

## Integration examples for wireless actuator with eTronic / mTronic

In the following examples, some applications of the wireless actuator (FSR61-230V or FSR61-24V) with the MACO wireless sensors eTronic and mTronic are described. This will make it possible to use it as a break contact on the one hand, and on the other hand as a make contact.

### Application example 1 – Break contact for heating/air conditioning control:

In the case of a residential unit with existing heating / air conditioning, or in a room with heating / air conditioning, the windows should be coupled so that only heating / cooling is done when all connected windows are closed, thus ensuring energy is used efficiently.



#### Functional description:

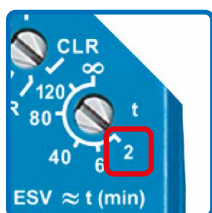
If one or more windows are opened or tilted, the contact closes. If all windows are closed, the contact opens.

#### Additional option:

If at least one window sensor no longer sends cyclic telegrams, the contact opens after 35 minutes.

### Installation and integration:

- › Install sensor(s) according to assembly instructions and check functionality (e.g. wireless tester Art. No. 480525).
- › Install and connect the switching actuator(s) in a suitable location (wireless connection to all sensors).
- › Teach sensor(s) in actuator(s).



- › Set lower rotary switch to „2“  
(→ LED flashes briefly)



- › Set upper rotary switch to „LRN“  
(→ LED flashes slowly)

- › Trigger the sensor's learning signal (see operating instructions). As soon as the sensor's signal has been registered, the LED goes out.
- › If further sensors are to be taught, briefly turn the upper rotary switch away from position „LRN“ and then turn it back to „LRN“. Repeat the process for the learning signal.
- › After completing the teaching, turn the upper rotary switch to position „ER“.

### Application example 2 – Make contact for wired alarm systems:

In a residential unit with an existing wired alarm system, additional window/door elements should be monitored – without additional cabling.



#### Functional description:

If one or more windows are opened or tilted, the contact closes. If all windows are closed, the contact opens.

#### Additional option:

If at least one window sensor no longer sends cyclic telegrams, the contact opens after 35 minutes.

#### Installation and integration:

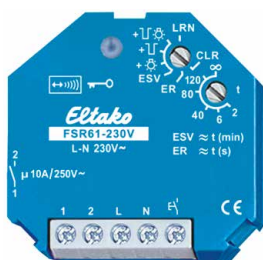
- › Install sensor(s) according to assembly instructions and check functionality (e.g. wireless tester Art. No. 480525). If necessary, activate the repeater function of the actuator.
- › Install the switching actuator(s) in a suitable location (wireless connection to all sensors) and connect them to the alarm system.
- › Teach sensor(s) in actuator(s).



- › Set lower rotary switch to „80“ (→ LED flashes briefly)
- › Set the upper rotary switch to „LRN“ (→ LED flashes slowly)
- › Trigger the sensor's learning signal (see operating instructions). As soon as the sensor's signal has been registered, the LED goes out.
- › If further sensors are to be taught, briefly turn the upper rotary switch away from position „LRN“ and then turn it back to „LRN“. Repeat the process for the learning signal.
- › After completing the teaching, turn the upper rotary switch to position „ER“.

### Application example 3 – Make contact for room air dependent fireplace:

In a residential unit, a room air dependent fireplace is to be operated while at the same time an exhaust air device exists (e.g. central ventilation or extractor hood). This may, according to legal requirements, only be in operation if it is ensured that a window is open and thus the supply of fresh air is guaranteed.



#### Functional description:

If one or more windows are opened or tilted, the contact closes. If all windows are closed, the contact opens.

#### Additional option:

If at least one window sensor no longer sends cyclic telegrams, the contact opens after 35 minutes.

## Installation and integration:

- › Install sensor(s) according to assembly instructions and check functionality (e.g. wireless tester Art. No. 480525). If necessary, activate the repeater function of the actuator.
- › Install the switching actuator(s) at a suitable location (radio connection to all sensors) and connect them to the exhaust air unit.
- › Teach sensor(s) in actuator(s).



- › Set lower rotary switch to „80“  
(→ LED flashes briefly)
- › Set the upper rotary switch to „LRN“  
(→ LED flashes slowly)
- › Trigger the sensor's learning signal (see operating instructions). As soon as the sensor's signal has been registered, the LED goes out.
- › If further sensors are to be taught, briefly turn the upper rotary switch away from position „LRN“ and then turn it back to „LRN“. Repeat the process for the learning signal.
- › After completing the teaching, turn the upper rotary switch to position „ER“.

## Important Notes!

After the teaching of each additional sensor, it must first be activated at least once (set upper actuator rotary switch to „ER“), without the participation/influence of the other already taught sensors, so that the series connection of all taught sensors works correctly thereafter.

On the input side, the wireless actuator can be coupled with up to 35 wireless sensors via EnOcean® wireless connection. Please note: Coupling the actuator with several sensors results in the collected display of all sensors via the connected actuator; i.e. (for application example 1): If one or more windows are opened or tilted, the contact closes. If all windows are closed, the contact opens.

Further information can be found in the documents for the wireless actuator or eTronic and mTronic sensors on the website [www.maco.eu](http://www.maco.eu).

## MACO near you:

[www.maco.eu/contact](http://www.maco.eu/contact)



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