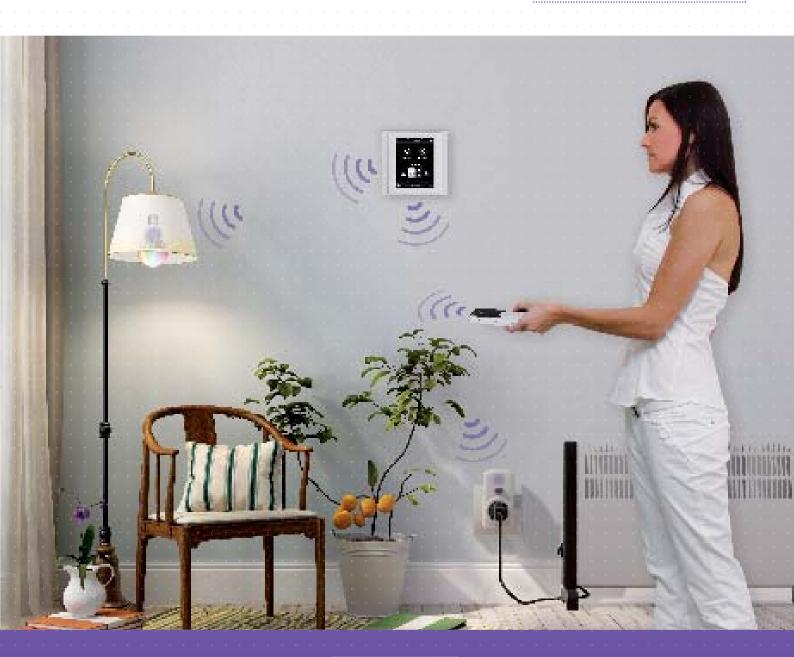


SMART WIRELESS ELECTRO-INSTALLATION



TECHNICAL CATALOGUE













Presentation of ELKO EP Company

The company ELKO EP is enjoying its twenty-first year on the tough and rapidly accelerating electronics market. It maintains its position thanks to its own development, precise production and distribution of devices, which make your day easier at home, and in industry, they reliably provide for a fluid process of automation technology.

A dynamic time requires fast-developing solutions. We can fortunately say that our work begins with our in-house development of such devices that you - our customers - are now demanding. We do not hesitate and we react flexibly. We are modernizing the production environment, last year automated production expanded to include the (faster, latest) SMD technology, which can handle producing up to 1,000,000 products per month. Our internal testing laboratory and a two-phase final inspection ensure oversight of quality of our manufactured products.



For several years now, we have been working intensively on developing intelligent electrical installations - in both bus and wireless design. The intelligent electrical installation (iNELS), by the way we designed it, does not just mean control of ordinary electrical elements such as light bulbs or sockets, but includes control of all technologies in the home including multimedia. And that ranks iNELS amongst the top in its field thanks to the complex concept and control of applications.

Our mission is to bring customers modern wiring solutions that make everyday life easier, facilitate work and save money. While others merely sell, we develop and produce. ELKO EP, always something more.

ELKO EP in numbers

Headquarters - production facility: Holešov, Czech Republic Year founded: 1993

Number of employees: 194 in Holešov, 254 in ELKO Holding Branches: Slovakia, Poland, Hungary, the Ukraine, Russia, Germany, Spain, Austria, Dubai Consolidated revenue: > 20 mil. EUR

Export countries: > 66

 $Important\ OEM\ customers:\ Schneider\ Electric,\ Eaton,\ Siemens,\ ETI,\ TYCO,\ GE$

Certification of processes: ISO 9001, ISO14001

Certification of products: CE (EU), UL (USA), GOST (RU), Ukrstandart (UA) a.j.

Attained awards



AWARDS GOLDEN
PRODUCT FOR
THE SMR-T
Super-multifunction
relay SMR-T won the
GOLDEN PRODUCT
Award at the electrical
fair in Ostrava.



ENTREPRENEUR OF THE YEAR 2004 In 2004 Jiří Konečný won the Entrepreneur of the year award.

AWARDS JIŘÍ KONEČNÝ



THE YEAR 2012 VODAFONE

In 2012, ELKO EP became Vodafone Company of the Year of the Zlin Region and placed second nationwide.

COMPANY OF



THE HONORABLE
MENTION "VISIONARIES"
FOR "WIRELESS SYSTEM"
In 2013 ELKO EP Ltd.
company received the
honorary mention of the
jury ChechInfo.



AWARDS RF TOUCH
BOHEMIAN-MORAVIAN
ASSOCIATIONS
The company ELKO EP s.r.o.
won the prestigious
GOLDEN AMPERE Award for
the product RF Touch.

Product Lines ELKO EP



RELAYS - Modular electronic devices

www.elkoep.com

A wide range of electronic modular devices, which bring new possibilities to home and office control, monitoring and security, as well as to industrial process control: time relays, installation contactors, staircase automatic switches, time switches clocks, dimmers, thermostats, power supplies units, control and signalling devices, GSM gates, etc.



iNELS RF Control - Wireless control

www.elkoep.com

A unique wireless control system providing you perfect control over your home! The RF Control system enables you to control functions such as heating, lighting, electrical appliances and window shutters, all with a single touch. No wall cutting, fast and easy installation, exclusive design of wireless wall switch buttons and other components.



iNELS BUS SYSTEM - Intelligent electro-installation system

www.inels.com

iNELS will transform your house into a timeless intelligent household. It will take charge of heating and air-conditioning regulation, lighting control and switching home appliance, while also providing perfect security for your home. Enjoy controlling your entire house via a TV screen thanks to iNELS Multimedia (iMM) or use the elegant iNELS Touch Panel (iTP).



AUDIO/VIDEO

www.elkoep.com

In this group you can find products, which brings you a new dimension of controlling music, video and home appliances. These are not just ordinary controllers but products which can be a pefrect part of your electro-installation.



LOGUS90 - Home switches and sockets

www.elkoep.com

We offer you exclusive switches, sockets and accessories in a standard plastic or metallic design. However, there are also charming luxury frames from purely natural materials such as genuine wood, metal, granite or hardened glass. Be especial!



ELKO Lighting s.r.o.

www.elkoep.com

We supply not only LED light sources to the market, but also we bring a complex lighting solution. Our goal is to supply quality and affordable LED light sources and provide a high-level of service - always to satisfy our customers!

Attained awards





AWARDS GOLDEN AMPER FOR "RF Touch"

RF Touch – wireless touch control unit won the GOLDEN AMPER.



AWARD OF CZECH AND MORAVIAN ELECTRICAL AND ELECTRONIC ASSOCIATION The ELKO EP product "LARA" has

The ELKO EP product "LARA" has gained the award – Innovative Product of the Year 2014.



AWARD FOR THE SMART RF BOX "eLAN-RF-003" In the competition Top Energie 2014, the product "Smart RF box eLAN-RF-003" won third place.



CZECH TOP 100 AWARD

ELKO EP ranked among the best 100 Czech companies.

Choose the right one!

PRICE OF **INSTALLATION**











Control using the TV	•
Tablet	•
PC / Laptop	•
Music playback	-
Video cameras	•
Weather station	-
Door communicator	-
Controlling home appliances	-
Touch panel	•
Control via Smartphone	•
Detectors	•
Wireless switch	•
Heating regulation	•
Controlling blinds	•
Dimming lights	•
Controlling appliances	•

Wireless electrical installations

Most of you have already built a house or furnished an apartment. If you want to bring life into your home, we have an elegant wireless solution. As the name implies, the wireless communication is works with a range of up to 200 m (depending on the internal structure of the house/apartment and the building materials used.)

The central brain is the RF Touch unit, which can be placed anywhere within range. It's possible not only to program entire system from this unit, but also to control it. Brightly replaces several thermostats and controllers. Within the system, you have an unlimited opportunity to add any drivers and place them wherever convenient.

Energy savings:













PRICE OF INSTALLATION











Bus electrical installations

Are you building a new house? Then you should consider a bus-based solution. A bus in this sense is a data conductor that is distributed in the walls across the entire home. As opposed to a wireless solution, its advantage is range, because up to 18 x 550 m buses can be distributed in a single building.

Connection to a computer expands the scope of its available functions. This system may be expanded to include multimedia extensions and can connect third party devices (household appliances, A/C, etc.). Control and monitoring the system can be performed via PC, the Internet, telephone, tablet, etc.

The system offers a wider range of applicable functions. A computer is used to set the parameters.

Energy savings:













Wireless electro-installation

What are the benefits of using wireless control?

- Remotely switching of home appliances or electrical devices
- Light dimming, light scenes
- Controlling shutters, blinds and internal window blinds
- Controlling the entrance gate and garage door
- Manual or automatic control according to a pre-set program
- Switching on/off home appliances depending on the response of sensors
- Response to (undesired) opening a window or a door
- Response to the movement of people (authorized and unauthorized)
- Saving energy thanks to lighting and heating regulation



RF Control - Wireless RF system is a unique solution of intelligent electrical installation especially for reconstructions of houses, apartments or wiring extensions. Installation can be performed easily without breaking or cutting into the walls. Units (actuators) can be installed directly into suitable wall boxes, lighting covers, switchboards and wherever installation allows you to do so.

Flexible location: ideal for installing in existing buildings, as well as for refurbished and new buildings: thanks to RF Control, you are not limited by the location of a switch, for instance when moving furniture. The wireless wall switch button may be glued to glass, mounted on a beam or just placed on a night table and easily moved elsewhere at anytime.

Controlling lights from your terrace or opening your garage? You will have the keychain - your portable controller - always readu!

The universal transmitter module converts up to 4 potential-free external inputs (buttons) to RF signal, facilitating the connection of the following devices to the system: door switches or buttons, electronic alarm sensors (fire, smoke, door detector...), bells, etc. Property protection and safety. A flood, temperature, fire or gas leakage sensor sends a signal to the actuator, which closes the water or gas supply, switches on ventilation, etc.

Receivers (actuators) may be mounted in an installation box, under the existing switch, light covers or ceiling, or on a DIN rail inside the switchboard.

A smart design of wireless wall switch buttons with plastic, glass,wood, metal or granite finish.



Switching el. appliances



Light dimming



Heating regulation



Air conditioning control



Roller blind control



Detector control

SMART BOX FOR CONTROLLING YOUR ELECTRICAL INSTALLATION WITH YOUR SMART PHONE

It's used for controlling the electro-installation with your smart phone or tablet. Control options are through the Web browser or iHC application (Android).



RF Touch offers you complete control over the electro-installation. All these with the possibility of setting a weekly program, all automatically and wirelessly.

REMOTE CONTROL "RF PILOT" WITH OLED DISPLAY

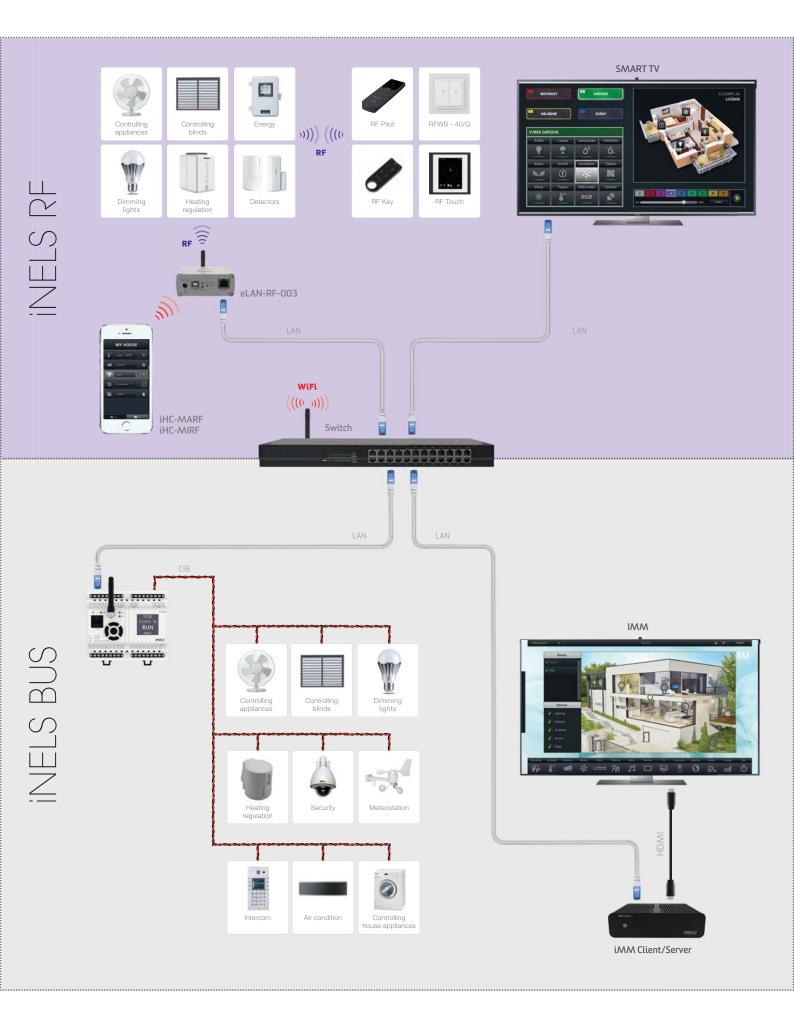
With an excellent complement to the RF Control system, the remote control comes with an elegant design and an OLED display. Thanks to RF Pilot you have a comfortable control over the home devices and appliances.







iNELS RF & iNELS BUS integration



Wireless kits to control your household



THE GAME OF LIGHTS

A kit to control lights via smartphone



REMOTE HEATING

A kit to control heating via smartphone



HEATING WITH SAVINGS

A kit to control heating via wireless RF Touch unit



EASY HEAT REGULATION

A kit for wireless temperature regulation in the home



RADIO & MUSIC IN THE SWITCH

A kit for controlling music, which perfectly fits in your home's interior



YOUR HOUSE UNDER THE THUMB

Control your house via a smartphone



ONE CONTROLLER FOR ALL

A kit for controlling IR devices via a smartphone.





THE KITS CAN BE EASILY AND QUICKLY EXTENDED

For more information, see our webpage:

www.inels.com

Overview of wireless system units







Overview of wireless system units

Dimmers

Dimmer for coloured (RGB) LED strips

R-L-C dimmer (single-function), flush mounted

R-L-C dimmer (multi-function), flush mounted

Universal dimmer (flush mounted)

Universal dimmer (DIN rail mounted)









RFDA-73M/RGB

RFDA-11B

RFDA-71B

RFDEL-71B

RFDEL-71M

Dimming socket (single-function)



Dimming socket

(multi-function)

Converter iNELS -DALI/DMX

Analog controller









RFDSC-11

RFDSC-71

EMDC-64M

RFDAC-71B

PREPARING

Lighting

Wireless coloured bulb



Wireless white





Monitoring units

Wireless flood detector

RFSF-1B





RFPM-2

RF-RGB-LED-550

RF-White-LED-675 RFSOU-1

Temperature control

Wireless thermovalve

Switch unit with a temperature sensor (flush mounted)

Switch unit with a temperature sensor

Wireless temperature sensor



FP-1













RFATV-1

RFSTI-11B

RFSTI-11/G

RFTI-10B

RFTC-50/G RFTC-100/G

Catalogue content

Wireless control system

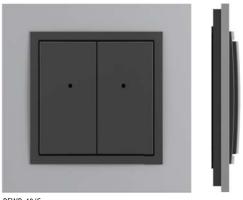
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RF ac	Functions tuators	Safety	Sockets	Irrigation	Swimming pool	Garage doors	Appliances	Shutters	⇒ Heating / Air conditioning	Lighting	Consumption
RFWB-20/G	What has a with the same had a same had a same had								TAAAA	2	
RFWB-40/G	Wireless switch, which can be located anywhere.		•		•	•	•	•		•	
RF Key RFIM-20B	A handy little helper in your pocket.		•								
RFIM-40B	The transmitter which can change your switch to wireless.						•		•		
RFSG-1M RF Touch/W	Save money by switching cheap/expensive current.				•		•				
RF Touch/B	Everything is under control with the touch control unit.	•	•	•	•	•	•	•		•	
RFAP/USB	Controlling the installations using your PC or laptop. Controlling using our smart application or web interface for your smart	•	•	•	•	•	•	•	•	•	
eLAN-RF-003	phone, tablet or TV. Controlling using our smart application or web interface for your smart		•	•	•	•	•	•	•	•	
eLAN-RF-Wi-003	phone, tablet or TV.		•	•	•	•	•	•		•	
RF Pilot	An inspiring design control.		•	•	•	•	•		•	•	
RFGSM-220M	Controlling and information are in your mobile phone.	•	•	•	•	•	•	•	•	•	
RFRP-20	Repeater for radio signal prolongation.		•	•	•		•		•	•	
RFSA-11B RFSA-61B	Switching appliances and lights with time functions.		•	•	•		•		•	•	
RFSA-62B	One actuator controls the two lighting circuits.		•	•	•		•		•	•	
RFSA-61M	Switching actuators for solutions to the switchboad, switching the socket circuits.		•	•	•		•		•	•	
RFSA-66M	Switching actuators for solutions to the switchboad, switching the socket circuits.		•	•	•		•			•	
RFSAI-61B	Features an external terminal to connect a wire button (a combination of wired and wireless electrical installation).			•			•		•	•	
RFSC-11 RFSC-61	Socket implementation - simple solution for switching the fan and other appliances.			•	•		•		•	•	
RFUS-11 RFUS-61	Switching in demanding environments (cellars, greenhouses, bathrooms).		•	•	•	•	•	•	•	•	
RFJA-12B	Controlling blinds, garage doors, shutters and awnings.					•		•			
RF-RGB-LED-550	Embedded RF module.									•	
RF-White-LED-675	Solutions for dimming LED strips.									•	
RFDA-73M/RGB	Dimmer for placing in the ceiling or in an installation box.									•	
RFDA-11B RFDA-71B	Universal dimmer for all types of loads.									•	
RFDEL-71B RFDEL-71M	Dimming control of lighting loads up to 600W.									•	
RFDSC-11 RFDSC-71	Simple solution for dimming your lamps.									•	
RFSOU-1	Automatically controls the brightness in the room.							•		•	
EMDC-64M	Control unit for DALI and DMX.									•	
RFATV-1	Wireless thermo-valve powered by batteries, it is ideal solution for radiators.								•		
RFSTI-11/G	It measures the temperature and at the same time monitors the critical floor value.								•		
RFSTI-11B	It measures the temperature and at the same time monitors the critical floor value.								•		
RFTI-10B	For sending information about the temperature. Placed any where thanks to battery power.				•				•		
RFTC-10/G RFTC-50/G	Digital controllers. The quick solution for heating control.								•		
RGTC-100/G RFDAC-71B	It controls thermodrives and serves for dimming fluorescent tubes.								•	•	
RFSF-1B	Protection against flooding.	•									
RFPM-2	Energy consumption indicator.										•







RFWB-40/G

Technical parameters

- The wireless controller is used to control switches and dimmers (lights, gate, garage door, blinds, etc.).
- RFWB-20/G: two buttons enable control of two units independently.
- RFWB-40/G: 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).
- When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF / ON, blinds up/down).
- Sending a command is indicated by a red LED.
- In LOGUS⁹⁰ switch frame design (plastic, glass, wood, metal, stone).
- Option of setting light scenes, where with a single press, you can control units of iNELS RF Control.
- Battery power supply (3V/CR2032 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-20.
- · Communication frequency with bidirectional protocol iNELS RF Control.

Supply voltage: 3V CR 2032 battery Transmission indication: red LED Number of buttons: Transmitter frequency: 868 MHz, 915 MHz, 916 MHz Signal transmission method: unidirectionally addressed message Range in free space: up to 200 m Other data Operating temperature: -10 to+50 °C Operating position: any Mounting: glue / screws IP 20 Protection: Contamination degree: LOGUS90 - Dimensions: Frame - plastic 85 x 85 x 16 mm Frame - metal, glass, wood, granite 94 x 94 x 16 mm

RFWB-20/G

RFWB-40/G

*comes with plastic frame. No installation into multi-frames.

20/G cover, frame)	frequency	EAN code
RFWB-20/G , white cover white frame	868.5 MHz	8595188140379
	868.1 MHz	8595188144025
(devic	915 MHz	8595188142953
	916 MHz	8595188147552

40/G cover, frame)	frequency	EAN code
RFWB-40/G , white cover white frame	868.5 MHz	8595188140607
RF /ice, w	868.1 MHz	8595188144032
(dev	915 MHz	8595188142960
	916 MHz	8595188147569

40/G cover, frame)	frequency	EAN code
RFWB-40/G e, white cover, white frame)	868.5 MHz	8595188140607
œ ø, ⁻	868.1 MHz	8595188144032
(devic	915 MHz	8595188142960
	916 MHz	8595188147569

EN 60669, EN 300 220, EN 301 489

R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)

Examples of placement

On wall

Weight*:

Related standards:



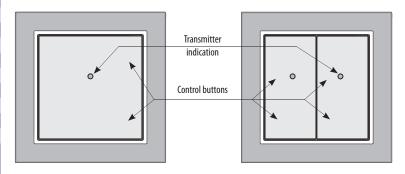


On glass

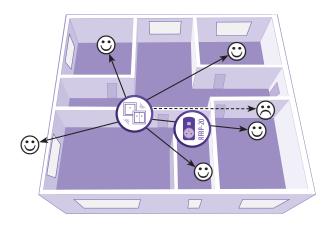


Device description

RFWB-20/G RFWB-40/G



Placement of units



For more information, see p. 56

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.









- The key alarm is used to control switches and dimmers (lights, gate, garage door, blinds, etc.).
- When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF / ON, blinds up/down).
- Sending a command is indicated by a red LED.
- Designed in black and white with laser printing.
- Four buttons enable control of four units independently.
- $\bullet \ \, {\rm Option}\, {\rm of}\, {\rm setting}\, {\rm light}\, {\rm scenes}, {\rm where}\, {\rm with}\, {\rm a}\, {\rm single}\, {\rm press}, {\rm you}\, {\rm can}\, {\rm control}\, {\rm units}\, {\rm of}\, {\rm iNELS}\, {\rm RF}\, {\rm Control}.$
- Battery power supply (3V/CR2032 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-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Technical parameters	RF KEY
Supply voltage:	3V CR 2032 battery
Transmission indication:	red LED
Number of buttons:	4
Transmitter frequency:	868 MHz, 915 MHz, 916 MHz
Signal transmission method:	unidirectionally addressed message
Range in free space:	up to 200 m
Other data	
Operating temperature:	-10 to +50 °C
Operating position:	any
Protection:	IP 20
Contamination degree:	2
Dimensions:	64 x 25 x 10 mm
Weight:	16 g
Related standards:	EN 60669, EN 300 220, EN 301 489
	R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)

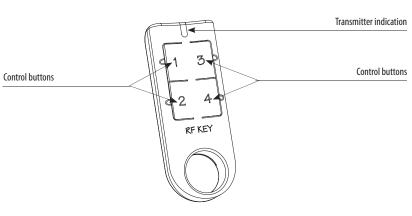
3V CR 2032 battery
red LED
4
868 MHz, 915 MHz, 916 MHz
unidirectionally addressed message
up to 200 m
-10 to +50 °C
any
IP 20
2
64 x 25 x 10 mm
16 g
EN 60669, EN 300 220, EN 301 489
R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)

For more information, see p. 56

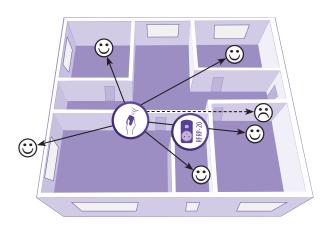
ite)	frequency	EAN code
N (w	868.5 MHz	8595188143332
RF Key/W (white)	868.1 MHz	8595188144148
품	915 MHz	8595188142946
	916 MHz	8595188152587

ack)	frequency	EAN code
'B (bl	868.5 MHz	8595188143752
RF Key/B (black)	868.1 MHz	8595188144131
~	915 MHz	8595188143325
	916 MHz	8595188147576

Device description



Placement of units







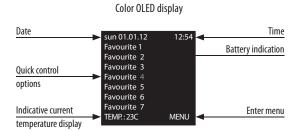
Combine the RF Pilot remote controller with the RF Touch control unit for maximum utilization of the RF Control system features.



Technical parameters	RF Pilot
<u>Display</u>	
Type:	color OLED
Resolution:	128 x 128 pixels
Side ratio:	1:1
Visible surface:	26 x 26 mm
Backlighting:	self-illuminating text
Diagonal:	1.5"
Control:	direction button, control buttons
<u>Power supply</u>	
Power supply:	2 x 1.5V AAA batteries / R03
Battery life:	approx. 3 years, according to the frequency of use and battery type
Control	
Range in free space:	up to 200 m
Frequency:	868 MHz, 915 MHz, 916 MHz
Other data	
Operating temperature:	0 to +55 °C
Storage temperature:	-20 to +70 °C
Protection:	IP20
Operating position:	any
Dimensions:	130 x 41 x 18 mm
Weight:	61 g
Related standards:	EN 60730-1

- The RF Pilot remote control is a central controller for switching electrical appliances and equipment, dimming lights, controlling blinds, etc.
- When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF / ON, blinds up/down).
- Option of setting light scenes, where with a single press, you can control up to 10 units at once.
- The Favorites mode lets you preset the most frequently used devices on the home screen.
- Option of grouping dimmers (RFDA-73M/RGB), where you can place up to 10 units under a single control panel = control of over 100 m of colored LED strip.
- Designed in white and anthracite with color OLED display.
- Display of room temperature, battery status, date and time directly on display.
- Bidirectional communication, transmits and receives commands and 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.
- It is possible to combine up to 40 units of iNELS RF Control (you can gradually expand the installation from 1 unit).
- Battery power (1.5V 2 x AAA 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-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Display description



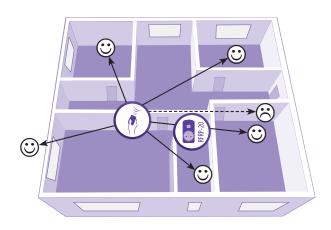
Settings Menu



Memory:
1/40
Type/address:
RFSA11/012345
Room:
Not allocated
Name:
Actuator 1
EXIT
ASSIGN

Memory:
1/40
Type/address:
Free position
Room:
Free position
Name:
Free position
EXIT

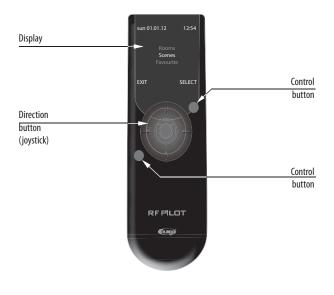
Example of usage



ite)	frequency	EAN code
t (w	868.5 MHz	8595188143769
RF Pilot (white)	868.1 MHz	8595188144155
~	915 MHz	8595188144216
	916 MHz	8595188153348

cite)	frequency	EAN code
RF Pilot (anthracite)	868.5 MHz	8595188145169
ot (ar	868.1 MHz	8595188145510
R Pil	915 MHz	8595188153355
æ	916 MHz	8595188153362

Device description

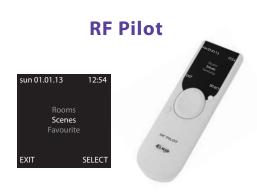


Switching actuators



Analog actuato

IP65





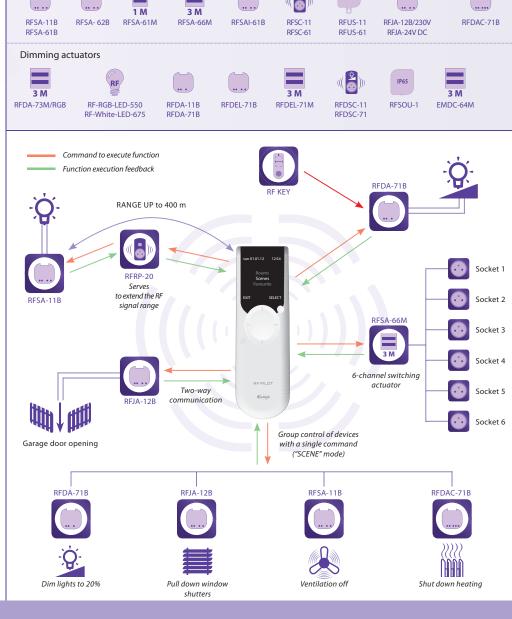














SCENES

- 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 230V or 24V DC (shutters between windows)



FAVOURITE

- 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



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)



DIMMING

- the regulation of light intensity (light bulbs, LED strips, halogen lights with electrical or coil transformer, fluorescent tubes with dimmable ballast 1–10V)
- customizable names of individual dimmed circuits (such as "lights" or "living room")
- "sunrise/sunset" imitation light gradually goes on or off during the preset period between 2 seconds and 30 minutes









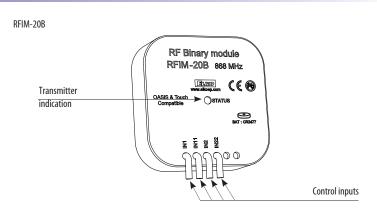
RFIM-20B

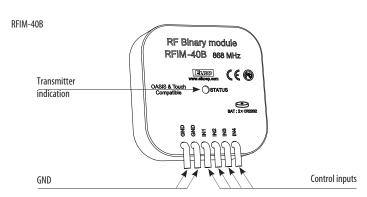
RFIM-40B

Technical parameters RFIM-20B RFIM-40B Supply voltage: 1 x 3V baterie CR 2477 2 x 3V baterie CR 2032 Battery life: 5 years Transmission indication / function: orange LED red LED Number of inputs: 2 4 Transmitter frequency: 868 MHz, 915 MHz, 916 MHz Signal transmission method: unidirectionally addressed message Range in free space: up to 200 m Other data Operating temperature: -10 to +50 °C Operating position: any Terminals (CY wire, cross-section): 4 x 0.75 mm² 6 x 0.75 mm² Length of terminals: 90 mm Resist.of connection between terminals < 300 Ω - for switched on button: - for disconnected contact: $> 10 \text{ k}\Omega$ Mounting: free at lead-in wires* Protection: IP30 Contamination degree: Dimensions: 49 x 49 x 13 mm Weight: 45 g 50 g Open contact voltage: pulse 12 V Length of cable to contact: max. 100 m of parallel lines max. 5 m EN 60669, EN 300 220, EN 301 489 Related standards:

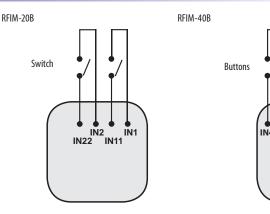
- $\bullet \ \underline{\text{RFIM-20B:}} \ \text{the wireless contact converter changes your existing button/switch to a wireless one.}$
 - two inputs enable control of two units independent.
 - battery power supply (3V/CR2477 included in the supply) with battery life of around 5 years based on frequency of use.
- RFIM-40B: the wireless contact converter changes your existing button to a wireless one.
 - four inputs enable control of four units independently.
 - battery power supply (2 x 3V / CR2032) with battery life of around 5 years based on frequency of use (included in the supply).
- It can be used to transmit information on switching on the contact (detector, button, technology, logic output).
- The BOX design lets you mount it right in an installation box under the button or switch.
- When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF / ON, blinds up/down).
- Sending a command is indicated by a red LED.
- Option of setting light scenes, where with a single press, you can control multiple units of iNELS RF Control.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Device description





Wiring



IN2 GND IN3 IN1 GND

g frequency		EAN code
RFIM-20B	868.5 MHz	8595188139274
~	868.1 MHz	8595188143943
	915 MHz	8595188142977
	916 MHz	8595188143134

1-40	frequency	EAN code
RFIM-40	868.5 MHz	8595188137188
	868.1 MHz	8595188143950
	915 MHz	8595188142984
	916 MHz	8595188142984

R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)



^{*}For more information, see p. 56







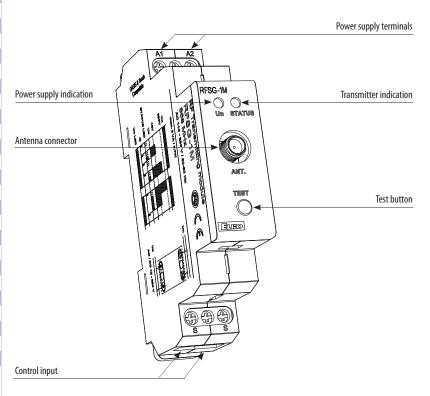
Technical parameters	RFSG-1M	
Supply voltage:	110 - 230 V AC / 50 - 60 Hz	24 V DC
Apparent input:	2 VA	-
Dissipated power:	0.2 W	0.5 W
Supply voltage tolerance:	+10 %	/ -25 %
Power supply indication:	gree	n LED
<u>Input</u>		
Control voltage:	AC 12-230V	/ DC 12-230V
Control input power:	AC 0.025VA	A / DC 0.1W
Control terminals:	\$	- S
The length of control impulse:	min. 25ms (m	ax. unlimited)
Transmission indication / function:	red	LED
Transmitter frequency:	868 MHz, 915 MHz, 916 MHz	
Signal transmission method:	unidirectionally addressed message	
Range in free space:	up to 160 m	
Minimum control distance:	20 mm	
Other data		
Operating temperature:	-15 to	+ 50 °C
Operating position:	an	y *
Mounting:	DIN rail supp	ort EN 60715
Protection:	IP20 from th	e front panel
Overvoltage category:	I	l.
Contamination degree:	2	
Connecting conductor cross-section: (mm²):	max. 1x2.5, max. 2x1.5 / with a hollow max. 1x2.5	
Dimensions:	90 x 17.6	x 64 mm
Weight:	62	g g
Related standards:	EN 60669, EN 30	220, EN 301 489
	R&TTE Directive, Order. No 426	/2000 Coll. (Directive 1999/EC)

^{*} For more information, see p. 56

-1M	voltage	frequency	EAN code
RFSG-1M	110-230V AC	868.5 MHz	8595188142847
	110-230V AC	868.1 MHz	8595188144070
	24V DC	868.5 MHz	8595188153386
	24V DC	868.1 MHz	8595188153393
	110-230V AC	915 MHz	8595188143004
	110-230V AC	916 MHz	8595188153379
	24V DC	915 MHz	8595188153409
	24V DC	916 MHz	8595188153416

- This wireless contact converter is especially appropriate for wireless transmission of information on switching HDO.
- Thanks to the network supply, it can also be used for partial transmission of information for control of an appliance or device.
- One-module design of the unit with mounting into switchboard.
- After leading in power to the "S" terminals, it periodically transmits the command *switch on* in an interval of 10 min. When disconnecting the power supply, immediately *switch off*.
- The button TEST on the controller is used to assign to a switching unit.
- Option of setting light scenes, where with a single press, you can control multiple units of iNELS RF Control.
- The power supply of the unit is in the range 110-230V AC (galvanically separated).
- The package includes an internal antenna AN-I , in case of locating the converter in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Device description



Wiring











RF Touch-B for mounting into an installation box

RF Touch-W unit for mounting on surfaces

Technical parameters	RF Touch-B	RF Touch-W
<u>Display</u>		
Type:	color TFT LCD	
Resolution:	320 x 240 pixels	/ 262,144 colors
Side proportion :	3	:4
Visible surface:	52.5 x	70 mm
Backlighting:	active (w	hite LED)
Touch area:	resistive 4-	-conductor
Diagonal:	3.	5"
Control:	tou	uch
<u>Power supply</u>		
Supply voltage/rated current:		from the back 100 – 230 V AC,
	100 -230 V AC	from the side 12 V DC*
Input power:	max	. 5W
Power supply terminals:	A1 ·	- A2
Control		
Range:	100) m
Min. distance RF Touch - Actuator:	1m	
Frequency:	868 MHz, 915	MHz, 916 MHz
<u>Connection</u>		
Connection:		no-screw push-in terminal
		box or jack Ø 2.1 mm jack
	terminal box	connector
Cross-section of connecting wires:	max. 2.5 mm ² /1.5 mm ² with a hollow	
Operating conditions		
Operating temperature:	0 to +50°C	
Storage temperature:	- 20 to +70°C	
Protection:	IP 20	
Overvoltage category:	III.	
Contamination degree:	2	
Operating position:	any	
Installation:	an installation box	anywhere indoor
Dimensions:	94 x 94 x 12 mm	94 x 94 x 24 mm
Weight:**	127 g	175 g
Related standards:	EN 60730-1	

RF Touch/W (white frame, white intermediate frame, white back cover)	voltage	frequency	EAN code
RF Touch/W hite frame, white ermediate frame, white back cover)	100-230V AC	868.5 MHz	8595188131711
RF efrar nedia ite bö	100-230V AC	868.1 MHz	8595188144193
whit ntern wh	100-230V AC	915 MHz	8595188153492
	100-230V AC	916 MHz	8595188153508
또 발 voltage frequency EAN code			
# <u>#</u> #	voitage	riequency	LAN COUC
RF Touch/B frame, white diate frame)	100-230V AC	868.5 MHz	8595188143738
돌동	100-230V AC	868.1 MHz	8595188144100

915 MHz

916 MHz

8595188153515

8595188153522

100-230V AC

100-230V AC

- Touch-W unit package. * Weight includes the plastic frame and the intermediate frame
- Adapter is included in the RF

- The wireless touch unit RF Touch is a central controller for heating, switching electrical appliances and equipment, dimming lights, controlling blinds, etc.
- It transmits and receives commands from units and processes set programs for automatic control.
- Thanks to bi-directional communication, it visualizes the current status of individual units.
- · Automatic control based on weekly program.
- Touch 3.5" color display.
- It is possible to combine up to 40 units of iNELS RF Control + 30 Oasis detectors (you can gradually expand the installation from 1 unit).
- Power to the touch unit is in the range 100 230V AC, (RF Touch/W also supplied via adapter 12V DC (included in the supply).
- RF Touch/W: wall mounting, secured in an installation box or glued to glass, wood, dry wall, etc.
- RF Touch/B: mounting of unit in installation box.
- Range up to 100 m (in open space), if the signal is insufficient between the RF Touch and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control .
- · Color design of RF Touch:
 - frames: in basic plastic design (white, black, red) or in the luxury design LOGUS90 glass, metal (aluminum, nickel, titanium).
 - intermediate frames: in basic white and dark gray with metallic coat aluminum, pearl, ice and gray.
 - rear cover: in white, ivory, light gray and dark gray
- You can choose your own color combination at e-shop ELKO EP.

In 2011, the RF Touch wireless unit won the prize GOLDEN AMP.





RF TOUCH





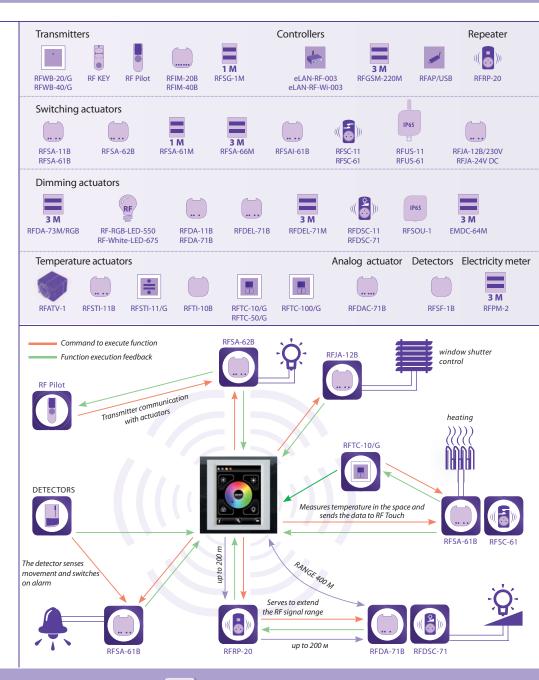














HEATING

- control of heating devices (boilers, thermo valve 0–10V...)
- temperature regulation in the entire house or in individual rooms
- information about outdoor temperature (wireless temperature sensor) terraces
- possibility to set your own heating program for the whole week
- holiday mode will interrupt the heating program when you are on holiday
- room temperature correction (during the heating program) is performed with a digital thermal regulator command



DIMMING

- the regulation of light intensity (light bulbs, LED bulbs, LED strips, halogen lights with electrical or coil transformer, fluorescent tubes with dimmable control gear 1–10V)
- customizable names of individual dimmed circuits (such as "living room lights")
- "sunrise/sunset" imitation light gradually goes on or off during the preset period between 2 seconds and 30 minutes



DETECTORS

- RF Touch communicates with detectors window, door, movement...
- possible to combine with switching actuators
- clear control over the entire house



SWITCHING

- this function serves to switch on/off lights, sockets, electrical appliances and devices
- intuitive control thanks to customized name options
- switch clock enabling you to switch appliances in real time, even during your absence (simulation of the presence of persons, etc.)
- switching actuator function selections: switch on/off, impulse relay, button, delayed ON/OFF (time of delay from 2 seconds to 60 minutes)



WINDOW SHUTTERS

- controlling window shutters, sunblinds, blinds, garage door, etc.
- · window shutters are controlled separately or as a group
- setting an independent time schedule for pulling up/down
- the window shutter receivers are powered by either 230V or 24V DC (shutters between windows, etc.)



QUICK CONTROL

- serves to control group of actuators with a single touch
- possibility to set up scenes; on activation, for example, window shutters are pulled down and lights are adjusted to required intensity





Technical parameters	eLAN-RF-003	eLAN-RF-Wi-003	
Interface RF Control			
Communication protocol:	RF Touch Compatible		
Broadcasting frequency	868 MHz, 915	MHz, 916 MHz	
Signal transfer method:	two-way addre	essed message	
Output for antenna:	SMA co	nnector	
Antenna RF:	1 dB (part	of supply)	
Indications RF communications:	1 x red RF status LED	1 x green RF status LED	
Range in free space:	up to	100 m	
Interface Ethernet			
ETH operating status indicator:	greei	n LED	
ETH communication indicator:	yellov	v LED	
Communications interface:	100 Mbp	os (RJ45)	
Preset IP address:	192.10	68.1.1	
Interface WiFi			
Standard:	Х	IEEE 802.11 b/g/n / 2.4 GHz	
WiFi Security:	Х	WEP, WPA-PSK, WPA2-PSK	
Frequency range WiFi:	Х	R-SMA	
Antenna WiFi:	Х	1 dB (part of suply)	
Indications WiFi communication:	Х	1 x red WiFi status LED	
Range:	Х	in to 200 m	
Supply voltage/current:	10-27 V DC / 200 mA SELV	10-27 V DC / 300 mA SELV	
Power:	adapter with connector Jack	Ø 2.1 mm (part of supply)	
	or connec	tor USB-B	
Supply voltage indication:	green LE	D POWER	
Button RESET:	settings to their defaults		
Power source:	230 VAC / 12 V DC pa	rt of supply of device	
Operating temperature:	-20 to	+50 °C	
Storage temperature:	-25 to +70 °C		
Protection:	IP20		
Contamination degree:	2		
Working position:	aı	ny	
Dimensions:	90 x 52	x 65 mm	
Weight:	136 g 145 g		

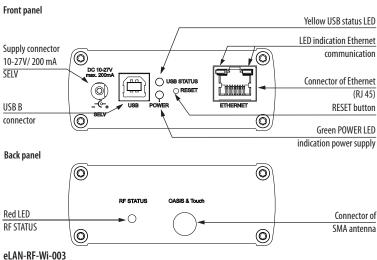
003	voltage	frequency	EAN code
eLAN-RF-003	24V DC	868.5 MHz	8595188146845
eLAI	24V DC	868.1 MHz	8595188148436
	24V DC	915 MHz	8595188153447
	24V DC	916 MHz	8595188153454

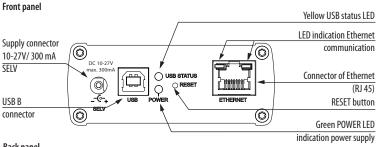
003	voltage	frequency	EAN code
F-Wi-	24V DC	868.5 MHz	8595188148726
eLAN-RF-Wi-003	24V DC	868.1 MHz	8595188153461
eL	24V DC	915 MHz	8595188153478
	24V DC	916 MHz	8595188153485

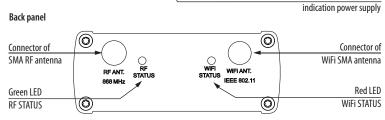
- The smart RF box enables you to control your electrical installation by smartphone, tablet or SMART TV.
- It transmits and receives commands of up to 40 units, and it processes set programs for automatic control, (you can gradually expand installation from 1 unit iNELS RF Control).
- Thanks to bi-directional communication, it visualizes the current status of individual units.
- The smart RF box eLAN-RF-003 is connected by network cable LAN to the home network (router) and communicates with your smart phone.
- The smart RF box eLAN-RF-Wi-003 is connected to the home network (router) via the Wi-Fi network and communicates with your smart phone. Connection to the home network is also possible via network LAN cable.
- The intuitive application environment offers central control from one place.
- Function of application iHC-MARF / iHC-MIRF:
 - control of hot water or electric underfloor heating
 - measuring temperature by wireless sensors
 - switching appliances (garage door, blinds, fan, sprinklers, sockets, etc.)
 - dimming lights (LED, energy-saving, halogen or classic lamps)
 - time switching (delayed switching off of light when leaving room)
 - video camera integration
 - light scenes (make multiple commands at once with a single press).
- If you don't have a fixed IP address, the Smart RF box will obtain it from DHCP server automatically.
- Power is supplied to the Smart RF box via adapter 10-27V DC (included in the supply) or PoE by power source (router) 24V DC.
- By connecting two Smart RF boxes by LAN cable, you avoid the problem of lack of signal range.
- Option of setting via web interface or directly in the application iHC-MARF (Android) / iHC-MIRF (iPhone).
- The package includes an internal antenna AN-I , in case the Smart RF box is located in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 100 m (in open space), if the signal is insufficient between the Smart RF box and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Device description

eLAN-RF-003











Technical parameters

iHC-MARF
iHC-MIRF

optimized for devices with a display resolution of 800x480

based on language set in mobile device, tablet or smart phone, and settings in OS Android or iOS

optimized for SMART TV SAMSUNG (produced since 2013)

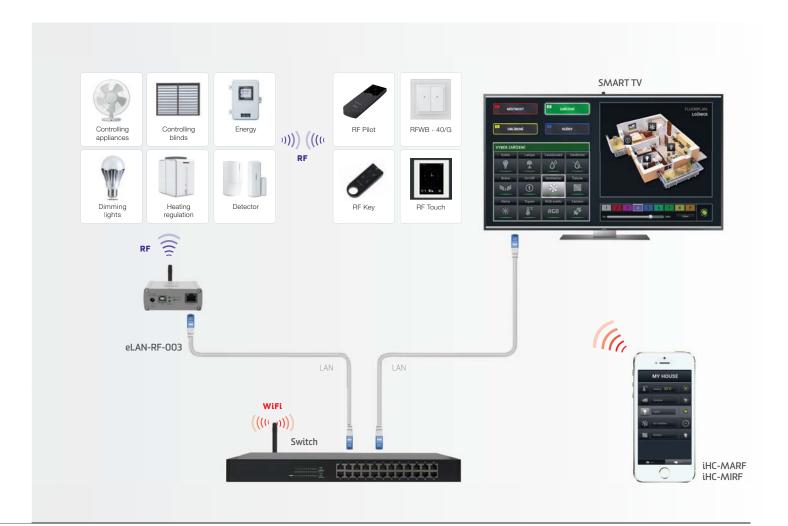
Control application for smart phones with Android operating system - iHC MARF and pfor smart phones iPhone - iHC MIRF

- The application iHC-MARF allows you to control your home easily by smartphone.
- The user-friendly and intuitive application environment offers central control from one place.
- iHC-MARF enables control of RF units by smart phone via a smart RF box, which is connected to the home Internet network.
- The smart RF box controls up to 40 units of iNELS RF Control, (you can gradually expand control from 1 unit of iNELS RF Control).
- If you don't have a permanently set IP address, the application supports its automatic obtaining from the DHCP server.
- Functions of the application iHC MARF:
 - regulation of hot water or electric underfloor heating (setting a weekly program)
 - measuring temperature (e.g. by wireless sensors)
 - switching appliances (garage door, blinds, fans, sprinklers, sockets, etc.)
 - dimming lights (LED, energy-saving, halogen lamps or classic light bulbs)
 - time switching (delayed switching off of light when leaving room)
 - integration of video cameras
 - light scenes (one press to perform multiple commands simultaneously)
 - remote control (switch on heating before returning from vacation).
- The application supports Android versions from 2.3 in your smartphone.

PROMO application is free to download (iNELS Home Control RF Promo)













Technical parameters	RFGSM-220M	
Power	30 2500 2500	
Supply voltage:	11-30V DC; backup power supply LI-ION batteries	
Maximum power consumption:	1W in standby mode / charging 1.6W	
Current consumption:	90 mA AC1 /12 V DC	
Consumption during communication:	max. 500 mA AC1 / 12 V DC	
Working band of GSM module:	850/900/1800/1900 MHz	
Transmitter output power:	2W for GSM 900, 1W for GSM 1800	
Inputs IN1, IN2, IN3, IN4		
Control voltage:	AC 12-230V or DC 12-230V (separated optocoupler)	
Control input power:	AC 0.025 VA/ DC 0.1W	
Length of control impulse:	min. 50 ms/ max. unlimited	
Inputs RF:	one-/two-way addressed message 868 MHz, 915 MHz, 916 MHz	
<u>Outputs</u>		
Number of contacts:	2x Switches (AgSnO ₂)	
Rated current:	8 A / AC1	
Switching power:	2500VA, 240 W	
Min. switching power DC:	500 mW	
Mechanical service life (AC1):	1x10 ⁷	
Electrical service life:	1x10 ⁵	
RF ouputs:	two-way addressed message 868 MHz, 915 MHz, 916 MHz	
Other data		
Operating system PC:	MS Windows XP and higher	
Range of RF module:	up to 150 m	
Operating temperature:	- 15 up to + 50°C	
Operating position:	any	
Mounting:	DIN rail EN 60715	
Protection:	IP 20 from front panel	
Overvoltage category:	II.	
Contamination degree:	2	
Cross-section of connecting wires (mm ²)	max. 1x2.5; max.2x1.5/ with a hollow max 1x2.5	
Dimensions:	90 x 52 x 65 mm	
Weight:	198 g	
Related standards:	EN 60730-1	

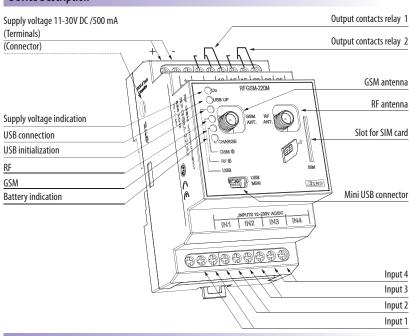
SW Connect1 for configuration of GSM gate

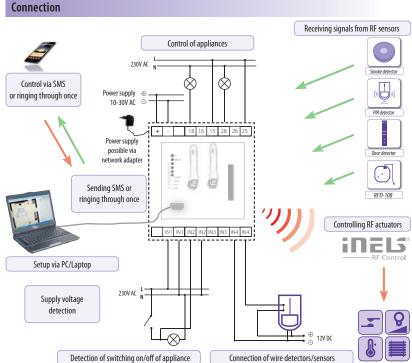
Available for download at www.elkoep.com/download/

20M	voltage	frequency	EAN code
RFGSM-220M	24V DC	868.5 MHz	8595188146043
RFGS	24V DC	868.1 MHz	8595188144186
	24V DC	915 MHz	8595188153423
	24V DC	916 MHz	8595188153430

- The multi-function GSM communicator is used for remote switching of heating, lights, gate, garage door, etc.
- GSM communicator can be used in several ways, which can be combined:
 - a) control by telephone, where a sent SMS or ringing through once switches an internal relay.
 - b) reacts to 1 of 4 potential free wired inputs (detectors, switches), where it is possible to set a consequent reaction.
 - c) offers the option of ascertaining the status of units iNELS RF Control (ON/OFF, temperature).
 - d) control by telephone, where a sent SMS or ringing through once transmits an RF command to the switching unit within range, which then switches something (e.g. heating).
 - e) security function (switching on the ALARM) in combination with wireless detectors OASIS, where activation / deactivation takes place by ringing through once or by key alarm.
- The three-module design of the unit into a switchboard enables connection of a switched load 2x 8A (2x 2000W).
- Settings are performed by SW Connect 1 via mini USB connector
- Li-lon battery for 30 minute function backup
- The GSM communicator is powered by an adapter in the range 11-30V DC.
- The package includes an internal antenna AN-I, in case of locating the communicator in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 150 m (in open space).
- Communication frequency with bidirectional protocol iNELS RF Control.
- Package includes: 2x internal antenna AN-I, mini USB connector, SW Connect 1, adapter 12V 6W.

Device Description









Thanks to the GSM communicator, you immediately know what the temperature is at home right now. Just send an SMS or ring the communicator once, the RF signal transfers this command to RF Touch and from RF Touch an SMS text message reply is sent back to your phone with the current temperature. You can then switch the heating on or off.



By sending an SMS or ringing once, you activate the GSM communicator, which sends an RF command to the temperature actuator, which then switches the heating (cable connection applied between the actuator and heater).



GSM communicator enables you to directly switch on up to 4 appliances. Its usefulness thus expands from simply switching into the area of detectors.

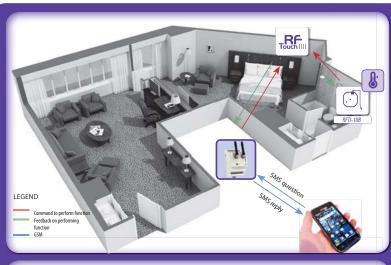
One of 4 inputs receives information from the detector and sends it by SMS to the given telephone number.

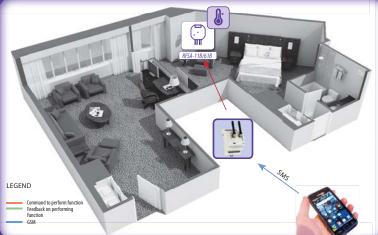


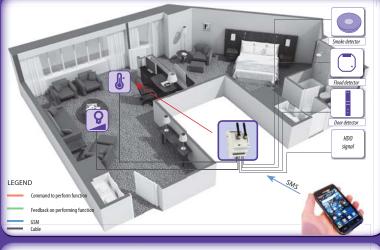
GSM communicator features a simple and secure function via dialing or key chain to activate the ARM / DISARM for guarding property.

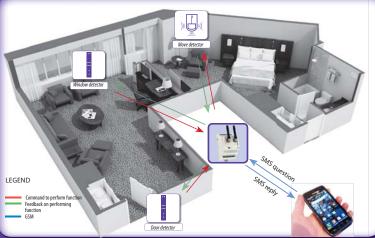
${\sf ARM}\ function = guarding$

In the case of detection or changes in the detector, the gateway sends a command to switch the siren, and can send an SMS to the set-up













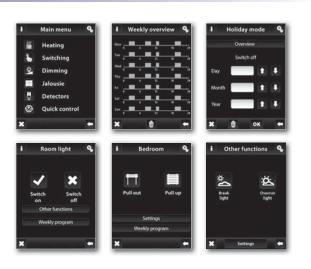
- RFAP/USB in combination with the application USB Wireless Manager is a virtual display of the wireless unit RF Touch in your PC, by means of which it communicates with wireless units iNELS RF Control.
- It is a central controller for heating, switching electrical appliances and equipment, dimming lights, controlling blinds, etc.
- It transmits and receives commands from units and processes set programs for automatic control.
- Thanks to bi-directional communication, it visualizes the current status of individual units.
- · Automatic control based on weekly program.

EXTERNAL ANTENNA AN-E

- It is possible to combine up to 40 units of iNELS RF Control + 30 Oasis detectors (you can gradually expand the
 installation from 1 unit).
- Support of operating systems Windows and Linux.
- Range up to 100 m (in open space), if the signal is insufficient between the RF Touch and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

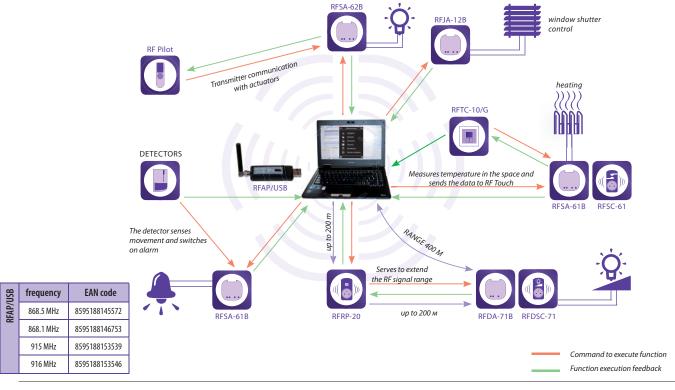
Technical parameters RFAP/USB max. 1W Power: USB 1.1 and higher, plug. "A" Interface: 100 m Min. distance of RF Touch-actuator 868 MHz, 915 MHz, 916 MHz green LED Power supply indication: red LED RF communication indication: Operating conditions 0 to +55°C Operating temperature - 20 to +70°C Storage temperature: IP30 Protection: Contamination degree: Work space: Installation: any Dimensions: 22 x 85 x 15 mm Weight: 20 g Related standards: EN 60950-1

Example of usage of RFAP/USB



Examples of usage of RFAP/USB

Connecting the RFAP/USB into a USB slot on your computer starts the application and installs Virtual Touch, which simulates the wireless RF Touch touch screen unit. This makes it completely mobile, and you have the option of controlling switching, dimming lights, controlling heating or air conditioning, and blinds. Detectors bring you security monitoring, e.g. open windows, door, or movement of persons.











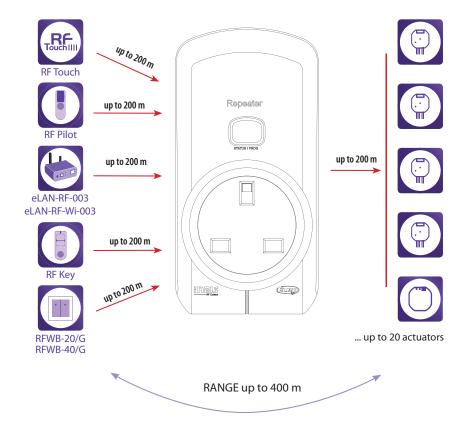
- · Radio frequency signal repeater
- This signal repeater is used to extend the range between the controller and unit by up to 200 meters.
- It is designed to transmit a signal to up to 20 units.
- Thanks to the socket design, installation is simple by direct insertion into the existing socket, the throughsocket function remains unchanged.
- · Indication:
 - green LED supply voltage
 - red LED active status (receiving and transmitting an RF signal)
- Supply voltage in the range 230 250 V AC.
- Programming is performed by a button.
- Communication frequency with bidirectional protocol iNELS RF Control.

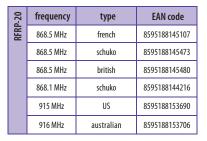
• Produced in 5 designs of sockets and plugs:

Technical parameters	RFRP -20		
Supply voltage:	230 - 250V / 50-60Hz	120 V AC / 60Hz	
Apparent input:	6	VA	
Dissipated power:	0.7	7W	
Transmitter frequency:	868 MHz, 915	MHz, 916 MHz	
Range in free space:	up to	200 m	
Minimum control distance:	20	mm	
Programming:	button		
	green LED / red LED		
Other data			
Operating temperature:	-20 to +55 ℃		
Storage temperature:	-30 to	+70°C	
Mounting:	plug into	a socket	
Protection:	IP20 I	Device	
Dimensions:	60 x 120 x 80 mm		
Weight:	22	5 g	
Related standards:	EN 607 3	80-1 ED.2	
nciated standards.	LIN UU/ 3	10 1 LD.2	

French	Schuko	British
CZ, SK, PL, FR	HU, DE, RU, AT, RO	GB
	ralian US	

Controlling up to 20 actuators







Neutral conductor

Phase conductor



- The switching unit with 1 output channel is used to control appliances, lights (easy to integrate it to control garage doors or gates).
- It can be combined with Control or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- It enables connection of the switched load up to 16A (4.000 W).
- RFSA-11B: single-function design switch on / off
- <u>RFSA-61B:</u> multi-function design button, impulse relay and time function of delayed ON or OFF with time setting of 2s-60 min.
- The switching unit may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- The unit power supply is 230V AC.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Function

For more information, see p. 54.

Indication of operating and programming mode Program button (ON/OFF manual control) Output relay contacts

Wiring				
L		L		
N — • I	•	N		
	\Diamond			
N L L	<1)		N	
RFSA-11	В			RFSA-11B
RFSA-61	В			RFSA-61B
V code				

Technical parameters				
Supply voltage:	230 V AC / 50 - 60 Hz	120 V AC / 60Hz	24 V DC	
Apparent input:	$7 \text{ VA / } \cos \phi = 0.1$	$7VA/\cos\phi=0.1$	-	
Dissipated power:	0.7 W	0.7 W	0.7 W	
Supply voltage tolerance:		+10 %; -15 %		
<u>Output</u>				
Number of contacts:		1x switching (AgSnO ₂)	
Rated current:		16 A / AC1		
Switching power:	40	000 VA / AC1, 384 W /	DC	
Peak current:		30 A / <3 s		
Switching voltage:		250 V AC1 / 24 V DC		
Max. DC switching power:		500 mW		
Mechanical service life:		3x10 ⁷		
Electrical service life (AC1):		0.7x10⁵		
<u>Control</u>				
RF, by command from transmitter:	868 MHz, 915 MHz, 916 MHz			
Manual control:	PROG (ON/OFF) button			
Range in free space:	up to 200 m			
Other data				
Operating temperature:		-15 to + 50 °C		
Operating position:		any *		
Mounting:		free at lead-in wires		
Protection:		IP 30		
Overvoltage category:		III.		
Contamination degree:		2		
Terminals (CY wire, cross-section):	2x 0.75 mm², 2x 2.5 mm²			
Length of terminals:		90 mm		
Dimensions:		49 x 49 x 21 mm		
	46 q			
Weight:		46 g		
Weight: Related standards:	EN 606	46 g 669, EN 300 220, EN 3	01 489	

* Fo	more	information,	see	p. 56
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118	voltage	frequency	EAN code
RFSA-11B	230V AC	868.5 MHz	8595188136839
4	230V AC	868.1 MHz	8595188143998
	24V DC	868.5 MHz	8595188151399
	24V DC	868.1 MHz	8595188151405
	230V AC	915 MHz	8595188151412
	230V AC	916 MHz	8595188147583
	120V AC	915 MHz	8595188143028
	120V AC	916 MHz	8595188151436
	24V DC	915 MHz	8595188151443
	24V DC	916 MHz	8595188151450

61B	voltage	frequency	EAN code
RFSA-61B	230V AC	868.5 MHz	8595188136242
-	230V AC	868.1 MHz	8595188146760
	24V DC	868.5 MHz	8595188151467
	24V DC	868.1 MHz	8595188151474
	230V AC	915 MHz	8595188151481
	230V AC	916 MHz	8595188147590
	120V AC	915 MHz	8595188143035
	120V AC	916 MHz	8595188151504
	24V DC	915 MHz	8595188151511
	24V DC	916 MHz	8595188151528







Technical parameters	RFSA-62B			
Supply voltage:	230 V AC / 50 - 60 Hz	120 V AC / 60Hz	24 V DC	
Apparent input:	$7 \text{ VA / } \cos \phi = 0.1$	$7 \text{ VA / } \cos \phi = 0.1$	-	
Dissipated power:	0.7 W	0.7 W	0.7 W	
Supply voltage tolerance:		+10 %; -15 %		
<u>Output</u>				
Number of contacts:		2 x switching (AgSnO	,)	
Rated current:		8 A / AC1		
Switching power:		2000 VA / AC1		
Peak current:		10 A / <3 s		
Switching voltage:		250 V AC1		
Max. DC switching power:		500 mW		
Mechanical service life:		1x10 ⁷		
Electrical service life (AC1):		1x10⁵		
Control				
RF, by command from transmitter:	868 MHz, 915 MHz, 916 MHz			
Manual control:	PROG (ON/OFF) button			
Range in free space:		up to 100 m		
Other data				
Operating temperature:		-15 to + 50 °C		
Operating position:		any *		
Mounting:		free at lead-in wires		
Protection:		IP 30		
Overvoltage category:		III.		
Contamination degree:		2		
Terminals (CY wire, cross-section):	1:	x 2.5 mm ² , 3 x 0.75 m	m ²	
Length of terminals:		90 mm		
Dimensions:		49 x 49 x 21 mm		
Weight:		46 g		
Related standards:	EN 60	669, EN 300 220, EN 3	01 489	
	R&TTE Directive, Or	der. No 426/2000 Coll	. (Directive 1999/EC)	

^{*} For more information, see p. 56

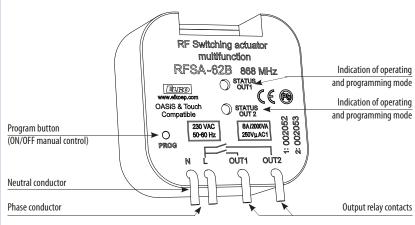
62B	voltage	frequency	EAN code
RFSA-62B	230V AC	868.5 MHz	8595188142816
_	230V AC	868.1 MHz	8595188144056
	24V DC	868.5 MHz	8595188151894
	24V DC	868.1 MHz	8595188151900
	230V AC	915 MHz	8595188151887
	230V AC	916 MHz	8595188147606
	120V AC	915 MHz	8595188151825
	120V AC	916 MHz	8595188151832
	24V DC	915 MHz	8595188151917
	24V DC	916 MHz	8595188151924

- The switching unit with 2 output channels is used for controlling appliances and light circuits.
- It can be combined with Control or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- It enables connection of switched load 2 x 8A (2 x 2.000 W).
- Function: button, impulse relay and time function of delayed start and return with time setting range of 2s-60 min.

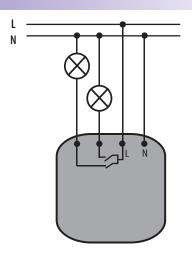
 It is possible to assign any function to each output relay.
- Each of the channels may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- The unit power supply is 230V AC.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

For more information, see p. 54.

Device description



Wiring







- RFSA-61M: the switching unit with 1 output channel is used for controlling appliances, sockets or lights.
 - the one-module design of the unit into a switchboard enables connection of a switched load up to 16A (4.000 W).
 - the switching unit may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- <u>RFSA-66M</u>: the switching unit with 6 output channels is used for independent control of up to 6 appliances, sockets or lights. It is possible to assign any function to each output relay.
 - the three-module design of the unit into a switchboard enables connection of a switched load $6 \times 8 \text{A}$ ($6 \times 2000 \text{W}$).
 - it is just right for creating scenes, where with one push of the controller, you can switch on or off all 6 channels simultaneously.
 - each of the channels may be controlled by up to 32 channels (1 channel represents one button on the controller).
- It can be combined with Control or System units iNELS RF Control.
- The integrated switching contact enables connection, where the controlled appliance may be switched on or off by command.
- Function: button, impulse relay and time function of delayed start or return with time setting range of 2s-60 min.
- The programming button on the unit is also used for manual control of the output.
- The unit power supply is in the range 110-230V AC.
- The package includes an internal antenna AN-I, in case of locating the element in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Technical parameters	RFSA-	61M	RFSA-	66M
Supply voltage:	110-230VAC/50-60Hz	12- 24 V DC	110-230VAC/50-60Hz	12-24 V DC SELV
Apparent input:	2.7 VA / $\cos \phi = 0.6$	-	min. 2VA /max. 5VA	-
Dissipated power:	1.62 W	0.8 W	min.0.5W/max.2.5W	max. 1.8 W
Supply voltage tolerance:				
<u>Output</u>		+10%	/ -25 %	
Number of contacts:			3x switching	(AgSnO ₂)
	1x switchin	g (AgSnO ₂)	3x switching	(AgSnO ₂)
Rated current:	16 A	/ AC1	8 A / A	AC1
Switching power:	4000 VA / AC	1, 384 W / DC	2000 VA	/ AC1
Peak current:	30 A /	'<3 s	10 A /	<3 s
Switching voltage:	250 V AC1	/ 24 V DC	250 V	AC1
Max. DC switching power:	500	mW	500 n	ηW
Mechanical service life:	3x ⁻	107	1x10 ⁷	
Electrical service life (AC1):	0.7>	10 ⁵	1x10 ⁵	
<u>Control</u>				
RF, by command from transmitter	868 MHz, 915 MHz, 916 MHz			
Manual control:	PROG (ON/OFF) button			
Range in free space:	up to 200 m			
Other data				
Operating temperature:	-15 °C to + 50 °C			
Operating position:		ar	ny *	
Mounting:		DIN rail	EN 60715	
Protection:		IP20 from th	ne front panel	
Overvoltage category:		I	II.	
Contamination degree:			2	
Connecting conductor cross-section (mm ²)	: max	c. 1x2.5, max. 2x1.5	/ with a hollow max. 1x	2.5
Dimensions:	90 x 17.6	x 64 mm	90 x 52 x	65 mm
Weight:	74 g	137 g	264 g 31	0 g
Related standards:		EN 60669, EN 30	0 220, EN 301 489	
	R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)			

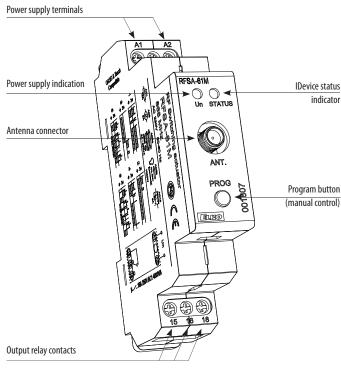
K-	For	more	information,	see	p. 56	
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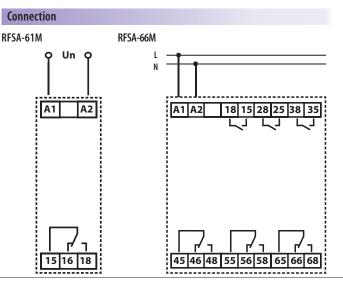
31M	voltage	frequency	EAN code
RFSA-61M	110-230V AC	868.5 MHz	8595188137003
R	110-230V AC	868.1 MHz	8595188144018
	24V DC	868.5 MHz	8595188152303
	24V DC	868.1 MHz	8595188152310
	110-230V AC	915 MHz	8595188143059
	110-230V AC	916 MHz	8595188152297
	24V DC	915 MHz	8595188152327
	24V DC	916 MHz	8595188152334

868.5 MHz	8595188142823
	0373100142023
868.1 MHz	8595188144063
868.5 MHz	8595188152914
868.1 MHz	8595188152921
915 MHz	8595188152822
916 MHz	8595188152907
915 MHz	8595188152938
916 MHz	8595188152945
	868.5 MHz 868.1 MHz 915 MHz 916 MHz 915 MHz

For more information, see p. 54.

Device description











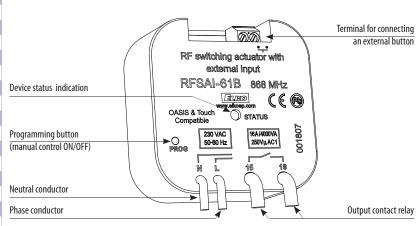
- The switching unit with 1 output channel is used for controlling appliances and lights. It is possible to connect the existing button to the internal terminal in the wiring.
- It can be combined with Control or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- It enables connection of the switched load up to 16A (4.000 W).
- Function: button, impulse relay and time function of delayed start or return with time setting range of 2s-60min.
- The switching unit may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- The unit power supply is 230V AC.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Technical parameters		RFSAI - 61B	
Supply voltage:	230 V AC / 50 - 60 Hz	120 V AC / 60Hz	24 V DC
Apparent power:	$7 \text{ VA} / \cos \varphi = 0.1$	$7 \text{ VA} / \cos \varphi = 0.1$	-
Dissipated power:	0.7 W	0.7 W	0.7 W
Supply voltage tolerance:		+10 %: -15 %	
Output			
Number of contacts:		1x switching (AgSnO,)	1
Rated current:		16 A / AC1	
Switching power:	40	00 VA / AC1, 384 W / I	DC
Peak current:		30 A / <3 s	
Switching voltage:		250 V AC1 / 24 V DC	
Min. switching power DC:		500 mW	
Mechanical service life:		3x10 ⁷	
Electrical service life (AC1):		0.7x10 ⁵	
Controlling			
RF command from the transmitter:	868	MHz, 915 MHz, 916 M	ИНz
Manual control:	ŀ	outton PROG (ON/OFF))
External button:	max. 12 m cable		
Range in open space:	up to 200 m		
Other data			
Voltage of open contact:		3V	
Resist. of connection for closed			
contact:		<1 kΩ	
Resist. of connection for open			
contact:		$>$ 10 k Ω	
Galvanic isolation of input:		No	
Operating temperature:		-15 up to + 50 °C	
Working position:		any *	
Mounting:	free at lead-in wires		
Protection:	IP 30		
Overvoltage category:	III.		
Contamination degree:	2		
Terminals (CY wire, Cross-section)): 2x 0.75 mm², 2x 2.5 mm²		
Terminal length:	90 mm		
Dimensions:	49 x 49 x 21 mm		
Weight:		46 g	
Related standards:	EN 606	669, EN 300 220, EN 30	01 489
	R&TTE Directive, Ord	ler. No 426/2000 Coll.	(Directive 1999/EC)

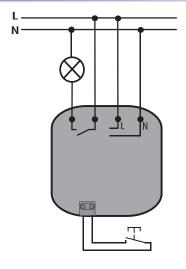
^{*}For more information, see p. 56

For more information, see p. 54.

Device description



Connection



9 0	voltage	frequency	EAN code
שוט-ואכזה	230V AC	868.5 MHz	8595188145893
2	230V AC	868.1 MHz	8595188146760
	24V DC	868.5 MHz	8595188151931
	24V DC	868.1 MHz	8595188151948
	230V AC	915 MHz	8595188151870
	230V AC	916 MHz	8595188151849
	120V AC	915 MHz	8595188151856
	120V AC	916 MHz	8595188151863
	24V DC	915 MHz	8595188151955
	24V DC	916 MHz	8595188151962







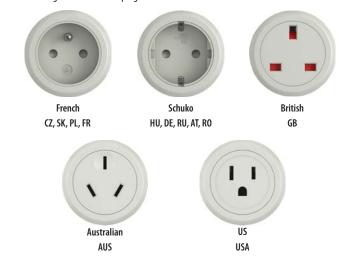
Technical parameters			
Supply voltage:	230 - 250V / 50-60Hz	120 V AC / 60Hz	
Apparent power:	6 V	'A	
Dissipated power:	0.7	W	
Supply voltage tolerance:	+10 %;	-15 %	
<u>Output</u>			
Number of contacts:	1x switchin	g (AgSnO ₂)	
Rated current:	16 A /	AC1	
Switching power:	4000 VA / AC1	, 384 W / DC	
Peak current:	30 A /	<3 s	
Switching voltage:	250 V AC1	/ 24 V DC	
Min. switching power DC:	1000	mW	
Mechanical service life:	3x10 ⁷		
Electrical service life (AC1):	0.7x10 ⁵		
Control			
RF command from the transmitter:	868 MHz, 915 N	868 MHz, 915 MHz, 916 MHz	
Manual control:	button PROG (ON/OFF)		
Range in open space:	up to 200 m		
Other data			
Operating temperature:	-15 up to	+ 50 °C	
Working position:	any	<i>,</i> *	
Mounting:	in a network so	cket 230 V AC	
Protection:	IP 30		
Overvoltage category:	III.		
Contamination degree:	2		
Dimensions:	60 x 120 x 80 mm		
Weight:	195 g		
Related standards:	EN 60669, EN 300	220, EN 301 489	
	R&TTE Directive, Order. No 426/	/2000 Coll. (Directive 1999/EC)	

Ξ.	frequency	type	EAN code
RFSC-11	868.5 MHz	french	8595188145596
	868.5 MHz	schuko	8595188145619
	868.5 MHz	british	8595188145114
	868.1 MHz	schuko	8595188146364
	915 MHz	US	8595188153713
	916 MHz	australian	8595188153720

61	frequency	type	EAN code
RFSC-61	868.5 MHz	french	8595188145602
	868.5 MHz	schuko	8595188145626
	868.5 MHz	british	8595188145442
	868.1 MHz	schuko	8595188146371
	915 MHz	US	8595188153737
	916 MHz	australian	8595188153744

* For more information see on p. 56

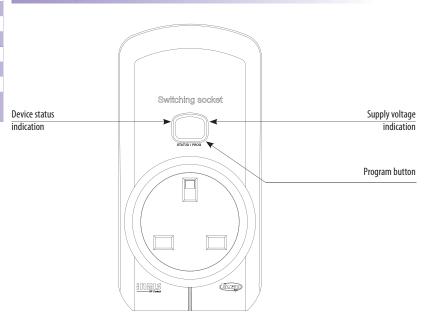
- The switched socket with 1 output channel is used to control fans, lamps, heaters and appliances, which are connected by a power cord.
- They can be combined with either Control or System units iNELS RF Control.
- Thanks to the socket design, installation is simple by direct insertion into the existing socket.
- It enables connection of the switched load up to 16A (4.000 W).
- RFSC-11: single-function design switch on / off.
- <u>RFSC-61</u>: multi-function design button, impulse relay and time function of delayed ON or OFF with time setting of 2s-60 min.
- The switched socket may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the socket is also used for manual control of the output.
- The socket power supply is 230V AC.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- Produced in 5 designs of sockets and plugs:



Function

For more information, see p. 54.

Device description





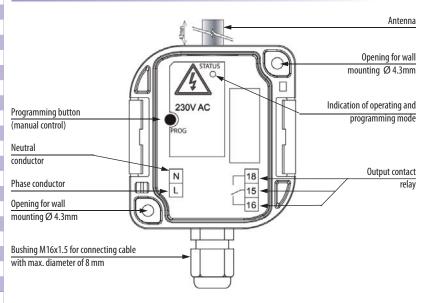




- The switching unit with 1 output channel is used for controlling appliances, sockets or lights.
- It can be combined with Control or System units iNELS RF Control.
- The increased IP 65 protection is suited to mounting on the wall or in harsh environments such as the cellar, garage or bathrooms.
- It enables connection of the switched load up to 12A (3.000 W).
- RFUS-11: single-function design switch ON / OFF.
- <u>RFUS-61</u>: multi-function design button, impulse relay and time function of delayed ON or OFF with time setting of 2s-60 min.
- The switching unit may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- The unit power supply is 230V AC.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency of with bidirectional protocol iNELS RF Control.

For more information, see p. 54.

Device Description



Device Description

4 - wire connection		3 - wire connection
N 18 15 16 N	galvanically - separated - contact	N 18 15 16 N

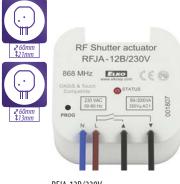
Tochnical navameters			
Technical parameters			
Supply voltage:	230 V AC / 50 - 60 Hz	120 V AC / 60Hz	24 V DC
Apparent power:	$5 \text{ VA / } \cos \phi = 0.1$	$5VA/\cos\phi=0.1$	-
Dissipated power:	0.6 W	0.6 W	0.7 W
Supply voltage tolerance:		+10 %; -15 %	
<u>Output</u>			
Rated current:	1	x switching (AgSn 0_2)
Number of contacts:		12 A / AC1	
Switching power:	30	00 VA / AC1, 384 W /	DC
Peak current:		30 A / <3 s	
Peak current:		250 V AC1 / 24 V DC	
Min. switching power DC:		500 mW	
Mechanical service life:		3x10 ⁷	
Electrical service life (AC1):	0.7x10 ⁵		
<u>Control</u>			
RF command from the transmitter:	868 MHz, 915 MHz, 916 MHz		
Manual control:	button PROG (ON/OFF)		
Range in open space:	up to 200 m		
Other data			
Operating temperature:	-15 up to + 50 °C		
Operating position:	any*		
Mounting:	screws		
Protection:	IP 65		
Overvoltage category:	III.		
Contamination degree:	2		
Cross-section of connecting wires (mm ²)	max. 1x2.5,max. 2x1.5/s a hollow max.1x2.5		
Recommended power cord:	CYKY 3x1.5 (CYKY 4x1.5)		
Dimensions:	136 x 62 x 34 mm		
Weight:	146 g		
Related standards:	EN 60669, EN 300 220, EN 301 489		
	R&TTE Directive, Ord	ler. No 426/2000 Coll.	(Directive 1999/EC)

^{*} For more information see on p. 56

RFUS-11	voltage	frequency	EAN code
RFUS	230V AC	868.5 MHz	8595188140546
	230V AC	868.1 MHz	8595188146777
	24V DC	868.5 MHz	8595188152464
	24V DC	868.1 MHz	8595188152471
	230V AC	915 MHz	8595188152488
	230V AC	916 MHz	8595188152495
	120V AC	915 MHz	8595188152501
	120V AC	916 MHz	8595188152518
	24V DC	915 MHz	8595188152952
	24V DC	916 MHz	8595188152969

-61	voltage	frequency	EAN code
RFUS-61	230V AC	868.5 MHz	8595188145268
	230V AC	868.1 MHz	8595188146791
	24V DC	868.5 MHz	8595188152525
	24V DC	868.1 MHz	8595188152532
	230V AC	915 MHz	8595188152549
	230V AC	916 MHz	8595188152556
	120V AC	915 MHz	8595188152563
	120V AC	916 MHz	8595188152570
	24V DC	915 MHz	8595188152976
	24V DC	916 MHz	8595188152983







RFJA-12B/230V

- The switching unit for blinds has 2 output channels used to control garage doors, gates, blinds, awnings, etc.
- It can be combined with Control or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or motor drive cover.
- RFJA-12B/230V: connection of switched load 2 x 8A (2 x 2.000 W).
- RFJA-12B/24VDC: contactless quiet switching.
- Short presses of the controller enable tilting of lamellas, and a long press enables you to draw the blinds up or down to the end position.
- Each of the units may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the unit is also used for manual control of the output.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- · Communication frequency with bidirectional protocol iNELS RF Control.

Technical parameters RFJA-12B 12-24 V DC Supply voltage: 230 V AC / 50 - 60 Hz $120\,V$ AC / $60\,Hz$ Apparent input: $7 \text{ VA} / \cos \phi = 0.1$ $7 \text{ VA} / \cos \phi = 0.1$ Χ Dissipated power: 0.7 W 0.7 W Power without load: 0.5 W Power under load: 25 W Supply voltage tolerance: +10 -15 %

<u>Output</u>		
Number of contacts:	2 x switching (AgSnO ₂)	х
Rated current:	8 A / AC1	Х
Permanent current:	х	1 A
Switching power:	2000 VA / AC1	Х
Peak current:	10 A / <3 s	1.5 A
Switching voltage:	250 V AC1	х
Switching output voltage*:	х	12-24 V DC*
Mechanical service life:	1x10 ⁷	Х
Electrical service life (AC1):	1x10 ⁵	Х
Control		

RF, by command from transmitter:	868 MHz, 915 MHz, 916 MHz
Manual control:	PROG (STOP, ▲, STOP, ▼)
Range in free space:	up to 100 m
Other data	
Operating temperature:	-15 to + 50 °C

operating temperature.	-15 to + 50 °C		
Operating position:	any **		
Mounting:	free at lead-in wires		
Protection:	IP 3	30	
Overvoltage category:	III.		
Contamination degree:	2		
Terminals:	CY wire, cross section 4x0.75 mm ²		
Length of terminals:	90 mm		
Dimensions:	49 x 49 x 21 mm 49 x 49 x 13 mm		

Related standards: EN 60669, EN 300 220, EN 301 489

R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)

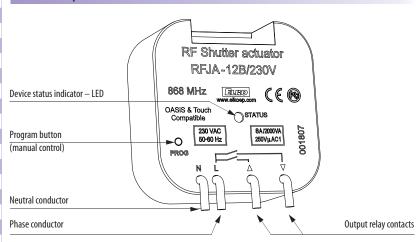
12B	voltage	frequency	EAN code
RFJA-12B	230V AC	868.5 MHz	8595188137010
	230V AC	868.1 MHz	8595188147729
	24V DC	868.5 MHz	8595188141772
	24V DC	868.1 MHz	8595188143974
	230V AC	915 MHz	8595188152013
	230V AC	916 MHz	8595188147637
	120V AC	915 MHz	8595188143097
	120V AC	916 MHz	8595188152044
	24V DC	915 MHz	8595188152051
	24V DC	916 MHz	8595188152068

- * Identical with supply voltage
- ** For more information, see p. 56

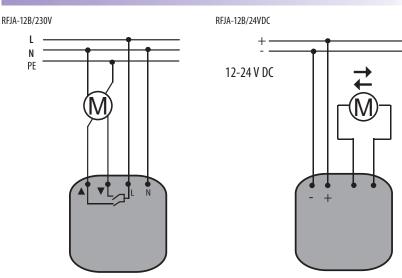
Function description

- 1. When the control button is pressed for less than 2 seconds, shutters move up (\triangle) or down (∇).
- 2. When the control button is pressed for more than 2 seconds, shutters move up (▲) or down (▼) until reaching the final position.

Device description

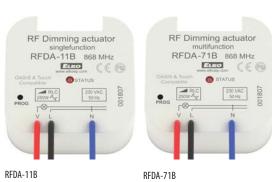


Connection









• The halogen dimmer is used to regulate light sources:

- R classic lamps
- L halogen lamps with wound transformer
- C halogen lamps with electronic transformer
- It can be combined with Controllers or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.
- Output load 250W.
- RFDA-11B: single-function dimming, ON/OFF.
- RFDA-71B: multi-function 6 light functions smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- The built-in overcurrent protection switches off the dimmer upon surges or short circuits.
- The halogen dimmer may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the controller is also used for manual control of the output.
- The unit power supply is 230V AC.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency 868 MHz with bidirectional protocol iNELS RF Control.
- You will find more on light sources and dimming options at www.elkoep.com/solutions.

Technical parameters

Supply voltage:	230 V AC / 50 Hz	120 V AC / 60 Hz
Apparent input:	$8.3~VA/\cos\phi=0.1$	$8.3 \text{ VA} / \cos \phi = 0.1$
Dissipated power:	0.83 W	0.83 W
Supply voltage tolerance:	+10/	-15 %
Connection:	3 conductors, ir	ncluding neutral

)utput	
locistanso	loadi

Resistance load:	250 VA*	150 VA*
Capacity load:	250 VA*	150 VA*
Inductive load:	250 VA*	150 VA*
Control		

Dimensions:

Related standards:

Weight:

<u>Control</u>			
RF, by command from transmitter:	868 MHz, 915 MHz, 916 MHz		
Manual control:	PROG (ON/OFF)		
Range in free space:	up to 160 m		
Other data			
Operating temperature:	-15 to + 50 °C		
Operating position:	any**		
Mounting:	free at lead-in wires		
Protection:	IP 30		
Overvoltage category:	III.		
Contamination degree:	2		
Terminals (CY wire, cross-section):	3x0.75 mm ²		
Length of terminals:	90 mm		

49 x 49 x 21 mm

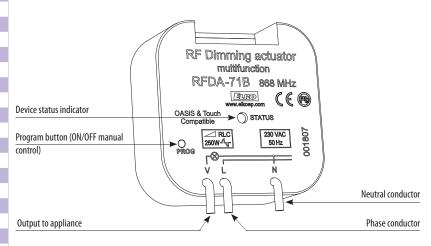
40 g EN 60669, EN 300 220, EN 301 489

R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)

Function

For more information, see p. 55.

Device description



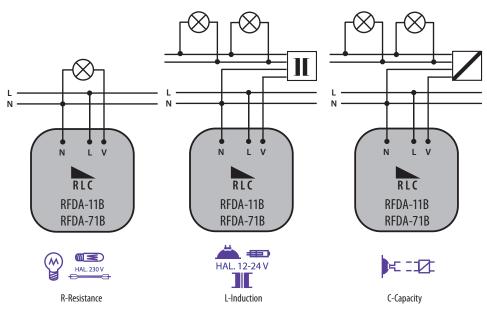
* For more information, see p. 55

^{* *}For more information, see p. 60

11B	voltage	frequency	EAN code
RFDA-11B	230V AC	868.5 MHz	8595188136846
~	230V AC	868.1 MHz	8595188143929
	230V AC	915 MHz	8595188151665
	230V AC	916 MHz	8595188151672
	120V AC	915 MHz	8595188143073
	120V AC	916 MHz	8595188151689

718	voltage	frequency	EAN code
RFDA-71B	230V AC	868.5 MHz	8595188136273
~	230V AC	868.1 MHz	8595188143936
	230V AC	915 MHz	8595188151696
	230V AC	916 MHz	8595188151702
	120V AC	915 MHz	8595188143080
	120V AC	916 MHz	8595188151719

Wiring with different types of load







Technical parameters

Maximum power without load:

RF by command from the transmitter

Load capacity of output +10V:

Supply terminals:

Supply voltage:

Dimmed load:

Rated current:

Peak current:

Control

Ext. signal:

Ext. signal:

Other data

Mounting

Protection:

Dimensions:

Number of channels:

Switching voltage:

Range in open space:

Operating temperature:

Storage temperature:

Contamination degree:

Cross-section of connecting wires (mm²):

Working position:

<u>Output</u>



RFDA-73M/RGB

Un+, GND

12-24 V DC stabilized

0.8 W

LED strip 12V,24V with common anode

RGB LED strips 12V, 24V with common anode

3x5 A

3x10 A

Un

868 MHz, 915 MHz, 916 MHz

0-10 V, 1-10V

1-10 V

up to 160 m

10 mA

-20 up to + 50 °C

-30 up to + 70 °C

any

DIN rail EN 60715

IP 20 from front panel

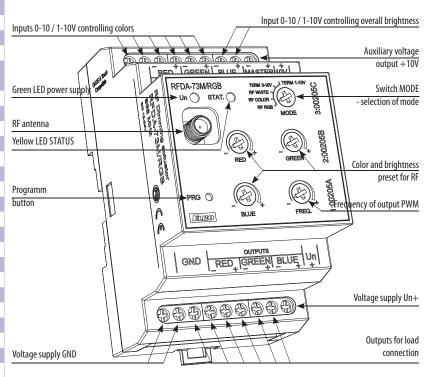
max 1x2.5, max 2x1.5/ with a hollow max. 1x2.5

90 x 52 x 65 mm

For more information, see p. 55.

- The dimmer for LED strips is used for independent control of 3 single-color LED strips or one RGB LED strip.
- The expanded selection of control modes enables it to be combined with:
 - a) Controllers and System units iNELS RF Control
 - b) by control signal 0(1)-10V
 - c) by connecting to iNELS BUS using a DAC ballast.
- The unit's three-module design with switchboard mounting enables connection of dimmed load 3 x 5A, which represents:
 - a) single-color LED strip 7.2W (ELKO Lighting) 3 x 8 m
 - b) RGB LED strip 14.2W (ELKO Lighting) 10 m.
- 6 light functions smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- The dimmer may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The power supply of the unit is in the range of 12-24V DC, and is indicated by a green LED.
- The package includes an internal antenna AN-I , in case of locating the unit in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- You will find more on light sources and dimming options at www.elkoep.com/solutions.

Device description

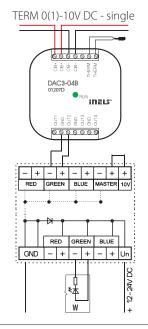


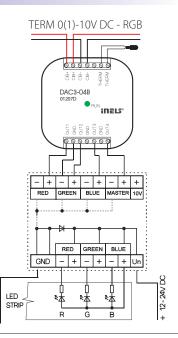
Weight:130 gControl optionsRelated standards:EN 60730-1; EN 60730-2-11

Output variations RF WHITE RF RGB /RF COLOR + - + - + BLUE RED GREEN BLUE - + - + Un - + GND GND + 12-24V ingle LED LED voltage frequency EAN code 12-24V DC 868.5 MHz 8595188146814 **Function** 12-24V DC 868.1 MHz 8595188144179

8595188152990

8595188153003





12-24V DC

12-24V DC

915 MHz

916 MHz



Control modes

RF RGB

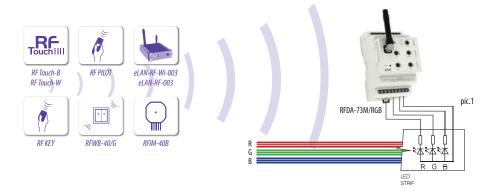
Switch settings in MODE:



RF RGB mode for controlling RGB LED strips.

In the RF RGB programming mode, colors are automatically assigned to individual transmitter buttons.

Note: The mode can be controlled by RF Touch, RF Pilot, RFWB-40/G, RF KEY, RFIM-40B, eLAN-RF-003 and eLAN-RF-Wi-003.



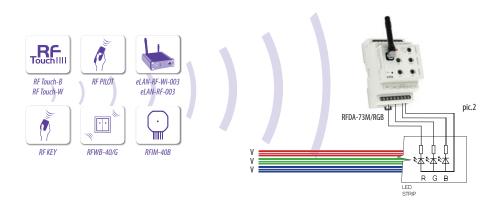
RF COLOR

Switch settings in MODE:



RF COLOR mode for controling RBG LED strips, where you can choose the color for individual transmitter buttons. A long press of the button starts the color search mode. After releasing the button, the current color is set for the given button.

Note: The mode can be controlled by RF Touch, RF Pilot, RFWB-40/G, RF KEY RFIM-40B, eLAN-RF-003 and eLAN-RF-Wi-003.



RF WHITE

Switch settings in MODE:



This works in a mode where it acts like three independent dimmers for 12-24V. Each channel can be programmed independently of one another and has its own address.

Dimming functions are identical to the unit RFDA-71B.

Note: The mode can be controlled by RF Touch, RF Pilot, RFWB-20/G, RFWB-40/G, RF KEY, RFIM-20B, RFIM-40B, eLAN-RF-003 and eLAN-RF-Wi-003.

RF Touch-B RF Touch-B RF Touch-W RF Net-Wi-003 eLAN-RF-W03 RFDA-73M/RGB Pi RFDA-73M/RGB

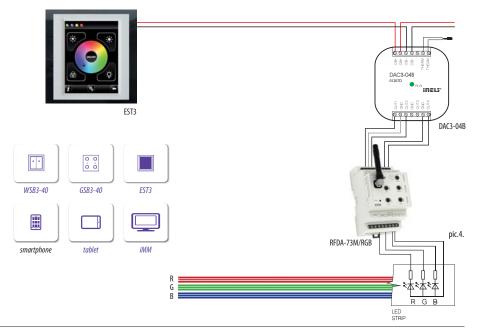
TERM 0-10V and TERM 1-10V

Switch settings in MODE:





Inputs 0 - 10V and 1 -10V serves for controlling iNELS with the help of DAC3-04M or DAC3-04B. This means it's possible to combine and control LED strips via iNELS.







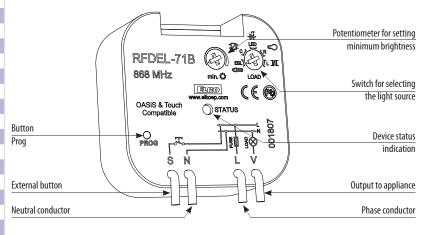


To destruct and account on	DEDE	1 74 B	
Technical parameters	RFDEL-71B		
Supply voltage:	230 V AC / 50 Hz	120 V AC / 60 Hz	
Apparent power:	1.1 VA	1.1 VA	
Dissipated power:	0.8 W	0.8 W	
Supply voltage tolerance:	+10/	-15 %	
Connection:	4-wire, with	"NEUTRAL"	
Dimmed load:	R,L,C, L	ED, ESL	
<u>Output</u>			
Contactless:	2 x M0	OSFET	
Load capacity:	160 W*	80 W*	
Control			
RF command from the transmitter:	868 MHz, 915 MHz, 916 MHz		
Range in open space:	up to 160 m (more on range on p. 53)		
Manual control:	button PROG (ON/OFF), external button		
Glow lamp connection:	No		
Other data			
Operating temperature:	-20 up to + 35°C		
Storage temperature:	-30 up to +70°C		
Operating position:	any**		
Mounting:	free at lead-in wires		
Protection:	IP 30 under normal conditions		
Overvoltage category:	III.		
Contamination degree:	2		
Terminals (CY wire, Cross-section):	4 x 0.75 mm ²		
Terminal length:	90 mm		
Dimensions:	49 x 49 x 21 mm		
Weight:	40 g		
Related standards:	EN 607 30-1 ED.2		

- The universal built-in dimmer is used to regulate light sources:
 - R classic lamps
 - L halogen lamps with wound transformer
 - C halogen lamps with electronic transformer
 - ESL dimmable energy-efficient fluorescent lamps
 - LED LED light sources (230V).
- It can be combined with Controllers or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.
- Output load 160W (AC1).
- 6 light functions smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- Thanks to setting the min. brightness by potentiometer, you will eliminate flashing of the LED and ESL light sources.
- The universal dimmer may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- Connection of the existing button on the control input "S" enables combination of wireless control with classic (wired) control.
- The programming button on the controller is also used for manual control of the output.
- The unit power supply is 230V AC.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- You will find more on light sources and dimming options at www.elkoep.com/solutions.

For more information, see p. 55.

Device Description



* capacity for power factor $\cos\phi=1$ The power factor of dimmable LEDs and ESL bulbs ran-

ges from $\cos\phi=0.95$ up to 0.4 An approximate value of maximum load may be ob-

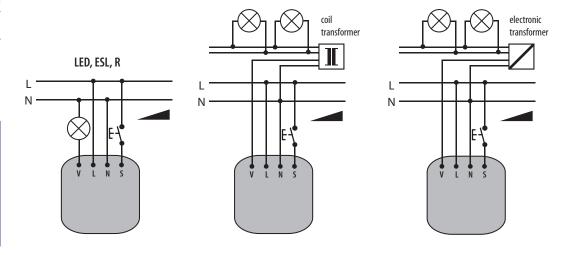
tained by multiplying the load capacity of the dimmer by the power factor of the connected light source.

You can find the list of dimmable light sources here www.elkoep.com/Solutions

** For more information, see p. 60

71B	voltage	frequency	EAN code
RFDEL-71B	230V AC	868.5 MHz	8595188145121
~	230V AC	868.1 MHz	8595188146401
	230V AC	915 MHz	8595188152204
	230V AC	916 MHz	8595188152211
	120V AC	915 MHz	8595188152228
	120V AC	916 MHz	8595188152235

Connection









Technical parameters	RFDEL-71M		
Supply voltage:	230 V AC / 50 Hz	120 V AC / 60 Hz	
Apparent power:	2.5 VA	1.1 VA	
Dissipated power:	0.8 W	0.6 W	
Supply voltage tolerance:	+10/	-15 %	
Dimmed load:	R,L,C,	LED, ESL	
<u>Output</u>			
Contactless:	2 x N	IOSFET	
Load capacity:	600 W*	300 W*	
Controlling			
By RF command from the transmitter	r: 868 MHz, 915 MHz, 916 MHz		
Range in open space:	up to 160 m		
Manual control:	PROG (ON/OFF) button, PROG external button, potentiometer		
Glow lamps connection:	No		
Analog control:	0 (1) - 10V		
Other data			
Operating temperature:	-20 up t	:o+35 °C	
Storage temperature:	-30 up	to +70°C	
Operating position:	vert	ical**	
Mounting:	DIN rail	EN 60715	
Protection:	IP 20 under normal conditions		
Overvoltage category:	III.		
Contamination degree:	2		
Cross-section of connecting wires:	max 1x2.5, max 2x1.5/with a hollow max. 1x2.5		
Dimension:	90 x 52 x 65 mm		
Weight:	125g		
Related standards:	EN 607 30-1 ed.2		

* Due to the huge amount of type of light sources, the maximum load depends on internal construction of dimmable LED and ESL bulbs and their power factor $\cos \varphi$, capacity for power factor $\cos \varphi = 1$. The power factor of dimmable LEDs and ESL bulbs ranges from $\cos \varphi = 0.95$ up to 0.4 An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source.

You can find the list of dimmable light sources here www.elkoep.com/Solutions

** For more information, see p. 60

	The universal	modular	dimmer is used	to regulate	light sources:
•	THE UIIIVEISAL	IIIVuulai	ullillici is uscu	to reduiate	munic sources.

- R classic lamps
- L halogen lamps with wound transformer
- C halogen lamps with electronic transformer
- ESL dimmable energy-efficient fluorescent lamps
- LED LED light sources (230V).
- · Control can be performed by:
 - a) Controllers and System units iNELS RF Control
 - b) by control signal 0(1)-10V
 - c) potentiometer
 - d) existing button in the installation.
- The unit's three-module design with switchboard mounting enables connection of a dimmed load of up to 600 W.
- 6 light functions smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- Thanks to setting the min. brightness by potentiometer, you will eliminate flashing of the LED and ESL light sources.
- The universal dimmer may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the controller is also used for manual control of the output.
- The unit power supply is 230V AC.
- The package includes an internal antenna AN-I , in case of locating the unit in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- You will find more on light sources and dimming options at www.elkoep.com/solutions.

Function

For more information, see p. 55.

Device description

External control by potentiometer or 0-10 V

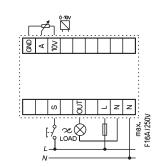
Output mode

Manual control/program

Potentiometer to set min. brightness

External control by by the select light source of the select li

Connection



M17	voltage	frequency	EAN code
RFDEL-71M	230V AC	868.5 MHz	8595188148979
鉴	230V AC	868.1 MHz	8595188153010
	230V AC	915 MHz	8595188153027
	230V AC	916 MHz	8595188153034
	120V AC	915 MHz	8595188153041
	120V AC	916 MHz	8595188153058







Technical parameters



recinical parameters					
Supply voltage:	230 - 250V / 50-60Hz 120 V AC / 60Hz				
Apparent power:	1.1 VA				
Dissipated power:	0.8	3 W			
Supply voltage tolerance:	+10/	-15 %			
Dimming load:	R,L,C, L	ED, ESL			
<u>Output</u>					
Contactless:	2 x M	OSFET			
Load capacity:	300 W*	150 W*			
Control					
RF command from the transmitter:	: 868 MHz, 915 MHz, 916 MHz				
Range in open space:	up to 160 m (more on range on p. 53)				
Manual control:	button PRC	G (ON/OFF)			
Other data					
Operating temperature:	-20 up to	o + 35 ℃			
Storage temperature:	-30 up t	o +70°C			
Working position:	a	ny			
Mounting:	in a network socket 230 V AC				
Protection:	IP 30				
Overvoltage category:	III.				
Contamination degree:		2			
Dimensions:	60 x 120 x 80 mm				

* capacity for power factor $\cos \phi = 1$

Weight:

Related standards:

The power factor of dimmable LEDs and ESL bulbs ranges from cos $\phi=0.95$ up to 0.4 An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source.

129 g

EN 60669, EN 300 220, EN 301 489

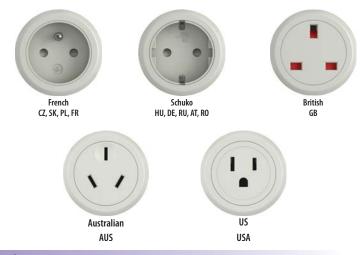
R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)

A list of test light sources can be found here : www.elkoep.com/solutions

Ξ	voltage	type	EAN code
RFDSC-11	868.5 MHz	french	8595188145923
_	868.5 MHz	schuko	8595188145930
	868.5 MHz	british	8595188145459
	868.1 MHz	schuko	8595188146388
	915 MHz	US	8595188153751
	916 MHz	australian	8595188153768

:-71	voltage	type	EAN code
RFDSC-71	868.5 MHz	french	8595188145947
_	868.5 MHz	schuko	8595188145954
	868.5 MHz	british	8595188145466
	868.1 MHz	schuko	8595188146395
	915 MHz	US	8595188153775
	916 MHz	australian	8595188153782

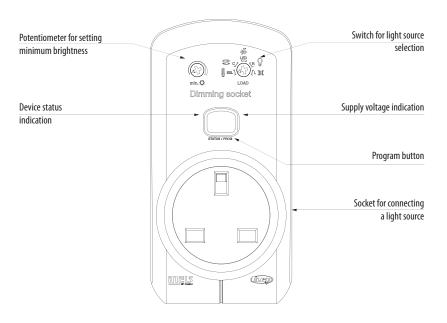
- The dimmed socket is used to control light sources that are connected by power cord especially lamps:
 - R classic lamps
 - L halogen lamps with wound transformer
 - C halogen lamps with electronic transformer
 - ESL dimmable energy-efficient fluorescent lamps
 - LED LED light sources (230V),
- It can be combined with Controllers or System units iNELS RF Control.
- Thanks to the socket design, installation is simple by direct insertion into the existing socket.
- · Output load 300W.
- RFDSC-11: single-function dimming, ON/OFF.
- RFDSC-71: multi-function 6 light functions smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- Thanks to setting the min. brightness by potentiometer, you will eliminate flashing of the LED and ESL light sources.
- The universal dimmer may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the socket is also used for manual control of the output.
- The unit power supply is 230V AC.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- You will find more on light sources and dimming options at www.elkoep.com/solutions.
- Produced in 5 designs of sockets and plugs:



Function

For more information, see p. 55.

Device description









Technical parameters	RFDAC-71B	
Supply voltage:	110 - 230 V AC / 50 - 60 Hz	
Apparent input:	3 VA	
Dissipated power:	1.2 W	
Supply voltage tolerance:	+10 /-15 %	
Potential-free analog		
output/max.current:	0(1)-10 V / 10 mA	
Control		
RF, by command from transmitter:	868 MHz, 915 MHz, 916 MHz	
Manual control:	PROG (ON/OFF) button	
Range in free space:	up to 200 m	
Minimum control distance:	20 mm	
Contact relay:	1x AgSnO ₂ , switches the phase conductor	
Rated current:	16A / AC1	
Switching power:	4000VA / AC1	
Switching voltage:	250V AC1	
Mechanical service life:	3x10 ⁷	
Electrical service life:	0.7x10 ⁵	
Indication:	red LED / green LED	
Output selection:	0(1)-10V / PROG button	
Other data		
Operating temperature:	-15 to + 50 °C	
Operating position:	any*	
Mounting:	free at lead-in wires	
Protection:	IP 30	
Overvoltage category:	III.	
Contamination degree:	2	
Terminals (CY wire, cross-section):	CY wire, cross section 3 x Ø 0.75 mm², 2 x Ø 2.5 mm²	
Length of terminals:	90 mm	
Dimensions:	49 x 49 x 21 mm	
Weight:	52 g	
Related standards:	EN 60669, EN 300 220, EN 301 489	
	R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)	

^{*} For more information, see p. 56

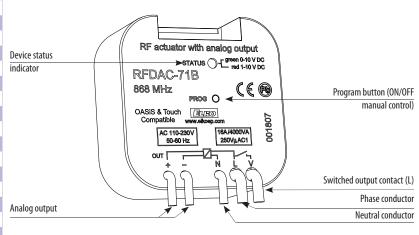
71B	voltage	frequency	EAN code
RFDAC-71B	110-230V AC	868.5 MHz	8595188142809
품	110-230V AC	868.1 MHz	8595188144049
	110-230V AC	915 MHz	8595188143110
	110-230V AC	916 MHz	8595188153119

- The analog controller with output 0(1)-10V is used for:
 - a) dimming fluorescent lamps (using a dimmable ballast).
 - b) dimming LED panels (when using a suitable dimmed source up to 50 units LP-6060-3K/6K).
 - c) Control of thermal actuators (TELVA).
 - d) control of other controllers (e.g. performance dimmers DIM-6).
- · It can be combined with Controllers or System units iNELS RF Control.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.
- Potential free analog output 10 mA, contact relay 16A.
- 6 light functions smooth increase or decrease with time setting 2s-30 min.
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- The analog controller may be controlled by up to 32 channels (1 channel represents 1 button on the controller).
- The programming button on the controller is also used for manual control of the output.
- The unit power supply is in the range 110-230V AC.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- You will find more on light sources and dimming options at www.elkoep.com/solutions.

Function

For more information, see p. 55.

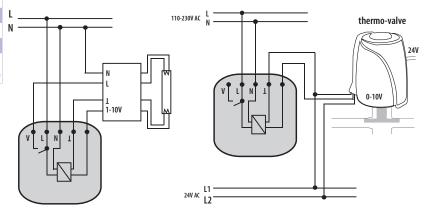
Device description



Connection

Connection example: dimming of fluorescent tubes with dimmable ballast

Connection example: with thermo valve

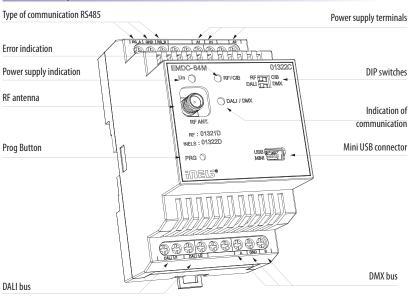




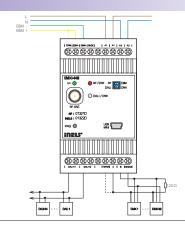


Tool - 250V AC / max. 100 mA Communication Input interface: EBM bus (RS485 communication) iNELS RF Control DALI (max. 64 ballasts) DMX (max. 32 receivers, with repeator to 64) Indication Power supply: Error surge or short DALI: Illuminated red LED Un Error surge or short DALI: Illuminated red LED RF/ERR Communication of unit status: LED DALI/DMX (see iNELS installation handbook) Other data Relative humidity: Operating temperature: Protection degree: IP20 device, IP40 mounitg in the switchboard Control device purpose: Control device construction: Characteristic of automatic action: Overvoltage category: II. Pollution degree: Qperating position: Installation: Ins	Technical parameters	EMDC-64M	
Communication Input interface: Indication Input interface: Indication Input interface: Input input interface: Input interface: Input interface: Input interface	Supply voltage /rated current:		
Input interface: EBM bus (RS485 communication) iNELS RF Control		100 - 250V AC / max. 100 mA	
iNELS RF Control Output interface: DALI (max. 64 ballasts) DMX (max. 32 receivers, with repeator to 64) Indication Power supply: green LED Un Error surge or short DALI: Communication RF: Indication of unit status: UED DALI/DMX (see iNELS installation handbook) Other data Relative humidity: Operating temperature: Protection degree: IP20 device, IP40 mounitg in the switchboard Control device ourstruction: Characteristic of automatic action: Overvoltage category: Pollution degree: Qperating position: Implementation: Implementation: Dimension: Weight: Rf control interface Communication protocol: RF Touch Compatible Transmitting frequency: Signal transmission method: Output for RF antenna: RF Antenna: Indication DALI (max. 64 ballasts) Illuminated red LED RF/ERR Illuminated red LED RF/ERR Illuminated red LED RF/ERR Intervent Sellastion interselled uniterselled uniters	Communication		
Output interface: DALI (max. 64 ballasts) DMX (max. 32 receivers, with repeator to 64) Indication Power supply: Green LED Un Error surge or short DALI: Illuminated red LED RF/ERR Irregularly flashing red LED RF/ERR Indication of unit status: Other data Relative humidity: Operating temperature: Protection degree: Control device purpose: Control device construction: Characteristic of automatic action: Overvoltage category: Pollution degree: Operating position: Implementation: Implementation: Dimension: Weight: RF Touch Compatible Transmitting frequency: Signal transmission method: Output for RF antenna: RANG (10 H) Illuminated red LED RF/ERR Illuminated red LED RF/ERR Illuminated red LED RF/ERR Inluminated red LED Un Illuminated red LED Un Inluminated red LED Un Inluminated red LED Un Inluminated red LED Un Inluminated red LED VIFERR Inluminated red LED VIFER Inluminated red LED VIFERR Inluminated LED VIFER Inlu	Input interface:	EBM bus (RS485 communication)	
DMX (max. 32 receivers, with repeator to 64) Indication Power supply: Error surge or short DALI: Communication RF: Indication of unit status: Other data Relative humidity: Operating temperature: Protection degree: Control device purpose: Control device construction: Characteristic of automatic action: Overvoltage category: Pollution degree: Operating position: Implementation: Dimension: Weight: Transmitting frequency: Signal transmission method: Outhout Alia illuminated red LED RF/ERR Illuminated red LED RF/ERR Illuminated red LED RF/ERR Irregularly flashing red LED RF/ERR Intended LED Referal Inten		iNELS RF Control	
Indication Power supply: Error surge or short DALI: Communication RF: Indication of unit status: Other data Relative humidity: Operating temperature: Protection degree: Control device construction: Characteristic of automatic action: Overvoltage category: Pollution degree: Operating position: Installation: Installation: Installation: Installation: Installation: Operating control interface Communication protocol: RF Touch Compatible Transmitting frequency: Signal transmission method: Output of RF antenna: REALIVE MED ALL/DMX (see iNELS installation handbook) Illuminated red LED RF/ERR Intended LED RF/ERR Illuminated red LED RF/ERR Intended LED RF/ER Intended LED RF/ER Intended LED RF/ERR Intended LED RF/ER Intended LED Rf/E	Output interface:	DALI (max. 64 ballasts)	
Power supply: Error surge or short DALI: Communication RF: Indication of unit status: Other data Relative humidity: Operating temperature: Protection degree: Control device construction: Characteristic of automatic action: Overvoltage category: Pollution degree: Operating position: Installation: Installation: Installation: Installation: Installation: Operating control interface Communication protocol: RF Touch Compatible Transmitting frequency: Signal transmission method: Output for RF antenna: READ DALI/DMX (see iNELS installation handbook) Other data irregularly flashing red LED RF/ERR Illuminated red LED RF/ERR Irregularly flashing red LED RF/ERR Irregularly flashing red LED RF/ERR Irregularly flashing red LED RF/ERR Interegularly flashing red LED RF/ER Interegularly flashing Interegularly Interegularly flashing Interegularly Interegularly flashing Interegularly Interegularly Interegularly Interegularly Interegularly Interegularly Interegularly Interegularly Inte		DMX (max. 32 receivers, with repeator to 64)	
Error surge or short DALI: Communication RF: Indication of unit status: Other data Relative humidity: Operating temperature: Protection degree: Control device purpose: Control device construction: Characteristic of automatic action: Operating position: Installation: Installation: Installation: Installation: Implementation: Operating protocol: RF Touch Compatible Transmitting frequency: Signal transmission method: Output for RF antenna: Relative humidity: Iill minimated red LED RF/ERR Iilluminated red LED RF/ERR IIllumination handbook) Image will a led of the switch bear soon of the switch board Indication from 4.00 + 0.00 + 0.00 + 0.00 Indication from 4.00 + 0.00 + 0.00 Indication from 4.00 + 0.00	<u>Indication</u>		
Communication RF: irregularly flashing red LED RF/ERR Indication of unit status: LED DALI/DMX (see iNELS installation handbook) Other data Relative humidity: max. 80 % Operating temperature: -20°C to +55°C Storage temperature: -30°C to +70°C Protection degree: IP20 device, IP40 mounitg in the switchboard Control device purpose: operating control device Control device construction: individual control device Control device construction: individual control device Overvoltage category: II. Pollution degree: 2 Operating position: any Installation: into switchboard on DIN rail EN60715 Implementation: 3-modulle Dimension: 90 x 52 x 65 mm Weight: 130g Rf control interface Communication protocol: RF Touch Compatible Transmitting frequency: 868 MHz, 915 MHz, 916 MHz Signal transmission method: bidirectionally addressed message Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Power supply:	green LED Un	
Indication of unit status: Other data Relative humidity: Operating temperature: Protection degree: Control device purpose: Control device construction: Characteristic of automatic action: Operating position: Installation: Installation: Implementation: Operating control device IP20 device, IP40 mounitg in the switchboard Overvoltage category: II. Pollution degree: Operating position: Installation: Installation: Implementation: Oincomplementation:	Error surge or short DALI:	illuminated red LED RF/ERR	
Other data Relative humidity: Operating temperature: -20°C to +55°C Storage temperature: -30°C to +70°C Protection degree: IP20 device, IP40 mounitg in the switchboard Control device purpose: Operating control device Control device construction: Characteristic of automatic action: Overvoltage category: II. Pollution degree: 2 Operating position: Installation: Installation: Installation: Implementation: Oimplementation: Oimpleme	Communication RF:	irregularly flashing red LED RF/ERR	
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Operating temperature: -20°C to +55°C Storage temperature: -30°C to +70°C Protection degree: IP20 device, IP40 mounitg in the switchboard Control device purpose: Operating control device Control device construction: Characteristic of automatic action: Overvoltage category: III. Pollution degree: 2 Operating position: Installation: Installation: Implementation: Dimension: Ower of the first of	Other data		
Storage temperature: -30°C to +70°C Protection degree: IP20 device, IP40 mounitg in the switchboard Control device purpose: Control device construction: Characteristic of automatic action: Overvoltage category: III. Pollution degree: 2 Operating position: Installation: Installation: Implementation: Dimension: Ower of the form of	Relative humidity:	max. 80 %	
Protection degree: IP20 device, IP40 mounitg in the switchboard Control device purpose: operating control device Control device construction: individual control device Characteristic of automatic action: 2.5 kV Overvoltage category: II. Pollution degree: 2 Operating position: any Installation: into switchboard on DIN rail EN60715 Implementation: 3-modulle Dimension: 90 x 52 x 65 mm Weight: 130g Rf control interface Communication protocol: RF Touch Compatible Transmitting frequency: 868 MHz, 915 MHz, 916 MHz Signal transmission method: bidirectionally addressed message Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Operating temperature:	-20°C to +55°C	
Control device purpose: Control device construction: Characteristic of automatic action: Corvoltage category: Pollution degree: Coperating position: Installation: Installation: Installation: Implementation: Communication protocol: Communication p	Storage temperature:	-30°C to +70°C	
Control device construction: Characteristic of automatic action: Overvoltage category: Pollution degree: Operating position: Installation: Installation: Installation: Implementation: Oimension: Weight: Tansmitting frequency: Signal transmission method: Output for RF antenna: RE Antenna: Individual control device 2.5 kV 11. 2.5 kV 12. 3. 4. 9. 10. 10. 10. 10. 10. 10. 10.	Protection degree:	IP20 device, IP40 mounitg in the switchboard	
Characteristic of automatic action: Overvoltage category: Pollution degree: Operating position: Installation: Into switchboard on DIN rail EN60715 Implementation: 3-modulle Dimension: 90 x 52 x 65 mm Weight: 130g Rf control interface Communication protocol: RF Touch Compatible Transmitting frequency: Signal transmission method: Didirectionally addressed message Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Control device purpose:	operating control device	
Overvoltage category: Pollution degree: 2 Operating position: Installation: Installation: Implementation: Im	Control device construction:	individual control device	
Pollution degree: 2 Operating position: Installation: Installation: Implementation: Implement	Characteristic of automatic action:	2.5 kV	
Operating position: Installation: Installation: Implementation: Implementation	Overvoltage category:	II.	
Installation: into switchboard on DIN rail EN60715 Implementation: 3-modulle Dimension: 90 x 52 x 65 mm Weight: 130g RF control interface Communication protocol: RF Touch Compatible Transmitting frequency: 868 MHz, 915 MHz, 916 MHz Signal transmission method: bidirectionally addressed message Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Pollution degree:	2	
Implementation: 3-modulle Dimension: 90 x 52 x 65 mm Weight: 130g Rf control interface Communication protocol: RF Touch Compatible Transmitting frequency: 868 MHz, 915 MHz, 916 MHz Signal transmission method: bidirectionally addressed message Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Operating position:	any	
Dimension: 90 x 52 x 65 mm Weight: 130g Rf control interface Communication protocol: RF Touch Compatible Transmitting frequency: 868 MHz, 915 MHz, 916 MHz Signal transmission method: bidirectionally addressed message Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Installation:	into switchboard on DIN rail EN60715	
Weight: 130g Rf control interface Communication protocol: RF Touch Compatible Transmitting frequency: 868 MHz, 915 MHz, 916 MHz Signal transmission method: bidirectionally addressed message Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Implementation:	3-modulle	
Rf control interface Communication protocol: RF Touch Compatible Transmitting frequency: 868 MHz, 915 MHz, 916 MHz Signal transmission method: bidirectionally addressed message Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Dimension:	90 x 52 x 65 mm	
Communication protocol: Transmitting frequency: Signal transmission method: Output for RF antenna: RF Ant	Weight:	130g	
Transmitting frequency: Signal transmission method: Output for RF antenna: RF Antenna: SMA connector 1 dB (supplied)	Rf control interface		
Signal transmission method: bidirectionally addressed message Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Communication protocol:	RF Touch Compatible	
Output for RF antenna: SMA connector RF Antenna: 1 dB (supplied)	Transmitting frequency:	868 MHz, 915 MHz, 916 MHz	
RF Antenna: 1 dB (supplied)	Signal transmission method:	bidirectionally addressed message	
i ub (supplieu)	Output for RF antenna:	SMA connector	
Range in free space: up to 100 m	RF Antenna:	1 dB (supplied)	
	Range in free space:	up to 100 m	

- The unit EMDC-64M is designed to control DALI electronic ballasts and DMX receivers from the iNELS system.
- EMDC-64M enables control of up to 64 independent electronic ballasts DALI (Digital Addressable Lighting Interface) for fluorescent lamps, LEDs and other light sources.
- EMDC-64M also enables connection of up to 32 receivers DMX (Digital MultipleX) in a single segment. If using repeaters, it is possible to control up to 64 devices.
- Control is possible from the system iNELS BUS System by means of a system bus EBM or from the system iNELS RF Control by wireless transmitters.
- Selection of control (RF/EBM) and the controlled (DALI/DMX) interface is performed using DIP switches on the front panel of the unit.
- DALI ballasts can be configured via MINI USB connector using the software EMDC DALI Configurator (DIP switches must be in the position RF and DALI).
- If using within a bus electrical installation (EBM interface), the functionality is set within the project in the software iDM3.
- The unit EMDC-64M is powered from the mains voltage 100-250V AC.
- The bus DALI is directly connected via the unit EMDC-64M.
- The system bus EBM is galvanically separated from the buses DALI/DMX. Terminals for connecting the DALI bus are equipped with short circuit and surge protection.
- It is possible to connect multiple units EMDC-64M onto one bus EBM; for more information, see the iNELS Installation Handbook.
- If this concerns the last unit on a system bus EBM, it is necessary to terminate the wire with a resistor with nominal resistance of 120Ω. The resistor is inside the unit, termination is made by shorting neighboring terminals TERM and EBM+.
- The bus DMX must be terminated at its end by a resistor with nominal resistive value 120Ω. Termination of the
 bus DMX on the part of the EMDC-64M is already implemented inside the unit. The resistor is inside the unit,
 termination is made by shorting neighboring terminals TERM and A.
- The connector MINI USB on the front panel of the unit is used the setting communications with iNELS RF Control transmitters and configuration of DALI ballasts.
- Communication frequency with bidirectional protocol iNELS RF Control. Range up to 100 m (in open space).
- The package includes an internal antenna AN-I; in case of locating the unit in a metal switchboard, you can use
 the external antenna AN-E for better signal reception.
- The EMDC-64M in 3-MODULE design is designed for mounting in a control panel on a DIN rail EN60715.



CO	n	n	Δ	c	tı	n	n
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54M	voltage	frequency	EAN code
EMDC-64M	230V AC	868.5 MHz	8595188150309
Ð	230V AC	868.1 MHz	8595188153065
	230V AC	915 MHz	8595188153072
	230V AC	916 MHz	8595188153089
	120V AC	915 MHz	8595188153096
	120V AC	916 MHz	8595188153102







Technical parameters	RF-RGB-LED-550	RF-White-LED-675	
Supply voltage:	100-240V AC	50/60 Hz	
Maximum power:	9 W	10 W	
Power factor:	<0.	6	
<u>Output</u>			
Lighting power:	6 W	8 W	
Luminous flux:	550Lm	675 Lm	
Color temperature:	RGB	2600, 5000	
Brightness regulation:	0-100%		
Durability:	30, 000 hours		
Controlling			
By RF command from transmitter:	868 MHz, 915 MHz, 916 MHz		
Free space range:	up to 2	20 m	
Other data			
Operating temperature:	0 up to +	- 50 °C	
Storage temperature:	-30 up to + 70 °C		
Connection:	socket E27		
Operating position:	any		
Dimension:	65 x 115 mm		
Weight:	150 g		

RF-RGB-LED-550

- The colored lamp with RF module enables you to create an atmosphere for reading, watching a movie, hosting
 a party with friends, etc.
- The lamp has an implemented wireless unit, which receives commands from system units of iNELS RF Control (link) and sends a signal for visualization of the current status ON/OFF, brightness.
- · Luminous flux up to 550Lm, with power 9W and life of 30,000 hours.
- RGB lamp function:
- colored light scenes
- option of setting brightness in a range of 0-100%
- circus mode, used for automatic blending of colors

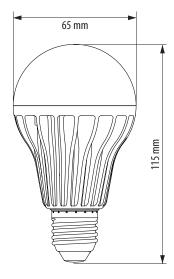
RF-White-LED-675

- The white wireless lamp with RF module is used for everyday illumination.
- The lamp has an implemented wireless unit, which receives commands from system units of iNELS RF Control (link) and sends a signal for visualization of the current status ON/OFF, brightness.
- Luminous flux up to 675Lm, with power 10W and life of 30,000 hours.
- · White wireless lamp functions:
 - option of setting brightness in a range of 0-100%
- setting color warm white / cold white
- When switched off, the set level is stored in the memory, and when switched back on, it returns to the most recently set value.
- · Assembly directly in your existing light with base E27.
- The power supply of the lamp is in the range 100 240 V AC.
- Range up to 200 m (in open space); if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Description of functions

RGB LED and White bulbs can be controlled through transmitters RF KEY, RFWB, RF Pilot and RF Touch. Using buttons or touch panel, it is possible to choose the desired color from the RGB spectrum or desired brightness.

Dimension



550	voltage	frequency	EAN code
Ė	230V AC	868.5 MHz	8595188149310
RF-RGB-LED-550	230V AC	868.1 MHz	8595188153126
품	120V AC	915 MHz	8595188153133
	230V AC	916 MHz	8595188153140

675	voltage	frequency	EAN code
-LED-	230V AC	868.5 MHz	8595188149365
RF-White-LED-675	230V AC	868.1 MHz	8595188153157
RF-W	120V AC	915 MHz	8595188153164
	230V AC	916 MHz	8595188153171



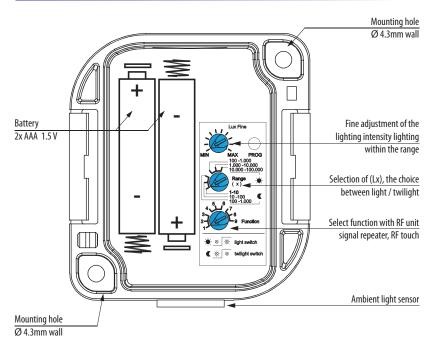




Technical parameters	RFSOU-1	
Power supply	2x1.5 Battery AAA	
Battery Life:	Appr. 2 years, according to the number of controlled units	
Setting the range of light levels		
Function (twilight switch)		
- Range 1:	1 10 lx	
- Range 2:	10 100 lx	
- Range 3:	100 1.000 lx	
Function - 🜣 (light switch)		
- Range 1:	100 1 000 lx	
- Range 2:	1 000 10 000 lx	
- Range 3:	10 000 100 000 lx	
Function setting:	rotary switch	
The level of lighting gently:	0.1 1 x range	
Fine adjustment of lighting levels:	potentiometer	
The time delay t:	0 / 1 min. / 2 min.	
Setting the delay time t:	rotary switch	
<u>Output</u>		
Sending RF communication packet:	868 MHz, 915 MHz, 916 MHz	
Range in free space:	up to 160 m	
Other data		
Working temperature:	-20 to +50°C*	
Storage temperature:	-30 to +70°C	
Operating position:	sensor side down	
Protection:	IP65	
Degree of pollution:	2	
Dimension:	72 x 62 x 34 mm	
Weight:	104 g	
Standards:	EN 60730-1, EN 300 220, EN 301 489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)	

^{*}Note: pay attention to the operating temperature of batteries

- The wireless twilight dimmer 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 combined with multifunctional switching units and blind switches.
- The increased IP 65 protection is suited to mounting on the wall or in harsh environments.
- Integrated sensor for measuring illumination, settable in 3 ranges 1 100,000 lx.
- Selection of function:
 - a) twilight switch automatically switches on upon a decrease in ambient light intensity, switches off upon an increase (appropriate for garden lights, advertisements, public lighting, etc.)
 - b) light switch automatically switches on upon an increase in ambient light intensity, switches off upon a decrease (appropriate for offices, restaurants, rooms, etc.)
- Settable delay up to 2 minutes to eliminate unwanted switching caused by surrounding influences.
- The twilight switch may control up to 32 units in the installation.
- 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 (1.5V / 2 x AAA included in supply) with battery 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-20.
- Communication frequency with bidirectional protocol iNELS RF Control.



N-1	frequency	EAN code
RFS0U-1	868.5 MHz	8595188147071
	868.1 MHz	8595188148443
	915 MHz	8595188153188
	916 MHz	8595188153195

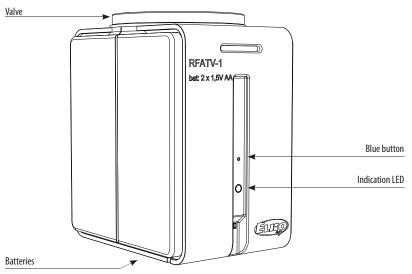






- The wireless thermostat measures room temperature by internal sensor; based on a set program in the system unit, it opens / closes the radiator valve.
- It can be combined with one of three system units: smart RF box eLAN-RF, wireless controller RFTC-100/G or touch unit RF Touch.
- It measures temperature in a range of $0 +32^{\circ}C$ and sends it to the system unit in regular 5-min. intervals.
- Monitoring function Open window, where upon a sudden change in temperature, it shuts the valve for a preset period.
- Setting the hysteresis and offset is performed in the system unit or application.
- Low battery indicator on the display of the system unit or in the application.
- Mounting directly on the valve of the heater (radiator).
- Battery power (1.5V / 2x AA included in supply) with battery life of around 1 year based on frequency of use.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- Package includes: adapters Danfoss RAV, RA, RAVL; 2x batteries AA 1.5V; key.

Technical parameters	RFATV-1
Supply voltage:	2 x 1.5 V batteries AA
Battery life:	1 year
<u>Control</u>	
Broadcasting frequency	868 MHz, 915 MHz, 916 MHz
RF command from the transmitter:	RF Touch
Range in open space:	up to 100 m
Other data	
Operating temperature:	0 up to +50 °C
Working position:	any
Protection:	IP 40
Dimensions:	65x65x48 mm
Thermostat end:	M 30 x 1,5
Piston stroke:	max. 4 mm
Controlling force:	max. 100 N
Related standards:	EN 60730



Package contents

Thermo-valve	
Кеу	
2x battery AA1.5V	-
Adaptors	660
Manual	Î

Adapters

Type of valve	Type of adapter
Danfoss RAV	
(the valve plunger must be fitted with	
the enclosed pin)	
Danfoss RA	9
Danfoss RAVL	0

٦-٧	frequency	EAN code
RFATV-1	868.5 MHz	8595188145138
	868.1 MHz	8595188149747
	915 MHz	8595188153607
	916 MHz	8595188153614



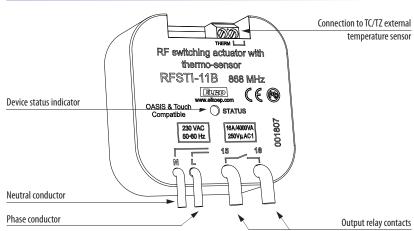




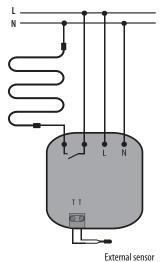
Technical parameters	RFSTI-11B		
Supply voltage:	230 V AC / 50 - 60 Hz		
Apparent input:	7 VA / $\cos \varphi = 0.1$	$7 \text{ VA / } \cos \varphi = 0.1$	-
Dissipated power:	0.7 W	0.7 W	0.7 W
Supply voltage tolerance:		+10 %; -15 %	
Temperature measurement input:	1x externa	I TZ/TC temperature s	ensor input
Temp. measurement range and accuracy:	-20 to	+50 °C; 0.5 °C of the	range
<u>Output</u>			
Number of contacts:		1x switching (AgSnO,)
Rated current:		16 A / AC1	
Switching power:	40	00 VA / AC1, 384 W /	DC
Peak current:	30 A / <3 s		
Switching voltage:	250 V AC1 / 24 V DC		
Max. DC switching power:	500 mW		
Mechanical service life:	3x10 ⁷		
Electrical service life (AC1):	0.7x10 ⁵		
Control			
RF, by command from transmitter:	868 MHz, 915 MHz, 916 MHz		
Range:	up to 160 m		
Other data			
Operating temperature:	-15 to + 50 °C		
Status indication:		red LED	
Operating position:		any	
Mounting:		free at lead-in wires	
Protection:		IP 30	
Overvoltage category:	III.		
Contamination degree:	2		
Outlets (CY wire, cross-section, length):	2xØ0.75mm², 2xØ2.5mm²,90 mm		
Dimensions:	49 x 49 x 21 mm		
Weight:	46 g		
Related standards:	EN 600	669, EN 300 220, EN 3	01 489
	R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/		

11B	voltage	frequency	EAN code
RFSTI-11B	230V AC	868.5 MHz	8595188135849
~	230V AC	868.1 MHz	8595188144087
	24V DC	868.5 MHz	8595188152419
	24V DC	868.1 MHz	8595188152426
	230V AC	915 MHz	8595188152372
	230V AC	916 MHz	8595188152389
	120V AC	915 MHz	8595188152396
	120V AC	916 MHz	8595188152402
	24V DC	915 MHz	8595188152433
	24V DC	916 MHz	8595188152440

- The temperature unit measures the temperature by external sensor, and controls the heating circuit (electric underfloor heating, air conditioning, boiler, etc.).
- These can be combined with system units: smart RF box eLAN-RF, wireless controller RFTC-50/G or touch unit RF Touch.
- It measures temperature in a range of -20 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change.
- Setting the heat/cool function, hysteresis and offset is performed in the system unit or application.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- It enables connection of the switched load up to 16A (4,000 W).
- The unit power supply is 230V AC.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- External sensor TC (0 ..+70 °C) or TZ (-40 ..+125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.



Connection



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Recommended external sensors

see p. 52





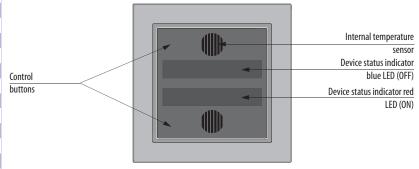




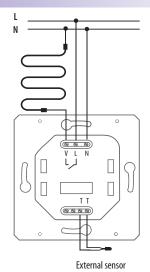
Technical parameters	RFSTI-11/G	
Supply voltage:	110-230 V AC / 50 - 60 Hz	
Apparent input:	$7 \text{ VA} / \cos \varphi = 0.1$	
Dissipated power:	0.7 W	
Supply voltage tolerance:	+10 %; -15 %	
Temperature measurement input:	1x internal NTC thermistor;	
	1x external TZ/TC temperature sensor input	
Temp. measurement range and accuracy:	-20 to +50 °C; 0.5 °C of the range	
<u>Output</u>		
Number of contacts:	1x switching (AgSnO ₂)	
Rated current:	8A / AC1	
Switching power:	2000VA / AC1; 240W / DC1	
Peak current:	30 A / <3 s	
Switching voltage:	250 V AC1 / 24 V DC	
Max. DC switching power:	500 mW	
Mechanical service life:	3x10 ⁷	
Electrical service life (AC1):	0.7x10 ⁵	
Control		
RF, by command from transmitter:	868 MHz, 915 MHz, 916 MHz	
Manual control:	buttons	
Range:	up to 160 m	
Other data		
Operating temperature:	-15 to + 50 °C	
Status indication:	blue, red LED	
Operating position:	vertical	
Mounting:	in an installation box	
Protection:	IP 20	
Overvoltage category:	III.	
Contamination degree:	2	
Cross-section of connecting cables:	max.1x2.5 mm ² , max. 2x1.5 mm ² / with a hollow max.1x2.5 mm ²	
Dimensions:	84 x 89 x 30 mm	
	68 g	
Weight:	00 y	
Weight: Related standards:	EN 60669, EN 300 220, EN 301 489	

.11/G :over, ame)	voltage	frequency	EAN code
RFSTI-11/G (white cover, white frame)	110-230V AC	868.5 MHz	8595188142779
RF (wh whit	110-230V AC	868.1 MHz	8595188149631
	110-230V AC	915 MHz	8595188153553
	110-230V AC	916 MHz	8595188153560

- The thermo-regulation drive measures the (internal/external) temperature by external sensor, and controls
 the heating circuit (electric underfloor heating, air conditioning, boiler, etc.).
- · Function:
 - Internal measures temperature by internal sensor and sends it to the system unit.
 - External measures temperature by external sensor and sends it to the system unit.
 - Combo measure room temperature by internal sensor and monitors critical floor temperature by external sensor.
- These can be combined with system units: smart RF box eLAN-RF, wireless controller RFTC-50/G or touch unit RFTouch.
- Manual control of temperature directly using buttons on the unit, where by pressing the upper button, a
 command is sent for automatic switching to the mode Party (preset temperature), and a press of the lower
 button sends a signal for switching to energy-saving mode (the change in temperature applies until the next
 set change of the heating program).
- Indication of status switched ON/OFF is provided by (red/blue) LED, which is found under the transparent cover of the temperature unit.
- It measures temperature in a range of -20 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change within 1 min.
- Setting the heat/cool function, hysteresis and offset is performed in the system unit or application.
- Switch design (design LOGUS $^{\rm 90}$) offers mounting in an installation box.
- It enables connection of the switched load up to 8A (2.000 W).
- The unit power supply is 110-230V AC.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- Color combination of heating unit in design of frames LOGUS⁹⁰ (plastic, glass, wood, metal, stone).
- External sensor TC (0 ..+70 °C) or TZ (-40 ..+125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.



Connection



Recommended external sensors

see n 52



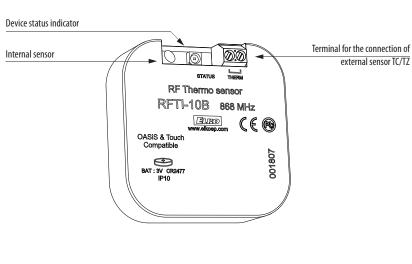






Technical parameters	RFTI-10B	
Supply voltage:	1 x 3V CR 2477 battery	
Battery life:	1 year	
Transmission indication / function:	red LED	
Temperature measurement	1x internal NTC thermistor	
	1x external TZ/TC temperature sensor input (see Accessories)	
Temp. measurement range and accuracy:	-20 to $+50$ °C ; 0.5 °C in the range	
Transmitter frequency:	868 MHz, 915 MHz, 916 MHz	
Signal transmission method:	unidirectionally addressed message	
Range in free space:	up to 160 m	
Other data		
Operating temperature:	-10 to +50 °C	
Operating position:	any	
Mounting:	glued / free-standing	
Protection:	IP30	
Contamination degree:	2	
Dimensions:	49 x 49 x 13 mm	
Weight:	45 g	
Related standards:	EN 60669, EN 300 220, EN 301 489	
	R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)	

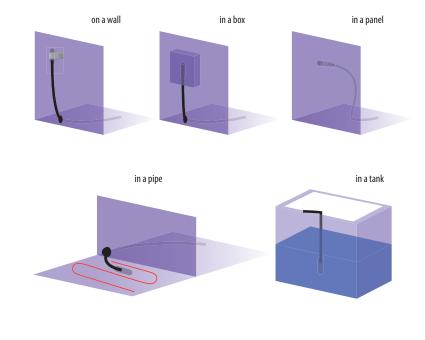
- The temperature sensor measures the temperature by internal sensor, which it sends in regular intervals to the system unit. Option of connecting an external sensor to the terminals THERM.
- The temperature sensor can be used in one of two ways:
 - For displaying the measured temperature (from a garage, balcony, cellar, garden) on the display of the system unit or in the application.
 - For measuring temperature, which it sends to the system unit, which may control the heating circuit based on the set temperature program (electric underfloor heating, air conditioning, boiler, etc.).
- It measures temperature in a range of -20 50 °C and sends it to the system unit in regular 5-min. intervals. It sends a signal upon sudden temperature change within 1 min.
- $\bullet \ \, \text{Battery power } (1.5\text{V}\,/\,1\,\text{x}\,\text{CR}\,2477\,\text{-}\,\text{included in supply}) \, \text{with battery life of around}\,\,1\,\text{year based on frequency of use}.$
- The temperature sensor can be placed anywhere thanks to battery power.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency 868 MHz with bidirectional protocol iNELS RF Control.
- External sensor TC (0 ..+70 °C) or TZ (-40 ..+125 °C) for length of 0.11 m, 3 m, 6 m, 12 m.



Recommended external sensors

see p. 52

Sensor location



-10B	frequency	EAN code
FT.	868.5 MHz	8595188131759
	868.1 MHz	8595188144124
	915 MHz	8595188153621
	916 MHz	8595188153638



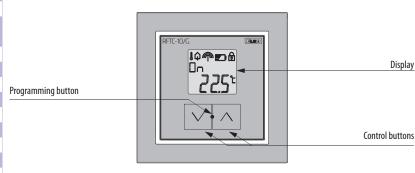






- The simple controller in design LOGUS⁹⁰ measures the room temperature by internal sensor, and based on the set temperature, it sends a command to control heating.
- The temperature controller can be used in one of two ways:
- For controlling an additional heat source (heater, oil radiator, radiant panel) with multi-function switching units RFSA-6x, RFUS-61 or RFSC-61.
- For sufficient temperature correction (\pm 10 °C) over the course of the program set in the system unit (change in temperature applies until the following set change of the heating program in the system unit).
- · Manual control by buttons on the unit.
- Range of measured temperature 0 55 °C.
- The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, etc.
- Battery power (1.5V / 2 x AAA included in supply) with battery life of around 1 year based on frequency of use.
- The flat rear side of the device enables its placement anywhere in the room where you wish to measure temperature.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control
- Color combination of heating unit in design of frames LOGUS⁹⁰ (plastic, glass, wood, metal, stone).

Description



	Signal strength	Battery status indication
	Circuit temperature measured	Locked for adjustment
	Circuit temperature set	
	Circuit status indicator	Temperature
	Temperature/time indication	measured in °C/°F
Ī		

Technical parameters	RFTC-10/G	
Supply voltage:	2 x 1.5V AAA battery	
Battery life:	1 year	
Temperature offset:	2 buttons	
	V / A	
Offset:	±5°C	
Display:	LCD, characters / see Display description	
Backlighting:	YES / active — blue	
Transmission indication / function:	symbols	
Temperature measurement input:	1x internal sensor	
Temp. measurement range and accuracy:	0 to $+55$ °C; 0.3 °C of the range	
Transmitter frequency:	868 MHz, 915 MHz, 916 MHz	
Signal transmission method:	bidirectionally addressed message	
Range in free space:	up to 100 m	
Minimum control distance:	20 mm	
Other data		
Max. number of control. RFSA-6x:	1	
Program:	Х	
Operating temperature:	0 to +55 °C	
Operating position:	wall-mounted	
Mounting:	glue / screws	
Protection:	IP20	
Contamination degree:	2	
Dimensions: frame - plastic	85 x 85 x 20 mm	
Frame - metal, glass, wood, granite	94 x 94 x 20 mm	
Weight:	66 g (without batteries)	
Related standards:	EN 60669, EN 300 220, EN 301 489	
	R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC	

C-10/G : cover, frame)	frequency	EAN code
RFTC-10/G hite cover, ite frame)	868.5 MHz	8595188142861
RFTC- (white or white fr	868.1 MHz	8595188153645
	915 MHz	8595188153652
	916 MHz	8595188153669







Technical parameters	RFTC-50/G
Supply voltage:	2 x 1.5V AAA battery
Battery life:	up to 1 year according to the number of controlling actuators
Temperature offset:	2 buttons
	V / A
Offset:	±5°C
Display:	LCD, characters / see Display description
Backlighting:	YES / active — blue
Transmission indication / function:	symbols
Temperature measurement input:	1x internal sensor
Temp. measurement range and accuracy:	0 to $+55$ °C; 0.3 °C of the range
Transmitter frequency:	868 MHz, 915 MHz, 916 MHz
Signal transmission method:	bidirectionally addressed message
Range in free space:	up to 100 m
Minimum control distance:	20 mm
Other data	
Max. number of controlling actuators:	4
Program	Weekly
Operating temperature:	0 to + 55 ℃
Mounting:	on the wall
Protection:	by gluing / screwing
Contamination degree:	IP20
Dimensions:	2
Frame - plastic	85 x 85 x 20 mm
Frame - metal, glass, wood, granite	94 x 94 x 20 mm
Weight:	66 g (without batteries)

EN 60669, EN 300 220, EN 301 489 directive R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)

- The wireless controller in design LOGUS⁹⁰ measures the room temperature by internal sensor, and based on the set temperature, it sends a command for heating / cooling.
- Option of setting a daily/weekly automatic control program.
- The temperature controller can be used in one of two ways:
- For controlling an additional heat source (heater, oil radiator, radiant panel) with multi-function switching units RFSA-6x, RFUS-61 or RFSC-61.
- For control of floor heating, when the internal sensor scans the room temperature, and based on the value, controls the heating unit RFSTI-11B, which monitors the critical floor value by external sensor.
- · Manual control by buttons on the unit.
- Range of measured temperature 0 55 °C.
- The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, day of the week, current time, etc.
- Battery power (1.5V / 2 x AAA included in supply) with battery life of around 1 year based on frequency of use.
- The flat rear side of the device enables its placement anywhere in the room where you wish to measure temperature.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- Color combination of temperature unit in design of frames LOGUS90 (plastic, glass, wood, metal, stone).

Display description



Displaying the day of the week

Displaying the time
Indication of manual mode
Displaying the temperature

The heating function switched output Indicates the state of connection with actuators

Temperature units °C

C-50/G cover, frame)	frequency	EAN code
RFTC-50/G hite cover, ite frame)	868.5 MHz	8595188148641
RFTC (white white fr	868.1 MHz	8595188149662
	915 MHz	8595188153670
	916 MHz	8595188153687

Related standards:





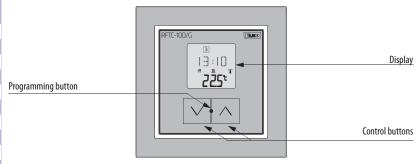




Technical parameters	RFTC-100/G	
Supply voltage:	100-230 V AC / 50 - 60 Hz	
Apparent input:	$3 \text{ VA} / \cos \phi = 0.1$	
Dissipated power:	0.3 W	
Supply voltage tolerance:	+10 %; -15 %	
Temperature offset:	2 buttons	
	V / A	
Offset:	±5°C	
Display:	LCD, characters / see Display description	
Backlighting:	YES / active — blue	
Transmission indication / function:	symbols	
Temperature measurement input:	1x internal sensor	
Temp. measurement range and accuracy:	0 to +55 °C; 0.3 °C of the range	
Transmitter frequency:	868 MHz, 915 MHz, 916 MHz	
Signal transmission method:	bidirectionally addressed message	
Range in free space:	up to 100 m	
Minimum control distance:	20 mm	
Other data		
Max. number of controlling actuators:	4	
Program	Weekly	
Operating temperature:	0 to + 55 °C	
Operating position:	vertical	
Mounting:	in an installation box	
Protection:	IP20	
Contamination degree:	2	
Cross-section of connecting cables:	max. 1x2.5, max. 2x1.5 / s dutinklou max. 1x2.5	
Dimensions:Frame - plastic	85 x 85 x 20 mm	
Frame - metal, glass, wood, granite	94 x 94 x 20 mm	
Weight:	72 g	
Related standards:	EN 60669, EN 300 220, EN 301 489 directive	
	R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)	

- The wireless controller in design LOGUS⁹⁰ measures the room temperature by internal sensor, and based on the set temperature, it sends a command for heating / cooling.
- Option of setting a daily/weekly automatic control program.
- The temperature controller can be used in one of two ways:
- For controlling an additional heat source (heater, oil radiator, radiant panel) with multi-function switching units RFSA-6x, RFUS-61 or RFSC-61.
- For control of floor heating, when the internal sensor scans the room temperature, and based on the value, controls the heating unit RFSTI-11B, which monitors the critical floor value by external sensor.
- Manual control by buttons on the unit.
- Range of measured temperature 0 55 °C.
- The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, day of the week, current time, etc.
- The unit power supply is 100-230V AC.
- The flat rear side of the device enables its placement anywhere in the room where you wish to measure temperature.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.
- Color combination of temperature unit in design of frames LOGUS90 (plastic, glass, wood, metal, stone).

Display description



Displaying the day of the week



E-100/G e cover, frame)	voltage	frequency	EAN code
	100-230V AC	868.5 MHz	8595188179997
RFTC- (white white f	100-230V AC	868.1 MHz	8595188153577
	100-230V AC	915 MHz	8595188153584
	100-230V AC	916 MHz	8595188153591







Technical parameters RFSF-1B Supply voltage: 1 x 3V baterry CR 2477 Battery life: 1 year Indications / transfer function: red LED Reset after flooding: JUMPER - Manual/Automatic Programming: with Prog button/ based batteries Measuring input: terminal 0.5-1mm² Voltage measuring input: 3 V Resistance measuring input for detecting flooding: ≤20 kΩ Resistance measuring input ≥40kΩ for flushing detection: Probe cable length: max. 30 m 868 MHz, 915 MHz, 916 MHz Frequency: Signal transmission method: two-way addressed message Range in free space: up to 160 m More information -10 to +50 °C Working temperature: Operating position: Mounting: glue / freely IP30 Protection: 2 Degree of pollution: 49 x 49 x 13 mm Dimensions Weight: 45 g Standards: EN 60730-1, EN 300 220, EN 301 489 directive R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)

Flood probe FP-1



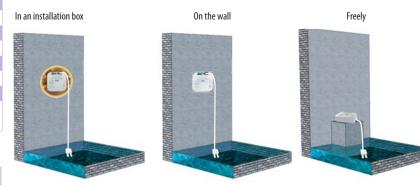
reconnical parameters	rr-I
Working temperature:	-10 to +40 °C
Mounting:	glue / screws
Length of cable:	3 m
Dimensions:	60x30x8mm
Related standards	EN 50130-4, EN 55022

- · Monitors areas (e.g. bathrooms, basements, shafts or tanks) to provide flood warning.
- Upon detecting water, the flood detector immediately sends a signal to the switched unit, which further switches on a pump, GSM gate (link to RFGSM-220M) or closes a pipe valve. (Link to valve in accessories).
- Option of connecting an external probe FP-1 (not included in supply max. wire length 30m.
- The programming button on the detector is used to:
 - a) setting the function with switching unit
 - b) ascertaining battery status
 - c) ascertaining signal quality between the unit and detector.
- Battery power supply (1.5V/CR2477 included in the supply) with battery life of around 1 year based on frequency of use.
- The detector can be placed anywhere thanks to battery power.
- Range up to 200 m (in open space); if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Device description

Device status indication Terminal for connection level (a) FUNCTION STATUS Jumper to select the RF Flood sensor alarm reset mode RFSF-1B 868 MHz Eliko $\mathbb{C} \in \mathfrak{S}$ 2C0X50 OASIS & Touch Program button 0 PROG

Location of the detector and probe



RFSF-1 probe)	frequency	EAN code
RFSF-1 (without probe)	868.5 MHz	8595188148603
itho	868.1 MHz	8595188149648
ڪ	915 MHz	8595188153218
	916 MHz	8595188153232

RFSF-1 (probe)	frequency	EAN code
RF g	868.5 MHz	8595188150095
	868.1 MHz	8595188153201
	915 MHz	8595188153225
	916 MHz	8595188153249



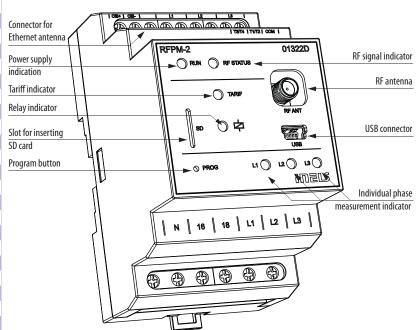




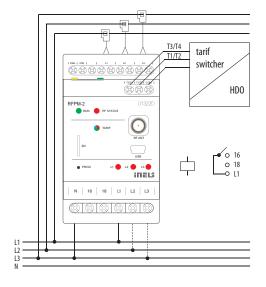
- It measures electricity consumption and sends it to the system unit where it displays the consumption.
- Data is stored in the internal memory, possibility of integrating an SD card for longer data storage.
- Two tariff measures of power consumption, which can be displayed in the form of kWh or financial costs.
- Option of setting the reaction to a specific consumption.
- Connection of up to three measuring sensors that are easily installed directly on the phase cable.
- Three module design of unit with assembly in switchboard.
- The package includes an internal antenna AN-I, in case of locating the unit in a metal switchboard, you can use the external antenna AN-E for better signal reception.
- The unit power supply is 230V AC.
- Range up to 100 m (in open space); if the signal is insufficient between the controller and unit, use the signal
 repeater RFRP-20.
- Communication frequency with bidirectional protocol iNELS RF Control.

Technical parameters	RFPM-2
Supply voltage:	100 - 230 V AC / 50-60Hz
Supply voltage tolerance:	+15/-20 %
Closed relay power input:	2.2 VA / 1.1 W
Measuring interval	
Grid:	1f - 3f
Frequency:	50- 60 Hz / +/-10%
Measuring accuracy:	Class 1.0
Current measuring coil:	max. 50A
Wire diameter:	max. 16 mm
Output	
Number of contacts:	1 NO/NC switches L1
Max. current:	16A / AC1
Switching power:	4000 VA (AC1)
Mechanical service life:	3 x 10 ⁷
Electrical service life:	0.7 x x10 ^s
Controlling	
By RF command from the transmitter:	868 MHz, 915 MHz, 916 MHz
Range in open space:	up to 100 m
<u>Status indicator</u>	
Supply voltage OK:	green LED
Relay closed:	red LED
L1, L2, L3:	individual phase measurement indicator
Tariff:	
Other data	
Operating temperature:	-20 up to + 35 °C
Storage temperature:	-30 up to +70°C
Operating position:	any
Mounting:	DIN rail EN 60715
Protection:	IP20 / IP 40 in cover
Overvoltage category:	II.
Contamination degree:	2
Cross-section of connecting wires:	max 1x2.5, max 2x1.5/ with a hollow max.1x2.5
Dimension:	90 x 52 x 65 mm
Weight:	125 g
Related standards:	EN 607 30-1 ed.2

ev)	ice	de	scri	ipti	on	



Connection



RFPM-1	voltage	frequency	EAN code
RFP	100-230V AC	868.5 MHz	85951881
	100-230V AC	868.1 MHz	85951881
	100-230V AC	915 MHz	85951881
	100-230V AC	916 MHz	85951881





Telva 230 V Telva 24 V

EAN code

TELVA 230V, NC: 8595188166010 TELVA 230V, NO: 8595188166027 TELVA 24V, NC: 8595188166034 TELVA 24V, NO: 8595188166041



- The thermo-regulation drive TELVA is used to control underfloor and radiator hot-water heating.
- It is known for its quiet operation. It has a built-in valve position indicator.
- By mounting using the VA valve adapter, the thermo-regulation drive TELVA is applicable for a
 wide range of thermostatic valves available on the market.
- Design:
 - without voltage open (NO)
 - without voltage closed (NC)

Technical parameters	Telva 230 V	Telva 24 V			
Operating voltage:	230 V, 50/60 Hz	24 V AC, 50/60 Hz			
Operating input:	1.8 W / 300 mA for max 2 min	1.8 W / 250 mA for max 2 min			
Settings:	4 mm				
Protection:	IP54/II				
Conductor:	2 x 0.7	75 mm²			
Stopping force:	100 N	I ±5 %			
Cable length:	1 m				
Color:	white RAL 9003				
Dimensions h/w/l:	55+5 x 44 x 61 mm				

• Type of use:

Underfloor heating - wireless controller RFTC-50/G measures the room temperature, and based on the set program, sends a command to the switching unit RFSA-66M to open / close the thermo-regulation drive TELVA at the distribution.

Accessories: Temperature sensors TC and TZ



Types of temp. sensors for range from 0 till +70 °C; Types of temp. sensors for range from -40 till +125 °C; connectible directly in the terminal block connectible directly in the terminal block

TC-0 - length 110 mm, weight 5 g	TZ-0 - length 110 mm, weight 4.5 g
TC-3 - length 3 m, weight 108 g	TZ-3 - length 3 m, weight 106 g
TC-6 - length 6 m, weight 213 g	TZ-6 - length 6 m, weight 216 g
TC-12 - length 12 m, weight 466 g	TZ-12 - length 12 m, weight 418 g

Resistive values of sensors in depending on temperature

Temperature (°C)	Sensor NTC (kΩ)	Sensor PT100 (Ω)
20	14.7	107.8
30	9.8	111.7
40	6.6	115.5
50	4.6	119.4
60	3.2	123.2
70	2.3	127.1
UTC 40 10 . 1		

NTC 12 $k\Omega$ tolerance is \pm 5% at 25 °C

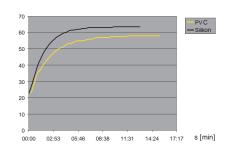
Long-term stability of the sensor resistance PT100 is 0.05% (10.000 Hrs).

- the temperature sensors contain a NTC thermistor filled in a metal hollow with a heat-conducing putty (TZ) or inside a PVC terminal (TC), high electric strength meeting which meets the double insulation requirements
- TC sensor supply cable to the TC sensor is made of a 2Dx0.5 mm CYSY conductor
- TZ sensor 2Dx0.5 mm V03SS-F cable with silicone isolation
 - suitable particularly for use under extreme temperatures

Technical parameters		TC	TZ			
Range:	0	+70 °C	-40	+125 °C		
Sensor:	NTC	NTC 12K 5 %		12K 5 %		
In air / water:	(τ65)	92 s / 23 s	(τ65)	62 s / 8 s		
In air / water:	(τ95)	306 s / 56 s	(τ95)	216 s / 23 s		
Cable material:	Heat-re	Heat-resistant PVC		ilicone		
Terminal material:	Heat-re	Heat-resistant PVC		plated copper		
Terminal:		IP 67		IP 67		IP 67

 τ 65 (95): is the time when the sensor is heated to 65 (95)% of the temperature environment in which the sensor is placed.

NTC sensor warming up - by air



PVC

- response to air temperature increase from 22.5 $^{\circ}\text{C}$ to 58 $^{\circ}\text{C}$

Silicone

- response to air temperature increase from 22.5 °C to 63.5 °C

Accessories: internal antenna AN-I, external antenna AN-E

Internal antenna AN-I

- for RFGSM-220M, eLAN-RF-003, eLAN-RF-Wi-003, RFDA-73/RGB, RFSA-61M, RFSA-66M, EMDC-64M, RFDEL-71M and transmitter module RFSG-1M into plastic switchboard
- rod angle, without cable
- sensitivity 1 dB
- the internal antenna is included in the standard package

EAN code

Internal antenna AN-I: 8595188161862

External antenna AN-E

- for RFGSM-220M, eLAN-RF-003, eLAN-RF-Wi-003, RFDA-73/RGB, RFSA-61M, RFSA-66M, EMDC-64M, RFDEL-71M and transmitter module RFSG-1M for mounting into metal switchboard
- cable length 3m
- sensitivity 5 dB
- the external antenna AN-E is supplied on request only

EAN code

External antenna AN-E: 8595188190121

inels RF Control

PROGRAMMING THE CONTROLLER AND UNIT

Insert the batteries into the controller.
Installation of unit based on requirement and unit design (in an installation box, switchboard, appliance cover, etc.).
Abide by the principles of correct installation location.



By pressing the programming button using a suitable tool (no sharp point) on the unit for longer than 1 second, the unit enters programming mode.

The LED on the unit starts to flash at half-second intervals. This flashing indicates that the unit is ready to receive a signal of any button of the RF controller.



The number of presses of the chosen controller button assigns the required function. Sending the signal is indicated by the flashing LED on the controller. The programming unit confirms receipt of the command by the LED going out briefly. It is then possible to repeat step 3 for programming the other buttons on the controller or even other controllers. The program function can be set as you wish to any controller position. One unit can be controlled by up to 32 channels (1 channel represents 1 button on a controller). The controller need not be bound only to one unit, but can control an unlimited number of elements that are within range of the RF signal by functions to which it is programmed.

Actuator program selection
3

Number of pressing the transmitter	Multifunction receivers					
button	Switch	Dimmer				
1x press	button	scene 1				
2x press	switch on	scene 2				
3x press	switch off	scene 3				
4x press	impulse relay	scene 4				
5x press	delayed off	sunrise				
6x press	delayed on	sunset				
7x press	-	ON/OFF				

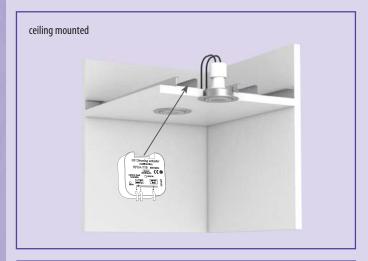
Pressing the programming button on the unit for shorter than 1 second closes the programming mode. The LED goes out.

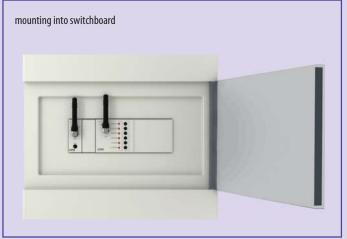
More detailed information is available in the user manuals of individual products.

INSTALLATION METHODS











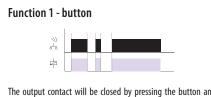
Single function RFSA-11B, RFSC-11, RFUS-11

Function button ON/OFF



The output contact closes by pressing one button position, and opens by pressing the other button position.

Multi function RFSA-61B, RFSA-62B, RFSA-61M, RFSA-66M, RFSAI-61B, RFSC-61, RFUS-61



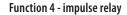
The output contact will be closed by pressing the button and opened by releasing the button.

Function 2 - switch on

The output contact will be closed by pressing the button.



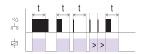
The output contact will be opened by pressing the button.





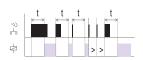
The output contact will be switched to the opposite position by each press of the button. If the contact was closed, it will be opened and vice versa.

Funcion 5 - delayed off



The output contact will be closed by pressing the button and opened after the set time interval has elapsed. t = 2s...60min.

Function 6 - delayed on



The output contact will be opened by pressing the button and closed after the set time interval has elapsed. t = 2s...60min.

Loadability products

RFJA-12B; RFSA-6	RFJA-12B; RFSA-62B; RFSA-66M; RFSTI-11/G; RFGSM-220M								
Load type	 cos φ ≥ 0.95 AC1	-M- AC2	-M- AG3	=(=)= AC5a without compensation	ACSa with compensation	HAL230V DAC5b	3E ACGa	 AC7b	———— AC12
	ACI	ACZ	ACS	Compensation	ACJa With Compensation	ACJU	ACOd	AC/D	ACIZ
Contact material AgSnO ₂ Contact 8A	250V/8A	250V/5A	250V / 4A	х	Х	250W	250V / 4A	250V / 1A	250V / 1A
Load type	<u>₹</u>	- 	- 	———	-M-	-M-		- 	-
	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
Contact material AgSnO ₂ Contact 8A	х	250V / 4A	250V/3A	30V / 8A	24V/3A	30V/2A	30V / 8A	30V/2A	х

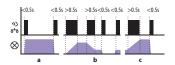
RFUS-11; RFUS-61									
Load type	cos φ ≥ 0.95	-M-	-M-	={]= AC5a without		HAL230V		- ^	-
	AC1	AC2	AC3	compensation	AC5a with compensation	AC5b	AC6a	AC7b	AC12
Contact material AgSnO ₂ Contact 14A	250V / 14A	250V / 5A	250V/3A	230V / 3A (690VA)	230V / 3A (690VA) up to max input C=14uF	1000W	Х	250V/3A	Х
Load type	∃ E₩	<u>-</u>	- -		-M-	<u> </u>		<u>-</u>	<u>-</u>
	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
Contact material AgSnO ₂ Contact 14A	Х	250V / 6A	250V / 6A	24V / 10A	24V/3A	24V/2A	24V / 6A	24V / 2A	х

RFSA-11B; RFSA-61B; RFSA-61M; RFSTI-11B; RFDAC-71B , RFSC-11, RFSC-61, RFSAI-61B									
Load type	cos φ ≥ 0.95	-(M)-	-M-	=(]⊧ AC5a without		HAL230V		- ^	-
	AC1	AC2	AC3	compensation	AC5a with compensation	AC5b	AC6a	AC7b	AC12
Contact material AgSnO ₂ Contact 16A	250V / 16A	250V / 5A	250V/3A	230V / 3A (690VA)	230V / 3A (690VA) up to max input C=14uF	1000W	Х	250V/3A	250V / 10A
Load type]E \	<u>-</u>	- -		-M-			\\	<u>-</u>
	AC13	AC14	AC15	DC1	DC3	DC5	DC12	DC13	DC14
Contact material AgSnO ₂ Contact 16A	Х	250V / 6A	250V / 6A	24V 10A	24V/3A	24V /2A	24V / 6A	24V / 2A	х

ineL

Single function RFDA-11B, RFDSC-11

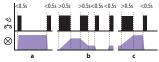
Light scene function



- a) By pressing the programmed button for less than 0.5 s, the light illuminates, by pressing the assigned button, it goes out.
- b) By pressing the programmed button for more than 0.5 s, fl uid brightness regulation will occur. After releasing the button, the brightness level is saved in the memory, and pressing the button shortly later will switch the light on/off to this intensity.
- c) It is possible to readjust the change in intensity at any time by a long press of the programmed button.
- The actuator remembers the adjusted value even after disconnecting from the power supply.

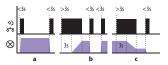
Multi function RFDA-61B, RFDA-73M/RGB, RFDEL-71B, RFDEL-71M, RFDSC-71, RFDAC-71B

Light scene function 1



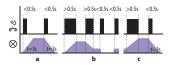
- a) By pressing the programmed button for less than 0.5 s, the light illuminates; it goes out by pressing again.
- b) By pressing the programmed button for more than 0.5 s, fl uid brightness regulation will occur. After releasing the button, the brightness level is saved in the memory, and pressing the button shortly later will switch the light on/off to this intensity.
- c) It is possible to readjust the change in intensity at any time by a long press of the programmed button.
- The actuator remembers the adjusted value even after disconnecting from the power supply.

Light scene function 2



- a) By pressing the programmed button for less than 3 s, the light illuminates; it goes out by pressing again.
- b) In order to limit undesirable control of brightness, fl uid brightness control occurs only by pressing a programmed button for over 3 s. After releasing the button, the brightness level is saved in the memory, and pressing the button shortly later will switch the light on/off to this intensity.
- c) It is possible to readjust the change in intensity at any time by pressing the programmed button for over 3 s.
- The actuator remembers the adjusted value even after disconnecting from the power supply.

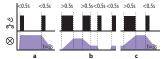
Light scene function 3



- a) By pressing the programmed button for less than 0.5 s, the light fl uidly illuminates for a period of 3 s (at 100% brightness). By pressing the button shortly again, the light will continuously switch off for 3 seconds.
- b) By pressing the programmed button for more than 0.5 s, fl uid brightness regulation will occur. After releasing the button, the brightness level is saved in the memory, and pressing the button shortly later will switch the light on/off to this intensity.
- c) It is possible to readjust the change in intensity at any time by a long press of the programmed button.

The actuator remembers the adjusted value even after disconnecting from the power supply.

Light scene function 4



- a) By pressing the programmed button for less than 0.5 s, the light illuminates. By pressing the button shortly again, the light will continuously switch off for 3 seconds (at 100% brightness).
- b) By pressing the programmed button for more than 0.5 s, fl uid brightness regulation will occur. After releasing the button, the brightness level is saved in the memory, and pressing the button shortly later will switch the light on/off to this intensity.
- c) It is possible to readjust the change in intensity at any time by a long press of the programmed button.
- The actuator remembers the adjusted value even after disconnecting from the power supply.

Function sunrise



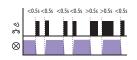
After pressing the programmed button, the light begins to illuminate in the programmed time interval in a range of 2 seconds to 30 minutes.

Function sunset



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



If the light is switched off, pressing the programmed button will switch it on. If the light is switched on, pressing the programmed button will switch it off.

Loadability products

PRODUCT	AUTOMATIC LOAD DETECTION	R HAL 230V		c H	ESL	LED		
		Standard light bulbs, halogen lamps	Low voltage lamps 12-24V wound transformers	Low voltage lamps 12-24V electric transformers	Efficient dimmable fluorescent lamps	CATEGORY 1 Mostly "multiple LED" illumination sources, power provided by LINEAR source limiting current (sharper dimming), lower price.	CATEGORY 2 Sources that have 1-3 power LEDs, power provided by SWITCHING the source regulating brightness based on the input voltage (smoother dimming), higher price GU10 with	on. Designed for dimming LED chips, LED strips, RGB LED.
					631	***	a higher body.	
RFDA-11B	•	•	•	•	х	х	•	Х
RFDA-71B	•	•	•	•	Х	х	•	х
RFDEL-71B	•	•	•	•	•	•	•	х
RFDEL-71M	•	•	•	•	•	•	•	х
RFDA-73M/RGB	х	х	х	Х	Х	х	х	•
RFDAC-71B	х	1 x Output	0/1-10 V =		Х	Х	х	х
RFDSC-11	•	•	•	•	•	•	•	х
RFDSC-71	•	•	•	•	•	•	•	Х

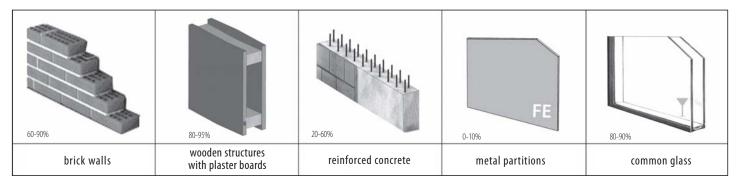
WARNING! Inductive and capacitive loads must not be connected simultaneously!







Radio frequency signal penetration through various construction materials

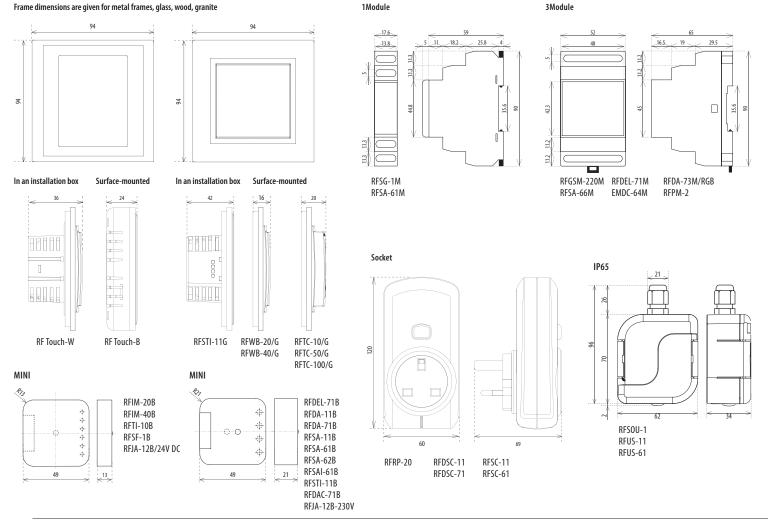


Instructions for use

For correct and faultless functioning and safe operation of the product, it is necessary to observe the following principles:

- Do not install in outdoor or wet spaces
- During maximum load, sufficient cooling must be ensured for RFDA-11B, RFDA-71B, RFDEL-71M and RFDEL-71B
- Do not install RF components into metal switchboard and steel lighting panels (the metal is an obstacle to the RF signal)
- Keep in mind that the radio signal range for RF installations depends on the building structure, materials used and the manner of unit location in the area.
- Actuators protection: Actuators are equipped with thermal protection, which disconnects output when the temperature inside the device exceeds a certain level.

Product dimension





Basic sets











Multifunction sets





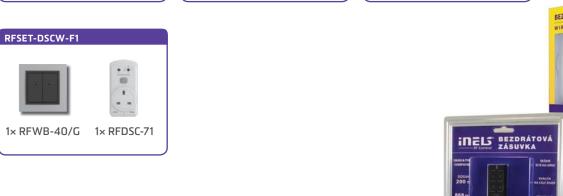


















A KIT TO CONTROL LIGHTS VIA SMARTPHONE

It's never been easier to set the appropriate ambience for reading a book or, watching a movie or a party with friends. All you need is wireless bulbs and a smart box, then you can control every device from the comfort of your smartphone, tablet or smart TV. You can't just control colored or white light bulbs, but also other appliances too.



A KIT FOR CONROLLING MUSIC, WHICH PERFECTLY FITS IN YOUR HOME'S INTERIOR

LARA is a music and internet radio player. We have registered 40 favorite Czech radios stations as presets stations, however you can easily change it using the configurator. LARA plays the music, which is stored in the NASA storage or in the external source (phone, MP3 player) that is connected through a cable on the front panel of the device. Built-in amplifier that allows direct connection of speakers (in the same LOGUS⁹⁰ design) or allows connection of external in-wall or ceiling speakers.



A SET FOR CONTROLLING IR DEVICES VIA A SMARTPHONE

Thanks to the Smart IR box, you can control the home appliances via a Smartphone. Thus you no longer need a bunch of controllers, you do not have to look for them, and you do not need to replace the battery. You always stick your phone in your pocket, always at hand. Moreover, you can control other devices which are placed in another room (e.g. you can turn off the TV in the children room).



CONTROL YOUR HOUSE VIA A SMARTPHONE

The kit "House under the thumb" which you're holding in your hands is the basic starter kit for you, which would like to make your home more comfortable. The starter kit consists of 2 colored wireless bulbs, 1 x switching socket and 1 x camera, which allows you to try the basic units of iNELS RF Control – wireless solution. Everything is preset to ensure fast and easy control.

VIRTUAL KITS

The virtual kit is a set of wireless units that are packed individually (as an individual product), but on the other hand, they are preset together (they are meant to work together) to ensure a simple installation. They are offered at a discounted price and it is not possible to separate any unit from this price.

UNDERFLOOR HEATING - BY WATER

Any wireless temperature regulator measures the room temperature, it compares with set temperature and time program, then sends a command to switch on the units. Based on the command from the temperature regulator, 6-channels switching unit is able to control up to 6 thermo-valves corresponding to heating circuits.

KIT CONSISTS OF:

Wireless temperature controller RFTC-50/G, wireless switch unit (6 outputs) RFSA-66M, thermodriver TELVA/230V.

UNDERFLOOR HEATING - BY ELECTRICITY

Temperature and switching unit (two in one) measures the floor temperature via external sensor (built-in). Then it sends data to wireless touch unit RF Touch, which compares it with the temperature set along with the time schedule and then sends a command back to switch on/switch off the heating circuits. It is possible to connect up to 4 temperature/switching units.

Advice 1) If just one reference temperature is enough for you, so then it can be measured by temperature sensor RFTI-10B and to switch up to 6 independent heating circuits you can use 6-channels switching actuator RFSA-66M.

Advice 2) The wireless unit RF Touch can be replaced by Smart RF box and all can be controlled via your smartphone. Both solution can be used together.

KIT CONSISTS OF:

Switching actuator with thermosensor RFSTI-11/G, Wireless touch unit RF Touch.





HEATING WITH SAVINGS 1× WIRELESS CONTROL UNIT RF TOUCH 3× WIRELESS THERMOVALVES

A KIT TO CONTROL HEATING VIA WIRELESS RF TOUCH UNIT

Includes 3 wireless thermovalves that are installed instead the standard radiator valves. It measures the room temperature and sends it to the RF Touch control unit. RF Touch compares it with the temperature set along with time schedule and sends a command to open or close the valve. You can set heating programs in the weekly schedule, separately for each circuit (room).



A KIT TO CONTROL HEATING VIA SMARTPHONE

It includes 3 wireless thermovalves that are installed instead the standard radiator valves. They measures the room temperature and send it to the Smart RF box. The Smart RF box compares it with the temperature set along with the time schedule in the application of your phone and sends a command to open or close the valve. You can always turn on the heating circuit via an app, whether you're at home, or just going to visit your cottage and do not want to come to unheated place.



A KIT FOR WIRELESS TEMPERATURE REGULATION IN THE HOME

This kit enables convenient and quick control of heater, oil heater, panel heater or portable air conditioner. Just plug the device into controlled switching sockets and appropriately place your controller RFTC-50/G. The desired temperature is set on the controller, that compares it with the current record and it sends a command to turn the device ON.



VIRTUAL KITS

AGAINST THE FLOOD

A wireless sensor monitors the water leaks or flooding in the critical places (basement, pits, shafts, bathroom, laundry room,...) and sends immediately a command to the switching unit to close the solenoid valve of the main water supply. You can be also informed of that accident through a GSM gateway by sending SMS text messages.

The KIT CONSISTS OF:

Switch unit RFUS-61, wireless flood detector RFSF-1B, flood probe FP-1.

We recommend: solenoid valve: MPW SS 304 - 1/2 (3/4) 230V AC.

COLORED RGB LED STRIP

The app in your smartphone can send (through RF smart box) the commands to the dimming unit to which the RGB strip is connected. From your app it is possible to switch ON/OFF, to set the color or to run the scene of automatic color blending.

Advice 1) The colored RGB strip can be controlled through RF Pilot, by controllers RFWB-20/40, RF Key,...

Advice 2) If you do not want the colored RGB strip, we can replace it by monochromatic (warm white, cool white, red, ...). Then you can connect 8 m of monochromatic strip (power 7.2W/m) to RFDA-73M/RGB to each output.

KIT CONSISTS OF:

Smart RF box, dimmer RFDA-73M/RGB, 2 x 5m coloured RGB strip 7.2W/m, power supply 230V/12V/100W.





ELKO EP, s.r.o.