Wireless actuator

Multifunction time relay
FMZ61-230V

CE

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 07/19 (see bottom side of housing)

1 NO contact potential free 10A/250V AC, incandescent lamps 2000 Watt.
Encrypted wireless, bidirectional wireless and with repeater function.
Only 0.8 watt standby loss.
For installation.
45mm long, 45mm wide, 33mm deep.
Supply voltage and control voltage locally 230V.

If a power failure occurs, the switching state is retained. If a power failure occurs repeatedly, the device is switched off in a defined sequence.

This wireless actuator features state-of-the-art hybrid technology that we developed: we combined the wear-free receiver and evaluation electronics with a bistable relay.

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.

In addition to the wireless control input via an internal antenna, this wireless actuator can also be controlled locally by a conventional 230V control switch if fitted previously. Glow lamp current is not permitted.

You can teach in encrypted sensors.

You can switch on **bidirectional wireless** and/or a **repeater** function.
Every change in state and incoming central command telegrams are then confirmed by a wireless telegram.
This wireless telegram can be taught-in in other actuators and in the GFVS software.

Function rotary switches
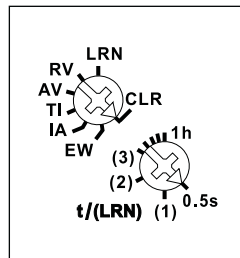
With the top rotary switch in the setting LRN up to 35 wireless pushbuttons can be assigned therefrom one ore more central control pushbuttons. In addition, wireless window/door contacts (FTK) may have a NO or NC function when the window is open. If a direction switch is taught-in, a function (e.g. TI) can be started using the top switch (START) and stopped with the bottom switch (STOP). The required function of the wireless actuator can then be selected. Switching will be visualised by flashing of the LED.

RV = off delay

AV = operate delay

TI = clock generator starting with impulse

IA = impulse controlled operate delay

EW = fleeting NO contact

The bottom rotary switch sets the time from 0.5 to 60 minutes.

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.

Description of functions
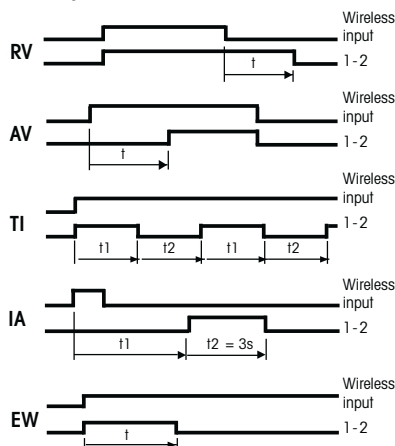
Typical connection
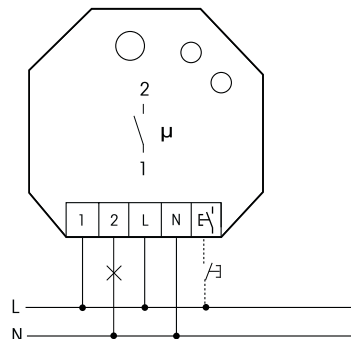
Technical data

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

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 FMZ61

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.

   Left stop 0.5s = teach-in FTK, FTKB, FTKB-hg, FFG7B and Hoppe window handle as NO contact;

   (1) = teach-in 'central OFF';

   (2) = teach-in universal switch;

   (3) = teach-in FTK, FTKB, FTKB-hg, FFG7B and Hoppe window handle as NC contact.

   Right stop 1h = teach-in direction switches;

   Direction switches are completely taught-in automatically when operating the top or bottom pushbutton. The side on which the pushbutton is first operated is defined for START and the other side for STOP.

   Rotary switches and GFVS can be taught-in in any position, confirmation telegrams are automatically activated and sent.

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

3. Operate the sensor to be taught-in. The LED goes out.

To teach-in further sensors, turn the upper rotary switch briefly away from position LRN. Continue the procedure from pos 1.

After teach-in, set the rotary switches of the actuators to the required function.

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.

When **TF-RWB** smoke detectors or **FWS81** water sensors are taught in, they are connected automatically. When they are in operation, turn the upper rotary switch to RV.

When a sensor receives an alarm tele-

gram, the relay switches on immediately.
If the lower rotary switch is at 0.5s, the relay switches all sensors off at the end of the alarm telegram.

If the lower rotary switch is at 1h, the relay does not switch off all sensors automatically at the end of the alarm telegram. Instead, they must be switched off by pressing the 'Central OFF' pushbutton.

Switching on/off repeater:
If control voltage is applied to the local control input when the power supply is switched on, 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 tot he left (anticlockwise) and then back away. The LED goes out immediately. The confirmation telegrams are switched-off.

Teaching-in feedback of this actuator in other actuators: the local control input has to be used for changing of switching position and simultaneously transmitting of feedback.

⚠ 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	10 mW

Hereby, Eltako GmbH declares that the radio equipment type FMZ61-230 V is in compliance with Directive 2014/53/EU.

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

Must be kept for later use!

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