

Wireless actuator **CE**  
Multifunction impulse switch  
FMS61NP-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 46/12** (see bottom side of housing)

1+1 NO contacts not potential free  
10A/250V AC, incandescent lamps up  
to 2000 watts. Bidirectional wireless and  
repeater function are switchable. Only  
0.7 watt standby loss.

For installation.  
45 mm long, 55 mm wide, 33 mm deep.  
Switching voltage and control voltage  
local 230V.

**This wireless actuator is a multifunction impulse switch and 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.**

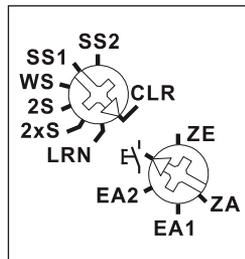
By using a bistable relay coil power loss and heating is avoided even in the on mode. After installation, wait for short automatic synchronisation before the switched consumer is connected to the mains.

In addition to the wireless control input via an internal antenna, this multifunction impulse switch can also be controlled locally by a conventional 230V control switch previously mounted (in the 2xS function only contact 1).

From production week 46/2012  
**bidirectional wireless** and **repeater** function

can be switched on. Every change in state and incoming central command 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



**With the top rotary switch** in the setting LRN up to 35 wireless pushbuttons can be assigned therefrom one or more central control pushbuttons. The required function of this multifunction impulse switch can then be selected. Switching will be visualised by flashing of the LED.

**2xS** = 2fold impulse switch each with 1 NO contact

**2S** = impulse switch with 2 NO contacts

**WS** = impulse switch with 1 NO contact and 1 NC contact

**SS1** = impulse multicircuit switch 1+1 NO contact with switching sequence 1

**SS2** = impulse multicircuit switch 1+1 NO contact with switching sequence 2

Switching sequence SS1:

0 - contact 1 - contact 2 - contacts 1+2

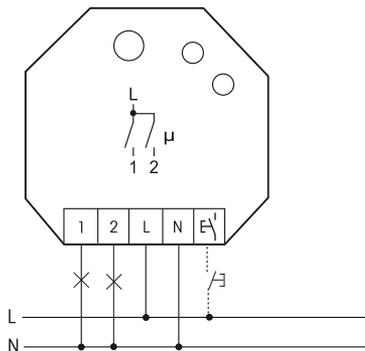
Switching sequence SS2:

0 - contact 1 - contacts 1+2 - contact 2

The bottom rotary switch is only required to teach-in the transmitters.

**The LED** performs during the teach-in process according to the operation manual. It shows wireless control commands by short flickering during operation.

### Typical connection



### Technical data

Rated switching capacity 10A/250V AC  
each contact

Incandescent lamp and 2000 W  
halogen lamp load<sup>1)</sup> 230V

Local control current at 3.5 mA  
230V control input

Fluorescent lamp load 1000 VA  
with KVG\* in lead-lag circuit  
or non compensated

Fluorescent lamp load with KVG\* 500 VA  
shunt-compensated or with EVG\*

Compact fluorescent lamps 15x7 W  
with EVG\* and 10x20 W  
energy saving lamps

Max. parallel capacitance 0.01 μF  
(approx. length) of (30 m)  
local control lead at 230V AC

Standby loss (active power) 0.7 W

<sup>1)</sup> Applies to lamps of max. 150W.

### Teaching-in wireless sensors in wireless actuators

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

### Teaching-in actuator FMS61NP-230V

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 upper rotary switch to CLR. The LED flashes at a high rate. Within the next 10 seconds, turn the lower 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, the repeater and the confirmation telegram are switched-off.

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

### Teaching-in sensors

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

**ZA** = teach-in 'central OFF';

**EA1** = teach-in switch 1 using the function 2xS 'ON/OFF';

**EA2** = teach-in switch 2 using the function 2xS 'ON/OFF';

**Pushbutton**  = teach-in pushbutton for multicircuit switch, 2S and WS;

**ZE** = teach-in 'central ON';

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

3. Operate the sensor which should 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.

### 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 to the 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: Contact 1:

Set the upper rotary switch to 2xS. For changing of switching state and simultaneously transmitting of feedback the local control input has to be applied. Contact 2: Turn the upper rotary switch from 2S to WS, contact 2 switches on and the corresponding feedback will be sent. Turn the upper rotary switch from WS to 2S, contact 2 switches off and the corresponding feedback will be sent.

**Teaching- in feedback of other actuators in this actuator:** Teaching-in feedback other actuators is only reasonable if this actuator is run in function setting 2S or 2xS. 'Switch on' will be taught-in in position 'central ON'. 'Switch off' will be taught-in in position 'central OFF'. After teach-in the function will be set.



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.

**For later use!**

**Eltako GmbH**

D-70736 Fellbach

 +49 711 94350000

[www.eltako.com](http://www.eltako.com)

11/2012 Subject to change without notice.