. 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.

To prevent unintentional teach-in, teach in pushbuttons by 'double-clicking' (pressing rapidly twice in succession).

Within 2 seconds, turn the upper rotary
switch three times to right stop LRN (turn
clockwise). The LED flashes 'double'.

'Double-click' the pushbutton you want
to teach in. The LED goes out.

To change back to teach-in with a 'single
click', turn the upper rotary switch 3 times
to right stop LRN (clockwise) within
2 seconds. The LED flashes at a low
rate.

After a power supply failure, the device
reverts automatically to teach-in with a
'single click'.

You can teach in unencrypted and
encrypted sensors.

Teach in encrypted sensors:

1. Turn the upper rotary switch to LRN.
2. Turn the lower rotary switch three
times to left stop (anticlockwise).
The LED flashes very rapidly.

3. Within 120 seconds, enable sensor encryption. The LED goes out.

Caution: Do not switch off the power supply.

4. Then teach in the encrypted sensor as described in *Teach in sensors*.

To teach in other encrypted sensors, turn the upper rotary switch briefly away from position LRN and then turn it to 1.

With encrypted sensors, use the 'rolling code', i.e. the code changes in each telegram, both in the transmitter and in the receiver.

If a sensor sends more than 50 telegrams when the actuator is not enabled, the sensor is no longer recognised by the enabled actuator and you must repeat teach-in as 'encrypted sensor'. It is not necessary to repeat the function teach-in.

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.

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.

Switch-on confirmation telegrams:

For deliveries ex-works the confirmation telegrams are switched-off. Set the upper rotary switch to CLR. The LED flashes nervously. Now within 10 seconds turn the bottom rotary switch 3 times to the left (anticlockwise) and then back away. The LED stops flashing and goes out after 2 seconds. The confirmation telegrams are switched-on.

Switch-off confirmation telegrams:

Set the upper rotary switch to CLR. The LED flashes nervously. Now within 10 seconds turn the bottom rotary switch 3 times to the left (anticlockwise) and then back away. The LED goes out immediately. The confirmation telegrams are switched-off.

Teach-in confirmation telegrams of this actuator in other actuators or GFVS 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.



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.

EnOcean wireless

Frequency	868.3 MHz
Transmit power	max. 10 mW

Hereby, Eitako GmbH declares that the radio equipment type FZK61NP-230V is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: eitako.com

Must be kept for later use!

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13/2018 Subject to change without notice.