## iNELS

Wireless electro-installation

## 


elkoep.com/wireless


## ELKO EP

ELKO EP have been your partner in the field for 30 years, developing and manufacturing the highest quality electronic devices for electroinstallation as well as smart system for residential and building automation.

ELKO EP employs more than 350 people across 15 foreign branches and exports its products to more than seventy countries. Company of the Year, Visionary of the Year, Superbrands and Global Exporter of the Year are just some of the awards we have received throughout the years as we consistently strive to move forward in the field of innovation and development.

Millions of relays, thousands of smart homes, hundreds of buildings and many satisfied customers - This is ELKO EP; a traditional company based in the center of Europe, where own development, production, logistics, and service are at the forefront of our focus.

Facts \& stats


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| On wall button controllers | Glass touch controller | Wireless touch unit | RF Key |
| RFWB-20 / RFWB-40 <br> - 2 or 4 buttons <br> - simple installation - can be attached or fixed anywhere <br> - in LOGUs ${ }^{90}$ design frames (natural materials and colour combinations) | RFGB-20 / RFGB-40 <br> - wall controller in elegant glass design <br> - 2 or 4 buttons <br> - in black or white glass sharp or rounded edges | RF Touch-2/BE, RF Touch-2/BR <br> - wireless touch unit for flushed mount <br> - it will become a central, wireless intuitively controlled home <br> - coloured 4" TFT display <br> - eLAN-RF gateway included | RF Key-40B/W <br> - 4 or 6 buttons controller <br> - pocket controller for every day <br> - in colour white or black |
|  |  |  |  |

Matter compatibility


When using wireless elements is faster and cheaper.

iNELS Wireless: units overview . 8

## Controllers


 14

RFSW-62, RFSW-262 | Glass touch controller with output relays - NEW! ........................................................................................ 17
RFDW-71, RFDW-271 | Glass touch controller with dimmer - NEW! ............................................................................................................. 18
RFGB-220/W, RFGB-220/B, RFGB-240/W, RFGB-240/B | Glass touch controllers, ROUND - PAIRING BUTTON ........................................ 19

RF KEY-40/W, RF KEY-40/B, RF KEY-60/W, RF KEY-60/B | Key fob - PAIRING BUTTON .......................................................................... 22

Switches
RFSA-61B | Switch unit, 1-channel - (BOX) $\qquad$
RFSAI-61BPF-SL - NEW!, RFSAI-61B-SL, RFSAI-62B-SL, RFSAI-11B-SL | Switch units with the inputs for external buttons - (BOX-SL) RFJA-32B-SL | Switch unit for shutters - (BOX-SL) $\qquad$ 25


RFSA-61MI, RFSA-61M | Switch unit, 1 channel - (1-MODUL DIN rail)25
RFSA-66MI, RFSA-66M | Switch unit, 6 channels - (3-MODUL DIN rail) ..... 26
.27
RFSC-61N | Switch socket-plug - (PLUG) 29

## Dimmers

RFDAC-71B|Analog controller,0(1)-10V-(BOX)....................................................................................................................................... 30

RFDALI-32B-SL, RFDALI-04B-SL | DALI controller, for 32/4 addresses - (BOX-SL) - NEW! .......................................................................... 32
RFDEL-71M | Universal dimmer, 1-channel - (3-MODUL DIN rail) .................................................................................................... 33
RFDEL-76M | Universal dimmer, 6-channels - (6-MODUL DIN rail) .................................................................................................................. 34
RFDA-73M/RGB | Dimmer for LED (RGB) strips, 3-channels - (3-MODUL DIN rail) ..................................................................................... 35

Temperature control
RFTC-3 | Glass touch thermostat for fancoils - NEW! ...........................................................................................................................................



RFTI-20 | Temperature and humidity sensor - (SURFACE) ...................................................................................................... 43
RFATV-2 | Wireless thermovalve ............................................................................................................................................. 44


## Converters

RFIM-40B/BP-SL, RFIM-40B/230-SL | Input contacts converter - (BOX-SL) - PAIRING BUTTON ........................................................... 46
RFSG-1M | Input contact converter (1-MODUL DIN rail) - PAIRING BUTTON ......................................................................................... 47
RFTM-1 Pulse converter - (IP65) .................................................................................................................................................... 48

## Detectors

RFSF-100 | Flood detector $\qquad$
RFSOU-1 | Twilight switch - (IP65) ........................................................................................................................................................ $50 .{ }_{-1}$ RFWD-100 | Window/door detector .. $\qquad$ RFMD-100 | Motion detector. $\qquad$ 51
RFMD-200|Motion detector for celiing mounting - NEW. 52
.. 53
RFSLT-S3 | Wireless hydrostatic level sensor - (IP65) - NEW! .....  54
System units
RF Touch-2/BE, RF Touch-2/BR | Wireless touch unit - NEW! ..... 56
eLAN-RF-103 | Smart RF gateway MOTT58
RFRP-20N | Repeater to extend the range - (PLUG) ..... 59
matter
RFWB-40G/MT | On-wall button controllers, 4 buttons MATTER - (LOGUS ${ }^{\circ}$ ).60
RFGB-40B/MT, RFGB-40W/MT | Glass touch controller - 4 buttons, SHARP MATTER ..... 61
RFSAl-62B-SL/MT | Switch unit with inputs for external buttons MATTER - (BOX-SL)$\begin{array}{r}62 \\ . \\ \hline\end{array}$

RFDEL-71B-SL/MT | Universal dimmer MATTER| .... .62 |
| :--- |
| . 63 |

ITM Motion detector for ceiling mounting MATTER ..... 64
65
HRESK
HRESK
HRESK
RFGS-30/S | Infront of door hotel room unit - NEW68
RFSW-62/S | Glass touch wireless controler with symbols - NEW! ..... 69
RFSA-266M | Switch unit for fancoil control - NEW! ..... 70
RFSAI-161B | Ligting control unit with pair detectors and external button input - (BOX ..... $\begin{array}{r}. . \\ .71 \\ \hline 73\end{array}$
Accessories
AN-I | Internal antenna .....  75
RFAF/USB|Service Key. ..... 75
AN-E1 | External antenna ..... 76
AN-E3 | External antenna .....  76
MS | Sensors for RFTM-1 ..... 77
77
WS | Sensors for RFTM- ..... 77
Overview of functions
Applications. .....  78
Voice assistants ..... 80
Product loadability ..... 8284
86
Pairing controllers with ineLS Wireless devices
Pairing controllers with ineLS Wireless devices
Setting the functions on the controllers ..... 86
87
Installation possibilities.
Scope Architecture .. 90


| N | P | ${ }_{6}^{18}$ | $\stackrel{\downarrow}{\lambda K}$ | B |
| :---: | :---: | :---: | :---: | :---: |
| NEW | PAIRING BUTTON | INCREASED PROTECTION | matter | MQTT |



Converters


RFMD-200


Matter



RFMD-200/MT
Motion detector MATTER

Hotel Retrofit (HRESK)
RFGS-30/SB - black glass

| RFGS-30/SW - white glass |
| :---: |
| Infront of dor hotel |
| room unit |


| RFSW-62/SB - black glass |
| :---: |
| RFSW-62/SW - white glass |
| Wireless touch glass remote |
| control with symbols |

Accessories



- On-wall button controller is used to control switches and dimmer (lights, gate, garage door, blinds, etc.).
- RFWB-20/G(GB): two buttons enable control of two units independently - RFWB-40/G(GB): four buttons enable control of four units independently. - The flat design with level base makes it ideal for fast installation on any
surface (fixation with adhesive or screws in the installation box). surface (fixation with adhesive or screws in the installation box) When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF/ON, blinds up/down).
- In LOGUS ${ }^{\circ 0}$ switch frame design (plastic, glass, wood, metal, stone),
- Option of setting light scenes, where with a single press, you can con-- trol units of iNELS Wireless.
- Battery power supply ( 3 V CR 2032 battery - included in the supply) with battery life of around 5 years based on frequency of use.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20N or protoco
component RFIO2 that support this feature.
- RFWB enables communication (RFIO2) and can thus communicate with the CU3-02M.
- Attention: The controller is paired with the elements using the pairing
button. Ord. codes for controllers with pairing button: RFWB-20/G Order button. Ord. codes for controllers with pairing button: RFWB-20/G Orde
No.: 8502 , RFWB-40/G Order No.: 8489 , see Pairing controllers on p. 84.


## Device description




RFWB-20/GB


RFWB-20/G


RFWB-40/GB


RFWB-40/G



* See page 75 for the load chart for each light source.


The glass design controlerwith dimmer and touch buttons is used to control light sources:
R- classic lamps (resistive load)
L- halogen lamps with wound transformer (inductive load)
C - halogen lamps with electronic transformer (capacity load) ESL - dimmable energy-efficient fluorescent lamps LED - LED light sources ( 230 V ) equipped with LED.
-The touch buttons on the circuit breaker allow you to directly control the integrated dimmer as well as other components of the installation
The backlight intensity (white IED) of the buttons is automatically The backlight intensity (white LED) of the buttons is automatically
adjusted depending on the ambient lighting. ent lighting

- They can be combined with detectors, controllers, iNELS Wire
system components for output control from other locations.
- 7 light functions - smooth increase or decrease with time setting $2 \mathrm{~s}-30 \mathrm{~min}$. Function description can be found on p. 82. - When switched off, the set level is stored in the memory, and when switche back on, it returns to the most recently set value Thank to setting the min. brightness you will eliminate flashing of
the EED and ESL light sources - The universal dimmer may be controlled by up to 25 -channels. - Possibility to set the memory status in case of power failure. - 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 the controller and unit, use the signal repeater RFRP-20N or protocol component RFIO2 that support this feature.
Pairing controllers on p. 84 .


Connection



Variants


- The Remote Wireless controller with display is a central controller for


| Technical parameters | RF Pilot/W | RF Pilot/A |
| :---: | :---: | :---: |
| Display |  |  |
| Type: | colour OLED |  |
| Resolution: | $128 \times 128$ pixels |  |
| Side ratio: | 1:1 |  |
| Visible surface: | $26 \times 26 \mathrm{~mm}$ |  |
| Backlighting: | self-illuminating text |  |
| Diagonal: | 1.5" |  |
| Contro: | direction button, control buttons |  |
| Power supply |  |  |
| Power supply: | $2 \times 1.5 \mathrm{~V}$ AAA batteries/RO3 |  |
| Battery life: | approx. 3 years, <br> according to the frequency of use and battery type |  |
| Control |  |  |
| Range: | in open space up to 200 m |  |
| Communication protocol: | RFIO |  |
| Frequency: | 866-922 MHz (for more information see p . 81 ) |  |
| Other data |  |  |
| Operating temperature: | $0 \mathrm{to}+55^{\circ} \mathrm{C}$ |  |
| Storage temperature: | -20 to $+70^{\circ} \mathrm{C}$ |  |
| Colourdesign: | white | anthracite |
| Protection: | 1 P 20 |  |
| Operating position: | any |  |
| Dimensions: | $130 \times 41 \times 18 \mathrm{~mm}$ |  |
| Weight: | 61 g |  |
| Related standards: | EN 60730, EN 63044, EN 300 220, EN 301489 |  |

## RF Pilot



- The Remote Wireless controller with display is a central controller for
switching electrical appliances and equipment, dimming lights, conswitching electrical appliances and equipment, dimming lights
trolling binds, etc.
- Designed in white and anthracite with colour OLED display.
. 4 directional joystick +2 buttons for intuitive operation.
- 4 directional joystick +2 buttons for intuitive operation.
- Option of setting light scenes, where with a single press, you can conOption of setting light scen
trol up to 10 units at once.
- Display of room temperature, battery status, date and time directly on display.
- The Favorites mode lets you preset the most frequently used devices
on the home screen. on the home screen.
- Bidirectional communication, transmits and receives commands and
displays the status of units. displays the status of units.
- Thanks to the function of measuring the signal between the controller and unit, you can use it for testing the range and signal quality. - Battery power ( $2 \times 1.5 \mathrm{~V}$ AAA batteries - included in supply with battery
life of around 3 years based on frequency of use and type of batteries Range up to 200 m (in open space), if the signal is insufficient between - the controller and unit, use the signal repeater RFRP-2ON or protocol component RFIO2 that support this feature.

- serves to select the most frequently used devices
on display activation, the "Favourite" menu pops up automatically
to provide you with a quick access to controlling devices


$$
\begin{aligned}
& \text { Group contro of devices } \\
& \text { witha sing ecommand } \\
& \text { "'scenvem mode) }
\end{aligned}
$$

$$
\begin{array}{ll}
\text { Command to oxecutut functio } & \text { Function execution feedback }
\end{array}
$$

(

## SCENES

- serves to control actuators as a group with a single touch - possibility to set up scenes; on activation, for example, window shutters are pulled down and the light will adjust to the required brightness


## WINDOW SHUTTERS

- controlling window shutters, blinds, garage door, etc.
window shutters are controlled separately or as a group the window shutter receivers are powered by either 230 V or 24 VDC (shutters between windows)


## SWITCHING

-this function serves to switch on/off lights, sockets, electrical appliances and devices
intuitive control thanks to customized name options
switching actuator function selections: switch on/off, impulse relay, button, delayed ON/OFF (time of delay from 2 seconds to 60 minutes) function description can be found on p. 82

## DIMMING

the regulation of light intensity (light bulbs, LED strips, halogen lights with electrical or coil transformer, fluorescent tubes with dimmable
ball ast 1-10 V ballast $1-10 \mathrm{~V}$ ) of individual dimmed circuits (such as "lights" or "sunrise/sunset" imitation - light gradually goes on or off during the preset period between 2 seconds and 30 minutes



| Technical parameters | RF KEY-40 | RF KEY-60 |
| :---: | :---: | :---: |
| Supply voltage: | 3 V CR 2032 battery |  |
| Battery life: | around 5 years based on frequency of use |  |
| Transmission indication: | red LED |  |
| Number of buttons: | 4 | 6 |
| Communication protoco: | RFIO |  |
| Transmitter frequency: | 866-922 MHz (for more information see p. 81) |  |
| Signal transmission method: | unidirectionally addressed message |  |
| Range: | in open space up to 200 m |  |
| Other data |  |  |
| Operating temperature: | -10 to $+50^{\circ} \mathrm{C}$ |  |
| Operating position: | any |  |
| Colour design: | white, black |  |
| Protection: | 1120 |  |
| Contamination degre: | 2 |  |
| Dimensions: | $64 \times 25 \times 10 \mathrm{~mm}$ |  |
| Weight | 16 g |  |
| Related standards: | En 60730, EN 63044, EN 300 220, EN 301489 |  |

- Key fob - sized remote control, available in black and white.
- When pressing the button, it sends a set signal (ON/OFF, dimming,
time switching OFF/ON, blinds un/down). time switching OFF/ON, blinds up/down).
RF KEY-40. four buttons enable control of four units independently,
RF KEY-60: six buttons enable control of four units independently. Battery power supply (3VCR 2032 battery - included in the supply)
with battery life of around 5 years based on frequency of use. Attention:The controller is paired with the elements using the $p$ button. Ord. codes for controllers with pairing button: RF KEY-40/W Order No.: 8504 , RF KEY-40/B Order No.: 8503 , RF KEY-60/W Order No.: Order No. 8504, , KFY-4N.

8505. RF KEY-60/B Order No.: 8490 , see Pairing controllers on p. 84.

## Device description





The switching unit with 1 output channel 16 A is used to control ap pliances, lights (easy to integrate it to control garage doors or gates). They can be combined with detectors, controllers, iNELS Wireles or system components.

- RFSA-61B: multifunction design - button, impulse relay and time function of delayed ON or OFF with time setting of $2 \mathrm{~s}-60 \mathrm{~min}$. Function description can be found on p. 86
The switching unit may be controlled by up to 25 -channels.
The programming button on the unit is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 200 m (in open space), if the signal is insufficient between
the controller and unit, use the signal repeater RERP-20N or protocol the controller and unit, use the signal repeater RFRP-20N or protoco component RFIO2 that support this feature.
The BOX design lets you mount it right in an installation box, a ceiling

| Technical parameters | RFSA-618/230V |
| :---: | :---: |
| Supply voltage: | 230 VAC |
| Supply voltage frequency: | $50-60 \mathrm{~Hz}$ |
| Apparent input: | $7 \mathrm{VA} / \cos \varphi=0.1$ |
| Dissipated power: | 0.7 w |
| Supply voltage tolerance: | +10\%; $15 \%$ |
| Output |  |
| Number of contacts: | $1 \times \mathrm{NO}$, non potencial |
| Rated current: | $16 \mathrm{~A} / \mathrm{AC1}$ |
| Switching power: | $4000 \mathrm{VA/AC1}, 384 \mathrm{~W} / \mathrm{DC}$ |
| Peak current: | $30 \mathrm{~A} / 2 \mathrm{~s}$ |
| Switching voltage: | $250 \mathrm{VAC1} 124 \mathrm{VDC}$ |
| Max. DC switching power: | 500 mw |
| Mechanical service life: | $3 \times 10^{7}$ |
| Electrical service life (AC): | $0.7 \times 10^{5}$ |
| Control |  |
| Wireles: | up to 25-channels (buttons) |
| Communication protocol: | RFIO2 |
| Frequency: | 866-922 MHz (for more information see p. 81) |
| Repeater function: | yes |
| Manual control: | button PROG (ON/OFF) |
| Range: | in open space up to 200 m |
| Other data |  |
| Operating temperature: | -15 to $+50^{\circ} \mathrm{C}$ |
| Operating position: | any |
| Mounting: | free at lead-in wires |
| Protection: | 1 P30 |
| Overvoltage category: | III. |
| Contamination degree: | 2 |
| Terminals (CY wire, cross section): | $2 \times 0.75 \mathrm{~mm}^{2}, 2 \times 2.5 \mathrm{~mm}^{2}$ |
| Length of terminals: | 90 mm |
| Dimensions: | $49 \times 49 \times 21 \mathrm{~mm}$ |
| Weight: | 46 g |
| Related standards: | en 60730, en 63044, En 300 220, en 301489 |

or controlled appliance cover.

## Device description

 Connection



The switching unit for shutters has 2 output channels used to control
garage doors, gates, blinds, awnings...
They can be combined with Controllers or iNELS Wireless System
-The BOX version offers mounting directly in the installation box, ceiling or motor drive cover.
RFJA-32B-SL: connection of switched load $2 \times 8 \mathrm{~A}(2 \times 2000 \mathrm{~W})$, with the possibility of connecting existing wire buttons.
Short presses of the controller allow tilting of the stats, of the raise / lower moves the blinds to the end position.
Each component can be controlled by up to 25 channels (1 channel represents one assigned controller).
The programming button on the device also serves as a manual output control.
For components, the repeater function can be set via the RFAF / USB
service device. service device.
Range up to 200 m (outdoors), in case of insufficient signal between the controller and the device, use the RFRP-20N signal repeater or components with the RFIO2 protocol that support this function. The contact material of the $\mathrm{AgSnO}_{2}$.

Device description


Function description
As long as the button on the remote control is pressed for $<2 \mathrm{~s}$, the
blinds move upwards $(\mathbf{\Delta}$ ) or downwards ( $\mathbf{\nabla}$ ).
2. When the button is pressed for> 2 s, the blinds move upwards $(\mathbf{\Delta})$ or
downwards $(\boldsymbol{\nabla})$ to the end position. Connection



- The switching unit with $1 \times 12$ A output channel is used for controlling
appliances, sockets or lights. appliances, sockets or lights.
- They can be combined with detectors, controllers, inELS Wireless or
system components. system components.
Mayed ONction design - button, impulse relay and time function of de
laf with tin can be found on p. 86 .
- The switching unit may be controlled by up to 25 -channels.
- The programming button on the unit is also used for manual control
of the output. of the output.
- Range up to 200 m (in open space), if the signal is insuffficient between
the controller and unit use the signal the controller and unit, use the signal repeater RFRP20 or protoco
component RFIO2 that support this feature. component RFIO2 that support this feature.
EAN code:


| Technical parameters | RFUS-61/230V |
| :---: | :---: |
| Supply voltage: | 230 VAC |
| Supply voltage frequency: | $50-60 \mathrm{~Hz}$ |
| Apparent power: | $5 \mathrm{VA} / \cos \varphi=0.1$ |
| Dissipated power: | 0.6 W |
| Supply voltage tolerance: | +10\%\%; $15 \%$ |
| Output |  |
| Rated current: | 1x switching (AgSnO ${ }_{2}$ ) |
| Number of contacts: | $12 \mathrm{~A} / \mathrm{ACl}^{1}$ |
| Switching power: | $3000 \mathrm{VA/AC1}, 384 \mathrm{~W} / \mathrm{DC}$ |
| Peak current: | $30 \mathrm{~A} / 3 \mathrm{~s}$ |
| Switching voltage: | $250 \mathrm{VAC1} / 24 \mathrm{VDC}$ |
| Min. switching power DC: | 500 mw |
| Mechanical service life: | $3 \times 10^{7}$ |
| Electrical service life (AC1): | $0.7 \times 10^{5}$ |
| Control |  |
| Wireless: | up to 25-channels (buttons) |
| Communication protoco: | RFIO2 |
| Frequency: | 866-922 MHz (for more information see p. 81) |
| Repeater function: | yes |
| Manual control: | PROG (ON/OFF) button |
| Range: | in open space up to 200 m |
| Other data |  |
| Operating temperature: | -15 to $+50^{\circ} \mathrm{C}$ |
| Operating position: | any |
| Mounting: | screws |
| Protection: | 1P65 |
| Overvoltage category: | III. |
| Contamination degree: | , |
| Cross-section of connecting | max. $1 \times 2.5$, max. $2 \times 1.5 /$ |
| wiresommended power cord: | CYKY $3 \times 1.5$ (CYKY 4x1.5) |
| Dimensions: | $136 \times 62 \times 34 \mathrm{~mm}$ |
| Weight: | 1469 |
| Relate standards: | EN 60730, EN 63044, en 300 220, EN 301489 |

- Communication frequency with bidirectional protocol RFIO2.


Connection




| RFEAC－718： 85951888148809 |  | －The BOX design lets you mount it right in an installation box，a ceiling or light cover． |
| :---: | :---: | :---: |
| Technical parameters | RFDAC－71B |  |
| Supply voltage： | $110-230 \mathrm{VaC}$ |  |
| Supply voltage frequency： | $50-60 \mathrm{~Hz}$ | Device description |
| Apparent input： | 3 VA |  |
| Dissipated power： | 1.2 W |  |
| Supply voltage tolerance： | ＋10／－15\％ | tus indica |
| Control |  | coneter |
| Potential－free analog | 0 （1）－10 V／10 mA |  |
| Rated current： | ${ }_{1 \times} \times \mathrm{AgSnO}_{2}$ ， wwitches the phase conductor |  |
| Rated current： | $16 \mathrm{~A} / \mathrm{AC1}$ | ［ick |
| Switching power： | 4000 VA／AC1 | orr $\square_{5}$ |
| Switching voltage： | $250 \mathrm{VAC1}$ | － |
| Mechanical service life： | $3 \times 10^{7}$ | svithed output contact（L） |
| Electrical service lif： | $0.7 \times 10^{5}$ |  |
| Indication： | red LED／green LED | Neutral conductor Phase conductor |
| Output selection： | O（1）－10VPRROG button |  |
| Control |  | Connection |
| Wireless： | up to 25－channels（buttons） |  |


| Wireless： | up to 25－channels（buttons） |
| :---: | :---: |
| Communication protoco： | RFIO2 |
| Frequency： | 866－922 MHz（for more information see p．81） |
| Repeater function： | yes |
| Manual control： | button PROG（ON／OFF） |
| Range： | in open space up to 200 m |
| Minimal control distance： | 20 mm |
| Other data |  |
| Operating temperature： | -15 to $+50^{\circ} \mathrm{C}$ |
| Operating position： | any |
| Mounting： | plug into a socket |
| Protection： | 1 P 30 |
| Overvoltage category： | III． |
| Contamination degree： | 2 |
| Terminals（CY wire，cross－section）： | $3 \times 0.75 \mathrm{~mm}^{2}, 2 \times 2.5 \mathrm{~mm}^{2}$ |
| Length of terminals： | 90 mm |
| Dimensions： | $49 \times 49 \times 21 \mathrm{~mm}$ |
| Weight： | 52 g |
| Related standards： | EN 60730，EN 63044，EN 300 220，EN 301489 |

The device with analog output 0 （1）－10 V is used to control devices， 1 l － minaires，thermal actuators and thermal heads－which are equipped with such an input．
－They can be combined with detectors，controllers，iNELS Wireless or system components．
－Potential free analog
Potential free analog output $0(1)-10 \mathrm{~V}$ ，contact relay 16 A ．
6 light functions－smooth increase or decrease with time setting The analog controller may be controlled by up to 25 － 86 ．
－The programming button on the controller is also used for manua control of the output．
Memory status can be pre－set in the event of a power failure． Range up to 200 m （in open space），if the signal is insufficient between the controller and unit，use the signal repeater RFRP－2No or protocol the controller and unit，use the signal repeater RFRP－20N or protoca
component RFIO2 that support this feature． The BOX design lets you mount it right in an to

## Device description

## ，

Connection example：dimming of fluorescent tubes with dimmable ballast


Connection example：with thermo valve


Universal built－in dimmer is used to regulate light sources
R －classic light bulbs，
－halogen bulbs with wound transformer，
－halogen bublbs with electronic transfo
ESL－dimmable energy saving lamps，
LED－LED light sources $(230 \mathrm{~V}$ ）
They can be combined with Detectors，Controllers or iNELS Wireless System Elements．
7 light functions－smooth start or stop with time setting 2 s－30 min function description p． 86
Min．brightness eliminates flickering LED and ESL light sources．
The universal dimmer can be controlled by up to 25 channe
Control input＂＂＂for connecting an existing wired button．
The programming button on the device also serves as a manual output
control． control．
 The repeater fun
service device．
Range up to 200 m （outdoors），in case of insufficient signal between the controller and the component，use the RFRP－20N signal repeater or components with the RFIO2 protocol that support this function．
The BOX version offers mounting directly in the installation box，ceiling or luminaire cover．

Device descriptio

Types of connectable loads

|  | $\underset{\text { HaL } 12.2 \text { 2av }}{\text { a }}$ 1II | に－ | 吅号 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| $\underset{\text { resisive }}{\text { R }}$ | inductive | $\underset{\text { capactive }}{\text { c }}$ | $\underset{\text { light }}{\text { Led }}$ | $\underset{\substack{\text { ESL } \\ \text { sving }}}{\text { cemer }}$ |

ReDEL－71B

| Technical parameters | RFDEL－71B－SL／230V |
| :---: | :---: |
| Supply voltage： | $230 \mathrm{VAC} / 50 \mathrm{~Hz}$ |
| Supply voltage frequency： | $50-60 \mathrm{~Hz}$ |
| Apparent power： | $5 \mathrm{VA} / \cos \varphi=0.1$ |
| Dissipated power： | 0.5 W |
| Supply voltage tolerance： | ＋10／－15\％ |
| Connection： | 4 －wire，with＂NEUTRAL＂ |
| Output |  |
| Dimmed load： | R，L，，，LED，ESL |
| Contactless： | $2 \times$ MOSEET |
| Load capacity：＊ | max． 300 W＊ |
| Control |  |
| Wieless： | up to 25－channels（buttons） |
| Communication protocol： | RFIO2 |
| Frequency： | $866-922 \mathrm{MHz}$（for more information see p．81） |
| Repeaterfunction： | yes |
| Range： | up to 200 m |
| Manual contro： | tlačitko PROG（ON／OFF） |
| External button／switch： | yes |
| Other data |  |
| Operating temperature： | -15 to $+45^{\circ} \mathrm{C}$ |
| Working position： | any |
| Mounting： | free at lead－in wires |
| Protection： | 1 P 40 |
| Overvoltage category： | III． |
| Contamination degree： | 2 |
| Connection： | screwless terminals |
| Connecting conductor： | $0.2-1.5 \mathrm{~mm}$ 2 solid／flexible |
| Dimensions： | $43 \times 44 \times 22 \mathrm{~mm}$ |
| Weight： | 30 g |
| Related standards： | en 60730，en 63044，En 300 220，en 301489 |


N

EAN code:
REDALL-04

| Technical parameters | RFDALI-04B-SL \| RFDALI-32B-SL |
| :---: | :---: |
| Supply voltage: | $100-230 \mathrm{VAC} / 50 \mathrm{~Hz}$ |
| Supply voltage frequency: | $50 / 60 \mathrm{~Hz}$ |
| Apparent power: | $5 \mathrm{VA} / \cos \varphi=0.1$ |
| Dissipated power: | 3 w |
| Supply voltage tolerance: | +10/-15\% |
| Connection: | 4-wire, L, , , DA, , DA- |
| Output DALI |  |
| Number of devices: | max. 4 \| max. 32 |
| Power supply: | 16V/100 mA |
| Control |  |
| Wireles: | 32-channels |
| Communication protocol: | iNELS Wireless |
| Frequency: | 866-922 MHz (for more information see p. 81) |
| Repeater function: | yes |
| Range: | up to 200 m |
| Manual control: | button PROG (ON/OFF) |
| External button / switch: | yes |
| Configuration |  |
| Interface | Wifi AP 2.4 GHz, webserver |
| Application | Internet browser |
| Other data |  |
| Operating temperature: | -15 to $+50^{\circ} \mathrm{C}$ |
| Working position: | any |
| Mounting: | free at lead-in wires |
| Protection: | 1840 |
| Overvoltage category: | III. |
| Contamination degre: | 2 |
| Connection: | screwless terminals |
| Connecting conductor: | $0.2-1.5 \mathrm{~mm}$ ' solid/flexible |
| Dimensions: | $43 \times 44 \times 22 \mathrm{~mm}$ |
| Weight: | 52 g |
| Related standards: | EN 60730, EN 63044, en 300220, EN 301489, EN 300328 |

The DALI controllers RFDAL-O4B-SL and RFDALI-32B-SL are designed to control devices with a DALL interface, such as dimmers, electronic ballasts, LED converters and more.
The control is performed by components from the iNELS Wireless
system, detectors, controllers or system devices system, detectors, controllers or system devices.
Assign and il devices is performed via webserver. -The DALI bus is powered by the DALI controller.
Control input " 5 " for connecting and controlling external buttons.
-The PROG button on the transmitter also serves as a manual output control Possibility to set memory status in case of power failure
The repeater function of the components can be set via webserver. Range up to 200 m (outdoors), in case of insufficient signal betwee
the controller and the device, use the RFRP-20N signal repeater or the controler and the device, use the RFRP-20N signal repeater
components with the RFIO2 protocol that support this function. The BOX version off ers mounting directly in the installation box, ceiling or luminaire cover, screwless terminals for connection.

## Device description




EAN code:
RFDEL-7M: 8595188148979

|  |  |  |
| :---: | :---: | :---: |
| Apparent power: | 2.5 VA | 1.1 Va |
| Dissipated power: | 0.8W | w |
| Supply voltage tolerance |  |  |



| Control |  |
| :--- | :---: |
| Wireless: |  |
| Communication protocol: | up to 32 channels (buttons) |
| Frequency: | $866-922 ~ \mathrm{MHz}$ (for more information see p .81 ) |


| Frequency: | $866-922 \mathrm{MHz}$ (for more information see p. 81) |
| :--- | :---: |
| Repeater function: | yes |
| Rage: |  |

Repeater function:
Range:

| control: | Sw (ON/OFF button |
| :--- | :--- |


| External button: | max. 50 m cable |
| :--- | :---: |
| Glow lamps connection: | no |


| Glow lamps connection: | potentiometer or $0(1)-10 \mathrm{~V}$ |
| :--- | :---: |
| Analog control: |  |
| Wireless Antenna: | AN-l included (SMA connector**) |
| Other data |  |

The universal modular dimmer is used to regulate light sources R- classic lamps (resistive load)

- halogen lamps with wound transformer (inductive load)
C - halogen lamps with electron

ESL - dimmable energy-efficient fuarsformer (capacity load
ESL - dimmable energy-efficient fluorescent lamps
EED - LED light sources equiped with LED.
Control can be performed by:
d detectors, Controllers and System units iNELS Wireless b) potentiometer
d) existing button in the installation

6 light functions - smooth increase or decrease with time settin s-30 min. Function description can be found on p. 86 .
Thanks to setting the min. brightness by potentiometer, you will elim nate flashing of the LED and ESL light sources.

- The universal dimmer may be controlled by up to 32 -channels.
- The programming button on the controller is also used for manual control of the output.
unit in a metal switchbo internal antenna AN-I, in case of locating the tter signal switchboard, you can use the external antenna AN-Efo entignal reception, see accessories on p. 76 .
- Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient betwee
the controller and unit, use the signal repeater RFRP-20N or protoco he controller and unit, use the signal repeater RERP-20N or protocol The unit's 3-MODULE design with switchb


## Device description

$\begin{aligned} & \text { Exteral control by } \\ & \text { potentiometer oro(1)-10V }\end{aligned}$

| Output mode |  | Indication of device mode |
| :---: | :---: | :---: |
| Manual <br> control/program |  | Operating mode indication |
| Potentiometer to set min. brightness |  | Wireless antenna |
| Switch to <br> select light source | (B) | Program button |
|  |  <br> (2) (2) OBOB | Output |
| Exteral control by button |  |  |

Connection and external control options


Wireless Antenn Operating temperat

| Operating temperature: | $-20 \mathrm{to}+35^{\circ} \mathrm{C}$ |
| :--- | :---: |
| Storage temperatur: | -30 to $+70^{\circ} \mathrm{C}$ |
| Operating position: | verical |
| Mounting: | DIN rail CN 60715 |

Mounting:
Overvoltage category:
Crosss-section of connecting wies: $\quad$ max. $1 \times 2.5$, max. $2 \times 1.5 /$ with a hollow max. $1 \times 2.5$
Dimensions
$90 \times 52 \times 65 \mathrm{~mm}$

| Weight: |  |
| :--- | :--- |
| Related standards: | EN 60730, en 63044, EN 300220, EN 301489 |

* See page 83 for the load chart for each light source.
** Max. Tightening Torque for antenna connector is 0.56 Nm .


* Max Tightening Torque for antenna connector is 0.56 Nm .
- The dimmer for LLED strisp is used for independent control of 3 single LED strips or one RGB LED strip
The expanded selection of control modes enables it to be combined with a) detectors, controllers and system units iNELS Wireless
b) device with out

The unit's 3-MODULE design with switchboard mounting enables con
nection of dimmed load $3 \times 5 \mathrm{~A}$ which represents. nection of dimmed load $3 \times 5 \mathrm{~A}$, which represents: a) single-colour LED strip 7.2 W -

6 light functions - smooth increase or decrease with time setting
$2 s-30$ min. Function description can be found on p. 86 . .
The dimmer may be controlled by up to 32 -channels.
-The power supply of the unit is in the range of $12-24 \mathrm{VDC}$, and is indicated by a green LED.
The package includes an internal antenna AN-I, in case of locating the nit in a metal switchboard, you can use the external antenna AN-E for better signal reception, see accessories on p. 76 .

- Memory status can be pre-set in the event of a power failure.
- 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.


## Device description

| Inputs $0-10 / 1-10 \mathrm{~V}$ controlling colours |  | $\begin{array}{c}\text { ut } 0-10 / 1-10 v \text { controlling } \\ \text { overal brightness }\end{array}$ |
| :---: | :---: | :---: |
|  | itititit (2)(2)(2)(2) | Auxiliary yoltage |
| Red Leo status | $\left\|\left.\right\|_{\text {Reo }}{ }^{+}\right\| \text {Gereten } \mid \text { eve }$ |  |
| Green LED <br> power supply |  | Switch MODE selection of mode |
| antenna |  | Colour and brightnes preset for Wireless |
| Program button |  | Frequency of output PWM |
|  |  | Voltage supply Un + |
| Votage supply GND | (2)SO2(2)S | Outputs for load connection |

Output variations and external control options


RFDA-73M/RGB | Dimmer for LED (RGB) strips, 3-channels
RFDSC-71N | Dimming socket-plug

- The dimmable socket is used to regulate the brightness of the lumi-R- classic lioht bubs (resistive load) $R$ - Classic ight bulbs (rstive load
- halogen bulbs with wound transformer (inductive load)

C- halogen bulbs with electronic transformer (capacitive load) ESL - dimmable energy saving lamps
LED - light sources equipped with LED
Multifunction - 6 light functions - smooth start or stop with time setting 2 s - 30 min. Description of functions on p. 86 .
Min. brightness potentiometer eliminates flickering of LED and ESL Min. brightnes
light sources.
The universal dimmer can be controlled by up to 32 channels.
The programming button on the socket also serves as a manual output control.
Possibility to set the output status memory in case of failure and sub-
sequent power recovery sequent power recovery.
Range up to 160 m (outdoors), in case of insufficient signal between the controller and the device, use the RFRP-20N signal repeater or components with the RFIO2 protocol that support this function.


Device description


## Types of loads

ESL dimmable energy saving lamps
C halogen bulbs with electronic transformer (capacitive load) LED LED light sources
R classic light bulbs (resistive load)

| L | hassicogen bulbs with wound transformer (inductive load) |
| :--- | :--- | :--- |

RFTC-3 | Glass touch thermostat for fancoils

## Buttons description

Designed to control 2 and 4 pipe fan coils, chillers


The picture of device is illustrative, the icons (symbols) are
confograble by the customer.

| Technical parameters | RFTC-3/W | RFTC-3/B |
| :---: | :---: | :---: |
| Power supply |  |  |
| Power supply voltage: | 110-230V AC, 50-60Hz, Land N terminals |  |
| Apparent/loss power input: | $4 \mathrm{VA} / 2 \mathrm{~W}$ |  |
| Supply voltage tolerance: | $\pm 10 \%$ |  |
| Outputs |  |  |
| Relays: | 5 x switching / $5 \mathrm{~A} / 250 \mathrm{~V}$ AC1/1385VA |  |
| Contact life: | mechanical: 10 mil. /electrical 100.000 switches |  |
| Analog Output: | $2 \times 0-10 \mathrm{~V}, 10 \mathrm{~mA}$ |  |
| Inputs (external) |  |  |
| Binary: | ro potential-free contact, terminals IN1/IN2 against GND, maximum wire length 30 m |  |
| Temperature: | 1x for external temperature sensor TC/TZ, terminals $\operatorname{IN} 1 / T \& / \mathbb{N} 2 / T C$, temperature range -20 to $+120^{\circ} \mathrm{C}$, accuracy $\pm 0.5^{\circ} \mathrm{C}$ |  |
| Sensors (internal) |  |  |
| Temperature: | range 0 to $+55^{\circ} \mathrm{C}$, accuracy $\pm 0.5^{\circ} \mathrm{C}$ from the range |  |
| Humidity: | $0-99 \% \mathrm{RH}$, accuracy $\pm 3^{\circ} \mathrm{C}$ f from the range |  |
| Proximity: | backlight activation when zooming $<25 \mathrm{~cm}$ |  |
| Lighting: | adaptive backight control of the display and buttons |  |
| Communications |  |  |
| Radio: | iNELS RFIO2, frequency $866-922 \mathrm{Mhz}$ |  |
| wifi: | AP 2.4 Ghz |  |
| Modbus: | RTU 485 |  |
| Control and display |  |  |
| Display: | LCD (VATN), active area $54 \times 34 \mathrm{~mm}$ |  |
| Buttons: | 8 x , capacitive, backlit |  |
| Functions |  |  |
| Fancoil types: | 2-pipe, 4-pipe |  |
| Parameter settings: | via WiFi and web interface |  |
| Connection |  |  |
| Terminal block: | 16 pole, screwless (push-in) |  |
| Wire cross section: | $0.2-1.5 \mathrm{~mm}$ ² solid / flexible |  |
| Mechanics |  |  |
| Operating temperature: | -0 to $50^{\circ} \mathrm{C} / \mathrm{max} 80 \% \mathrm{RH}$ |  |
| Storage Temperature: | -20 to $60^{\circ} \mathrm{C}$ |  |
| Enclosure: | 1 P 30 (mounted) |  |
| Overvoltage Category: | 1. |  |
| Pollution Degree: | 2 |  |
| Working position: | horizontal |  |
| Installation: | on EU/BS box with 60 mm screw pitch |  |
| Dimension: | $120 \times 80 \times 27 \mathrm{~mm}$ |  |
| Weight: | 230 g |  |
| Shape: | SHARP edges |  |
| Color (glass and plastic): | White | Black |
| Order Code: | 8915 | 8914 |
| EAN Code: | 8595188189156 | 8595188189149 |
| Standard: | EN 60730, | En 301489 |

$3 \times$ relays for fan speed (LOW, MEDIUM, HIGH), $2 \times$ relays for heating/cooling
mode a
x analog outputs $0-10 \mathrm{~V}$ for proportional control of valves
$2 x$ inputs for connecting wired detectors (door's magnet detector); of which 1x input for external temperature sensor TC/TZ
Built-in digital temperature and humidity senso
Proximity sensor to activate display backlight / button
VA/TN LCD display, 8 touch backlit buttons
Screwless angle clamps for easy wire connection
Wifi for device setup (via web browser) and connection to iNELS.Cloud
iNELS APP, HRS and BMS via MQTT protocol

- Modbus RTU for external HVAC devices and supervision software

Power supply: AC 110-230V AC
Installation on round (EU) and square (BS) boxes
Possibility of the glass and icons customization icons.inels.com
 - Ending: cavity
Temperature
increase
Temperature


| Technical parameters | RFTC-10/G |  |
| :---: | :---: | :---: |
| Supply voltage: | $2 \times 1.5 \mathrm{VAAA}$ batteries |  |
| Battery life: | 1 year based on frequency of use |  |
| Temperature correction: | 2 buttons V/^ |  |
| Temperature offset: | $\pm 5^{\circ} \mathrm{C}$ |  |
| Display: | LCD, characters/see Display description |  |
| Backlighting: | active 10 s after pressing |  |
| Transmisision indication/function: | symbols |  |
| Temperature measurement: | 1x internal sensor |  |
| Temp. measurement range and accuracy: | 0 to $+55^{\circ} \mathrm{C}$; <br> $0.3^{\circ} \mathrm{C}$ of the range |  |
| Control |  |  |
| Communication protocol: | RFIO |  |
| Frequency: | 866-922 MHz (for more information see p. 81) |  |
| Repeater function: | no |  |
| Signal transmission method: | bidirectionally addressed message |  |
| Range: | in open space up to 100 m |  |
| Minimum control distance: | 20 mm |  |
| Other data |  |  |
| Max. number of control. RFSA-6x: | 1 |  |
| Program: | $\times$ |  |
| Operating temperature: | 0 to $+55^{\circ} \mathrm{C}$ |  |
| Operating position: | wall-mounted |  |
| Mounting: | glue/screws |  |
| Protection: | 1 P30 |  |
| Contamination degree: | 2 |  |
| Dimensions frame <br> - plastic: <br> - metal, glass, wood, granite: | $85 \times 85 \times 20 \mathrm{~mm}$ |  |
| Weight: | 66 g (without batteries) |  |
| Related standards: | EN 60730, EN 63044, EN 3000 220, en 301489 |  |
| Compatibility |  |  |
| RFTouch elan-RF | RFSA-6x/RFSAI-6x $\quad$ RFSTT-11B-SL | RFATV-2 |
| $\checkmark$ | $\checkmark$ - | - |

Display description

- RFTC-10/G is used for temperature measurement (in the range of 0
to $55^{\circ} \mathrm{C}$ ) and correction of the pre-set temperature in RF Touch or to $55^{\circ} \mathrm{C}$ ) and correction of the pre-set temperature in RF Touch or
eLAN-Wireless system devices in the range of $\pm 5^{\circ} \mathrm{C}$. The temperature correction is valid until the next program change in the given system device.
- The backlit LCD display displays the current and set temperature, sta
tus (ONOFF) battery status, ect. The backitt LCD display displays
tus (ON/OFF), battery status, etc.
- Range up to 100 m (in open space), if the signal is insufficient between
the controller and unit, use the signal repeater $\mathrm{FFRP-}$ - 2 N the controller and unit, use the signal repeater RFRP-2ON or protocol component RFIO2 that support this feature.
Colour combination of heating unit in design of frames LOGUS ${ }^{\circ 0}$ (plas-
tic, glass, wood, metal, stone). tic, glass, wood, metal, stone).

${ }^{\text {EAN code: }}$

| Technical parameters | RFTC-50/G |  |  |
| :---: | :---: | :---: | :---: |
| Supply voltage: | $2 \times 1.5 \mathrm{~V}$ AAA batteries |  |  |
| Battery life: | 1 year based on frequency of use according to the number of controlling actuators |  |  |
| Temperature correction: | 2 buttons V/^ |  |  |
| Temperature offset: | $\pm 5^{\circ} \mathrm{C}$ |  |  |
| Display: | LCD, characters/see Display description |  |  |
| Backlighting: | active 10 s after pressing |  |  |
| Trasmission indication/function: | symbols |  |  |
| Temperature measurement: | 1x internal sensor |  |  |
| Temp. measurement range and accuracy: | 0 to $+55^{\circ} \mathrm{C} ; 0.3^{\circ} \mathrm{C}$ of the range |  |  |
| Control |  |  |  |
| Communication protocol: | RFIO |  |  |
| Frequency: | $866-922 \mathrm{MHz}$ (for more information see p. 81) |  |  |
| Repeater function: | no |  |  |
| Signal transmission method: | bidirectionally addressed message |  |  |
| Range: | in open space up to 100 m |  |  |
| Minimum control distance: | 20 mm |  |  |
| Other data |  |  |  |
| Max. number of control. | 4 |  |  |
| RFSA-6x: |  |  |  |
| Program: | Weekly |  |  |
| Operating temperature: | 0 to $+55^{\circ} \mathrm{C}$ |  |  |
| Operating position: | on the wall |  |  |
| Mounting: | by gluing/screwing |  |  |
| Protection: | 1 P30 |  |  |
| Contamination degree: | 2 |  |  |
| Dimensions frame <br> -plastic: <br> - metal, glass, wood, granite | $85 \times 85 \times 20 \mathrm{~mm}$ |  |  |
| Weigh: | 66 g (without batteries) |  |  |
| Related standards: | EN 60730, EN 63044, EN 300 220, EN 301489 |  |  |
| Compatibility |  |  |  |
| RFTouch eLAN-RF | RFFAA-6xRFSAA-6x | RFST-111-SL | RFATV-2 |
| - - | $\checkmark$ | $\checkmark$ | - |
| Display description |  |  |  |
| Displaying the day of the week |  |  |  |
| Displaying the time |  | The heating function switched output |  |
|  |  |  |  |
| 1 Indiction of manual mode |  | Indicates the state of |  |
| Displaying the temperature |  |  | ature units ${ }^{\circ} \mathrm{C}$ |

- RETC-50/G is a separate thermostat that allows wireless control of un to 4 multifunctional switching components, e.g. RFSAI-6X, RFUS-61 RFSTI-11B.
- Temperature measurement with built-in sensor in the range of $0.55^{\circ} \mathrm{C}$, temperature setting in the range of 0 to $+55^{\circ} \mathrm{C}$ in the weekly program.
tus (ONklit LCD display displays the current and set temperature, sta - Battery pow , (2ytery status, day of the week, current time, etc. tery life of around 1 year based on frequency of use.
- Range up to 100 m (in open space), if the signal is insuffic
the controller and (in open space), if the signal is insuffficient between the controller and unit, use the signal repeater RFRP-20N or protocol component RFIO2 that support this feature.
Colour combination of temperature unit in design of frames LOGUS9 Colour combination of temperature.
(plastic, glass, wood, metal, stone).


## Device description



- The temperature element measures the temperature with an externa
sensor and at the same time contros the heating circuit sensor and at the same time controls the heating circuit (electric under
floor heating, air conditioning, boile...).
They can be combined with Detectors, Controllers or inELS Wireless system components.
It measures the temperature in the range -20 to $+50^{\circ} \mathrm{C}$ and sends it to the system component in a regular 5 min. intervals. It sends a signal
when the temperature changes suddenly.
-The heating/cooling, hysteresis and offset functions are set in the sysem component or application.
allows the connection of a switched load up to $8 \mathrm{~A}(2,000 \mathrm{~W})$.
Range up to 200 m (outdoors), in case of insufficient signal between the controller and the device, use the RFRP-200 signal repeater or compo-
nent with the RFFO2 protocol that support this function. nent with the RFIO2 protocol that support this function.
The BOX version offers installation directly in the installation box, celing or cover of the controlled appliance. Easy installation thanks to
External sensor TC $\left(-20\right.$ to $\left.+80^{\circ} \mathrm{C}\right)$ or $\mathrm{TZ}\left(-40\right.$ to $\left.+125^{\circ} \mathrm{C}\right)$ with a length of $3 \mathrm{~m}, 6 \mathrm{~m}, 12 \mathrm{~m}$. See „Accessories" on page 45 .

| Technical parameters | RFSTI-11B-SL |
| :---: | :---: |
| Supply voltage: | 230 VAC |
| Supply voltage frequency: | $50-60 \mathrm{~Hz}$ |
| Apparent input: | $7 \mathrm{VA} / \cos \varphi=0.1$ |
| Dissipated power: | 0.7 w |
| Supply voltage tolerance: | +10\%\%-15\% |
| Temp. measurement range and accuracy: | -20 to $+50^{\circ} \mathrm{C}$ $0.5^{\circ} \mathrm{C}$ of the range |
| Output |  |
| Number of contacts: | 1x switching |
| Rated current: | $8 \mathrm{~A} / \mathrm{AC1}$ |
| Switching power: | 2000 VA/AC1 |
| Peak current: | $10 \mathrm{~A} /<3 \mathrm{~s}$ |
| Switching voltage: | $250 \mathrm{VAC1}$ |
| Mechanical service life: | $1 \times 10^{7}$ |
| Electrical service life (AC1): | $1 \times 10^{5}$ |
| Control |  |
| Wireless: | 25-channels |
| Communication protoco: | RFIO2 |
| Frequency: | $866-922 \mathrm{MHz}$ (for more information see p .81 ) |
| Repeater function: | yes |
| Manual contro: | button PROG (ON/OFF) |
| Externa button/switch: | yes |
| Range: | in open space up to 200 m |
| Other data |  |
| Operating temperature: | -15 to $+50^{\circ} \mathrm{C}$ |
| Operating position: | any |
| Mounting: | free at lead-in wires |
| Protection: | 1 P 40 |
| Overvoltage category: | III. |
| Contamination degree: | 2 |
| Connection: | screwless terminals |
| Connecting conductor: | $0.2-1.5 \mathrm{~mm}$ 2 solid/flexible |
| Dimensions: | $43 \times 44 \times 22 \mathrm{~mm}$ |
| Weight: | 319 |
| Related standards: | EN 60730, EN 63044, EN 300 220, EN 301489 |



EAN code:
RTT-20: 5955188134019

| Technical parameters | RFTI-20 |
| :---: | :---: |
| Supply voltage: | $2 \times 3$ V CR 2032 battery |
| Battery lif: | up to 1 year, according to the number of activations |
| Transmission indication/function: | red LED |
| Tempeatureanduumidilymeasurement | integrated digital sensor |
| Temperature measurement | -10 to $+50^{\circ} \mathrm{C}$; |
| range and accuracy: | $0.5^{\circ} \mathrm{Cof} \mathrm{range}$ |
| Humidity measurement | 0 to $90 \%$; |
| range and accuracy: | $\pm 3 \%$ of range |
| Output |  |
| Communication protoco: | RFIO |
| Frequency: | 866-922 MHz (see p. 81) |
| Repeater function: | no |
| Signal transmission: | unidirectional message |
| Range: | in open space up to 160 m |
| Other data |  |
| Operating temperature: | -10 to $+50^{\circ} \mathrm{C}$ |
| Working position: | any |
| Mounting: | glue/screws/loose |
| Protection: | 1 P30 |
| Contamination degre: | 2 |
| Dimensions: | $75 \times 25 \times 14 \mathrm{~mm}$ |
| Weight: | 45 g |
| Related standards: | EN 60730, EN 63044, EN 300 220, EN 301489 |

With an integrated digital sensor, it measures temperature and humidity in the range of -10 to $+50^{\circ} \mathrm{C}$ and at regular intervals of 20 min ds to the system device (eLAN-RF, RF-Touch).
In the event of a sudden change in temperature and humidity, it send a signal within 1 min .
(2x3 batteries CR 2032 - included in the package) with a lifetim
approx. 1 year (according to ambient temperature cycling).

- Range up to 160 m (in open space), in case of insufficient signal be tween the controller and the device, use RFRP-20N signal repeater or
devices with RFIO2 devices with RFIO2 protocol that support this function.

Device description


The wireless thermovalve is used to regulate the temperature in the room.
It is is insalled directly on the radiator valve where it immediately measures It is installed directly on the radiator valve, where it immediately measures
the temperature in the room with the help of a internal temperature senso and regulates the radiator valve with the built-in motor. The valve can also be installed on valves in distribution boards, when a temperature sensor from another element of the iNELS Wireless system will be used to measure the temperature in the room.
Oo use the functions of the valve, it is necessary to connect it to the e LAN-RF
or RF Touch systen or RF Touch system units, which, will nensurs heating and control of the valve from the app (Android, iOS, Samsung Smart TV) and the system unit with manual or automatic temperature modes.
The valve measures the temperature in the range of $0^{\circ} \mathrm{C} . .50^{\circ} \mathrm{C}$ and receives control instructions from the system units ata a regular interval of every 6 minutes.
The valve supports functions of anti-freeze mode, open window detection communication failure with system unit and valve stiffening, which are communication aifurew
The valve supports hysteresis and offset functions that can be set in the application or system unit.
Battery power $2 \times \mathrm{AA} 1.5 \mathrm{~V}$ batteries (included in the package)
Communication range with system unit up to 200 m (in open space), to increase the range or change the direction of the signal, it is possible to use the RFRP-2ONN repeater or other units of the system with support for the repaater function.

- In the base, the head is compatible with M30x1,5 valves, adapters that are not incluced in the package can be used for other valves.


## Device description



## TC, TZ | Temperature sensors





| Technical parameters | TC | TZ | Resistive values of sensors in depen | dance on temperature |
| :---: | :---: | :---: | :---: | :---: |
| Range: | -20 to $+80^{\circ}\left(-4 t 00^{176} 6^{\circ} \mathrm{F}\right)$ |  |  |  |
| Scanning element: | NTC 12K | NTC 12K | Temperature ( ${ }^{\circ} \mathrm{C}$ ) | Sensor NTC (kR) |
| Tolerance: | $\pm\left(0.15^{\circ} \mathrm{C}+0.0021\right.$ t) | $\pm\left(0.15^{\circ} \mathrm{C}+0.0021 \mathrm{t}\right)$ | 20 | 14.7 |
| In air/in water: | (T0.5) $\leq 18 \mathrm{~s}$ | (T65) $62 \mathrm{~s} / 8 \mathrm{~s}$ | 30 | 9.8 |
| In air/in water: | (r0.9) $\leq 48 \mathrm{~s}$ | (T95) $216 \mathrm{~s} / 23 \mathrm{~s}$ | 40 | 6.6 |
| Cable material: | PVC unshielded, $2 \times 0.25 \mathrm{~mm}^{2}$ | $\begin{gathered} \text { silicon } \\ \text { VO3SS-F } 2 \mathrm{D} \times 0.5 \mathrm{~mm}^{2} \end{gathered}$ | 50 | 4.6 |
|  |  |  | 60 | 3.2 |
| Terminal material: | polyamide | stainless steel | 70 | 2.3 |
|  | 1P67 | IP67 |  |  |

Tolerance of sensor NTC $12 \mathrm{k} \Omega$ is $\pm 5 \%$ by $25^{\circ} \mathrm{C} / 77^{\circ} \mathrm{F}$.
Diagramm of sensor warm up via air


- Thermister temperature sensors are made of Negative Temperature
-Thermister temperature sensors are made of Negative Temperatur Coefficient (NTC) embedded in a PVC or metal sleeve with a thermallyconductive sealer
- Sensor TC - Sensor TZ
cable VO3SS-F $2 \mathrm{D} \times 0.5 \mathrm{~mm} / 0.02^{\prime \prime}$ with silicone insulation for use in high temperature applications.
silicone insulation for use in high
- Temperature sensors can be connected directly to the terminal block Cable lengths can not be changed, connected or modified.


T65 (95): time, which sensor needs to heat up on 65 (95) \% of ambient temperature of environment, in which is located.


- RFIM-40B / BP-SL: the wireless contact converter changes the wired button / switch to wireless.

| EAN code: <br> RFIM-40B/BP-SL: 8595188184069 | RFMM-408/23-SL: 8595188184076 |  |
| :---: | :---: | :---: |
| Technical parameters | RFIM-40B/BP-SL | RFIM-40B/230-SL |
| Supply voltage: | $1 \times 3$ V battery CR 123A | 230 VAC |
| Battery life: | 8 years based offrequency use |  |
| Indicationstransferfunction: | red LED |  |
| Number of inputs: | 4 | 4 |
| Supply voltage tolerance: |  | +10\% $\%-15 \%$ |
| Control |  |  |
| Communication protocol: | RFIO2 |  |
| Frequency: | 866-922 MHz (for more information see p. 81) |  |
| Repeater function: | no |  |
| Signal transmission method: | unidirectionally addressed message |  |
| Range: | in open space up to 200 m |  |
| Other data |  |  |
| Operating temperature: | -10 to $+50^{\circ} \mathrm{C}$ |  |
| Operating position: | any |  |
| Line resistance between terminals <br> - for closed button: <br> - for open contact: | <300 $\Omega$ |  |
| Mounting: | free at lead-in wires |  |
| Protection: | 1P40 |  |
| Surge category: | III. |  |
| Contamination degre: | 2 |  |
| Connection: | screwless terminals |  |
| Dimensions: | $43 \times 44 \times 22 \mathrm{~mm}$ |  |
| Weight: | 37 g | 25 g |
| Contact voltage: | 3 V | 230 VA |
| Length of cable to contact: | max. 5 m | max. 100 m |
|  |  | of parallel lines |
| Related standards: | en 60730, en 63044, | N 3000220, en 301489 |

- battery supply ( 3 V battery CR123A - included in the package) with a lifes-
pan of about 8 years according to the frequency of use. - batery of about 8 years according to the frequency of use,
the contact can be permanently closed.
- RFII-40B / 230-SL: the contact converter changes the button / switch
with local mains supply to wireless with local mains supply to wireless.
4 inputs allow to control 4 devices independently,
-mains supply, the inputs respond to the supply of mains supply
- It can be used to transmit contact closing information (detector, but-
tons, technology, logic output). tons, technology, logic output).
- When the button is pressed, it sends the set command (ON / OFF, dim-
ming, time off / on, pull / pull). ming, time off/ on, pull/ / pull).
- Ability to set scenes where
nents with a single press.
- Range up to 200 m (outdoors), in case of insufficient signal between the controller and the component, use the RFRP-20N signal repeater or elements with the RFIO2 protocol that support this function.
- The BOX version offers mounting directly in the installation box under the button $/$ switch.
- Attention: The controller is paired with the elements using the pairing
button. Ord. codes for controllers with pairing button: button. Ord. codes for controllers with pairing button: RFIM-40B/BP-SL Or-
der No.: 8406 , RFIM-40B/230-SL Order No. 8407 see Pairing controllers on p. 84.


## Device description



- This wireless contact converter is especially appropriate for wireless
transmission of information on switching HDO. transmission of information on switching HDO.
- Thanks to the permanent power supply, it can also be used for partial
transmission of information for control of an appliance or device - After leading in power to the " 5 " terminals, it periodically transmits the - command switch on in an interval of 2 min. When disconnecting the command switch on in an interval of 2 .
- The button TEST on the controller is used to assign to a switching unit.
- The package includes an internal antenna AN-I, in case of locating the converter in a metal switchboard, you can use the external antenn AN-E for better signal reception, see accessories on page 66 .
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20N.
- 1-MODULE design of the unit with mounting into switchboard.
- The product is suitable for the transmission of control signals within photovoltaic electrical installations.
- Attention: The controller is paired with the elements using the pairing button. Ord. codes for controllers with p


## Device description



## Connection




| Technical parameters | RFTM-1 |
| :---: | :---: |
| Power supply: | $2 \times 1.5$ AAA batteries |
| Battery Life: | Appr. 2 years, (depending on the type of sensor, frequency of transmissions and pulses) |
| Indication |  |
| Setting mode: | Green LED flashes - active <br> Red LED - flashes during impulse sensor registration |
| Communications Test | Green LED - communication OK |
| - Wireless STATUS: | Red LED - communication ERR |
| Normal operation: | no indication |
| Control |  |
| Manual contro: | button SET |
| Sensor Selection: | rotary potentiometer |
| Supported sensors (not included in the package): | LS (LED sensor) MS, WS (magnetic sensor) So (Contact, open collector, magnetic contacts) |
| Output |  |
| Communication protoco: | RFIO |
| Frequency | $866-922 \mathrm{MHz}$ (for more information see p. 81) |
| Range: | in open space up to 100 m |
| Other data |  |
| Working temperature: | -20 to $+50^{\circ} \mathrm{C}$ * |
| Storage temperature: | -30 to $+70^{\circ} \mathrm{C}$ |
| Operating position: | any |
| Protection: | 1P65 |
| Cross-section of connecting wires: | max. 0.5 - 1 mm ${ }^{2}$ |
| Dimension: | $72 \times 62 \times 34 \mathrm{~mm}$ |
| Weight: | 104 g |

* Pay attention to the operating temperature of batteries.

The wireless pulse converter detects home energy meters (electric water, gas) by means of sensors, and sends them to the wireless unit eLAN-RF-103.
MIIES in valyes are displayed in the NELS application iHC-MAIRF/iHC The , in daily, weekly or monthly overview in graphs.
The sensor is designed for use on existing meters and even without the impulse output" $\mathrm{SO}^{\prime \prime}$ (The gauge must support scan).

- RFTM-1 transfers consumption from meters using sensors - LS (LED
sensor), WS (Magnetic sensor for meter) MS (Magnetic sons) sensor), WS (Magnetic sensor for meter), MS (Magnetic sensor) or by impuls output (,SS0").
-For each consumption meter, it is necessary to have one pulse converte RFTM-1.
Battery power ( $2 \times 1.5 \mathrm{~V}$ AAA batteries - included in package) with average battery life of around 2 years (according to the type of scan, frequency of transmissions and pulses).
- Range up to 100 m (in open space), if the signal between the controller and the user is weak, use the signal repeater RFRP-20N or protoco component RFIO2 that support this feature.
The increased IP65 protection is appropriate for mounting in risers switchboards and other demanding environments.



EAN code:
RFFF-100:8

| Technical parameters | RFSF-100 |
| :---: | :---: |
| Power supply |  |
| Battery power: | $2 \times 1.5 \mathrm{~V}$ AAA batteries |
| Battery life by frequency | 3 years |
| Setting |  |
| Alarm Detection: | optical and audible alarm |
| Battery status view: | low battery is indicated by 5 flashes every 15 minutes or by display in the system element |
| Acoustic signal: | greater than $45 \mathrm{~dB} / 1 \mathrm{~m}$ |
| Detection |  |
| Sensor: | contacts for flooding |
| Detection principle: | contact between the sensor sensed liquid |
| Response Time: | 25 after connecting the scanning contacts |
| Measurement accuracy: | 99.8\% |
| Sensitivity: | in the range 0-170 k |
| Control |  |
| Communication protoco: | RFIO |
| Frequency: | 866-922 MHz (for more information see p. 81) |
| Repeater function: | no |
| Signal transmission method: | unidirectionally addressed message |
| Range: | in open space up to 160 m |
| Other parameters |  |
| Working temperature: | 0 to $+50^{\circ} \mathrm{C}$ (Pay attention to the operating temperature of batteries) |
| Storage temperature: | -20 to $+60^{\circ} \mathrm{C}$ |
| Operation position: | capture contacts for flooding downwards |
| Mounting: | loose |
| Protection degree: | $1 \mathrm{P6} 2$ |
| Dimension: | $\varnothing 89 \times 23 \mathrm{~mm}$ |
| Weigh: | 92 g |
| Related standards: | en 60730, en 63044, en 301489, en 300220 |

The flood detector is used to detect water leakage - the activation occurs the moment the flooding of the contacts located on the under detector occurs.
Upon detecting water, the flood detector immediately sends a signal
ot the switched unit pipe valve.
Flood detection is signalled by optical and acoustic signalling.
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 protoco component RFIO2 that support this feature.

## Descritption



## Function

When the scanning contact is connected, the detector sends the message
and starts

| Conductivity of liquids |  |  |
| :---: | :---: | :---: |
| Liquids suitable for detection |  | Inadmissible liquids |
| Type of liquid | Resistivity [ cm$]^{*}$ |  |
| Drinking water | 5-10 k $\Omega$ | Demineralised water |
| Well water | 2-5 $\mathrm{K} \Omega$ | Deionised water |
| River water | 2-15 kת | Bourbon |
| Rain water | $15-25 \mathrm{k} \Omega$ | Gasoline |
| Waste water | 0.5-2 k $\Omega$ | oil |
| Seawater | $\sim 0.03 \mathrm{~K} \Omega$ | Liquid gases |
| Salt water | $\sim 2.2 \mathrm{k} \Omega$ | Paraffin |
| Natura/ hard water | $\sim 5 \mathrm{k}$ | Ethylene glycol |
| Chlorinated water | $\sim 5 \mathrm{k} \Omega$ | Paints |
| Condensed water | $\sim 18 \mathrm{k} \Omega$ | High alcohol-content |
| Milk | $\sim 1 \mathrm{k} \Omega$ | liquids |
| Milk serum | $\sim 1 \mathrm{k}$ |  |
| Fruit juices | $\sim 1 \mathrm{k} \Omega$ |  |
| Vegetable Juices | $\sim 1 \mathrm{k} \Omega$ |  |
| Broths | $\sim 1 \mathrm{k} \Omega$ |  |
| Wine | $\sim 2.2 \mathrm{k} \Omega$ |  |
| Beer | $\sim 2.2 \mathrm{k} \Omega$ |  |
| Coffee | $\sim 2.2 \mathrm{k} \Omega$ |  |
| Soap toam | $\sim 18 \mathrm{k} \Omega$ |  |

Resistivity Characterizes the resistive properties of materials which conduct eleatic


EAN ode:
RFFSOU-1: $: 8555188147071$

| Technical parameters | RFSOU-1 |
| :---: | :---: |
| Power supply: | $2 \times 1.5 \mathrm{AAA}$ batteries |
| Battery Life: | Appr. 2 years, <br> according to the number of controlled units |
| Setting the range of light levels |  |
| Function $\varangle$ (twilight switch) <br> Range 1: <br> Range 2: <br> Range 3: | 1 to $101 x$ 10 to $1001 x$ 100 to 1.000 Ix |
| Function-O (light switch) <br> - Range 1: <br> - Range 2: <br> Range 3: | 100 to 1000 Ix <br> 1000 to 10000 Ix <br> 10000 to 100000 Ix |
| Function setting: | rotary switch |
| The level of lighting gently: | 0.1 to $1 \times$ range |
| Fine adjustment of lighting levels: | potentiometer |
| The time delay : | $0 / 1 \mathrm{~min} . / 2 \mathrm{~min}$. |
| Setting the delay time t: | rotary switch |
| Control |  |
| Communication protoco: | RFIO |
| Frequency: | 866-922 MHz (for more information see p. 81) |
| Repeater function: | no |
| Range: | in open space up to 160 m |
| Other data |  |
| Working temperature: | -20 to $+50^{\circ} \mathrm{C}$ |
| Storage temperature: | -30 to $+70^{\circ} \mathrm{C}$ |
| Operating position: | sensor side down |
| Protection: | 1P65 |
| Degree of pollution: | 2 |
| Dimension: | $72 \times 62 \times 34 \mathrm{~mm}$ |
| Weight: | 104 g |
| Standards: | EN 60730, EN 63044, EN 300 220, en 301489 |

-The twilight switch measures the light intensity and based on a set value, it sends the command to switch on the lights or pull the blinds up or down

- It can be
switches.
- Integrated sensor for measuring illumination, settable in 3 ranges 1-100,000 lx.
Selection of function:
bient ligstitch -atomatically switches on upon a decrease in am bient light intensity, switches off upon an increase (appropriate for garden lights, advertisements, public lighting, etc.).
b) light switch - automatically switches on upor an increase in am bient light intensity, switches off upon a decrease (appropriate for offices, restaurants, rooms, etc.).
- caused by surrounding influences.

The twilight switch may control
The programming button on the regulator is used for:
a) setting a function with a switching or blind unit
b) ascertaining battery status
C) ascertaining signal quality between the unit and dimmer.

- Battery power $(2 \times 1.5 \mathrm{~V}$ AAA batteries - included in supply) with bat-
tery life of around 2 years based on the number of tery life of around 2 years based on the number of controlled units. 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 the controller and unit, use the signal repeater RFRP-20N or protoco component RFIO2 that support this feature.


## Device description




The Window/Door detector is used to detect opening where activation occurs when the magnet and the sensor become separated. Use:

- in combination with the switching unit for automatic light control (cellar, garage, etc.).
- by means of the Smart RF gate, detection can be displayed on you smart phone in the form of a notification; alarms are stored in the history, which is visualized in the iNELS application.
Anti-tamper function: an alarm is triggered if there is an unauthorized interference to detector.
Power supply: $1 \times 3$ VCR 2032 battery, the battery life is around 1 year thanks to the ability to turn off the LED indicator it is possible to extend up to 3 years.
"Low Battery" Alerts on Your iNELS App.
The detectors are compatible with switching components marked with the RFIO2 communication protocol and the eLAN-RF system components.

| EAN code: <br> RFMD-100: 8595188150293 |  |
| :---: | :---: |
| Technical parameters | RFMD-100 |
| Power supply: | $2 \times 1.5 \mathrm{~V}$ A batteries |
| Battery life: | up to 1 year, according to the number of activations |
| Drained battery indicator: | yes |
| Control |  |
| Communication protocol: | RFIO |
| Frequency: | 866-922 MHz (for more information see p. 81) |
| Repeater function: | no |
| Detection angle: | $105^{\circ}$ |
| Detection distance: | max. 12 m |
| Recommended working height: | max. 2.4 m |
| Other data |  |
| Working temperature: | -10 to $+50^{\circ} \mathrm{C}$ |
| Protection: | 1P20 |
| Colour: | white |
| Dimension: | $46 \times 105 \times 43 \mathrm{~mm}$ |
| Weight: | 57 g |
| EMC resistance: | level 2 |
| Related standards: | EN 60730, EN 63044, EN 301489, EN 300220 |

The motion detector PIR is used to detect persons moving inside the interior.

- Use:
in combination with a or triggering an alarm. means of the Smart RF gate, detection can be displayed on your smart phone in the form of a notification; alarms are stored in the his-
tory, which is visualized in the iNELS application. tory, which is visualized in the iNELS application.
Sensitivity settings of the PIR detector for eliminating
- Integrated lighting sensor, thanks to which you can set the detector's reaction time.
- Option of activation/deactivation of the LED indicator on the detector cover. - Option of activation/deactivation of the LED indicator on the detector cover.
- function: an alarm is triggered if there is an unauthorized interference to detector.
- Power supply: $2 \times 1.5 \mathrm{~V}$ AA batteries, the battery life is around 1 year - "Low Battery" Alerts by double LED flashing or on iHC App. RFIO2 communication protococol and the eLAN-Wireless system components.


## Detection field



The motion detector PIR is used to detect presence persons moving
inside the building interior.

- Use:
- in combination with a switching unit for automatic control of lighting or triggering an alarm.
by means of the Smart RF gate, detection can be displayed on your smart phone in the form of a notification; alarms are stored in the history, which is visualized in the iNELS application.
In combination with hotel elements (HRESK) it can serve as a room ocSensitivity settings of the PIR detector for eliminating unwanted triggering.
. Option
Option of activation/deactivation of the LED indicator on the detector cover.
Power supply: $2 \times 1.5 \mathrm{~V}$ AA batteries, the battery life is around 1 year. - "Low Battery" Alerts by double LED flashing or on iHC App.
- The detectors are compatible with switching components marked
with the RFIO2 communication protocol and the eLAN-Wireless syswith the RFIO2 co


## .



Upper cover

$2 \times 1.5$ AA batteries $\cdots$


| Technical parameters | s RFMD-200 |
| :---: | :---: |
| Power supply: | $2 \times 1.5 \mathrm{~V}$ A b batteries |
| Battery life: | up to 1 year, according to the number of activations |
| Drained battery indicator: | yes |
| Control |  |
| Communication protocol: | RFIO |
| Frequency: | $866-922 \mathrm{MHz}$ (for more information see p. 81) |
| Repeater function: | no |
| Detection angle: | $110^{\circ}$ |
| Detection distance: | max. 9.5 m |
| Recommended working height: | max. 2.5 m |
| Other data |  |
| Working temperature: | -10 to $+50^{\circ} \mathrm{C}$ |
| Protection: | IP20 |
| Colour: | white |
| Dimension: | - 95 mm , height incl. lens 30 mm |
| Weight: | 113 g |
| Related standards: | EN 60730, EN 63044, EN 301489, EN 300220 |

EAN code:
EAN code:
RFMD-20:
: 5951888189994


- It measures the level of liquids based on the principle of hydrostatic pressure measurement.
- It consists of a communication unit in a plastic case with IP65 protection placed above the surface and a stainless steel pressure probe connected by a cable lowered to the bottom of the tank.
- The standard length of the probe cable is 3 m or 9 m

The unit communicates wirelessly via the RFIO2 protocol with the de-
vices of the iNELS RF Control system and is powered by a 3 V vices of the iNELS RF Control system and is powered by a 3 V6 lithium
battery. The range of the switching actuators from the unit is determibettery. The range of the switching actuators from the unit is determi-
ned by the building/location, in open space it is normally 200 meters. - The unit can also communicate with the eLAN-RF-103 gateway, which - The unit can also communicate with the eLAN-RF-103
conveys level information to the iNELS application.

- In the application, it is possible to manage switching actors, edit no tifications, continuously monitor the level, pressure temperature and tifications, continuously monitor the level, pressure, temperature and
battery discharge status in the unit. - The unit itself is set up via the iSonda application from an Android/IOS
smartphone via the Bluetooth interface (LowEnergy, 4.1 and higher).




Materials (in contact with the medium)

| Housing: | stainless steel 1.4301 (304) |
| :--- | :---: |
| Seal: | FKM |
| Membrane: | stainless steel 1.4435 (316 L) |
| Cable jacket: | PUR | Cable jacket: PUR PR





Screen preview


## הMQTT



EAN odde:
eLAN-RF-13: 8595188180443

| Technical parameters | eLAN-RF-103 |
| :---: | :---: |
| Interface Wireless Control |  |
| Communication protoco: | RFIO2 |
| Broadcasting frequency: | 866-922 MHz (for more information see p. 81) |
| Signal transer method: | two-way addressed message |
| Output for antenna: | SMA connector* |
| Antenna Wireless: | AN-11 dB |
| Andication Wiriess communications: | $1 \times$ green RF LED |
| Range: | in open space up to 100 m |
| Interface Ethernet |  |
| ETH operating status indicator: | green LED |
| ETH communication indicator: | yellow LED |
| Communications interface: | 100 Mbps (R145) |
| Preset IP address: | DHCP |
| Power supply |  |
| Supply voltage/current: | 5 V DC/0.5 A |
| Power source: | $110-230 \mathrm{~V}$ AC/5 V DC-2 A (connector USB-C) |
| Button RESET |  |
| - short press: | restart the device |
| - press> 5 s | reset network settings |
| - press 10 s: | reset to factory settings |
| Indication LED STATUS |  |
| - green: | normal mode |
| - red: | error condition |
| - orange: | initialization/start |
| Other data |  |
| Operating temperature: | -20 to $+50^{\circ} \mathrm{C}$ |
| Storage temperature: | -25 to $+70^{\circ} \mathrm{C}$ |
| Protection: | 1 P 20 |
| Contamination degre: | 2 |
| Working position: | any |
| Dimensions: | $90 \times 52 \times 65 \mathrm{~mm}$ |
| Weight: | 136 g |
| *Max Tightening Torque for antenna connector is 0.56 Nm . |  |

The Smart Wireless Box is a gateway between iNELS Wireless elements and applications for smarttphones, tablets, watches, televisions, voic
assistants (Gooogle Home \& Alexa) and other thid It is produceogle Home \& Alexa) and other third-party devices. a) eLAN-RF-103: LAN communication

- It communicates from up to 70 iNELS Wireless elements, processes set programs for automatic control.
- Thanks to two-way communication, it displays the current status of individual elements.
Powered by 5 V DC/ $/ 2 \mathrm{~A}$ adapter, USB-C connector (included).
- Configuration is done via the iHC application.

Wireless gate is located internal antenna AN-I, in case the Smart externa late is located in a metal switchboard, you can use the external antenna AN-E for better signal reception, see accessories on
p.76. For the eLAN-RF-Wi-103 version. p. 76. For the eLAN-RF-Wi-103 version.

- Supports the MQTT protocol, which enables two-way communication
between the eLAN-RF-103 and therefore also with the entire iNELS between the eLAN-RF-103 and therefore also with the entire iNELS
Wireless system with platforms such as Home Assistant, Homekit and other Smart Home and building management systems.


The signal repeater is used to increase the range between the
The signal repeater is used to increase the It is designed for signal transmission up to 20 components. Indications:
green LED - supply voltage,
ed LED -active status (receiving and transmitting Wireless signal). Programming is done with the key.
Thanks to the socket design, installation is simple by plugging it directly into the existing socket, the function of the through socket will be retained.

Produced in 3 designs of sockets/plugs:



| Technical parameters | RFRP-20N/230V |
| :---: | :---: |
| Supply voltage: | 230 V |
| 'Supply voltage frequency: | $50-60 \mathrm{~Hz}$ |
| Apparent input: | $7 \mathrm{VA} / \cos \varphi=0.1$ |
| Dissipated power: | 0.7 w |
| Supply voltage tolerance: | +10\%/-15\% |
| Control |  |
| Communication protocol: | RFIO2 |
| Frequency: | 866-922 MHz (for more information see p. 81) |
| Range: | in open space up to 200 m |
| Minimum control | 20 mm |
| Programming: | button - green LED/red LED |
| Other data |  |
| Operating temperature: | -20 to $+55^{\circ} \mathrm{C}$ |
| Storage temperature: | -30 to $+70^{\circ} \mathrm{C}$ |
| Mounting: | plug into a socket |
| Protection: | $1 P 20$ device |
| Dimensions: | $63 \times 110 \times 74 \mathrm{~mm}$ |
| Weight: | 115 g |
| Related standards: | EN 60730, EN 63044, EN 300 220, EN 301489 |

59


| Technical parameters | RFWB-40G/MT |
| :---: | :---: |
| Supply voltage: | 3 V CR 2032 battery |
| Battery life: | around 2 years based on frequency of use |
| Transmission indication: | red LED |
| Number of buttons: | 4 |
| Application protoco: | Matter |
| Communication protocol: | thread |
| Frequency: | 2,46 |
| Signal transmission method: | MESH |
| Range: | in open space up to 200 m |
| Other data |  |
| Operating temperature: | -10 to $+50^{\circ} \mathrm{C}$ |
| Operating position: | any |
| Mounting: | glue/screws |
| Protection: | 1 P 20 |
| Contamination degree: | 2 |
| Dimensions frame |  |
| - plastic: | $85 \times 85 \times 16 \mathrm{~mm}$ |
| - metal, glass, wood, granite: | $94 \times 94 \times 16 \mathrm{~mm}$ |
| Weight (plastic): | 39 g |
| $\underline{\text { Related standards: }}$ | en 60730, en 63044, en 301489, EN 300328 | - The pushbutton type wall-mounted controllers are used to control

switches and dimmers (of lights, barriers, gates, window shutters, etc.). - It communicates on the Thread protocol that guarantees compatibility
with other products with the Matter support. He
surface (by sticking or screwing it onto a junction box) surface (by sticking or screwing it onto a junction box).
After a short pressing the pushbutton, it transmits the preset com-- Transmission of the command is indicated by a red LED.

- Design of the LOGUS90 switch frames (plastics, glass, wood, metal,
stone). stone).
- Battery power supply ( 3 V battery CR 2032 is included) with lifetime
of approx. 2 years, depending on the frequency of use. of approx. 2 years, depending on the frequency of use. - The applicable reach is up to 200 m (in free area). - The element with the actuator can be paired through a border router
supporting Matter and through an application supporting Matter The supporting Matter and through an application supporting Matter. The
border router is understood as equipment such as HomePod Mini, Google Nest Hub or Samsung SmartThings Station.


## Device description






| Operating temperature: | -10 to $+50^{\circ} \mathrm{C}$ |
| :--- | :---: |
| Operating position: | any |
| Mounting: | glue/screws |
| Protection: | \|P20 |
| Contamination degree: | 2 |
| Dimensions: | $94 \times 94 \times 8 \mathrm{~mm}$ |
| Weight: | 107 g |
| Related standards: | EN 60730, EN 63044, EN 301489, EN 300328 | EN 60730, EN 63044, EN 301489 , EN 300328

Glass touch controller in black with a width of only 8 mm .
Communicating on the Thread protocol, which guarantees compat ibility with other Matter-enabled products.
4 capacitive buttons allow you to control 4 independent devices. After pressing the button, it sends the set command (short press, long press). Sending a command is indicated by a red LED. The flat mounting base allows installation with screws, double-sided ape or placement on the table.
Battery power ( $2 \times 3$ V batteries CR 2032 - part of the package) with a lifespan of approx. 2 years depending on the frequency of use. Range up to 200 m (in open space).
The element with the actuator can be paired through a border router upporting Matter and through an application supporting Matter. The order router is understood as equipment such as HomePod Min Google Nest Hub or Samsung SmartThings Station.


Variants


Choose your own style
Flat wireless switches that can be mounted on glass, tile, furniture ... Such a quick change of location when you're moving.

$\lambda_{\lambda}^{1} k$ matter


| EAN code: |
| :--- |
| RFSAL-62BSSLIMT: 8595188189750 |


| Technical parameters | RFSAI-62B-SL/MT |
| :---: | :---: |
| Supply voltage: | 230 VAC |
| Supply voltage frequency: | $50-60 \mathrm{~Hz}$ |
| Apparent input: | $7 \mathrm{VA} / \cos \varphi=0.1$ |
| Dissipated power: | 0.7 w |
| Supply voltage tolerance: | +10\%; $15 \%$ |
| Output |  |
| Number of contacts: | 2xswitching |
| Rated current: | $8 \mathrm{~A} / \mathrm{AC1}$ (in total) |
| Switching power: | 2000 VA / AC1 |
| Peak current: | $10 \mathrm{~A} /<35$ |
| Switching voltage: | $250 \mathrm{VAC1}$ |
| Mechanical service life: | 10 mill. |
| Electrical service life (AC1): | 100 thousand |
| Control |  |
| Application protocol: | Matter |
| Communication protocol: | thread |
| Method of signal transmission | MENH |
| Frequency: | 2.4 GHz |
| Manual control: | button PROG (ON/OFF) |
| External button/switch: | yes, opposite the L terminal |
| Range: | in open space up to 200 m |
| Other data |  |
| Operating temperature: | -15 to $+50^{\circ} \mathrm{C}$ |
| Operating position: | any |
| Mounting: | free at lead-in wires |
| Protection: | 1 P 40 |
| Overvoltage category: | III. |
| Contamination degre: | 2 |
| Connection: | screwless terminals |
| Connecting conductor: | $0.2-1.5 \mathrm{~mm}^{2}$ solid/fl exible |
| Dimensions: | $43 \times 44 \times 22 \mathrm{~mm}$ |
| Weight: | 45 g |
| Related standards: | EN 60730, EN 63044, EN 301489, EN 300328 |

- The switching element with two output relays can be used to contro
some appliances and lights. some appliances and light
the Matter support. - The wireless controllers (RFGB-4/MT) and also the existing wired swit-
ches/pushbuttons can be used for control. ches/pushbuttons can be used for control.
The BOX-SL design offers installation directly in the junction box, soffit or cover of the controlled appliance. Easy connection of wires thanks The applicable reach is up
The maximum switched power is 2000 W ( 8 A ), the relay contact materia
AgSnO2 + Zero Cross predestine AgSnO2 + Zero Cross predestines it for switching of lighting loads. - The reset pushbutton on the element can also be used as manual contro
of the input. of the input.
- The element with the controller can be paired through a border router
supporting Matter and through an application supporting Matter. The supporting Matter and through an application supporting Matter. The
border router is understood as equipment such as HomePod Mini, Google
Nest Hub or Samsung Smarthings Station Nest Hub or Samsung SmartThings Station.


## Device description



## Connection







| (WHITE glass, SHARP edges) |  |
| :--- | :---: |
| Technical parameters | RFGS-30/5 |
| Supply voltage: | $230 \mathrm{VAC} / 50-60 \mathrm{~Hz}$ or $24 \mathrm{~V} \mathrm{AC} / \mathrm{DC}$ |
| Apparent/loss power input: | $1.1 \mathrm{VA} / 0.8 \mathrm{~W}$ |
| Supply yotage tolerance: | $\pm 10 \%$ |
| Output |  |


| Output |  |
| :--- | ---: |
| Relay: | $2 \times$ switching $/ 8 \mathrm{~A} / 250 \mathrm{VAC1} / 2000 \mathrm{VA}$ |
| Peak Current: | Ipeak $<110 \mathrm{~A} 300 \mathrm{~s} / \mathrm{max}$ input capacitance 125 uF |
| Contact Life: | mechanical 10 mil. electrical 100,000 cycles |
| Control |  |

- In connection with the RFSW-62/S room unit (or RFTC-3 thermostat) it is used to signali the status of MUR, green LED and DND, red LED MUR and DND buttons are interlocked
Also includes a bell button for controll
the switched output of this unit or any iNELS Wireless switching ele ment. The button has 2 colors of backlighting (explained below) The second switched output of this unit can be used to switch the in front door light and control it from the schedule HRS system, by time
Or intensity
- The unit can be mounted in an installation box, for example replace
a bell button or light switch, only requires a 230 V AC power supply. a bell button or light switch, only requires a 230 V AC power supply.
Communication is then wireless Communication is then wireless
-The unit can be controlled by up to 4 indoor units (RFSW-62/S or RFTC-3) - Setup and programming is done by a pairing button + signaled by
service LEDs service LEDs
The unit can be connected to the HRS (Hotel Reception Software) via
the eLAN-RF gateway or the RFTC-3 thermostat The functions can the the eLAN-RF gateway or the RFTC-3 thermostat. The functions can then
be controlled from the reception PC console or the iNELS application. - Standard glass colour white/black, room number and hotel logo can
be defined when ordering be defined when ordering



| Technical parameters | RFSW-62/S |
| :---: | :---: |
| Supply voltage: | $230 \mathrm{VAC} / 50-60 \mathrm{~Hz} \mathrm{or} 24 \mathrm{~V} \mathrm{AC} / \mathrm{DC}$ |
| Apparent/loss power input: | $1.1 \mathrm{VA}^{\prime} 0.8 \mathrm{~W}$ |
| Supply voltage tolerance: | $\pm 10 \%$ |
| Output |  |
| Relay: | $2 \times$ switching / 8 A/250 V AC1 / 2000 VA |
| Peak Current: | Ipeak <110A 300us / max. input capacitance 125 uF |
| Contact Life: | mechanical 10 mil. /electrical 100,000 cycles |
| Control |  |
| Number of Buttons: | 6 |
| Communication: | wireless, iNELS RFIO2 protocol |
| Frequency: | $866-922 \mathrm{MHz}$ (more on page 81) |
| Repeater Function: | yes |
| Range: | in open areas up to 200 m |
| Connection |  |
| Terminal block: | screwless- push in |
| Wire gauge: | $0.2-1.5 \mathrm{~mm} 2$ solid flexible |
| Other data |  |
| Operating Temperature: | -10 to $+50^{\circ} \mathrm{C}$ |
| Storage temperature: | -30 to $+70^{\circ} \mathrm{C}$ |
| Enclosure: | front 1P60 / rear P1P20 |
| Overvoltage Category: | 1. |
| Pollution Degree: | 2 |
| Working position: | Any |
| Instalation: | in to the installation box |
| Dimension: | $94 \times 94 \times 39 \mathrm{~mm}$ |
| Weight: | 1319 |
| EAN for $230 \mathrm{~V}, \mathrm{WHITE}$, SHARP: | RFSW-62/SW/230: 8595188189484 |
| EAN for $230 \mathrm{~V}, \mathrm{BLACK}$, SHARP: | RFSW-62/SB/230: 8595188189255 |
| EAN for $24 \mathrm{~V}, \mathrm{WHITE}$, SHARP: | RFSW-62/SW/24: 8595188191289 |
| EAN for $24 \mathrm{~V}, \mathrm{BLACK}$, SHARP: | RFSW-62/SB/24: 8595188191296 |
| Related standards: | en 60730, en 63044, En 301489, en 300220 |



- The wireless glass remote control with symbols is used for: - Control of iNELS Wireless elements (lighting, blinds or curtains) Control of the RFGS-30/S front door unit for MUR/DND
Switching of $2 \times$ light circuits
- MUR (Make Up Room, green LED) and DND (Do not Disturb, red LED)
buttons are interlocked
- Butler button calls hotel service (set in HRS)
- the top 3 buttons can be freely defined to control local outputs of the unit or any inELS Wireless element located in the room (switching, dimming, HVAC, shading)
- Setup and programming is done by pairing button + signaling by service LEDs
- The unit can be connected to the HRS (Hotel Reception Software) system via eLAN-RF gateway or RFTC-3 thermostat. The functions can then be controlled from the reception PC console or the iNELS application of the phone.
Standard glass colour white/black buttons and descriptions at the to -or hotel logo when ordering


## Device description



Connection


४ zeRo cross $\gg\rangle>$ r riendly Light switching the relay contacts switch the ehase po-
tential (L) and are equipped with zero

The output contacts ( $\mathrm{V} 1, \mathrm{~V} 2$ ) are galvani-
cally isolated fion cally isolated from the power supply and
share a common COM terminal cross switching technology

| Technical parameters | RFSA-266M/230V |
| :---: | :---: |
| Supply voltage: | $110-230 \mathrm{VAC}$ |
| Supply voltage frequency: | $50-60 \mathrm{~Hz}$ |
| Apparent input: | min. $2 \mathrm{VA} /$ /max. 5 VA |
| Dissipated power: | min. $0.5 \mathrm{~W} /$ max. 2.5 W |
| Supply voltage tolerance: | +10\%/-25\% |
| Output |  |
| Number of contacts: | 5x switching ( $\mathrm{AgSnO}_{2}$ )/7 $\mathrm{A} / \mathrm{AC1} / 10 \mathrm{~A} / 3 \mathrm{~s}$ |
| Switching power: | 1750 Va/AC1 |
| Switching voltage: | $250 \mathrm{VAC1}$ |
| Mech. / el. service lif (AC1): | $5 \times 10^{6 / 6 \times 10^{4}}$ |
| Analog output | 2×0-10V (OUT1, OUT2) |
| Input |  |
| Analog | YES, $2 x$ terminals INT1/GND, INTT/GND/ $2 \times$ NTC 12 ICR (TC/TZ sensor) |
| Control | YES, terminals IN/GGND, IN2/GND |
| Communication protocol: | RFIO2, MODBUS, WIF, MOTT |
| Frequency: | $866-922 \mathrm{MHz}$ (for more info see p. 81) |
| Repeater function: | yes |
| Range: | in open space up to 160 m - RFSA-66MI |
| Other data |  |
| Operating temperature: | $-15^{\circ} \mathrm{Cto}+50^{\circ} \mathrm{C}$ |
| Operating position: | any |
| Mounting: | DIN rail en 60715 |
| Protection: | IP20 from the front panel |
| Overvoltage category: | III. |
| Contamination degree: | 2 |
| Connecting conductor | max. $1 \times 2.5$, max. $2 \times 1.5 /$ |
| cross-section (mm): | with a hollow max. $1 \times 2.5$ |
| Dimensions: | $90 \times 52 \times 65 \mathrm{~mm}$ |
| Weight: | 264 g |
| Related standards: | en 60730, en 63044, EN 300 220, EN 301489 |

- Thanks to the 5 -channel design of the switching component it can
control the heating/cooling mode and 3 speed levels. $d 3$ speed leve
The RFSA-266M wireless switch unit can be combined with the RFTC-4. - The input channels are used to connect to external TC/TZ temperature sensor.
The product is independently functional when connected to the MODBUS,
otherwise , must be conneceted to otherwise it must be connected to control element, e.g. RFTC-4.
Support for both 2 -pipe fancoil and 4 -pipe fancoil.
- Fancoil controls the cooling or heating of the room and provides up

In case of insufficient signal between the controller and the switch In case of insufficient signal between the controler and the switch
unit, usel that support this functer RFRP-20N or elements with RFIO2

Connection for fancoil control


㖼



EAN code:
RFSAl-1618:8955188149341
Technical parameters RFSAI-161B/230V RFSAI-161B/120V

| Supply voltage: | 230 VAC | 120 VAC |
| :---: | :---: | :---: |
| Supply voltage frequency: | $50-60 \mathrm{~Hz}$ | 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 ${ }^{\text {a }}$ |  |
| Rated current: | $12 \mathrm{~A} / \mathrm{A}^{1}$ |  |
| Switching power: | $3000 \mathrm{VA} /$ AC1, $288 \mathrm{~W} / \mathrm{DCC}$ |  |
| Peak current: | 30 A, max. 4 sat 10\% |  |
| Switching voltage: | $250 \mathrm{VAC} 1 / 24 \mathrm{VDC}$ |  |
| Min. switching power DC: | $100 \mathrm{~mA} / 10 \mathrm{~V}$ |  |
| 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: | $3 \times 10^{7}$ |  |
| Electrical service life (AC1): | $5 \times 10^{4}$ |  |
| Indication of relay switch: | red LED |  |
| Control |  |  |
| Communication protocol: | 8 RFIO2 |  |
| Frequency: |  |  |
| Repeater button: | yes |  |
| Manual control: | button PROG (ON/OFF) |  |
| External button: | cable length max. 12 m 4** |  |
| Range: | in open space up to 160 m |  |
| Other data |  |  |
| Open contact voltage external switch: | 3 V |  |
| Resistor for the management of external switch: | $<1 \mathrm{k} \Omega$ |  |
| Resist. of connection for open contact: | $>10 \mathrm{k} \Omega$ |  |
| Galvanic isolation of input: | no |  |
| Operating temperature: | -15 to $+50^{\circ} \mathrm{C}$ |  |
| Storage temperatur: | -30 to $+70^{\circ} \mathrm{C}$ |  |
| Working position: | any |  |
| Mounting: | free at lead-in wires |  |
| Protection: | 1 P30 |  |
| Overvoltage category: | III. |  |
| Contamination degree: | - |  |
| Terminals: | $0.51 \mathrm{~mm}^{2}$ |  |
| Terminals (CY wire, Cross section): | $2 \times 0.75 \mathrm{~mm}^{2}, 2 \times 2.5 \mathrm{~mm}^{2}$ |  |
| Terminal length: | 90 mm |  |
| Dimensions: | $49 \times 49 \times 21 \mathrm{~mm}$ |  |
| Weight: | 50 g |  |

ted pair cable for this distance.
Control button input is at the suply voltage potential.

Switch component with one output channel which
nation with detectors for automatic lighting control. RFSAI-161B has a pre-set control algorithm (sce
requirements of hotel room control, see wiring.
Each RFSAI-161B can be programmed with 1x RFMD-100, 1x RFWD-100
nd $1 \times$ wireless controller (RFWB-40/G or RF KEY).
The terminals on the component give you the opportunity to conne
a wired detector or an existing key installation.
It enables connection of the switched load up to $1 \times 12 \mathrm{~A}(3000 \mathrm{VA})$.
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-2ON or protocol component RFIO2 that support this feature.

Device description


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

## Connection

RFSSAl-1618/230V
RFSAl-161B/120V
RFSAI-161B/120V


RFSAI-161B | Ligting control unit with pair detectors and external button input
RFSTI-111B | Overheating/overcooling switch unit with advanced functions

## Function

When RFMD-100 motion detector captures the movement of theguest, 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 tim
(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 compon-ents that are con-
trolled 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.

When guest wakes up and presses any RFWB-40 button, then
(6) $\begin{aligned} & \text { pressing on button makes all units working again after previous } \\ & \text { pressing button on position } D \text { and it also re-enable RFMD-100 } \\ & \text { motion detector primary function }\end{aligned}$ motion detector primary function.



| EAN code: |
| :--- |
| RFST1-1118:8555188149150 |



## Function

The external sensor senses the temperature of the room, turns the ar conditioner on and off according to the set temperature. Responds to commands from the detector - when you open the window, turn off air conditioning

## Connection

The component measures temperature in the range of 15 to $35^{\circ} \mathrm{C}$ wit external sensor and on the basis of the set temperature switches air - It is particularly

With the Wind suitable for hotel rooms.
opened, the device relay contact is autom, when the window/door is by saving unnecessary energy consumed foally disconnected, there dow/door is open.

- It enables connection of the switched load up to 12 A $(3000 \mathrm{VA})$
- Up to 4 RFWD-100 detectors can be connected to one RFSTI-111B devic - 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 the controller and unit, use the signal repeater RFRP-20N or pro
component RFIO2 that support this feature. omponent RFIO2 that support this feature,
or controlled appliance cover.



## Accessories

AN-I |Internal antenna


The rod antenna with SMA connector is supplied as standard with the product

## Extension cable for external antenna



10 m


- The internal antenna is included in the standard package.

| Technical parameters |  |
| :--- | :---: |
| Connector Type: | SMA (male/female) |
| Colour: | white |
| Cable Length: | 10 m |

Measured range between controllers and RFSA-66M

|  | RFGB | RFWB | RF KEY |
| :--- | :---: | :---: | :---: |
| AN-I | 305 m | 290 m | 190 m |
| AN-E | 300 m | 290 m | 200 m |
| AN-E3 | 275 m | 260 m | 180 m |

The range is measured $w$ id $d$ ect vibity
RFWB-x, RF KEY and RFSA-66M actuators.
Connecting the antenna extension cable does not affect the range

RFAF/USB | Service Key

| Technical parameters | RFAF/USB |
| :---: | :---: |
| Power: | max. 1 W |
| Interface: | USB 1.1 and higher, plug. .A" ${ }^{\text {a }}$ |
| Range: | 100 m |
| Min. distance of RF Touch- |  |
| Actuator: | 1 m |
| Communication protoco: | RFIO2 |
| Frequency: | 866-922 MHz (for more information see p. 81) |
| Power supply indication: | green LED |
| communication indication: | red LED |
| Other data |  |
| Operating temperature: | 0 to $+55^{\circ} \mathrm{C}$ |
| Storage temperature: | -20 to $+70^{\circ} \mathrm{C}$ |
| Protection: | 1 P 30 |
| Contamination degre: | 2 |
| Work space: | any |
| Installation: | any |
| Dimensions: | $22 \times 85 \times 15 \mathrm{~mm}$ |
| Weight: | 20 g |
| Related standard | EN 60730, EN 63044, EN 300 220, EN 301489 |



- The RFAF/USB Service Key (in conjunction with the Wireless analyze) is designed for iNELS Wireless Control system partners and serves for Setting the repeater (signal amplifier) through the iNELS Wireles Control elements labeled as RFIO2. This option allows you to communicate over longer distances (in the order of 50 m ) via existing
iNELS Wireless elements in the installation (eliminating the use of the RFRP-20N repeater).
upgrade of frimware in the iNELS Wireless elements (labeled RFIO2),
in the case of new firmware versions that improve the functionality of the elements on which we are constantly working.
The Wireless Network Analyzer will reliably analyze the communi-
cation between the controller (where you plan to place it) and the component in the installation. Indicates signal strength/quatty as well as possible frequencies that can interfere with communication SW Wireless analyzer can
SW/FW Wireless Control


## Accessories

AN-E1 | External antenna


The LED sensor scan
sumption by flashing.
sumption by flashing.
-The LED sensor is particularly suitable for power meters Tulse sensing (the LED LE on the meter is marked " $\mathrm{imp} \mathrm{p}^{\text {" }}$.
put
The sensor's scanner is affixed with glue above the LED diode of the meter
signaling indication of consumption.

- The sensor is connected to the internal terminal of the RFTM-1 converter.

| Technical parameters | MS |
| :---: | :---: |
| Voltage range: | 1.6 to 3.6 V |
| Consumption | 7 A * |
| Output load: | max.3mA |
| Scanning period: | 100ms |
| Switch sensing sensitivity |  |
| (output L): | $\pm(2.3$ to 0.7$) \mathrm{mT}$ |
| Opening detectioning sensitivity |  |
| (output->) ${ }^{\text {H }}$ : | $\pm(0.9$ to 3.8$) \mathrm{mT}$ |
| Hysteresis: | 1 mT |
| Working temperature: | -40 to $80^{\circ} \mathrm{C}$ |
| Other data |  |
| Cross-section of connecting wires: | max. 3.5 mm |
| Wire length: | 1.5 m |
| Protection: | 1920 |

## LS | LED senso



The LED sensor scans LED impulses on the meter, which indicates con-
sumption ny flashing.
The LED sensor is particularly suitable for power meters that support LED he LED sensor is particularly suitable for power meters that support LED
pulse sensing (the LED on the meter is marked "imp"). he sensor's scanner is affixed with glue above the LED diode of the meter signaling indication of consumption.
The sensor is connected to the internal terminal of the RFTM-1 converter.

| Technical parameters | LS |
| :---: | :---: |
| Voltage range: | 2.5 to 3.7 V |
| Minimum consumption (idle mode): | 0.5uA * |
| Maximum power consumption (pulses 100Hz): | max. 2uA * |
| Working temperature: | -20 to $50^{\circ} \mathrm{C}$ |
| Other data |  |
| Cross-section of connecting wires: | max. 3.5 mm |
| Wire length: | 1.5 m |
| Protection: | 1 P 20 |

## wS | Magnetic sensor for water mete



A magnetic sensor that detects the pulse that iscreted by ach rotation of the magnet placed on the unit dial meter.
The WS sensor is especially suitable for water meters that support magnetic sensing.
The sensing sensor is glued over the circular unit face of the gauge (the
scanning dial is different from the other indicators, e.g. the white arrow scanning
wheel.).
The sensor is connected to the internal terminal of the RFTM-1 converter.

| Technical parameters | WS |
| :---: | :---: |
| Voltage range: | 1.65 to 5.5 V |
| Consumption: | 1.5uA * |
| Output load: | max. 150uA |
| Switch sensing sensitivity: | $\pm(0.3$ to 1.1 ) mT |
| Opening detection sensitivity: | $\pm(0.2$ to 0.91 mT |
| Hysteresis: | 0.2 mT |
| Working temperatur: | -40 to $80^{\circ} \mathrm{C}$ |
| Other data |  |
| Cross-section of connecting wires: | max. 3.5 mm |
| Wire length: | 1.5 m |
| Protection: | 1 P20 |

* Measured at $3 V$, no load output.

AN-E3 | External antenn


AN-E3 antenna measurement graph




Overview
Absolute control over the state of all technologies．


Colour setting Easy adjustment of the light scene with one


Device list Control the device from anywhere．

Control application for smartphones and tablets with Android and iPhone opera The user－friendly and intuitive applicatily control your house． from one place．
－The application enables control of the complete iNELS Wireless and BUS solution via the Smart RF gate，Connection server，Central unit and other supported third
－party devices that are connected to －party devices that are connected to the home Internet network．
The application allows free remote control．
－IHC－AiO features：
unification of all inELS devices under one application．Specifically，eLAN RF 003 eLAN RF 103，eLAN IR，CU3，CS and LARA
within BUS it is now possible to configure rooms without the need for a public －werver or CS
s． er managen
user management－in the application it will be possible to set rights for all users
who will use one system
automation－creation of conditions within Wireless，BUS systems or in both systems
－low battery notification，alarms，actuator status
history of states of individual actors
display of all added devices in a clear menu and the possibility of configuring your own dashboard．



Rooms management Settings according to individual rooms．


Device control via Smart TV is possible not only in the wireless installa－
tion of iNELS Wireless Control using the smart boxeLAN－RF，but also in tion of iNELS Wireless Control using the smart box eLAN－RF，but also in
the case of wired option iNELS BUS using the Connection server．The iHC－SMTV app is free to download from the app store on your Smart TV．
－The
－The control of app works with a classic TV remote control．
Every Smart TV that has been manufactured since 2015 and supports
OS Tizen is compatible． S Tizen is compatible
unctionality
ON／OFF switching，with the possibility of time schedules
dimming ON／OFF，smooth brightening／dimming，color change
scenes
heating temperature correction，heating mode change，cooling／heating mode）
cameras（image，or live stream if supported by web browser on SmartTV． －iHC－SMTV（Smart TV App）is free and is not licensed in any way
－Here you will find a link to the application：
Download：目苞置

Lighting Multimedia




Shutters／Blinds Possibility of individual or joint control of shading technology．


Temperature You can set the temperature in each room exactly as you like．

The communication between the components is wireless at $866-922 \mathrm{MHz}$ (according to country standards/regulations), using the unique RFIO and RFIO2 protocols. Both are proprietary wireless protocols from ELKO EP, which have a completely unique structure. RFIO2 is an extension of the RFIO protocol and allows users to use newly introduced features, such as unit signals (repeater), for selected features. This protocol is fully compatible with the previous version of the protocol (RFIO).

## Available frequency for individual territories:

865.15 MHz India
868.1 MHz Russia
868.5 MHz EU, Ukraine, Middle East

## Benefits of RFIO:

- Communication is low-energy and reliably transfers small data packets.
- Fees or licenses are not required.
- No overlapping of communication space with unaddressed commands.
- Frequency used does not interfere with Wi-Fi/Bluetooth devices.
- Setting communication between components is not conditional on working with a computer or system.


## Benefits of RFIO2:

- Products labeled as "RFIO2" will allow newly set selected components such as unit signals (repeaters).
- For components, you can easily update FW using the RFAF/USB service device.
- Enables communication with RFMD-100 and RFWD-100.
- Data transfer between wireless components takes place in such a way that other receivers within range can help transfer the information (packet) to a remote receiver that is out of reach. It is possible to cover large-scale objects (real estate) and also increase the reliability of transmission in more demanding buildings.
Backward compatibility with RFIO elements is retained.


New mobile app for controlling all compatible elements from the iNELS portfolio.


## ${ }^{\text {alexa }}$

-With Alexa Artificial Intelligence, you can simplify your daily life by set ting an alarm, notifications, creating new items, or reminders in you The voice assistant can answer questions and control individual de vices and smart home
Ts available on mobile phones, TVs, smart speakers and other devices. - The voice assistant is designed to comfortably control the Wireles As a comp blends in with every modern home. .Here you will find a link to the manual:

EN

## Google Home



## $0{ }^{\circ}$

Google Home can become a member of your smart home family. This allows you to ith the smarte eLAN-RF box via the Cloud connection, light intensity by voice
The voice assistant is designed to conveniently control the Wireless Controlled electro-installations by voice using your mobile phone or smart speaker.
As a complement to Wireless Control, inELS Smart Home Solution
blends in with every modern home. - Here you will find a link to the manual:


## Application iNELS:

Designed for ios $11+$ and Android 7.0+.
Optimized for devices with $1024 \times 768$ screen resolution.
The language of he application changes automatically according to the language set in Android/ioS.
You can crate a cloud account on the login screen in
of megabytes per second ( $36-1 \mathrm{Mbit}$ ) s and higher).

## Product loadability

Problematic choice of suitable relay contact for a particular load switched with a product is described below. Mostly we experience problems with incorrect choice of load (mea
ning incorrect relay for a particular load) which results in permanent switching of contact sealin) or damage ning incorrect relay for a particiclar load) which results in permanent switching of contact (sealing) or damage on relay contact -
What load can you use? Detailed types of load according to standard EN 60947 are described in charts below - categories of use.

| Category of use | Typical use | EN |
| :---: | :---: | :---: |
| AC current, $\cos \varphi=\mathrm{P} / \mathrm{S}(-)$ |  |  |
| AC-1 | Non-inductive or slightly inductive load, resistance furnace Includes all appliances supplied by AC current with power factor $(\cos \varphi) \geq 0.95$ Examples of usage: resistance furnace, industrial loads | 60947-4 |
| AC-2 | Motors with slip-ring armature, switching off | 60947 |
| AC-3 | Motors with short-circuit armature, motor switching when in operation <br> This category applies to switching off motors with short-circuit armature while in operation. While switching, contactor switches current which is 5 up to 7 times rated current of motor. | 60947-4 |
| AC-4 | Electro-motors with short-circuit armature: start up, braking by backset, changeover | 60947 |
| AC-5a | Switching of electrical gas-filled lights, fluorescent lights | 60947-4 |
| AC-5b | El. bulb switching <br> Enables low contact loading due to resistance of cold fiber is many times smaller that the one of hot fiber | 60947-4 |
| AC-6a | Switching of transormers | 60947-4 |
| AC-6b | Switching of capacitors | 60947-4 |
| AC-7a | Switching low inductive loads of home appliances and similar applications | 60947 |
| AC-7b | Load of motors for home appliances | 60947 |
| AC-8a | Switching of hermetically sealed motors of cooling compressors with manual reset switches against overload Hermetically sealed cooling compressors have to be placed in one box without external shaft or shaft padding and motor must operate with cooling liquid | 60947 |
| AC-8b | Switching of hermetically sealed motors of cooling compressors with manual reset switches against overload Hermetically sealed cooling compressors have to be placed in one box without external shaft or shaft padding and motor must operate with cooling liquid | 60947 |
| AC-12 | Switching of semiconductor loads with separation transformers | 60947-5 |
| AC-13 | Switching of semiconductor loads with separation transformers | 60947-5-1 |
| AC-14 | Switching of low electro-magnetic load (max. 72 VA) | 60947-5-1 |
| AC-15 | Management of alternating electro-magnetic loads <br> This category applies to switching inductive loads with input for closed electro-magnetic circuit higher than 72 VA Use: switching coils of contactors | 60947-5 |
| AC-20 | Connecting and disconnecting in unloaded states | 60947-3 |
| AC-21 | Switching resistive loads, including low loading | 60947-3 |
| AC-22 | Switching of mixed resistive and inductive loads, including low overloading | 60947-3 |
| AC-23 | Switching of motor loads or other high inductive loads | 60947-3 |
| AC-53a | Switching of motors with shor--ircuit armature with semiconductor contactors | 60947 |


| DC-1 | Non-inductive or low inductive load, resistive furnaces | 60947-4 |
| :---: | :---: | :---: |
| DC-3 | Shunt motors start-up, braking by backset, reversion, resistive braking | 60947-4-1 |
| DC-5 | Series motor: start-up, braking by backset, reversion, resistive braking | 60947-4-1 |
| DC-6 | Non-inductive or low inductive loads, resistive furnaces - el. bulbs | 60947-4-1 |
| DC-12 | Management of resistive loads and fixed loads with insulation by opto-electic element | 60947-5-1 |
| DC-13 | Switching of electromagnets | 60947-5-1 |
| DC-14 | Switching of electromagnetic loads in circuits with limiting resistor | 60947-5-1 |
| DC-20a(b) | Switching and breaking without loada: frequent swith ing , b: occasional switching) | 60947-3 |
| DC-21a(b) | Switching ohmic loads including limiting overloading (a: frequent switching, b: occasional switching) | 60947-3 |
| DC-22a(b) | Switching of compound ohmic and inductive loads including limited overloads (e.g. shunt motors) (a: frequent switching, b: random switching) | 60947-3 |
| DC-23 | Switching of highly induutive loads (e.g. series motors) | 60947-3 |


 inconstancy of parameters of switched device. Manufacturer of relays records always guaranteed parameters in ideal conditions which are done by a norm (temperature, pressure,
humidity etc.) and reality can be in a lot of cases different. Category of use (classification) of a particular relay is done by material of outputc contacts.

b) AgNi - designated for switching resistive loads, good quality switching and conducting (contact doesn't oxidate) small currents/voltages, it is not designated for surge currents and olods with inductive component.
c) AgSS or AgSNO- -suitabe forswitthing loads with inductive component, not suitable for switching small currents/voltages, it is more resistive to surge currents, suitable for
DC voltage switching, less suitable for switching loads of ohmictype. d) Wf (wolfram)-special contact designated for switching surge currents with inductive component.
e) with gold (AgSi/Au) - Used for $"$ improving
contacts for low currents
voltages, prevents oxidation.

## Loadability products

RFJA-32B-SL; RFSA-62B-SL; RFSAI-62B-SL; RFSA-66M; RFSAI-11B-SL; RFSAI-62B-SL/TH; RFSW-62; RFSW-262; RFSTI-1 1B-SL; RFSAI-61B-SL; RFSA-61MI

| Load type | $\begin{aligned} & \overrightarrow{\cos \varphi 20.95} \\ & { }^{A C 1} \end{aligned}$ | $- \text { © }$ | $\underset{A C 3}{-(M-}$ | $: C$ |  |  | $\underset{\text { AC6a }}{\substack{\text { B/k }}}$ | $\sim_{A C 7 b}$ | $\stackrel{\square}{\text { AC12 }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Contact material } \\ \mathrm{AgSnO}_{2}, \text { Contact } 8 \mathrm{~A} \end{gathered}$ | $250 \mathrm{~V} / 8 \mathrm{~A}$ | $250 \mathrm{~V} / 5 \mathrm{~A}$ | $250 \mathrm{~V} / 4 \mathrm{~A}$ | $\times$ | $\times$ | 250 W | $250 \mathrm{~V} / 4 \mathrm{~A}$ | $250 \mathrm{~V} / 1 \mathrm{~A}$ | $250 \mathrm{~V} / 1 \mathrm{~A}$ |
| Load type |  | $\bar{m}$ AC14 | $\begin{aligned} & \overline{-\bar{m}}-1 \\ & \text { AC15-15 } \end{aligned}$ | $\stackrel{\square}{\square}$ | -(M) DC3 | $\underset{\text { DC5 }}{-(\mathrm{M}-}$ | $\stackrel{\square}{\text { DC12 }}$ | $\overline{\bar{m}} \overline{\text { DC13 }}$ | $\begin{gathered} \overline{M n} \\ \text { DC14 } \end{gathered}$ |
| Contact material AgSnO ${ }_{2}$, Contact 8 A | $\times$ | $250 \mathrm{~V} / 4 \mathrm{~A}$ | $250 \mathrm{~V} / 3 \mathrm{~A}$ | $30 \mathrm{~V} / 8 \mathrm{~A}$ | 24V/3 A | $30 \mathrm{~V} / 2 \mathrm{~A}$ | $30 \mathrm{~V} / 8 \mathrm{~A}$ | 30V/2 A |  |

RFUS-61

| Load type |  | $\underset{\text { AC2 }}{\text { M }}$ | $-$ |  |  |  | $\begin{aligned} & \text { B\|k } \\ & \text { AC6a } \end{aligned}$ | $\sim_{\text {AC7b }}^{n}$ | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Contact material } \\ \mathrm{AgSnO}_{2}, \text { Contact } 14 \mathrm{~A} \end{gathered}$ | 250V/12 A | $250 \mathrm{~V} / 5 \mathrm{~A}$ | 250V/3 A | $\begin{gathered} \left.\begin{array}{c} 230 \\ (130) \\ (690 \\ \hline \end{array}\right) \end{gathered}$ | $\begin{aligned} & 230 \mathrm{~V} / 3 \mathrm{~A}(690 \mathrm{VA}) \\ & \text { up to } \mathrm{max} \text { input } \mathrm{C}=14 \mathrm{uF} \end{aligned}$ | 1000 W | $\times$ | $250 \mathrm{~V} / 3 \mathrm{~A}$ | $\times$ |
| Load type |  | $\overline{\text { AC14 }}$ | $\underset{\substack{\neq-1 \\ \text { AC15 }}}{\underbrace{}_{n}}$ | $\begin{gathered} -\square \\ \text { DC1 } \end{gathered}$ | $-$ | $\underset{\text { DC5 }}{(M)}$ | $\stackrel{-}{\square}$ | $\bar{\sim}$ | $\bar{\sim}$ |
| $\begin{gathered} \text { Contact material } \\ \mathrm{AgSnO}_{2}, \text { Contact } 14 \mathrm{~A} \end{gathered}$ | $\times$ | $250 \mathrm{~V} / 6 \mathrm{~A}$ | $250 \mathrm{~V} / 6 \mathrm{~A}$ | 24V/10A | $24 \mathrm{~V} / 3 \mathrm{~A}$ | 24V/2A | 24V/6A | 24V/2 A | $\times$ |

## RFSA-61M; RFSC-61N; RFSA-61MI

| Load type | $\underset{\cos \varphi 20.95}{ }$ AC1 | $-(\mathrm{M})$ | -(M) AC3 | $\stackrel{\square}{\text { ACswithout }}$ |  |  |  | $\sim_{A C 7 b}$ | $\stackrel{-}{-\square}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Contact material } \\ \mathrm{AgSnO}_{2} \text {, Contact } 16 \mathrm{~A} \end{gathered}$ | $250 \mathrm{~V} / 16 \mathrm{~A}$ | $250 \mathrm{~V} / 5 \mathrm{~A}$ | $250 \mathrm{~V} / 3 \mathrm{~A}$ | $\begin{aligned} & \begin{array}{c} 230 \mathrm{~V} / \mathrm{A} \\ (690 \mathrm{VA}) \end{array} \end{aligned}$ | $\begin{aligned} & 230 \mathrm{~V} / 3 \mathrm{~A}(690 \mathrm{VA}) \\ & \text { up to } \mathrm{max} \text { input } \mathrm{C}=14 \mathrm{uF} \end{aligned}$ | 1000w | $\times$ | $250 \mathrm{~V} / 3 \mathrm{~A}$ | 250V/10 A |
| Load type |  | $\overline{\mathrm{AC} 14}$ | $\begin{aligned} & \overline{\mathbf{m}_{9}^{\prime}} \\ & \text { AC15 } \end{aligned}$ | $\stackrel{\square}{\square}$ | $-$ | $-(\mathrm{M}-$ | $\stackrel{-}{\square}$ | $\overline{\overline{\mathrm{DC}} 13}$ | $\overline{\mathrm{DC} 14}$ |
| Contact material $\mathrm{AgSnO}_{2}$, Contact 16 A | $\times$ | $250 \mathrm{~V} / 6 \mathrm{~A}$ | $250 \mathrm{~V} / 6 \mathrm{~A}$ | 24V/10 A | 24V/3 A | 24V/2A | 24V/6A | 24V/2 A | $\times$ |


| Rating of the light source ELKO lighting on dimmers ELKO EP |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LED bulb |  | LED spot lights |  |  | LED panels |  | LED/RGB Strip |  |  |  |  |  |
|  | $\begin{aligned} & \text { DLBEEET- } \\ & 806-2 K 7 \end{aligned}$ | $\begin{aligned} & \text { DLBEEE27-1-2 } \\ & 806-5 \mathrm{~K} \end{aligned}$ | $\begin{gathered} \text { DLSL-GU10- } \\ -350-3 \mathrm{~K} \end{gathered}$ | $\begin{gathered} \text { LLL-GU10- } \\ 350-3 \mathrm{~K} \end{gathered}$ | $\begin{gathered} \text { LSL-GU10- } \\ 350-5 \mathrm{~K} \end{gathered}$ | LP.060-3k | LP-600-6k | $\begin{gathered} \text { Lebstrip } \\ 7.2 W \end{gathered}$ | $\begin{gathered} \text { LeD stip } \\ 14.4 \mathrm{~W} \\ \hline \end{gathered}$ | $\underset{\substack{\text { LeD stip } \\ 19.2 W \mathrm{w}}}{\substack{\text { sip }}}$ | $\begin{gathered} \text { LED stip } \\ 28.8 \mathrm{~N} \\ \hline \end{gathered}$ | $\begin{gathered} \text { RGB strip } \\ 7.2 W \end{gathered}$ | $\begin{gathered} \text { RGB strip } \\ 14.4 \mathrm{~W} \end{gathered}$ |
|  | $\underset{\mathbb{H}}{\mathbb{H}}$ | $\underset{\mathbb{H}}{\mathbb{W}}$ | $=$ | 筑iiy | sili) |  |  | $\infty$ | (2) |  | + | \% | , |
| RFDSC-71N | $\checkmark$ humber | $\checkmark$ pumber | $\checkmark$ pumber |  | $\checkmark$ number | number | number | number | number | number | . number | number |  |
| RFDEL-71B-SL | $\checkmark 11$ | $\checkmark 11$ | $\checkmark$ 25 | $\checkmark{ }^{13}$ | $\checkmark \quad 13$ |  | , |  | - | : |  |  |  |
| RFDA-73M/RGB | - | $\cdots$ | $\cdots$ |  |  | - | - | $\checkmark$ 3x8m | $\checkmark 3 \times 4 \mathrm{~m}$ | $\checkmark$ 3x5m | $\checkmark 3 \times 4 \mathrm{~m}$ | $\checkmark 20 \mathrm{~m}$ | $\checkmark$ l 10 m |
| RFDAL-32B-SL |  |  |  |  |  | $\checkmark$ ¢ 5 | $\checkmark \quad 50$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## wARNING!

May lead to different results based on the state of network cable length and other
factors.
This table contains the results of tests that were conducted internally and therefore This table contains the results of tests that were conducted internally and therefore
is ONLY for customers only informative. The products were tested in test laboratories ELKK $\mathbb{E P}$ and therefore the company assumes no responsibility for any imitation test
environment. environment.
Inductive and capacitive loads must not be connected simultaneously!

Load capacity:
Due to the huge amount of type of light sources, the maximum load depends on
 ranges from $\cos \varphi=0.95$ up to $\varphi=0.4$ A An approx aximate value of maximum load may be
obtained by obtained by multiplying
connected light source.

There are different types of pairing according to the factory version of the driver. Due to technological advances, which are inevitable even in our products, you can have controllers with or without a pairing button. You can identify the controller with the pairing button by the mark $\because \stackrel{\rightharpoonup}{p}:$ on the print on the back of the instrument panel and the physical presence of the pairing button on the controller.

To position the pairing buttons on your controllers:


RFGB (both round and sharp versions):
Pressing on the upper control mandrel (pape clip, screwdriver) will eject the battery
and the pairing button is released.


RFWB: By removing the co
button is accessed.


RF Key
It is located and the side near the button number 5 .

> To assign a controller using the pairing button

Hold the pairing button for 1 second to put the controller into pairing mode - the red LED indicates with a short flash. Next, hold the PROG button on the device you want to control for $1 \mathrm{~s}, 2 \mathrm{sec}$ or 3 s (see. Tab 1) PROG button modes) Next, continue setting the functions ( 1 to 6 ) by pressing the appropriate button on the controller with the appropriate number of presses (see Tab 2). Finish programming by briefly pressing the PROG button on the device and briefly pressing the pairing button on the controller. We recommend that you first enter the controller into pairing mode and then the device. Putting the controller and the device into pairing mode is signaled by a red LED with a short blink.


Press (15) of the pairing
button button
Controlerer transmiter (i.e. RFGB,
RFWB, FFEEE , etce)


Long press ( $1 \mathrm{~s}>$ ) of the PROG button (see. Tab 1)


hort press ( $>15$ ) of the selected button on the controller (number of
presses $=$ function)


Short press (>15) of the
Short press $(>$ s) of the
PROG button to close


Short press ( $>15$ ) of the pairing button to exit the pairing mode

Assign a controller without a pairing button
Procedures without a pairing button are used to assign older controls to devices, and two pairing options are possible, depending on the version of the device. This is a pairing without putting into the so-called „pairing".,"Compatibility Mode" or with the introduction to "Compatibility Mode" mode (the oldest possible version).


Removing and inserting the battery to activate the default state



Short press (>1s) of the selected button on the controller (number of presses $=$ function
D) Pairing without compatibility mode

First, insert the battery into the controller. If the battery has already been inserted into the controller, remove it for at least 5 s to restore it to its default state. After inserting the battery, while the red LED is lit ( 3 s ), press and hold 1 until the controller starts to indicate the driver mode by briefly flashing the LED. Then release the button to make the controller ready for pairing. Next, hold down the PROG button on the device you want to control for 1,2 or $3 \mathrm{~s}($ see. Tab 1) continue to set functions 1 to 6 by pressing the appropriate button on the controller with the appropriate number of presses (see Tab 2). Finish programming by briefly pressing the PROG button on the device and removing and reinserting the battery into the controller.

(C)
Pairing in compatibility mode
To pair the oldest versions of devices with drivers, it is necessary to switch the driver to Compatibility Mode. Remove the battery from the controller 5 s . After inserting the battery, the red LED is on for 3 s , press and hold 1 and 2 at the same time and keep them pressed until the controller signals the transition to Pairing in compatibility mode by flashing rapidly. Then the buttons must be released. The controller, which is in Compatibility Mode, is ready for pairing, so you only need to put the device into pairing mode. $1 \mathrm{~s}, 2 \mathrm{~s}$ or 3 s (depending on type see. table Modes of the PROG button) and continue setting functions 1 to 6 by pressing the appropriate button on the controller with the appropriate number of presses according to the manual of the device. Finish programming by briefly pressing the PROG button.
Switching between 1 and 2 modes also works the other way around, so you can switch back to Pairing without compatibility mode (transition indicator - double flash)

| Table 1) Modes of the PROG button on the devices |  |  |  |
| :---: | :---: | :---: | :---: |
| Applies to: | $\begin{gathered} \text { Applies to: } \\ \text { Eatinering } \\ \text { paing } \\ \text { (Step 2) } \end{gathered}$ | $\begin{gathered} \text { Clearing } \\ \text { channel/ } \\ \text { button } \\ \text { memory } \end{gathered}$ | $\begin{gathered} \text { Clear the } \\ \text { memory of } \\ \text { an entire } \\ \text { device } \end{gathered}$ |
| RFSA-11B, RFSAI-11B-SL, RFSA-61B, RFSA-61B-SL, RFSA-61M, RFSA-61MI, RFSA-66M, RFSA-66MI, RFSC-61, RFUS-61, RFDA-11B, RFDEL-71B, RFDEL-71M, RFDEL-76M, RFDALI-04B, RFDALI-32B, RFDA-73M/RGB, RFDSC-71N | 15 | 5 s | 8 s |
| RFSAI-62B-SL, RFSAA-62B, RFSAA-628BRSWW-62, RFSW-262, RFDW-71, RFDW-271 | 3 s | 7 s | 11 s |
| RFDAC-71B | 2 s | 5 s | 10 s |

Clear the memory of the button


To clear an already paired channel to a button on the controller, press the To clear an already paired channel to a button on the controller, press the
PROG on the device for a period of time of 5 sor 7 s (see. Tab 1). Clear the memory of the button and press the appropriate button on the controller that you want to unpair. After this step, it returns to its working state.

## DRIVER

| DEVELOPMENT <br> AXIS | Pairing <br> 2. manner | Pairing <br> 2. manner | Pairing <br> 1. manner |
| :---: | :---: | :---: | :---: |
|  | 2009 | (c) (B) |  |
|  |  | 2020 |  |

## 困 $\times$ (I)PROG ${ }^{\text {ה }}$

Please note:
If you are pairing older versions of drivers or features with each other, it is not possible to clearly determine whether you need to use Compatibility Mode for pairing or not. Therefore, you need to try both ways.
RF Key/W and RF Key/ , key fobs and
of the oldest possible version can no longer be paired with devices that have radio wavelet markings on the PROG button. RFSAI-62-SL, RFSA-62B, RFSAl-62B and RFDAC-71B units have a different pairing method. Always follow the instructions for the devices.

## Setting the functions on the controllers

Table 2) Programming of feature functions
Single function - RFSA--11B-SL

| Single function - RFSA-111-SL |  |  |
| :---: | :---: | :---: |
| Assign a function | Feature description | Graph |
|  | Function button ON/OFF <br> The output contact closes by pressing one button position, and opens by releasing the button. |  |
| It is a singlefunction relay, so when programming the ON N function on the upper pusher, the OFF function is assigned to the button belowit automatically |  |  |
| Spinaci prvky multifunkě̃i - RFSA-61B, RFSA-62B-SL, RFSA-61M, RFSA-66M, RFSAI-62B-SL, RFSC-6IN, RFUS-61 |  |  |
|  | Function 1 - button <br> The output contact will be closed by pressing the button and opened by releasing the button. |  |
| (1) 2x ${ }^{\text {K click }}$ | Function 2 - switch on <br> The output contact will be closed by pressing the button. |  |
| (1) 3x click | Function 3 - switch of <br> The output contact will be opened by pressing the button. | $\begin{aligned} & \text { P1 } \\ & \square \end{aligned}$ |
| (6) 4x click | Function 4 - impulse relay <br> 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. |  |
|  | Function 5-delayed off <br> The output contact will be closed by pressing the button and opened after the set time interval has elapsed. $\mathrm{t}=2 \mathrm{~s}-60 \mathrm{~min}$. |  |
| doay | $\begin{aligned} & \text { Function } 6 \text { - delayed on } \\ & \text { The output contact will be opened by pressing } \\ & \text { the button and closed after the set time interval has elapsed. } \mathrm{t}=2 \mathrm{~s}-60 \mathrm{~min} \text {. } \end{aligned}$ |  |
| The timing function (5 and 6) is performed by combining multiple presses and tracking the time for which we want to activate the delayed retur or start (see. Manual for switching devices). |  |  |
| Stmivaci prrky multifiunkěni RFDA-73M/RGB, RFDEL-71B-SL, RFDEL-71M, RFDSC-7IN, RFDAC-71B, RFDW-71 |  |  |
|  | Light scene function 1 <br>  <br>  |  |
|  |  switch the light on/off to this is itensity.litis possible to treadiust the change in intensity at any time by pressing the programmed button for verer 3 s. The actuator remembers the adiusted vilue even atter disconnecting from the power supply. |  |
|  |  |  |
|  | The brightness level is saved in the the memene function and essing the button shortiv later will switch the light on/off to this intensity.litis possible to readiust the change in intensity at any time by a long press of the programmed butto. The actuator remembers the adiusted value even atter disconnecting from the power supply. |  |
|  | Function sunrise <br> After pressing the programmed button, the light begins to illuminate in the programmed time interval in a range of 2 seconds to 30 minutes. |  |
|  | Function sunset <br> After pressing the programmed button, the light begins to dim in the programmed time interval in a range of 2 seconds to 30 minutes. |  |
|  | Function ON / OFF <br> If the light is switched off, pressing the programmed button will switch it on. If the ligh is switched on, pressing the programmed button will switch it off. |  |
|  | Function switch OFF <br> The dimmer output switches off by pressing the button. |  |



## 1) Surface mounted

Wall mounted or in an installation box with spacing of 65 mm .
RFWB-20/G RFGB-40B/MT RFGB-220 RFWB-40/G RFGB-40W/MT RFGB-240
RFWB-40G/MT RFTC-10/G
$\begin{array}{ll}\text { RFGB-20 } & \text { RFTC-50/G } \\ \text { RFGB-40 } & \text { RFTC-150/G }\end{array}$
2) Flush mounted

RF Touch-2 RFSW-62/S
RFDW-71
RFGS-30/S

## 3) DIN Rail mounted

On DIN rail according to EN 60715 .
RFSG-1M
RFDA-73M/RGB RFDEL-71M RFSA-266M

RFSA-66M
RFSA-66M

RFDE--6M
4) Flush mounted (BOX)

RFIM-40B-BP-S $\begin{array}{ll}\text { RFIM-40B-BP-SL } & \text { RFSAI-62B-SL } \\ \text { RFIM-40B-230-SL } & \text { RFSAl-61BPF-SL } \\ \text { RFDALI-32B-SL } & \text { RFJA-32B-SL }\end{array}$ $\begin{array}{ll}\text { RFDALL-32B-SL } & \text { RFJA-32B-SL } \\ \text { RFDAL-04B-SL } & \text { RFSTI-11B-SL }\end{array}$ $\begin{array}{ll}\text { RFDALL-04B-SL } & \text { RFSTI-11B-SL } \\ \text { RFDEL-71B-SL } & \text { RFSAI-161B } \\ \text { RFSAI-11B-SL } & \text { RFST-11B }\end{array}$ $\begin{array}{ll}\text { RFSLAI-11B-SL } & \text { RFSLI-111B } \\ \text { RFSA-61B } & \text { RFSAI-62B-SL }\end{array}$ $\begin{array}{ll}\text { RFSA-61B } & \text { RFSTII-111B } \\ \text { RFSAI-62B-SL/MT }\end{array}$

## 5) Mounted into the cover of applianc

RFDALI-32B-SL RFSAI-62B-SL RFSTI-111B
$\begin{array}{lll}\text { RFDALI-32B-SL } & \text { RFSAI-62B-SL } & \text { RFSTI-111B } \\ \text { RFDALI-04B-SL } & \text { RFSAI-BPF-SL } & \text { RFSAI-62B-SL/M }\end{array}$
$\begin{array}{ll}\text { RFDAL-I204B-SL } & \text { RFSAI-BPF-SL } \\ \text { RFDEL-71B-SL } & \text { RFJA-32B-SL } \\ \text { RFSA-11B-SL } & \text { RSST-1B-SL }\end{array}$
$\begin{array}{ll}\text { RFSAI-11B-SL } & \text { RFSTI-11B-SL } \\ \text { RFSA-61B } & \text { RFSAl-161B }\end{array}$
$\begin{array}{ll}\text { RFSA-61B } & \text { RFSAI-161B }\end{array}$

## 6) Surface mounted

| RFSOU-1 | RFWD-100 |
| :--- | :--- |
| RFUS-61 | RFOWB-20 |
| RFTM-100 | RFMD-200 |
| RFS-100 | RFSLT-S3 |
| RFMD-100 |  |




Detector


RFTouch 2






RF KEY-40 RF KEY-60

Box




- Headquarters

ELKO EP Holding SE, Czech Republic

- Europe

ELKO EP Balkan d.o.o
ELKO EP Bulgaria OOD
ELKO EP Germany GmbH
ELKO EP Hungary Kft.
ELKO EP POLAND Sp. z o.o.
ELKO EP SLOVAKIA, s.r.o.
ELKO EP UK Ltd.
ELKO EP UKRAINE LLC

- Africa \& Middle East

ELKO EP Egypt LLC ELKO EP Kuwait Ltd.
ELKO EP MEA LLC
ELKO EP Saudi Arabia Ltd.
ELKO EP South Africa PTY Ltd.

