RFSAI-161B | Ligting control unit with pair detectors and external button input

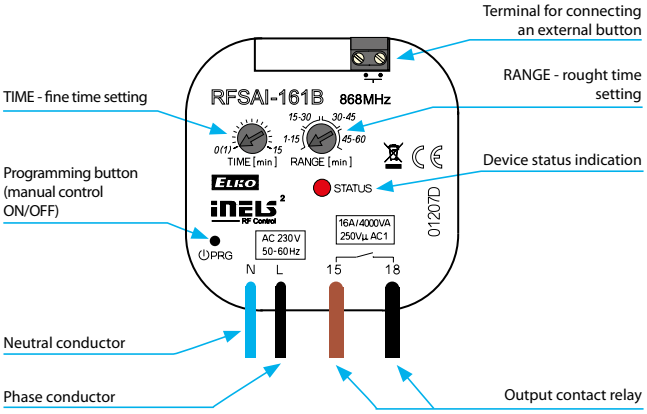
EAN code:
RFSAI-161B: 8595188149341

- 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 (RFWB-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-20N or protocol component RFIO2 that support this feature.

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 ($AgSnO_2$)	
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 (Cat. III surges by EN 60664-1)	
Isolation voltage open contact:	1 kV	
Mechanical service life:	$3x10^7$	
Electrical service life (AC1):	$5x10^4$	
Indication of relay switch:	red LED	
Control		
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p.72)	
Repeater button:	yes	
Manual control:	button PROG (ON/OFF)	
External button:	cable length max. 12 m *	
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 kΩ	
Resist. of connection for open contact:	>10 kΩ	
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^2	
Terminals (CY wire, Cross-section):	2x 0.75 mm^2, 2x 2.5 mm^2	
Terminal length:	90 mm	
Dimensions:	49 x 49 x 21 mm	
Weight:	50 g	

* We recommend using a twisted pair cable for this distance.
Control button input is at the supply voltage potential.

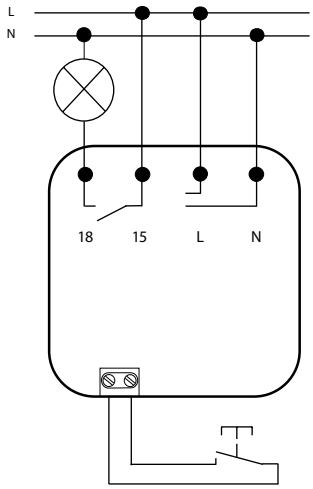
Device description



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

Connection

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



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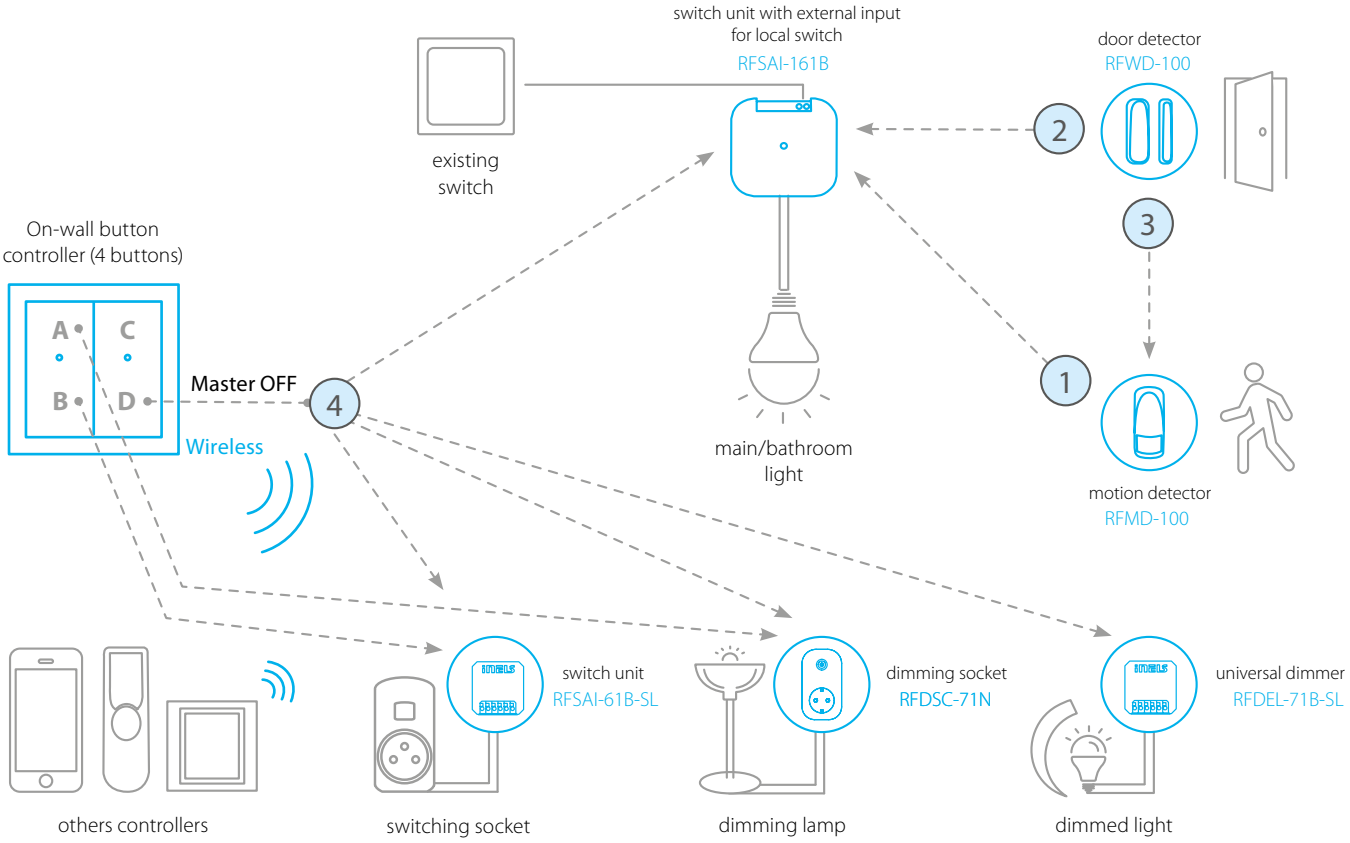
Example



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.