iNELS RFSAI-xB-SL Switch Unit with Input For External Button User Manual

Contents

iNELS RFSAI-xB-SL Switch Unit with Input For External Button

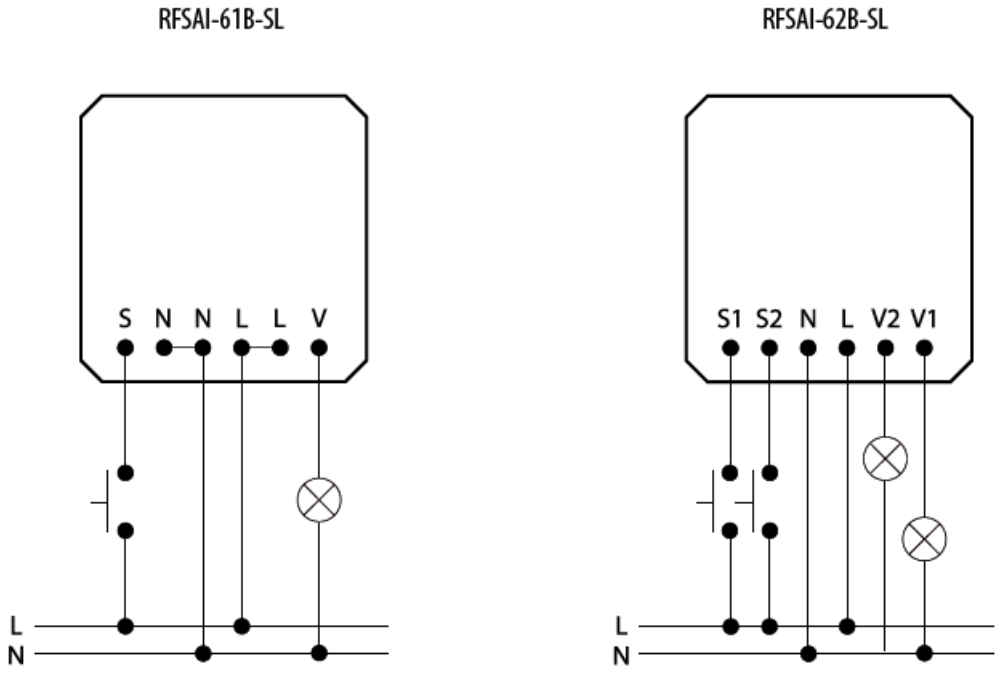
Characteristics

- The switching component with one/two output relays is used to control appliances and lights. Switches/buttons connected to the wiring can be used for control.
- They can be combined with Detectors, Controllers or iNELS RF Control System Components.
- The BOX version off ers installation directly in the installation box, ceiling or cover of the controlled appliance. Easy installation thanks to screwless terminals.
- It allows the connection of switched loads with a total sum of 8 A (2000 W).
- **Functions**: for RFSAI 61B-SL and RFSAI 62B-SL – pushbutton, impulse relay and time functions of delayed start or return with time setting 2 s-60 min. Any function can be assigned to each output relay. For RFSAI-11B-SL, the button has a fi xed function – ON / OFF.
- The external button is assigned in the same way as the wireless one.
- Each of the outputs can be controlled by up to 12/12 channels (1-channel represents one button on the controller). Up to 25 channels for RFSAI-61B-SL and RFSAI-11B-SL.
- The programming button on the component also serves as a manual output control.
- Possibility to set the output status memory in case of failure and subsequent power recovery.
- The elements of the repeater can be set for the components via the RFAF / USB service device, PC, application.
- Range up to 200 m (outdoors), in case of insuffi cient signal between the controller and the device, use the RFRP-20 signal repeater or component with the RFIO2 protocol that support this function.
- Communication with bidirectional RFIO2 protocol.
- The contact material of the AgSnO2 relay enables switching of light ballasts.

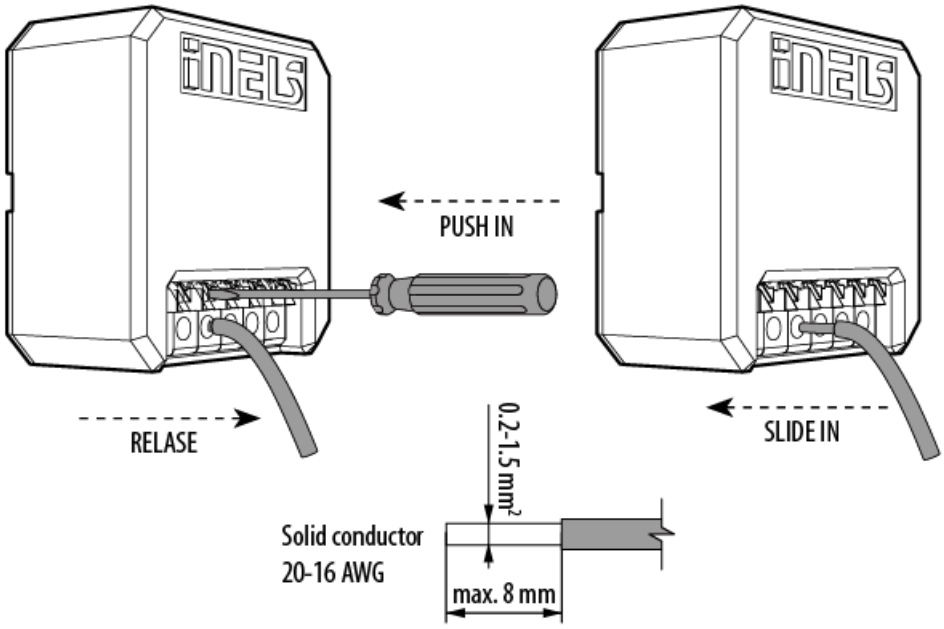
Assembly

- mounting in an installation box / (even under the existing button / switch)
- mounting into the light cover
- ceiling mounted

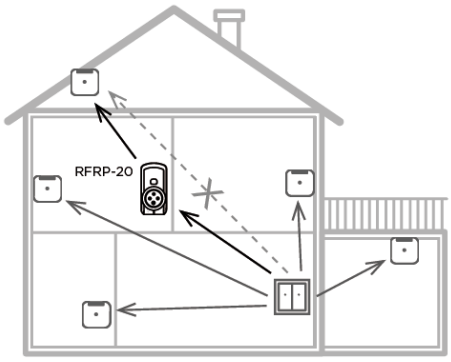
Connection

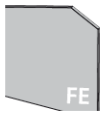


Screwless terminals

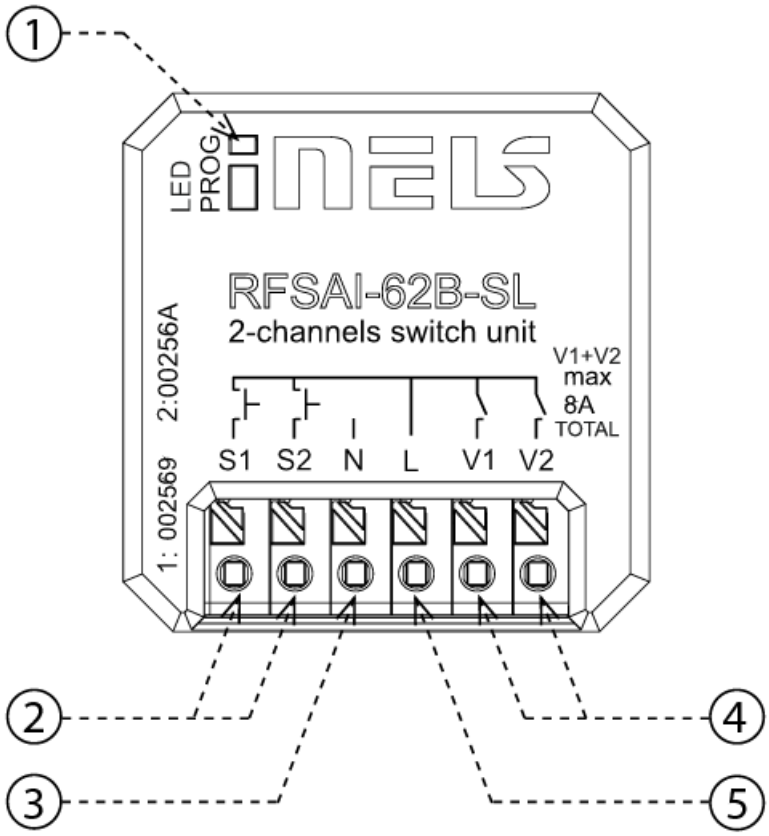


Radio frequency signal penetration through various construction materials



				
60 - 90 %	80 - 95 %	20 - 60 %	0 - 10 %	80- 90 %
brick walls	wooden structures with plaster boards	reinforced concrete	metal partitions	common glass

Indication, manual control

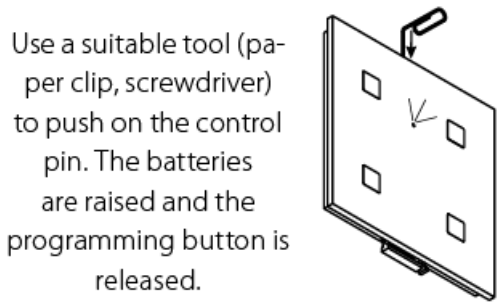


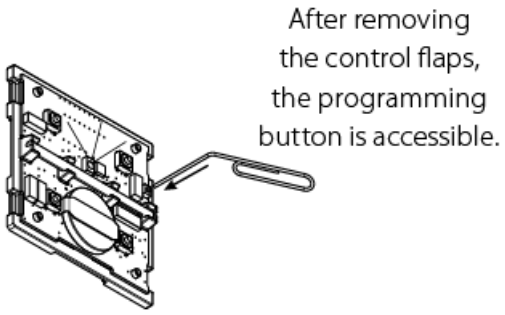
1. LED / PROG button
    1. LED green V1 – device status indication for output 1
    2. LED red V2 – device status indication for output 2.

       Indicators of memory function:

        1. On – LED blinks x 3.
        2. Off – The LED lights up once for a long time.
    3. Manual control is performed by pressing the PROG button for<1s.
    4. Programming is performed by pressing the PROG button for 3-5s.
2. Terminal block – connection for external button
3. Terminal block – connecting the neutral conductor
4. Terminal block – load connection with the sum of the total current 8A (eg V1=6A, V2=2A)
5. Terminal block for connecting the phase conductor

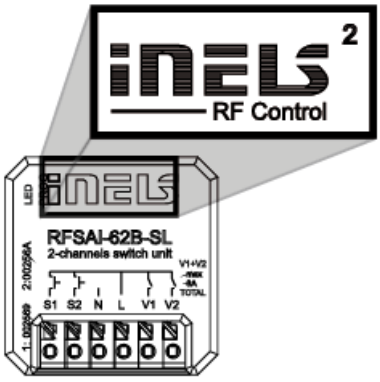
In the programming and operating mode, the LED on the component lights up at the same time each time the button is pressed – this indicates the incoming command. RFSAI-61B-SL: one output contact, status indication by red LED



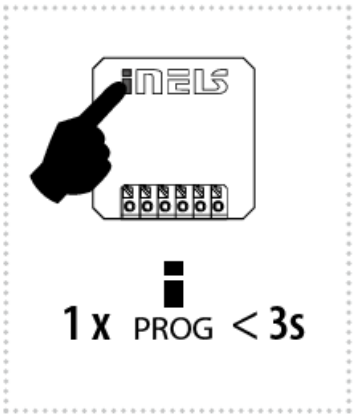


Compatibility

The device can be combined with all system components, controls and devices of iNELS RF Control and iNELS RF Control2. The detector can be assigned an iNELS RF Control2 (RFIO2) communication protocol.



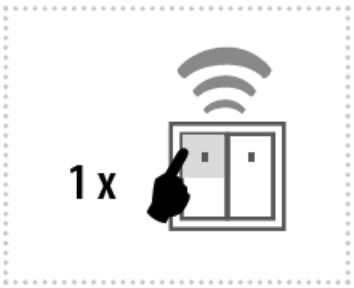
Channel selection
Channel selection (RFSAI-62B-SL) is done by pressing the PROG buttons for 1-3s. RFSAI-61B-SL: press for more than 1 second. After button release, LED is flashing indicating the output channel: red (1) or green (2). All other signals are indicated by corresponding color of LED for each channel.



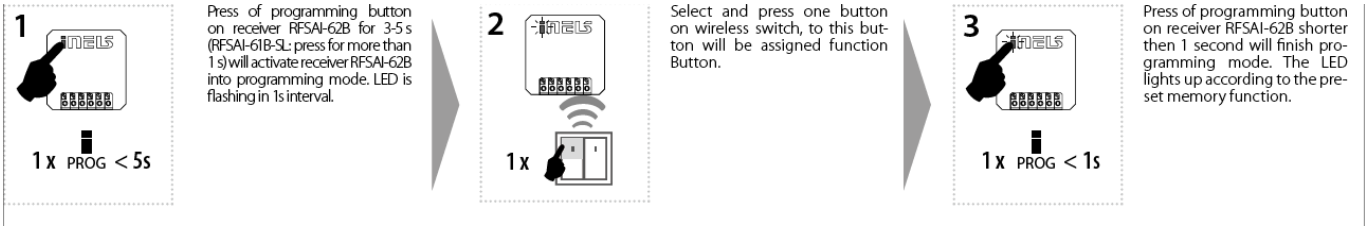
Function button

Description of button

The output contact will be closed by pressing the button and opened by releasing the button. For the correct execution of individual commands (press = closing / releasing the button = opening), the time delay between these commands must be a min of . 1s (press – delay 1s – release).



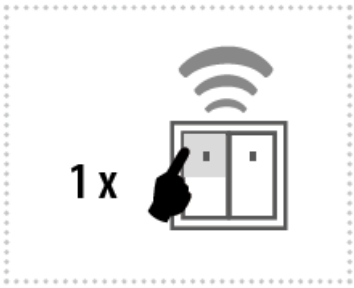
Programming



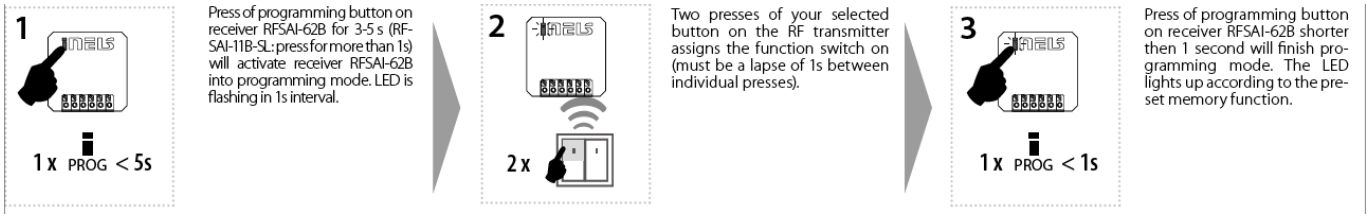
Function switch on

Description of switch on

The output contact will be closed by pressing the button.



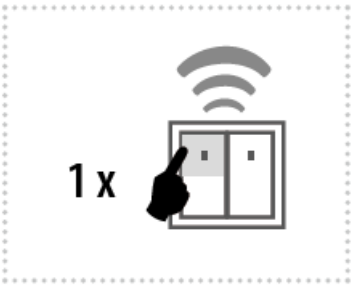
Programming



Function switch off

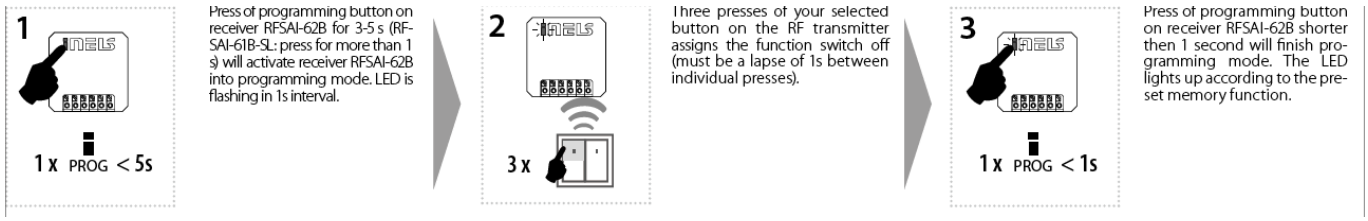
Description of switch off

The output contact will be opened by pressing the button.



Programming

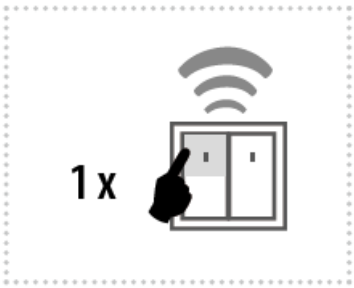
Press of programming button on receiver RFSAI-62B for 3-5 s (RFSAI- 61B-SL: press for more than 1 s) will activate receiver RFSAI-62B into programming mode. LED is flashing in 1s interval.



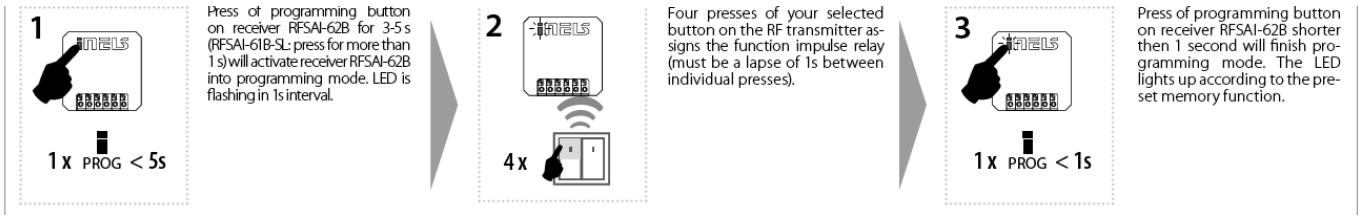
Function impulse relay

Description of impulse relay

The output contact will be switched to the opposite position by each press of the button. If the contact was closed, it will be opened and vice versa.



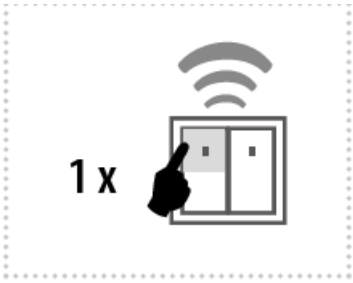
Programming



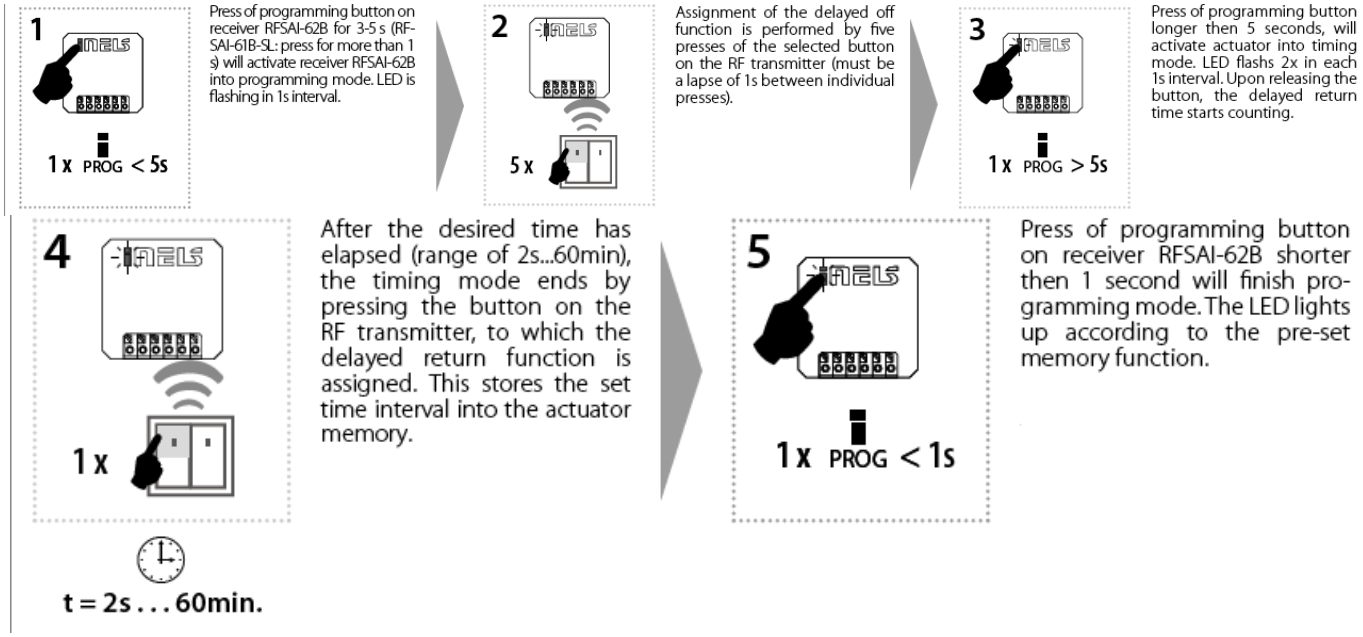
Funcion delayed off

Description of delayed off

The output contact will be closed by pressing the button and opened after the set time interval has elapsed.



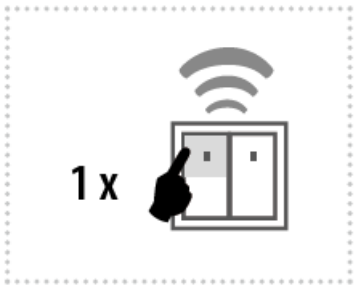
Programming



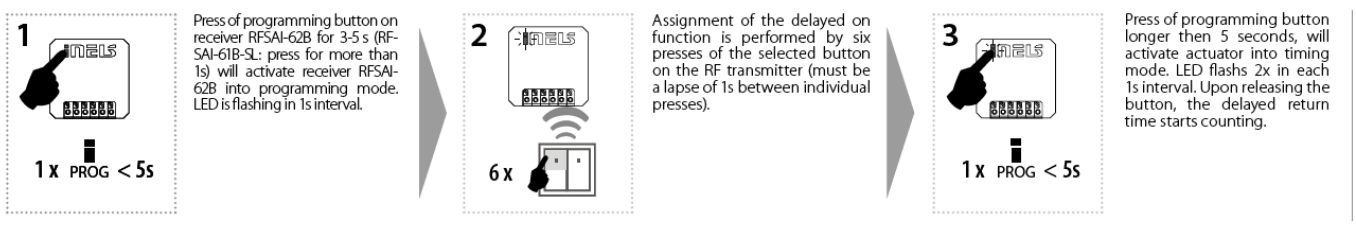
Function delayed on

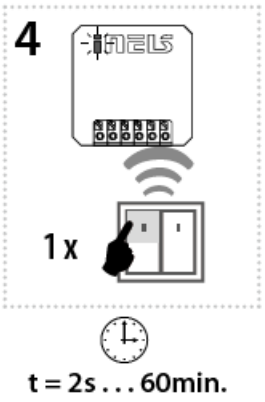
Description of delayed on

The output contact will be opened by pressing the button and closed after the set time interval has elapsed.

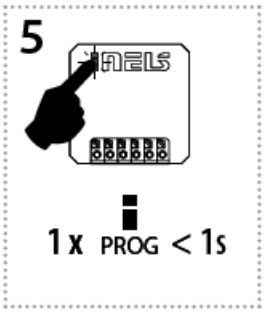


Programming





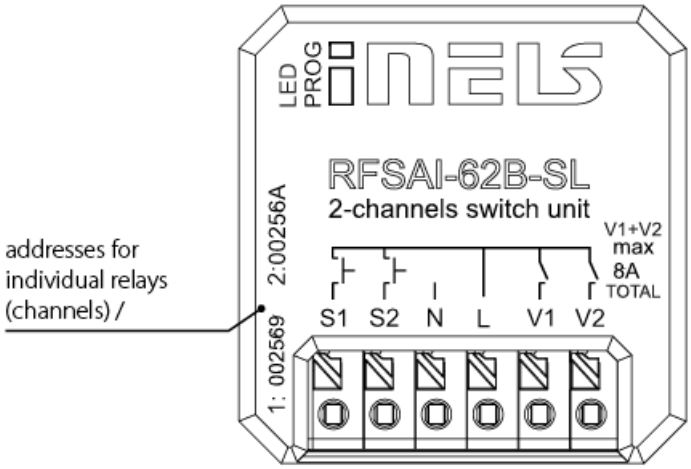
After the desired time has elapsed (range of 2s...60min), the timing mode ends by pressing the button on the RF transmitter, to which the delayed return function is assigned. This stores the set time interval into the actuator memory.



Press of programming button on receiver RFSAI-62B shorter then 1 second will finish programming mode. The LED lights up according to the pre-set memory function.

Programming with RF control units

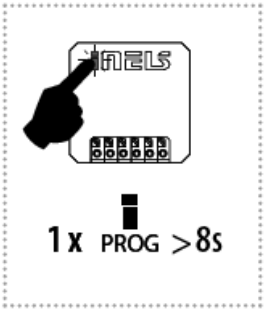
Addresses listed on the front side of the actuator are used for programming and controlling the actuator and individual RF channels by control units.



Delete actuator

Deleting one position of the transmitter

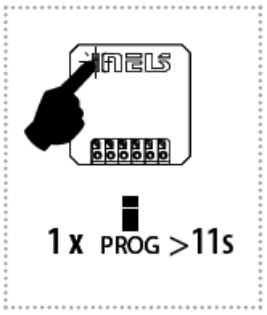
By pressing the programming button on the actuator for 8 seconds (RFSAI-61B-SL: press for 5 second), deletion of one transmitter activates. LED flashs 4x in each 1s interval. Pressing the required button on the transmitter deletes it from the actuator's memory. To confirm deletion, the LED will confirm with a flash long and the component returns to the operating mode. The memory status is not indicated. Deletion does not affect the pre-set memory function.



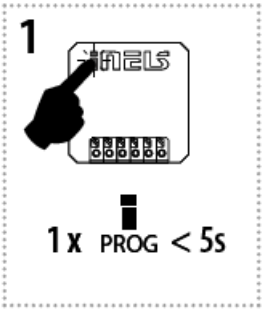
Deleting the entire memory

By pressing the programming button on the actuator for 11 seconds (RFSAI-61B-SL: press for more than 8 second), deletion occurs of the actuator's entire memory. LED flashs 4x in each 1s interval. The actuator goes into the programming mode, the LED flashes in 0.5s intervals (max. 4 min.). You can return to the operating mode by pressing the Prog button for less than 1s. The LED lights up according to the pre-set memory function and the

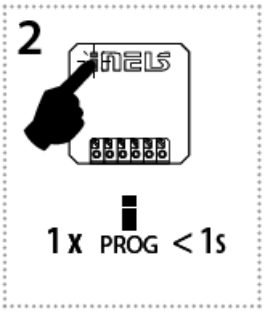
component returns to the operating mode. Deletion does not aff ect the pre-set memory function.



Selecting the memory function
Press of programming button on receiver RFSAI-62B for 3-5 second (RFSAI-61B-SL: press for 1 second) will activate receiver RFSAI- 62B into programming mode. LED is flashing in 1s interval.



Press of programming button on receiver RFSAI-62B for 3-5 second (RFSAI-61B-SL: press for 1 second) will activate receiver RFSAI- 62B into programming mode. LED is flashing in 1s interval.



- **Memory function on:**
  - For functions 1-4, these are used to store the last state of the relay output before the supply voltage drops, the change of state of the output to the memory is recorded 15 seconds after the change.
  - For functions 5-6, the target state of the relay is immediately entered into the memory after the delay, after re-connecting the power, the relay is set to the target state.
- **Memory function off:**
  When the power supply is reconnected, the relay remains off.

The external button RFSAI-62B-SL is programmed in the same way as for wireless. RFSAI-11B-SL it is not programmed, it has a fixed function.

Technical parameters

Supply voltage:		230 V AC		
Supply voltage frequency:		50-60 Hz		
Apparent input:		7 VA / cos φ = 0.1		
Dissipated power:		0.7 W		
Supply voltage tolerance:		+10 %; -15 %		
Output				
Number of contacts:		1x switching / 1x kapcsoló		2xswitching/2x kapcsoló8
Rated current:		A / AC1		
Switching power:		2000 VA / AC1		
Peak current:		10 A / <3 s		
Switching voltage:		250 V AC1		
Mechanical service life:		1×107		
Electrical service life (AC1):		1×105		
Control				
Wireless:		25-channels/ 25 csatorna	2 x 12-channels/2×12 csatorna	
Number of functions:		1	6	6
Communication protocol:		RFIO2		
Frequency:		866–922 MHz (for more information see p. 74)/ 866–922 MHz (lásd a 74. oldalon)		
Repeater function:		yes/ Igen		
Manual control:		button PROG (ON/OFF)/ PROG gomb (ON/OFF)		
External button / switch: Range:		yes/ Igen		
Other data		in open space up to 200 m/ nyílt térben 200 m-ig		
Operating temperature:				
Operating position:		-15 až + 50 °C		
Operating position:		any/ Bármi		
Mounting:		free at lead-in wires/ laza a tápvezetékeken		
Protection:		IP40		

Overvoltage category:		III.	
Contamination degree:		2	
Connection:		screwless terminals/ csavar nélküli bilincsek	
Connecting conductor:		: 0.2-1.5 mm2 solid/flexible/ 0.2-1.5 mm^2 szilárd/rugalmas	
Dimensions:		43 x 44 x 22 mm	
Weight:		31g	45 g
Related standards:		EN 60730, EN 63044, EN 300 220, EN 301 489	

Supply voltage:	230 V AC		
Supply voltage frequency:	50-60 Hz		
Apparent input:	7 VA / cos φ = 0.1		
Dissipated power:	0.7 W		
Supply voltage tolerance:	+10 %; -15 %		
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Number of contacts:	1x switching / 1x kapcsoló		2xswitching/2x kapcsoló8
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Switching power:	2000 VA / AC1		
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Switching voltage:	250 V AC1		
Mechanical service life:	1×107		
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Repeater function:	yes/ Igen		
Manual control:	button PROG (ON/OFF)/ PROG gomb (ON/OFF)		

External button / switch: Range:	yes/ Igen	
Other data	in open space up to 200 m/ nyílt térben 200 m-ig	
Operating temperature:		
Operating position:	-15 až + 50 °C	
Operating position:	any/ Bármi	
Mounting:	free at lead-in wires/ laza a tápvezetékeken	
Protection:	IP40	
Overvoltage category:	III.	
Contamination degree:	2	
Connection:	screwless terminals/ csavar nélküli bilincsek	
Connecting conductor:	: 0.2-1.5 mm2 solid/flexible/ 0.2-1.5 mm^2 szilárd/rugalmas	
Dimensions:	43 x 44 x 22 mm	
Weight:	31g	45 g
Related standards:	EN 60730, EN 63044, EN 300 220, EN 301 489	

Control button input is at the supply voltage potential.

Attention:
When you instal iNELS RF Control system, you have to keep minimal distance 1 cm between each units. Between the individual commands must be an interval of at least 1s.

Warning
Instruction manual is designated for mounting and also for user of the device. It is always a part of its packing. Installation and connection can be carried out only by a person with adequate professional qualifi cation upon understanding this instruction manual and functions of the device, and while observing all valid regulations. Trouble-free function of the device also depends on transportation, storing and handling. In case you notice any sign of damage, deformation, malfunction or missing part, do not install this device and return it to its seller. It is necessary to treat this product and its parts as electronic waste after its lifetime is terminated. Before starting installation, make sure that all wires, connected parts or terminals are de-energized. While mounting and servicing observe safety regulations, norms, directives and professional, and export regulations for working with electrical devices. Do not touch parts of the device that are energized – life threat. Due to transmissivity of RF signal, observe correct location of RF components in a building where the installation is taking place. RF Control is designated only for mounting in interiors. Devices are not designated for installation into exteriors and humid spaces. The must not be installed into metal switchboards and into plastic switchboards with metal door – transmissivity of RF signal is then impossible. RF Control is not recommended for pulleys etc. – radiofrequency signal can be shielded by an obstruction, interfered, battery of the transceiver can get fl at etc. and thus disable remote control.

ELKO EP declares that the RFSAI-xxB-SL type of equipment complies with Directives 2014/53/EU, 2011/65/EU, 2015/863/EU and 2014/35/EU. The full EU

Declaration of Conformity is at:

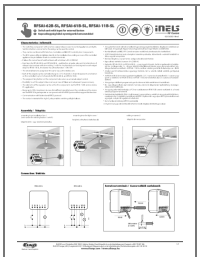
- **https://www.elkoep.com/switching-units-with-inputs-for-external-buttons—-rfsai-11b-sl**

- https://www.elkoep.com/switching-units-with-inputs-for-external-buttons—-rfsai-61b-sl
- https://www.elkoep.com/switching-units-with-inputs-for-external-buttons—rfsai-62b-sl

ELKO EP, s.r.o., Palackého 493, 769 01 Holešov, Všetuly, Czech Republic

- **Tel**.: +420 573 514 211
- **e-mail**: elko@elkoep.com
- www.elkoep.com

Documents / Resources

	iNELS RFSAI-xB-SL Switch Unit with Input For External Button [pdf] User Manual RFSAI-62B-SL, RFSAI-61B-SL, RFSAI-11B-SL, RFSAI-xB-SL Switch Unit with Input For External Button, Switch Unit with Input For External Button, Input For External Button, External Button, Button

References

- ELKO EP - Global relay manufacturer • ELKO EP
- Kezdőlap • ELKO EP Hungary