



### Technical parameters RFSAI-161B/230V RFSAI-161B/120V

|                           |              |          |
|---------------------------|--------------|----------|
| Supply voltage:           | 230 V AC     | 120 V AC |
| Supply voltage frequency: | 50–60 Hz     | 60 Hz    |
| Apparent power:           | 9 VA         | 9 VA     |
| Dissipated power:         | 0.7 W        |          |
| Supply voltage tolerance: | +10 %; -15 % |          |

### Output

|   |   |
|---|---|
| Number of contacts:                                       | 1x switching (AgSnO <sub>2</sub> )                  |
| Rated current:  | 12 A/AC1  |
| Switching power:  | 3000 VA/AC1, 288 W/DC                               |
| Peak current:   | 30 A, max. 4 s at 10%                               |
| Switching voltage:  | 250 V AC1/24 V DC                                   |
| Min. switching power DC:                                  | 100 mA/10 V   |
| Insulation voltage between outputs and internal circuits: | basic insulation<br>(Cat. III surges by EN 60664-1) |
| Isolation voltage open contact:                           | 1 kV  |
| Mechanical service life:                                  | 3x10 <sup>7</sup>                                   |
| Electrical service life (AC1):                            | 5x10 <sup>4</sup>                                   |
| Indication of relay switch:                               | red LED   |

### Control

|                         |  |
|-------------------------|--|
| Communication protocol: | RFIO2  |
| Frequency:              | 866–922 MHz (for more information see p. 76)       |
| Repeater button:        | yes  |
| Manual control:         | button PROG (ON/OFF)                               |
| External button:        | cable length max. 12 m $\triangle_{\frac{1}{2}}$ * |
| Range:                  | in open space up to 160 m                          |

### Other data

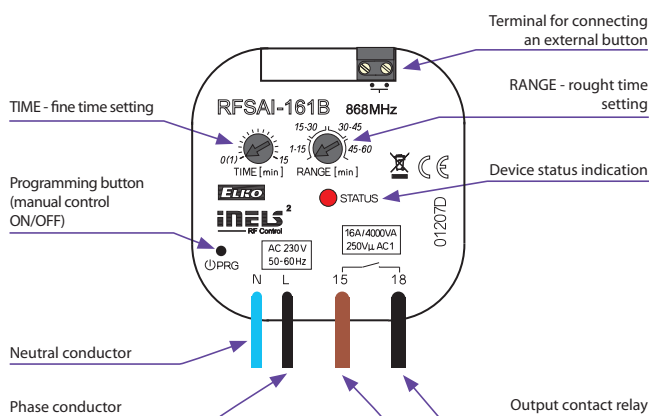
|   |  |
|---|--|
| Open contact voltage external switch:           | 3 V  |
| Resistor for the management of external switch: | <1 k $\Omega$                                    |
| Resist. of connection for open contact:         | >10 k $\Omega$                                   |
| Galvanic isolation of input:                    | no   |
| Operating temperature:                          | -15 to +50 °C                                    |
| Storage temperature:                            | -30 to +70 °C                                    |
| Working position:                               | any  |
| Mounting:                                       | free at lead-in wires                            |
| Protection:                                     | IP30   |
| Overvoltage category:                           | III.   |
| Contamination degree:                           | 2  |
| Terminals:                                      | 0.5–1 mm <sup>2</sup>                            |
| Terminals (CY wire, Cross-section):             | 2x 0.75 mm <sup>2</sup> , 2x 2.5 mm <sup>2</sup> |
| Terminal length:                                | 90 mm  |
| Dimensions:                                     | 49 x 49 x 21 mm                                  |
| Weight:   | 50 g   |

\* We recommend using a twisted pair cable for this distance.

$\triangle_{\frac{1}{2}}$  Control button input is at the supply voltage potential.

- Switch component with one output channel which is used in combination with detectors for automatic lighting control.
- RFSAI-161B has a pre-set control algorithm (scene) adapted to the requirements of hotel room control, see wiring.
- Each RFSAI-161B can be programmed with 1x RFMD-100, 1x RFWD-100 and 1x wireless controller (RFBW-40/G or RF KEY).
- The terminals on the component give you the opportunity to connect a wired detector or an existing key installation.
- It enables connection of the switched load up to 1x 12 A (3000 VA).
- The programming button on the unit is also used for manual control of the output.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.

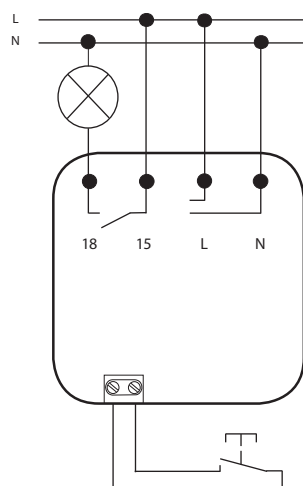
### Device description



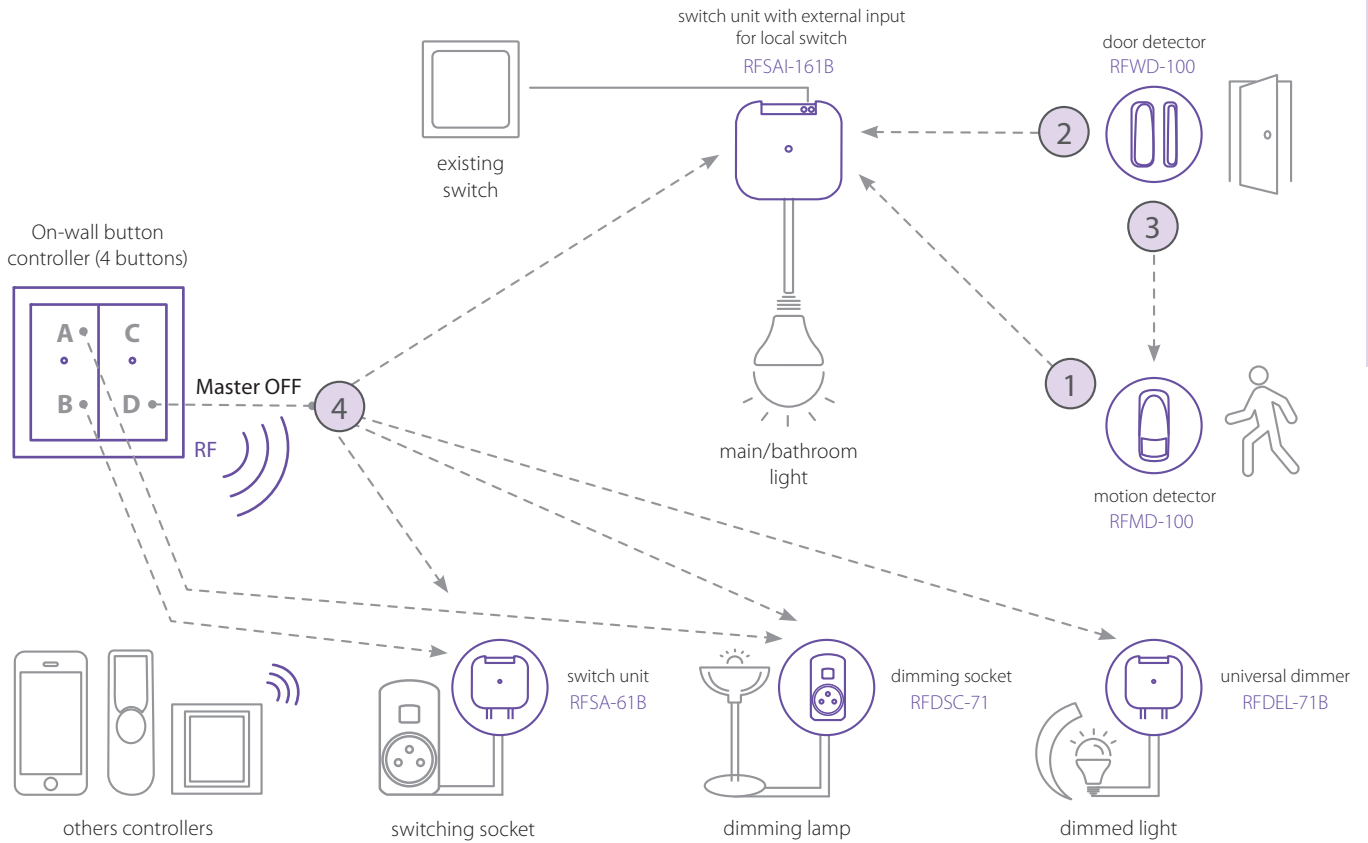
Compatible wireless detectors:  
 Movement: RFMD-100  
 Door/Window: RFWD-100

### Connection

RFSAI-161B/230V  
 RFSAI-161B/120V



Example



Function

- 1 When RFMD-100 motion detector captures the movement of the guest, the light ON command is sent.
- 2 The functionality of RFWD-100 door detector is delayed OFF= after the guest (or cleaner) close the door than the timer starts running (which you can set) and the light will turn OFF.
- 3 If there is movement the command from RFWD-100 door detector (delay off) will be cancelled by the motion detector RFMD-100 command.
- 4 Pressing the button at position D of RFWB-40 On-wall button controller sends an OFF command to all components that are controlled from that button while blocking the response to RFMD-100 motion detector.
- 5 You are able to control other units with other channels (A, B, C) on RFWB-40 On-wall button controller.
- 6 When guest wakes up and presses any RFWB-40 button, then pressing on button makes all units working again after previous pressing button on position D and it also re-enable RFMD-100 motion detector primary function.