

Wireless Switching actuator

FSA12-12V DC



valid for devices from production week 44/08
(see bottom side of housing)

4-channel expansion, 1 NO contact per channel
4 A/250V AC, potential free from the power
supply, with DX technology.
Only 0.1 watt standby loss.

Modular device for DIN-EN 50022 rail mounting.
1 modul = 18 mm wide, 58 mm deep.

Connection to RS485 interface (terminals RSA and RSB) of the upstream wireless switching actuator FAM12, wireless antenna switching actuator FAA12 or FAB12. Up to a total of 128 channels of FSA12, FSB12, FUD12NPN and FSG12 can be added in this way.

Up to 35 wireless pushbuttons each with
4 functions can be assigned to each channel
of an FSA12 therefrom in the setting ES one
more central pushbuttons.

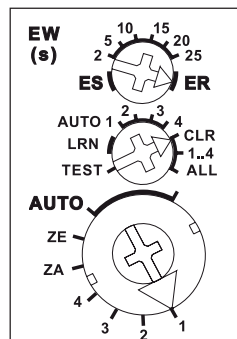
The channels are configured together and
switch consumers directly or they can switch
conventional switchgear from the Eltako range.
Each NO contact has a switching capacity up to
4 A/250V AC. Incandescent lamps 1000 watts.

Eltako Duplex technology allows you to switch normally potential free contacts in zero passage switching when 230V A/C voltage 50Hz is switched. This drastically reduces wear. To achieve this, simply connect the N conductor to the terminal (N) and L to K (L). This results in an additional standby consumption of only 0.1 watt.

If the channels are used to control switchgear
that has no zero passage switching, (N) should
not be connected, otherwise the additional
off-delay would have the opposite effect.

A 12V DC voltage is supplied from an existing
source or from a switching power supply unit
WNT12-12V DC which has a width of only
1 module. When all 4 relays are switched on,
1 watt is required.

Function rotary switches



The upper rotary switch defines the function of the 4 channels together as impulse switch (ES), fleeting NO contact (EW) or relay (ER). In ES function, central control commands ON/OFF can be taught-in. In EW function, a wiping time of 2 to 25 seconds can be set.

The middle and the lower rotary switches are for teaching-in the wireless pushbuttons and if necessary the four channels will be tested. In normal mode, the two rotary switches are finally set to AUTO.

When **motion detector/brightness sensors FBH** are taught-in, the switching threshold is defined on the last FBH taught-in to switch the lamp on/off depending on the brightness. A off delay of 2 minutes is a fixed setting in the FBH.

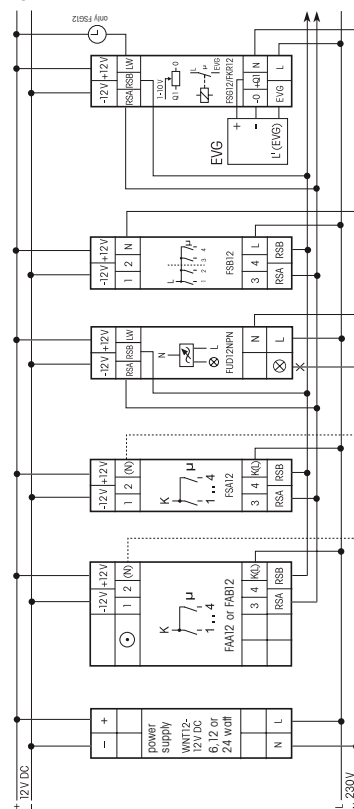
When **window/door contacts FTK** are taught-in, different functions can be set with the middle rotary switch in position AUTO 1 to AUTO 4 and linked to maximum 32 FTKs:

AUTO 1 = window closed then output active.
AUTO 2 = window open then output active.
In settings AUTO 3 and AUTO 4 the FTKs
taught-in to a single channel are linked
automatically. With AUTO 3 all FTKs must be
closed so that the N/O contact closes (e.g. for
climate control). With AUTO 4 one open FTK is
sufficient to close the N/O contact (e.g. for an
alarm signal or to switch on the power supply
for an extractor hood).

One or several FTKs can be taught-in in several
channels to allow several simultaneous
functions in each FTK. After a power failure the
link is restored by a new signal to the FTK and
a signal on the next status message 15 minutes
later.

The LED below the function rotary switch
ES/EW/ER 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

Incandescent lamp and up to 1000W
halogen lamp load¹⁾ 230V

Standby loss (active power) 0,1W

¹⁾ Applies to lamps of max. 150W.

Teaching-in Wireless Sensors in Wireless Actuators

All sensors such as wireless pushbuttons, wireless hand-held transmitters, wireless transmitter modules, wireless window/door contacts, wireless timers and wireless motion detector and brightness sensors must be taught-in in the actuators (receivers with dimmers, switches and relays) so that they can detect and execute commands.

Teaching-in actuator FSA12-12V DC

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 middle rotary switch to CLR ALL (or to
CLR 1..4 if you only want to clear one channel

and also set the lower rotary switch to the
required channel). The LED flashes at a high
rate. Within the next 10 seconds, turn the
upper 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 or sensors of a channel are cleared.
Clear individual taught-in sensors in the
same way as in the teach-in procedure, except
that you set the middle 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. Use the lower rotary switch, select the
required channel 1 to 4 or the position
ZE/ZA for the central control unit.
2. Set the middle rotary switch to LRN.
The LED flashes at a low rate.
3. Operate the sensor to be taught-in.
The LED goes out. As central control unit
pushbutton either a rocker or the right half
of a double rocker can be taught-in. With
other pushbuttons, teach-in the upper and
lower buttons as required.

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

After teaching-in, set the middle and lower
rotary switches to AUTO and turn the function
rotary switch to the required position ES, EW 2
to EW 25 or ER. Taught-in central control unit
switches are only active in position ES. For
taught-in window/door contacts FTK, note that
the middle rotary switch must be in the required
setting AUTO 1 to 4.

When the middle rotary switch is set to TEST,
the 4 contacts can be closed individually using
the lower rotary switch:

TEST + AUTO = all contacts open,
TEST + 1 = contact 1 closed,
TEST + 2 = contact 2 closed, etc.



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 reminder!

**This electrical equipment may only be
installed by skilled electricians otherwise
fire hazard or danger of electric shock
exists!**