

Wireless actuator


 Impulse switch with integrated relay
function noiseless FSR61G-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
41/12** (see bottom side of housing)

Noiseless solid-state relay not potential-free, 400 Watt, off delay with switch-off early warning and switchable pushbutton permanent light. 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.

 At a load of < 1 W a GLE has to be
switched parallelly to the load.

**This wireless actuator offers the latest
in hybrid technology developed by us:
we combined wear-free receiver and
evaluation electronics with zero passage
switching solid state relays.**

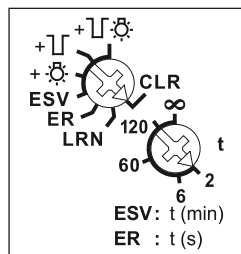
 In addition to the wireless control input
via an internal antenna, this wireless
actuator can also be controlled locally
by a conventional 230V control push-
button mounted upstream. Glow lamp
current is not approved.

From production week 41/2012

bidirectional wireless and **repeater** function
can be switched on. 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, in the FVS software
and in FUA55 universal displays.

Scene control: several FSR61s can be
switched on or off in a scene by one of the
four control signals of a double-rocker
pushbutton taught-in as scene pushbutton.

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. In addition wireless
window/door contacts with the function
N/O contact or N/C contact while the
window is open, wireless outdoor bright-
ness sensors FAH and wireless motion/
brightness sensors FBH. The required
function of the impulse switch with
integrated relay function can then be
selected:

ER = switching relay

ESV = impulse switch.

Possibly with off delay, then:

 + = ESV with pushbutton
permanent light

 + = ESV with switch-off
early warning

 + = ESV with pushbutton
permanent light and
switch-off early warning

If the permanent light function is
switched on, the function can be activated
by pressing the pushbutton for longer
than 1 second. This function switches off
automatically after 2 hours or by pressing
the pushbutton.

If the switch-off early warning is
switched on, the light starts to flicker
approx. 30 seconds before time-out.
This is repeated three times at decreasing
time intervals.

If both switch-off early warning and push-
button permanent light are switched
on, switch-off early warning is activated
before automatic switch-off of the
permanent light.

The function **ESV on the bottom rotary
switch** sets the off delay from 2 to 120
minutes. In setting ∞ normal impulse
switch function ES without off delay,
without pushbutton permanent light and
without switch-off early warning.

In setting ER = switching relay of the
other rotary switch, this 2nd rotary switch
fulfils a safety and power saving function
in the settings except ∞. If the switch-
off command is not recognised, e.g. since
the pushbutton is jammed or it was
pressed too quickly, the relay switches
off automatically on expiry of a time
adjustable between 2 and 120 seconds.
When a FTK is taught-in, this time function
is turned off.

Twilight switch with taught-in wireless out-
door brightness sensor FAH and then in
function setting ESV. In time setting 120 the
contact opens with a delay of 4 minutes
if the brightness level is sufficient. In time
setting ∞ the contact opens instantly.
The local and central push-button control
is still possible.

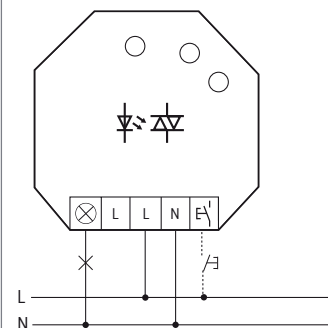
Motion detection with taught-in wireless
motion detector FBH in function setting ER.
The device switches on when motion is
detected. If no more motion is detected,
the contact opens after the time delay
setting t = 2 to 255 seconds
(Position ∞).

**Outdoor brightness sensor and motion
detector** can be used together with
function setting ER to evaluate motion
only in darkness. If the FAH detects bright-
ness, the contact opens immediately.

When teaching-in, the switching threshold
is also taught-in: between break of twilight
and complete darkness.

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

Typical connection



Technical data

Incandescent lamp and halogen lamp load ¹⁾ 230V	400W
Fluorescent lamp load with KVG* shunt-compensated or with EVG*	400VA
Compact fluorescent lamps with EVG* and saving lamps ESL	400VA
Local control current at 230V control input	3.5mA
Max. parallel capacitance (approx. length) of local control lead at 230V AC	0.01 μF (30m)
Standby loss (active power)	0.7W

¹⁾ Applies to lamps of max. 150W.* EVG = electronic ballast units;
KVG = conventional ballast units

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 FSR61G-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 clock-
wise) 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 con-
firmation 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:

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 2 = teach-in 'central OFF' and FTK and Hoppe window handle as NC contact;

Pos 6 = teach in scene pushbutton; a complete doublerocker pushbutton is assigned automatically;

Pos 60 = teach-in pushbutton 'ON/OFF';

Pos. 120 = teach-in pushbutton as NC contact;

Right stop ∞ = teach-in 'central ON' and FTK and Hoppe window handle as NO contact

The FBH requires no teach-in function.

When a **FAH is taught-in as twilight sensor**, the position of the bottom rotary switch defines the threshold: 2 = complete darkness and 120 = break of twilight.

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.

Teaching-in scenes:

Four scenes can be saved by a scene pushbutton previously taught-in.

1. Switch on/off impulse relays
2. The switching state is saved by pressing one of the four rocker ends of a doublerocker scene pushbutton for 3-5 seconds.

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:

For changing of switching state and simultaneously transmitting of feedback the local control input has to be applied.

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 ESV.

'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 ESV and the off-delay 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!

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09/2012 Subject to change without notice.