CU3-01M, CU3-02M | Centrální jednotka

EAN kód
CU3-01M: 8595188132220
CU3-02M: 8595188132398

Technické parametry	CU3-01M	CU3-02M
Indikace LED		
Zelená LED RUN:	Bliká - komunikace s BUS; svítí - bez komunikace	
Červená LED ERR:	Bliká - chybějící projekt; svítí - jednotka zastavena	
OLED displej	zobrazuje aktuální stav a nastavení	
Typ:	barevný OLED	
Rozlišení:	128x128 bodů/poměr stran 1:1	
Viditelná plocha:	26x26 mm	
Ovládání:	pomocí směrových tlačítek	
Vnitřní hodiny reálného času:	přesnost: 1s/den při 23 °C	
Vstupy		
Vstup:	4x spínací nebo rozpínací proti GND (-)	
	2x analogový vstup 0 ÷ 30 V	
Výstupy		
Výstup:	reléový výstup - NO/GND	
Počet připojených jednotek přímo na CU3-01M (02M):	max. 64 (2x32)	
Možnost rozšíření přes externí master sběrnice:	až 576 jednotek (CU3-01M (02M) a 8x MI3-02M)	
Komunikace		
BUS		
Maximální počet jednotek:	max. 32 jednotek na jednu větev BUS	
Maximální délka vedení:	max. 500 m (závisí na úbytku napájení)	
Systémová sběrnice EBM		
Maximální délka vedení:	max. 500 m	
Počet připojených ext. masterů:	až 8 (s ohledem na zvyšování otočky cyklu)	
Ethernet		
Konektor:	RJ45 na čelním panelu	
Komunikační rychlost:	100 Mbps	
Indikace stavu Ethernet:	zelená - komunikace Ethernet	
	žlutá - rychlost Ethernet 100 Mbps	
Přednastavená IP adresa:	192.168.1.1	
	(IP adresu lze měnit v menu pomocí displeje a tlačítek)	
Napájení		
Napájecí napětí/tolerance:	27 V DC, -20/+10 %	
Ztrátový výkon:	max. 3 W	
Jmenovitý proud:	110 mA (při 27 V DC)	
Provozní podmínky		
Pracovní teplota:	-20 až +55 °C	
Skladovací teplota:	-25 až +70 °C	
Vzdušná vlhkost:	max. 80%	
Stupeň krytí:	IP20 přístroj, IP40 se zákrytem v rozvaděči	
Kategorie přepětí:	II.	
Stupeň znečištění:	2	
Pracovní poloha:	libovolná	
Instalace:	do rozvaděče na DIN lištu EN 60715	
Provedení:	6-MODUL	
Svorkovnice:	max. 2.5 mm^2	
Rozměry a hmotnost		
Rozměry:	90 x 105 x 65 mm	
Hmotnost:	288 g	291 g

• CU3-01M a CU3-02M jsou centrálními jednotkami systému iNELS a jsou prostředníkem mezi uživatelským programovým prostředím a ovladači, jednotkami a aktory připojenými na sběrnici.

• K CU3-01M a CU3-02M je možné přímo připojit až dvě větve sběrnice BUS, přičemž na každou sběrnici lze připojit až 32 jednotek iNELS3.

• Další jednotky je do systému možné připojit prostřednictvím rozšiřujících modulů MI3-02M, které se připojí k CU3-01M (02M) pomocí systémové sběrnice EBM.

• Centrální jednotka CU3-02M se od CU3-01M liší tím, že je navíc vybavena RF modulem umožňujícím komunikaci s vybranými jednotkami ze systému iNELS RF Control.

• Uživatelský projekt a remanentní data jsou uloženy na nonvolatilní vnitřní paměti a data jsou tedy zálohována i bez přítomnosti napájecího napětí. Záloha reálného času (RTC) po dobu 10 dnů.

• Možnost nastavení synchronizace času přes NTP server.

• Konektor RJ45 Ethernet portu se nachází na čelním panelu jednotky, rychlost přenosu je 100 Mbps.

• U CU3-01M (02M) je možno využít i 4 bezpotenciálových vstupů pro připojení externích ovladačů (tlačítka, vypínače, senzory, detektory atd.) a také 2 analogových vstupů 0÷30 V.

• CU3-01M (02M) disponuje OLED displejem, který zobrazuje aktuální stav a umožňuje nastavení (síťové nastavení, datum, čas, služby) centrální jednotky CU3-01M (02M).

• Pohyb v menu CU3-01M (02M) pomocí směrových tlačítek na předním panelu.

• CU3-01M, CU3-02M v provedení 6-MODUL jsou určeny pro montáž do rozvaděče na DIN lištu EN60715.

Rozhraní iNELS RF Control pro CU3-02M

Komunikační protokol:	RF Touch Compatible
Vysílací frekvence:	866 MHz/868 MHz/916 MHz
Způsob přenosu signálu:	obousměrně adresovaná zpráva
Výstup pro anténu RF:	SMA konektor*
Anténa RF:	1 dB (součást balení)
Dosah ve volném prostranství:	až 100 m

* Max. utahovací moment konektoru antény: 0.56 Nm.

SHARP

21,5°
15,0° | 42 %

21,5°
15,0° | 42 %

EAN code   The picture of device is illustrative, the icons (symbols) are configurable by the customer.
GRT3-50/B: 8595188156301
GRT3-50/W: 8595188156349

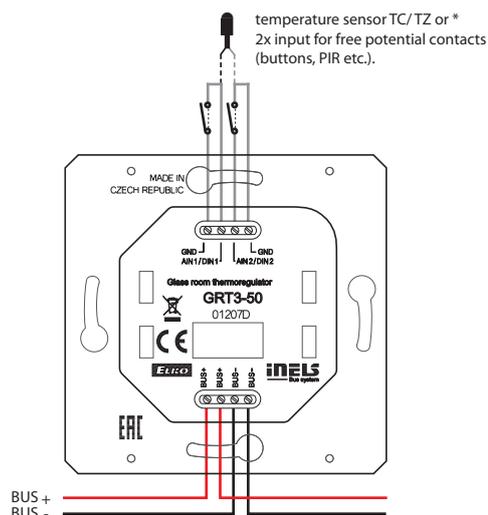| Technical parameters	GRT3-50
Inputs	
Temperature measuring:	YES, built-in temperature sensor
Scope and accuracy of temp. measurement:	0 to +55°C; 0.3°C from the range
Humidity measurement:	YES
Humidity measurement range:	0 to 99% RH
Humidity measurement accurancy:	± 3 % Relative humidity
Inputs:	2x AIN/DIN
Resolution:	by setting 10-bit
External temperature sensor:	YES, the connection between AIN1/DIN1 and AIN2/DIN2
Type of external sensor:	TC/TZ
Temperature measurement range:	-20°C to +120°C
Temperature measurement accuracy:	0.5°C from the range
Buttons	
Number of control buttons:	5
Type:	Capacitive
Indication:	Coloured illuminated symbol
Display	
Display:	colored TFT, 20 x 25.5 mm
Resolution:	240 x 240 pixels
Outputs	
Acustic output:	piezo-changer
Tactile output:	Vibration motor
Communication	
Installation BUS:	BUS
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 0.5 W
Rated current:	85 mA (at 27 V DC), from BUS
Connection	
Terminals:	0.5 - 1 mm²
Operating conditions	
Relative humidity:	max. 80 %
Operating temperature:	-20 to +55 °C
Storing temperature:	-30 to +70 °C
Protection degree:	IP20
Overvoltage category:	II.
Pollution degree:	2
Operation position:	any
Installation:	on the wall, observing the conditions for correct installation of the thermostat
Dimensions and weight	
Dimensions:	94 x 94 x 36 mm
Weight:	156 g

- Glass room thermo-regulator GRT3-50 is part of a comprehensive range of glass iNELS control units for guest room management system (GRMS) and serves to regulate the temperature in the room.
- GRT3-50 thermo-regulator has a display for displaying the current room temperature and desired temperature. To adjust the required temperature, it is possible to use the touch buttons with symbols "-" and "+".
- GRT3-50 is also suitable for controlling fan coils and fan speed can be easily adjusted by using the touch buttons with symbols.
- Thermo-regulator GRT3-50 also has a further two touch buttons whose function can be adjusted by software, for example fan coil on/ off, heating/cooling or comfort temperature for heating or cooling.
- Thermo-regulator is equipped with an integrated temperature sensor for ambient temperature measurement.
- The glass room thermo-regulator is a design component of the iNELS system and is available in elegant black (GRT3-50/B) and white (GRT3-50/W) version.
- Printing is possible to customize to the investor requirements.
- Individual symbols can be illuminated in one of seven colours - red, green, blue, yellow, pink, turquoise and white.
- GRT3-50 are designed for mounting into an installation box.

Connection

temperature sensor TC/ TZ or *
2x input for free potential contacts
(buttons, PIR etc.).

MADE IN
CZECH REPUBLIC

GND   GND
AIN1 / DIN1   AIN2 / DIN2

Glass room thermoregulator
GRT3-50
01207D

BUS+ BUS+ BUS- BUS-

BUS +
BUS -

* The choice is made in iDM3 for each unit separately.

DMD3-1 | Combined detector

EAN code
DMD3-1: 8595188157513

Technical parameters	DMD3-1
Inputs	
Angle of motion detection:	140 °, 4 m
Recommended installation height:	2.5 - 3 m
Changing the PIR sensitivity:	Yes, 0 to 127 (max. sensitivity)
PIR scan type:	single/dual
Default setup PIR:	99 dual
Temperature measuring:	YES, built-in temperature sensor
Scope and accuracy of temp. measurement:	-25 to +110 °C; ± 0.3 °C
Humidity measurement:	YES
Humidity meas. range:	0 to 99% RH
Humidity meas. accurancy:	± 4 % RH
Light Metering:	YES
Detection angle:	± 55 °
Measuring range:	1 - 100 000 lx
Number of control buttons:	1
Outputs	
Indication red LED:	identification DALI MASTER/communication options
Indicating blue LED:	PIR Activation
Indication green LED RUN:	communications/unit status
Communication	
Interface:	Installation BUS iNELS DALI
Power supply	
From iNELS BUS:	27 V DC, -20/+10 %
Rated current:	18 mA
From DALI BUS:	16 V (max. 23 V)
Rated current:	27 mA
Dissipated power:	max. 0.5 W
Connection	
Terminals:	0.3 - 0.8 mm²
Operating conditions	
Operating temperature:	-20 to +55 °C
Storing temperature:	-30 to +70 °C
Protection degree:	IP20
Operation position:	vertical
Installation:	celling
Dimension and weight	
Dimension:	Ø 76 x 73 mm
- installation hole diameter:	60 mm
- diameter visible:	76 mm
Weight:	81 g

For proper function of the detector it is necessary to eliminate all interference from heat or light sources in the sensing area.

The detector cannot be installed on an unstable or vibrating surface.

Lower mounting height will reduce the overall size of the detection zone.

The distance from the unit and the colour of the illuminated area affects the resulting value of the measured illumination by the DMD3-1 unit.

- DMD3-1 is a combined detector for ceiling mounting.
- Possibilities to use the DMD3-1:
  - motion detector
  - sensor luminescence
  - temperature measuring
  - humidity measurement
- The unit is equipped with two communication interfaces:
  - installation iNELS BUS
  - DALI (a maximum 4 pcs of DMD3-1 or DLS3-1 units can be used on one DALI bus).
- The motion detector is used to detect people moving in the area. Using the passive scanning infrared spectrum for detection.
- Integrated luminescence sensor can be used for sensing current luminescence at the point of installation of the unit. This information can be used in tasks to maintain a constant luminescence. In space where it is possible, thanks to the contribution of natural light from the outside to adjust the artificial light, which can reduce energy consumption.
- Setting the communication interface is done using the SET button.
- The unit can be configured via the iNELS3 Designer & Manager software, which, among other things it is possible to:
  - set the desired function depending on detected motion.
  - resolve jobs based on the value of luminescence.
  - enable/disable the alarm LED on the detector housing.
- DMD3-1 detector is designed for indoor installation and is not intended for outdoor use.
- DMD3-1 detector is powered directly via the iNELS BUS installation (nominal 27 V DC) or DALI BUS (nominal 16 V DC).
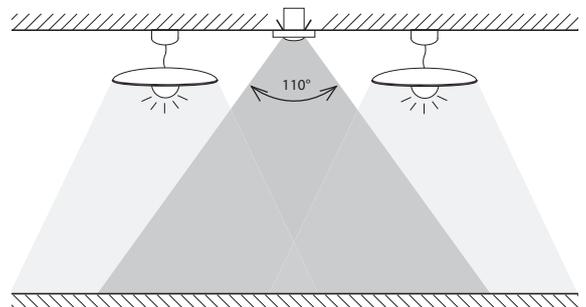
Connection
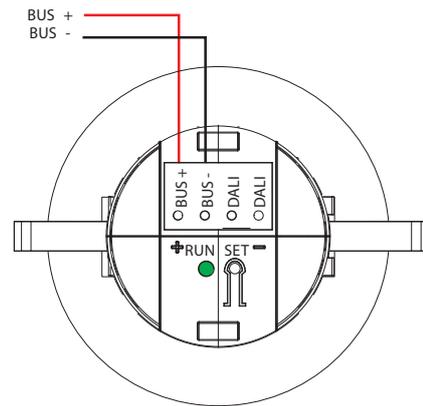
Scanning range

Motion detector
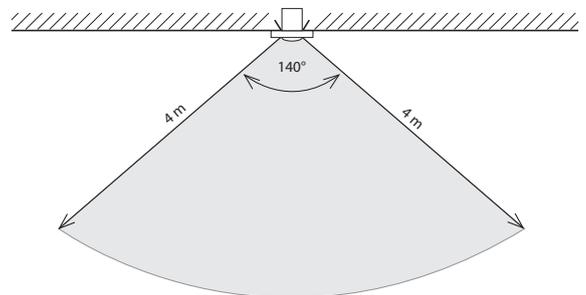
Light sensor

EAN code
IDRT3-1 white: 8595188149488 (device, cover)
IDRT3-1 ivory: 8595188179614 (device, cover)
IDRT3-1 ice: 8595188179591 (device, covert)
IDRT3-1 pearl: 8595188179621 (device, cover)
IDRT3-1 aluminium: 8595188179584 (device, cover)
IDRT3-1 gray: 8595188179607 (device, cover)

- IDRT3-1 is a digital wall temperature controller used to regulate the temperature in a room.
- Using the IDRT3-1, it is possible to correct the given heating/cooling circuit within a range of ±3, ±4 or ±5 °C (optional in SW iDM3).
- The temperature controller is equipped with an integrated heat sensor used to measure the room temperature. It is also equipped with two analog digital inputs (AIN/DIN), which can be used to connect two potential free contacts or a single external temperature sensor TC/TZ (e.g. for measuring the floor temperature).
- The display shows the current temperature and after pressing one of two buttons under the display, you can control the desired temperature.
- Readability improves after pressing one of the buttons to activate the backlight.
- Heating/cooling circuit is assigned with a thermo-regulator using iDM3.
- In the case of temperature correction within ±3, ±4 or ± 5 °C, this change is valid until the next time mark within the time schedule established in iDM3.
- IDRT3 -1 in design LOGUS⁹⁰ is intended for mounting into an installation box.

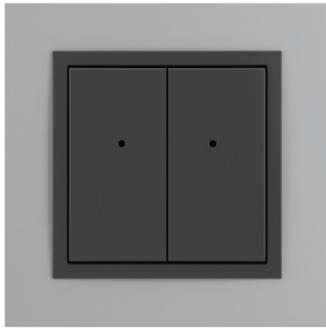| Technical parameters	IDRT3-1
Inputs	
Temperature measuring:	YES, built-in thermo sensor
Range/accuracy of temp. measuring:	0 to +55°C; 0.3°C from range
Heating/cooling circuit correction:	±3, ±4 or ± 5 °C
Manual ontrol of heating/ cooling circuit:	2 x buttons
External temperature sensor:	YES, the connection between AIN1/DIN1 and AIN2/DIN2
Type of external sensor:	TC/TZ
Temperature measurement range:	-20°C to +120°C
Temperature measurement accuracy:	0.5°C from range
Communication	
Installation:	BUS
Display:	symbol display
Backlight:	YES
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 0.5 W
Rated current:	20 mA (at 27 V DC), from BUS
Connection	
Terminals:	0.5 - 1 mm²
Operating conditions	
Operating temperature:	0 to +50 °C
Protection degree:	IP20
Overvoltage category:	II.
Pollution degree:	2
Operation position:	vertical, downward with BUS terminal
Installation:	into installation box
Dimensions and weight	
Dimensions - plastic:	85.6 x 85.6 x 50 mm
- metal, glass, wood, granite:	94 x 94 x 50 mm
Weight:	76 g (without frame)

Connection

temperature sensor TC / TZ or *
2x input for free potential contacts
(buttons, PIR etc.).

MADE IN
CZECH REPUBLIC

GND ⏌ AIN1/DIN1   ⏌ GND AIN2/DIN2

Digital room thermoregulator
IDRT3-1
00207D

BUS+ BUS+ BUS- BUS-

BUS +
BUS -

* The choice is made in iDM3 for each unit separately.

WSB3-40, WSB3-40H | Wall switch button

EAN code
WSB3-40: 8595188132336
WSB3-40H: 8595188133043

Technical parameters	WSB3-40	WSB3-40H
Inputs		
Temperature measuring:	YES, built-in temperature sensor	
Scope and accuracy of temp. measuring:	0 to +55°C ; 0.3°C from the range	
Number of control buttons:	4	
Humidity measurement:	NO	YES
Humidity measurement range:	-	0 to 99% Relative humidity
Humidity measurement accurancy:	-	± 3 % Relative humidity
Inputs:	2x AIN/DIN	
External temperature sensor:	YES, the connection between AIN1/DIN1 and AIN2/DIN2	
Type of external sensor:	TC/TZ	
Temp. measurement range:	-20 °C to +120 °C	
Temp. measurement accuracy:	0.5 °C from range	
Outputs		
Indication:	two-colored LED (red, green)	
Number of LEDs:	2	
Communication		
Installation BUS:	BUS	
Power supply		
Supply voltage/tolerance:	27 V DC, -20/+10 %	
Dissipated power:	max. 0.5 W	
Rated current:	25 mA (at 27 V DC), from BUS	
Connection		
Terminals:	0.5 - 1 mm²	
Operating conditions		
Operating temperature:	-20 to +55 °C	
Storing temperature:	-30 to +70 °C	
Protection degree:	IP20	
Overvoltage category:	II.	
Pollution degree:	2	
Operation position:	any	
Installation:	into installation box	
Dimensions and weight		
Dimensions		
- plastic:	85.6 x 85.6 x 42 mm	
- metal, glass, wood, granite:	94 x 94 x 36 mm	
Weight:	55 g (without frame)	

- Wall mounted controllers with upstroke control WSB3-40 and WSB3-40H are the basic and most popular feature (control) of the iNELS system.
- Built-in micro-switch with low upstroke offers elegant and pleasant control.
- Controllers WSB3-40 and WSB3-40H are supplied with four channels.
- Two-coloured indication LEDs located in each controller, can signal the status of controlled appliances or the status of any sensor or actuator in the system.
- Wall buttons in WSB3 series are compatible with both types of frames LOGUS90 (85.6x85.6 or 94x94 mm), therefore you can combine them with double and triple frames and classic products of the series.
- Each controller is equipped with a temperature sensor. It is also equipped with two analog/digital inputs (AIN/DIN), which can be used to connect two potentialless contacts or one external temperature sensor TC/TZ (e.g. for measuring floor temperature).
- Compared to standard wall buttons WSB3-20 and WSB3-20H are more flexible and multifunctional. You can for example controll appliances by short and long push of the button (e.g.: dimming, shutter control, scenes).
- Each button can control any appliance in the system and can use a variety of centralized or time controlled features. Accordingly, the customer can choose the simplicity/complexity of the operation. The big advantage is the possibility to change the method of control by only making software modifications without physical interventions into the structure of the building.
- Each button (fold) can have different functional modes beside lighting control:
  a) Classic wall-switch:
   - upper button ON, bottom button OFF
  b) Button controller (impulse relay):
   - first press ON, second press OFF
  c) Dimmer:
   - short press – ON/OFF
  d) Time switch:
   - ON after press, automatically OFF after set time
  e) Setting light scenes – for example: for watching TV:
   - shutters down
   - main light 30% intensity
   - wall-lamps 50% intensity
- WSB3 in LOGUS90 design is designed for mounting into an installation box.

Connection

temperature sensor TC/TZ or *
2x input for free potential contacts
(buttons, PIR etc.).

+ BUS
- BUS

* The choice is made in iDM3 for each unit separately.

SHARP
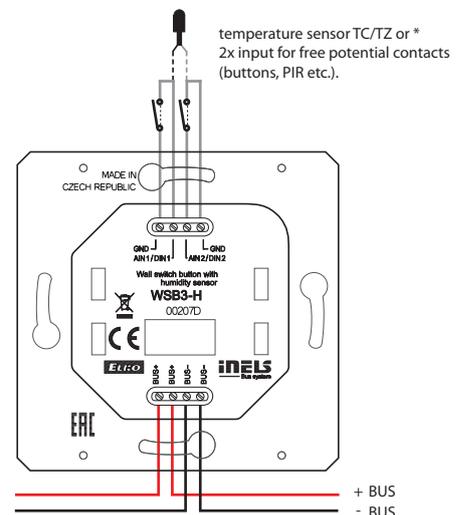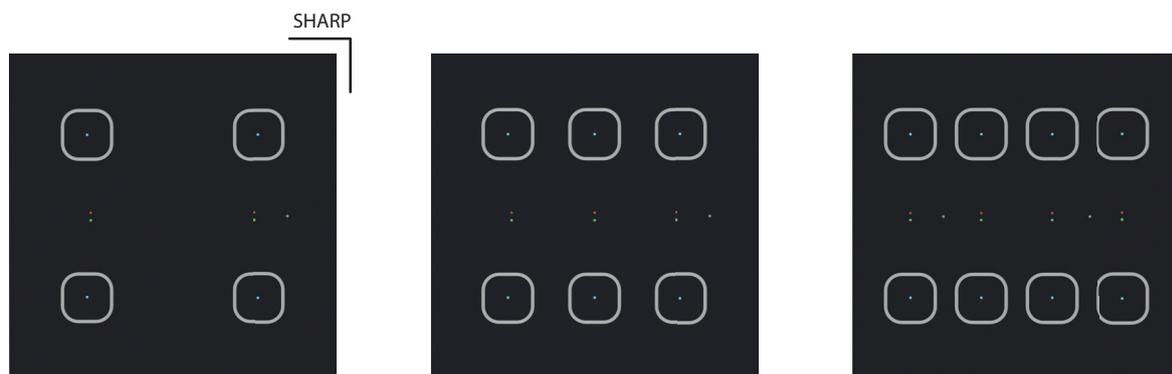
EAN code
GSB3-40/B: 8595188132909
GSB3-60/B: 8595188132916
GSB3-80/B: 8595188132923

Technical parameters	GSB3-40	GSB3-60	GSB3-80
Inputs			
Temperature measuring:	YES, built-in thermo sensor		
Scope and accuracy of temp. measuring:	0 to +55°C; 0.3°C from the range		
Number of control buttons:	4	6	8
Inputs:	2x AIN/DIN		
Resolution:	according to the settings, 10 bits		
Ext. temperature sensor:	Yes, the connection between AIN1/DIN1 and AIN2/DIN2		
Type of ext. sensor:	TC/TZ		
Temperature measurement range:	-20°C to +120°C		
Temperature measurement accuracy:	0.5°C from range		
Outputs			
Indications:	pair of LEDs (red, green)		
Number of LED:	2	3	4
Communication			
Installation BUS:	BUS		
Power supply			
Supply voltage/tolerance:	27 V DC, -20/+10 %		
Dissipated power:	max. 0.5 W		
Rated current:	25 - 40 mA (at 27 V DC), from BUS		
Connection			
Terminals:	0.5 - 1 mm²		
Operating conditions			
Relative humidity:	max. 80 %		
Operating temperature:	-20 to +55 °C		
Storing temperature:	-30 to +70 °C		
Protection degree:	IP20		
Overvoltage category:	II.		
Pollution degree:	2		
Operation position:	any		
Installation:	into installation box		
Dimensions and weight			
Dimensions:	94 x 94 x 36 mm		
Weight:	155 g		

- The wall controller with touch controls series GSB3 is a design element (controller) in the system iNELS with elegant and comfortable control. Controllers are available in black (e.g. GSB3-40/B) and white (e.g. GSB3-40/W) variants.
- Between each pair of touch buttons there is available a pair of indicator LEDs (green, red) to signal not only the status of the controlled appliances, but also the status of any sensor or actuator in the system.
- At the location of each touch button there is available a blue diode signaling the touching of the given button. Touching may be signaled by a vibration impulse or sound tone - selectable in the software iDM3.
- Controllers are 4-channels (GSB3-40), 6-channels (GSB3-60) and 8-channels (GSB3-80).
- All versions are in the same dimension as a basic modular wall-switch (94x94 mm).
- Each controller is equipped with a thermo sensor. It is equipped with two analog-digital inputs (AIN/DIN), and it is possible to connect two potentialless contact or an external temperature sensor TC/TZ. (for example on floor temperature measurement).
- Controllers are equipped with an ambient light intensity sensor. From the basic information from the sensor, it is possible to illuminate orientation blue diodes in the touch controls GSB3 or perform various actions in the software iDM3, e.g. illuminate light circuits in a hallway, etc.
- Advantages over conventional switches/buttons include space saving, signaling of any output system, the ability to measure temperature and also the ability to connect external buttons or detectors.
- Each channel (button) can control any actuator (appliance) in the system. It is also possible to program various functions or macro (set of functions) to each button. This allows you to control several appliances with one button simultaneously.
- Each button (channel) can have different functional modes beside lighting control:
  a) Classic wall-switch:
   - upper button ON, bottom button OFF
  b) Button controller (impulse relay):
   - first press ON, second press OFF.
  c) Dimmer:
   - short press – ON/OFF
  d) Time switch:
   - ON after press, automatically OFF after set time.
  e) Setting light scenes – for example: for watching TV:
   - shutters down
   - main light 30% intensity
   - wall-lamps 50% intensity
- Design series LOGUS⁹⁰ offers glass frames in black and white color. These frames goes perfectly with GSB3 wall buttons.

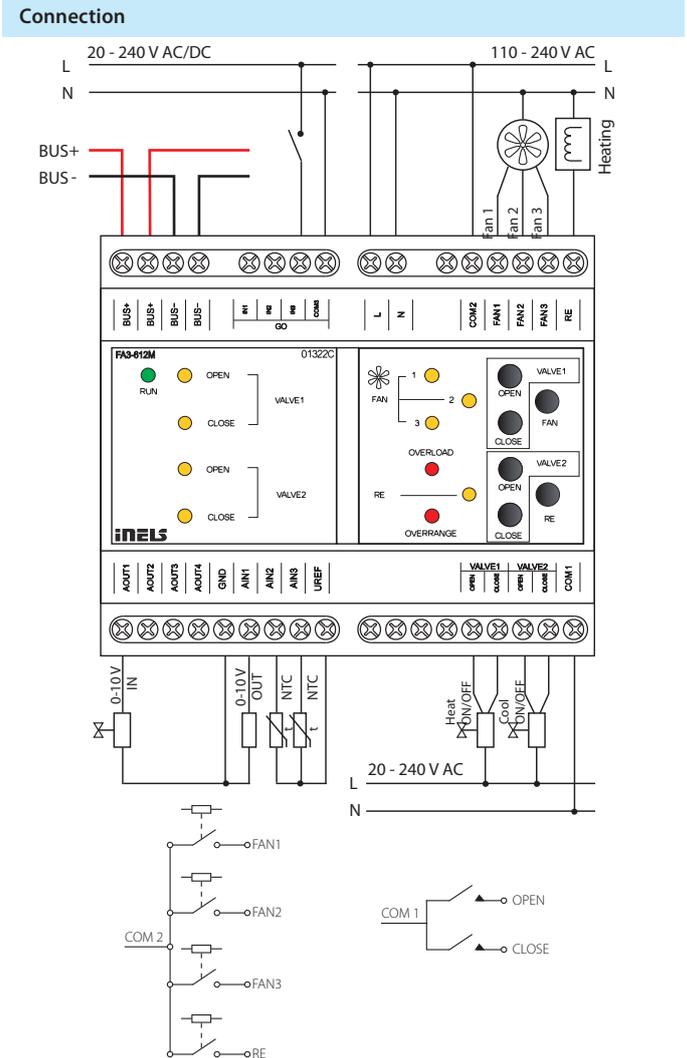# FA3-612M | Fan Coil Control Actuator

EAN code

FA3-612M: 8595188135276

- FA3-612M is a unit (actuator) designed to control fan coil units using analogue/digital inputs and analog/relay outputs.
- Analog inputs for temperature, voltage or current measurement (URef reference voltage can also be used).
- The digital inputs are galvanically isolated with positive logic (Sink) in the 24-230 V AC/DC voltage range.
- Analog outputs 0-10 V.
- Connection to the installation BUS.
- Buttons for closing/opening the valve, fan and heating relay.
- The LEDs on the front panel indicate FAN, RE, VALVE1, VALVE2, OVER-RANGE, and OVERLOAD status.
- FA3-066M in 6-MODULE version is designed for mounting into a switchboard, on DIN rail EN60715.

Technical parameters — FA3-612M

Input	
Analog inputs:	3x voltage, current or temperature input
Number of inputs:	3
Galv. separation from inner circuits:	No
Diagnostic:	indication red LED OVERRANGE (exceeding the range, interruption of a sensor or overload of Uref output)
Common terminal:	GND
Converter resolution:	14 bits
Input resistance - for voltage ranges: - for current ranges:	approx. 150 kΩ 100 Ω
Types of inputs/measuring ranges*:	**Voltage** (U): 0 ÷ +10 V (U) ; 0 ÷ +2 V (U) **Current** (I) : 0 ÷ +20 mA (I) ; ÷ +20 mA (I) **temperature**: input at ext. temperature sensor TC, TZ, Ni1000**, Pt1000**, Pt100** see accessories/ according to used sensor from -30°C to 250°C
Digital inputs:	3x switching or expansion, positive logic (SINK)
Input voltage:	20 - 240 V AC (50 - 60 Hz)/DC
Galv. separation from internal circuits:	Yes
Common lead:	GO COM3
Outputs	
Analog:	4x (A_OUT1 - A_OUT4)
Voltage analog. output/max. Current:	4x 0(1) - 10 V/10 mA
Uref reference voltage outputs	
Voltage/Current Uref:	10 V DC/100 mA
Output overload indication:	red LED OVERLOAD
SSR (Electronic Relay):	4x (VALVE1 - VALVE2)
Switching voltage:	20 - 240 V AC
Switching capacity:	480 VA
Peak current:	20 A, t ≤ 16 ms
Output indication:	yellow LED
Relay 6A:	4x (FAN1-FAN3, RE)
Switching voltage:	250 V AC, 24 V DC
Switching capacity:	1500 VA/AC1; 300 VA/AC15; 180 W/DC, AC3
Relay outputs separated from from all internal circuits:	reinforced Insulation (Cat. II surges by EN 60664-1)
Minimum switching load:	500 mW (12 V/10 mA)
Mechanical life:	10×10^6
Electrical life AC1:	6×10^4
Output indication:	yellow LED
Communication	
Installation BUS:	BUS
Status indication unit:	green LED RUN
Power supply	
Supply voltage/tolerance/ rated current:	27 V DC, -20/+10 %, 5 mA
Supply voltage of power section (relay) tolerance/ nominal current:	AC 230 V (50 Hz), -15/+10 %, 20 mA
Dissipated power:	max. 1 W

Connection	
Terminal:	max. 2.5 mm²/1.5 mm² with sleeve
Operating conditions	
Operating temperature:	-20 to +55 °C
Storing temperature:	-30 to +70 °C
Protection degree:	IP20 device, IP40 mounting in the switchboard
Overvoltage category:	II.
Pollution degree:	2
Operating position:	any
Installation:	switchboard on DIN rail EN 60715
Design:	6-MODULE
Dimensions and weight	
Dimensions:	90 x 105 x 65 mm
Weight:	307 g

Connection

* selectable for each input individually by configuration in the user program iDM3.
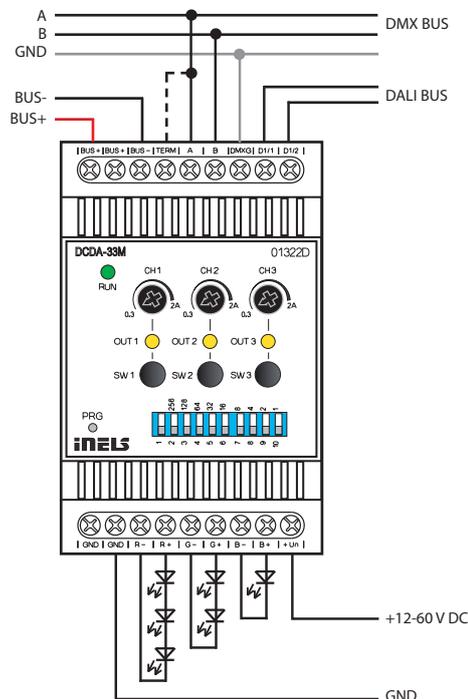** The FA3-612M / Pt version is available for these sensors.

DCDA-33M | Dimming actuator for LED sources, 3-channel
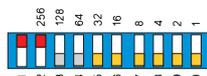
EAN code
DCDA-33M: 8595188146807

- DCDA-33M is a dimming unit designed to dim single-color and RGB LED light sources controlled by variable current.
- The actuator has three independent channels and each output channel is individually addressable and controllable.
- DCDA-33M actuator can be controlled from the BUS, DALI or DMX.
- When controlling the unit from the BUSes and DMX, also the fourth virtual channel can be supported to control overall brightness (BUS – set in iDM3, DMX – set by long press of the PRG button).
- DCDA-33M can directly control from the system iNELS where the communication interface is the installation BUS.
- If for controlling, a communication interface DALI or DMX is used, it is possible to use the master unit EMDC-64M.
- The supply voltage of the dimming unit must be at least 4 V higher than the expected output voltage on the load.
- Setting the communication interface and addresses of actuators is performed using DIP switches:
  a) switch No. 1
   - In the upper position determines DALI or BUS
   - In the lower position determines DMX
  b) switch No. 2 (if that switch 1 is in the upper position)
   - In the upper position determines DALI
   - In the lower position determines BUS
- Using the control buttons on the front panel, you can manually control the output.
- The input circuits of communication interfaces are optically isolated from the supply voltage connected lamp unit, and is therefore resistant to electromagnetic interference.
- DCDA-33M in 3-module is designed for panel mounting on DIN rail EN60715.

Technical parameters — DCDA-33M

Technical parameters	DCDA-33M
Power supply	
Supply terminals:	Un+, GND
Supply voltage:	12 - 60 V
Consuption:	min. 0.5 W, max. 165 W
Supply voltage from BUS/ tolerance:	27 V DC, -20/+15 %
Dissipated power:	max. 2 W
Outputs	
Dimming load:	LED chips controlled by variable streams or alternatively multiple LED chips connected in series *
Number of channels:	3
Rated current:	350 mA - 2 A
Output power:	3x 50 W
Output voltage:	6.5 - 55 V
Switching voltage:	Un
Output indication	LED OUT1, OUT2, OUT3
- light:	ON
- short:	flashing
- no light:	OFF
Control	
DALI:	1200 bit/s, 250 mA
BUS:	compatible with iNELS3, consumption < 4 mA
DMX:	250 kbit/s, 512 channels, control RGB(M) 3(4) channels
Operating conditions	
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
Overvoltage category:	II.
Pollution degree:	2
Operating position:	vertical
Installation:	into switchboard on DIN rail EN60715
Implementation:	3-MODULE
Dimensions and weight	
Dimensions:	90 x 52 x 65 mm
Weight:	135g

* for more information, see our manual.
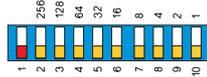
Connection

Setting the DIP switches

Setting the DALI communication interface - Switch 1 and 2.

Setting the BUS communication interface - Switch 1 and 2.

Setting the DMX communication interface - Switch 1.
Setting address - Switch 2-10.

DA3-22M | Universal dimming actuator, 2-channel

EAN code
DA3-22M: 8595188132626
DA3-22M/120V: 8595188133036

- DA3-22M is a universal dimming 2-fold actuator enabling control of brightness intensity of dimmable light sources of the type ESL, LED and RLC with power supply 230 V.
- DA3-22M has two MOSFET controlled outputs 230 V AC, maximum load is 2x 400 VA.
- Option of connecting an external temperature sensor.
- Each output channel is independently controllable and addressable.
- Type of light source is set by a switch on the front panel.
- By setting the min. brightness potentiometer on the front panel, flashing of different types of light sources is eliminated.
- DA3-22M is equipped with two inputs 230 V AC, which can be controlled by mechanical switches (buttons, relays). Inputs are galvanically connected to potential L, which is permanently at the terminals IN1 and IN2.
- Buttons on the front panel, you can manually switch on or off the corresponding output.
- Electronic overcurrent and thermal protection - switch off output in case of overload short circuit and overheating.
- The power supply (potential L) must be protected by a protective element corresponding to the power input of the connected load, e.g. a safety fuse.
- During installation, it is necessary to leave on each side of the actuator at least half the module space for better cooling.
- DA3-22M in 3-MODULE version is designed for mounting into a switchboard on DIN rail EN60715.

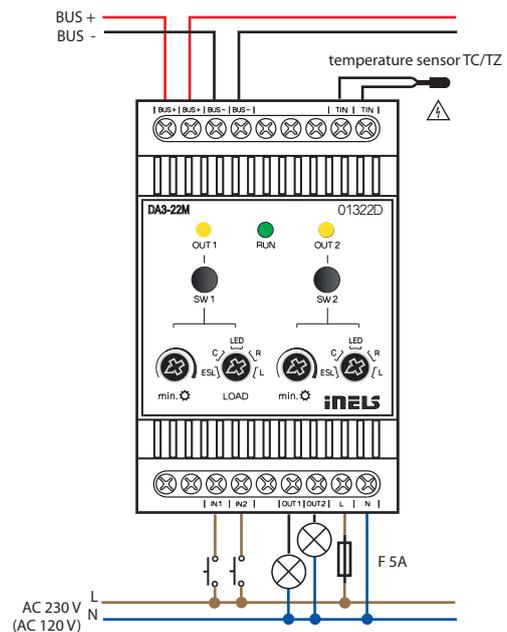| Technical parameters		DA3-22M	DA3-22M/120V
Inputs			
Input:	⚠	2x inputs, switching potential L*	
Temperature measuring:	⚠	YES, input for external thermo sensor TC/TZ	
Scope and accuracy of temp. measurement:		-20 to +120°C; 0.5°C from the range	
Number of control buttons:		2x buttons	
		4x potenciometers on front panel	
Outputs			
Output:		2x contactless outputs, 2x MOSFET	
Load type:		resistive, inductive, capacitive**, LED, ESL	
Isolation BUS separated from all internal circuits:		reinforced Insulation	
		(Cat. II surges by EN 60664-1)	
Isolation voltage between particular power:		max. 500 V AC	
Minimal controlled load:		10 VA	
Maximal controlled load:		400 VA for each channel	200 VA for each channel
Output indication ON/OFF:		2x yellow LED	
Device protection:		thermal/short-term overload/	
		long-term overload	
Communication			
Installation BUS:		BUS	
Power supply			
Supply voltage by BUS/ tolerance:		27 V DC, -20/+10 %	
Rated current:		5 mA (at 27 V DC), from BUS	
Status indication unit:		green LED RUN	
Supply voltage for power section/tolerance:		AC 230 V (50 Hz), -15/+10 %	AC 120 V (60 Hz), -15/+10 %
Dissipated power:		max. 13 W	max. 7.5 W
Connection			
Terminal:		max. 2.5 mm²/1.5 mm² with sleeve	
Operating conditions			
Air humidity:		max. 80 %	
Operating temperature:		-20 to +35 °C	
Storing temperature:		-30 to +70 °C	
Protection degree:		IP20 device, IP40 mounting in the switchboard	
Overvoltage category:		II.	
Pollution degree:		2	
Operating position:		vertical	
Installation:		switchboard on DIN rail EN 60715	
Design:		3-MODULE	
Dimensions and weight			
Dimensions:		90 x 52 x 65 mm	
Weight:		170 g	

* The inputs are not galvanically isolated from the supply voltage.
** **Attention:** It is not allowed to connect loads of inductive and capacitive character, at the same time.
⚠ Input is connected to the mains voltage potential.

Connection

Types of connectable loads

type of source	symbol	description
R resistive		ordinary light bulb, halogen lamp
L inductive	HAL. 12-24 V	coiled transformer for low-voltage halogen lamps
C capacitive		electronic transformer for low-voltage halogen lamps
LED		LED lamps and LED light sources, 230 V
ESL		dimmable energy-saving fluorescent tubes

DA3-06M | Dimmer Actuator, 6-channel

EAN code
DA3-06M: 8595188174442
DA3-06M/120V: 8595188174459

- DA3-06M is a universal six-channel dimmer actuator that controls the brightness of dimmable ESL, LED and RLC light sources with 230 V power.
- The DA3-06M has 6 semiconductor controlled 230 V AC outputs. Maximum possible load is 150 VA for each channel.
- Each of the output channels is individually controllable.
- Setting min. brightness with the potentiometer on the front of the instrument eliminates flickering of different types of light sources.
- Using the front panel control buttons, you can manually control the output.
- The actuator is equipped with electronic overcurrent and thermal protection that shuts off the output during overloads, short circuits or overheating.
- When installing, on each side of the actuator, it is necessary to leave at least half a module space for better cooling.
- DA3-06M in 6-MODULE version is designed for mounting into a switchboard/ DIN rail EN60715.

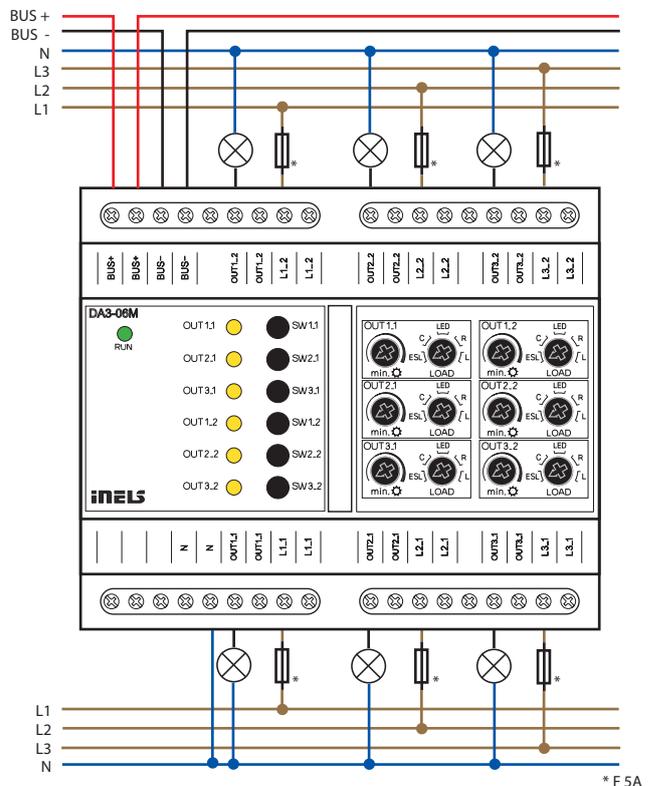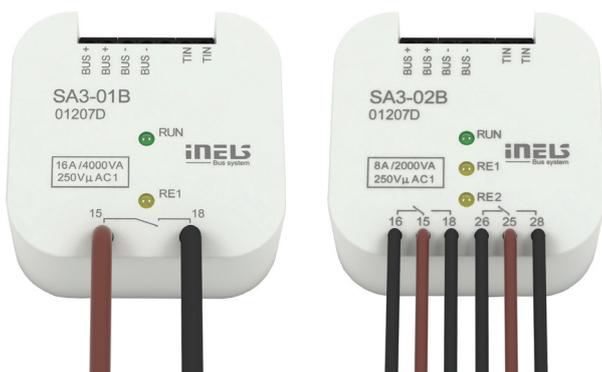| Technical parameters	DA3-06M	DA3-06M/120V
Outputs		
Output:	6x contactless outputs, 2x MOSFET, channel	
Load type:	resistive, inductive, capacitive*, LED, ESL	
Isolation BUS separated from all internal circuits:	reinforced Insulation (Cat. II surges by EN 60664-1)	
Isolation voltage between particular power:	max. 500 V AC	
Minimal controlled load:	10 VA	
Maximal controlled load:	150 VA for each channel	75 VA for each channel
Output indication ON/OFF:	6x yellow LED	
Device protection:	thermal/short-term overload/ long-term overload/short circuit	
Communication		
Installation BUS:	BUS	
Power supply		
Supply voltage by BUS/ tolerance:	27 V DC, -20/+10 %	
Rated current:	100 mA (at 27 V DC), from BUS	
Status indication unit:	green LED RUN	
Supply voltage for power section/tolerance:	3x AC 230 V (50 Hz), -15/+10 %	3x AC 120 V (60 Hz), -15/+10 %
Connection		
Terminal:	max. 2.5 mm²/1.5 mm² with sleeve	
Operating conditions		
Air humidity:	max. 80 %	
Operating temperature:	-20 to +35 °C	
Storing temperature:	-30 to +70 °C	
Protection degree:	IP20 device, IP40 mounting in the switchboard	
Overvoltage category:	II.	
Pollution degree:	2	
Operating position:	vertical	
Installation:	switchboard on DIN rail EN 60715	
Design:	6-MODULE	
Dimensions and weight		
Dimensions:	90 x 105 x 65 mm	
Weight:	320 g	

* **Attention:** It is not allowed to connect loads of inductive and capacitive character, at the same time.

Connection

* F 5A

Types of connectable loads

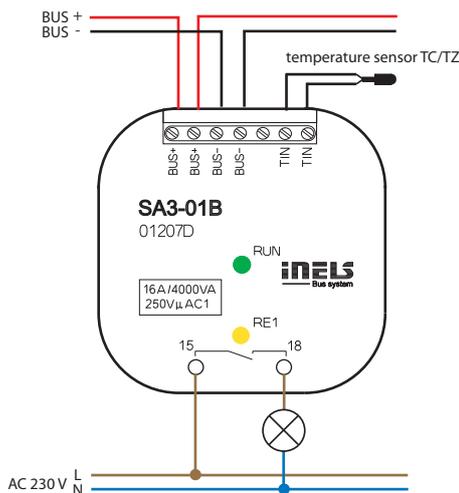| type of source	symbol	description
R resistive		ordinary light bulb, halogen lamp
L inductive	HAL. 12-24 V	coiled transformer for low-voltage halogen lamps
C capacitive		electronic transformer for low-voltage halogen lamps
LED		LED lamps and LED light sources, 230 V
ESL		dimmable energy-saving fluorescent tubes

SA3-01B, SA3-02B | Switching actuators, 1-channel and 2-channel

SA3-01B
01207D

16A/4000VA
250Vμ AC1

RUN

iNELS
Bus system

RE1

15   18

SA3-02B
01207D

8A/2000VA
250Vμ AC1

RUN
RE1
RE2

iNELS
Bus system

16 15 18 26 25 28

EAN code
SA3-01B: 8595188132350
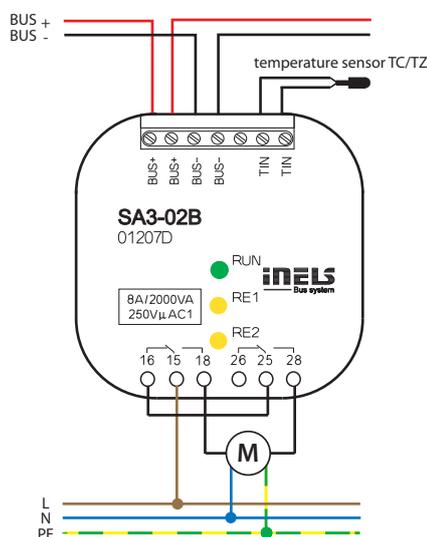SA3-02B: 8595188132367

- Actuators are designed for switching of one (SA3-01B), respectively two (SA3-02B) of various appliances and loads relay output (potential-less contact).
- SA3-01B contains 1 relay with switching potentialless contact with max. load 16 A/4000 VA/AC1.
- SA3-02B contains 2 relays with switching potentialless contacts with max. load 8 A/2000 VA/AC1.
- Output contacts are separately controllable and addressable.
- Both relay actuator SA3-02B are individually decorated input terminals, and therefore can switch various independent potentials.
- Thanks to changeover contacts, the SA3-02B actuator can used to control a 230 V drive (such as blinds, shutters or awnings), whereas by proper bridging of contacts, it is possible to secure locking hardware options while switching on phase two outputs.
- Actuators are equipped with a temperature input for connecting an external two-wire temperature sensor TC/TZ (see accessories).
- LED on front panel signalizes state of each output.
- SA3 is normally supplied in the option $AgSnO_2$ contact material.
- SA3-01B, SA3-02B are designed for mounting into the installation box.

Technical parameters	SA3-01B	SA3-02B
Inputs		
Temperature measuring:	Yes, input for external thermo sensor TC, TZ	
Scope and accuracy of tem. meas.:	-20 to +120°C; 0.5°C from the range	
Outputs		
Output:	1x NO 16 A/AC1	2x NC 8 A/AC1
Switching voltage:	250 V AC, 24 V DC	
Switched load:	4000 VA/AC1, 384 W/DC	2000 VA/AC1, 192 W/DC
Surge current:	30 A; max. 4 s.	
when repeating 10%		10 A
Output relays separated from all internal circuits:	reinforced Insulation (Cat. II surges by EN 60664-1)	
Insulation voltage between relay outputs RE1-RE2:	x	basic Isolation (Cat. II surges by EN 60664-1)
Minimal switching current:	100 mA/5 V	
Switching frequency/no load:	1200 min^{-1}	300 min^{-1}
Switching frequency/rated load:	6 min^{-1}	15 min^{-1}
Mechanical lifetime:	3x 10^7	1x 10^7
Electrical lifetime for AC1:	0.7x 10^5	1x 10^5
Output indication:	yellow LED	2x yellow LED
Communication		
Installation BUS:	BUS	
Power supply		
Supply voltage/tolerance:	27 V DC, -20/+10 %	
Dissipated power:	max. 4 W	
Rated current:	30 mA (at 27 V DC)	50 mA (at 27 V DC)
Status indication unit:	green LED RUN	
Connection		
Data terminals:	terminal, 0.5 - 1 mm^2	
Power outputs:	2x conduct. CY, Ø 2.5 mm^2	6x conduct.CY, Ø 0.75 mm^2
Operating conditions		
Operating temperature:	-20 to +55 °C	
Storage temperature:	-30 to +70 °C	
Protection degree:	IP30	
Overvoltage category:	II.	
Pollution degree:	2	
Operating position:	any	
Installation:	into installation box	
Dimensions and weight		
Dimensions:	49 x 49 x 21 mm	
Weight:	50 g	50 g

Connection

SA3-01B

BUS +
BUS -

temperature sensor TC/TZ

BUS+ BUS+ BUS- BUS- TIN TIN

SA3-01B
01207D

RUN

iNELS
Bus system

16 A/4000VA
250Vμ AC1

RE1

15   18

AC 230 V L
N

SA3-02B

BUS +
BUS -

temperature sensor TC/TZ

BUS+ BUS+ BUS- BUS- TIN TIN

SA3-02B
01207D

RUN

iNELS
Bus system

8A/2000VA
250Vμ AC1

RE1
RE2

16 15 18 26 25 28

M

L
N
PE

SA3-06M | Switching actuator, 6-channel

EAN code
SA3-06M: 8595188132879

- The actuator is designed for switching up to six various appliances and loads with potentialless contact.
- SA3-06M is a switching actuator contains 6 independent relays with changeover potentialless contacts.
- Maximum load per contact is 8 A/2000 VA/AC1.
- Each of six output contacts are individually controllable and addressable.
- The relays are divided into two groups, the group of four relays on the bottom terminal switches the common potential, a pair of relays on top of the terminal switches second common potential.
- The actuator is suitable for operating discontinuously controlled thermo drives in the distributor underfloor heating.
- LEDs on the front panel signal the status of each output.
- Contact status of each relay can be changed separately and manually by control buttons on a front panel.
- SA3-06M is normally supplied in the option $AgSnO_2$ contact material.
- SA3-06M in 3-MODULE version is designed for mounting into a switchboard/DIN rail EN60715.

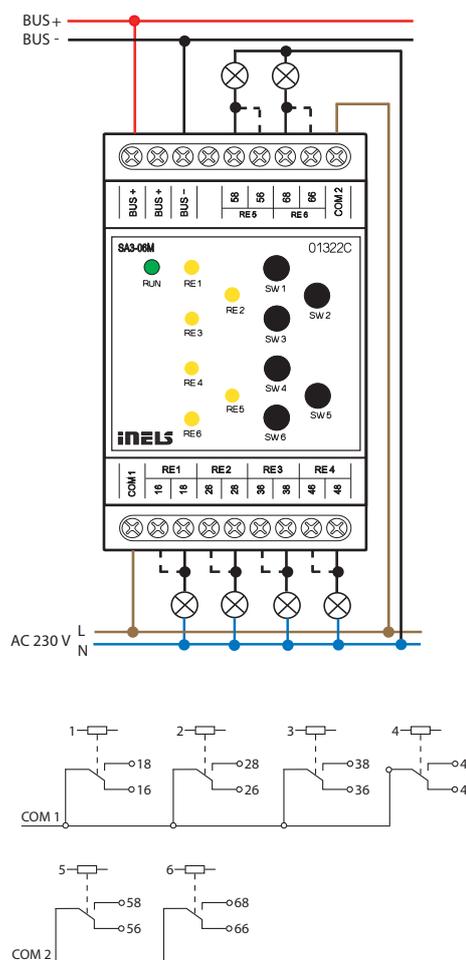| Technical parameters	SA3-06M
Outputs	
Output:	6x changeover 8 A/AC1
Switching voltage:	250 V AC, 24 V DC
Switching output:	2000 VA/AC1, 192 W/DC
Surge current:	10 A
Output relays separated from all internal circuits:	reinforced Insulation (Cat. II surges by EN 60664-1)
Isolation between relay outputs COM1 and COM2:	reinforced Insulation (Cat. II surges by EN 60664-1)
Isolation between individual relay outputs:	basic insulated (Cat. II surges by EN 60664-1)
Isolates. voltage open relay contact:	1 kV
Max. current terminals COM1 and COM2:	16 A
Min. switched current:	100 mA/5 V DC
Switching frequency/no load:	300 min^{-1}
Switching frequency/rated load:	15 min^{-1}
Mechanical life:	$2x 10^7$
Electrical life AC1:	$5x 10^4$
Output indication:	6x yellow LED
Communication	
Installation BUS:	BUS
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 9 W
Rated current:	60 mA (at 27 V DC), from BUS
Status indication unit:	green LED RUN
Connection	
Terminal:	max. 2.5 mm²/1.5 mm² with sleeve
Operating conditions	
Air humidity:	max. 80%
Operating temperature:	-20 to +55 °C
Storing temperature:	-30 to +70 °C
Protection degree:	IP20 device, IP40 mounting in the switchboard
Overvoltage category:	II.
Pollution degree:	2
Operation position:	any
Installation:	switchboard on DIN rail EN 60715
Design:	3-MODULE
Dimensions and weight	
Dimensions:	90 x 52 x 65 mm
Weight:	160 g

Connection

SA3-012M | Switching actuator, 12-channel

EAN code
SA3-012M: 8595188132466
SA3-012M/120V: 8595188133029

- The actuator is designed for switching to twelve various appliances and loads with potentialless contact.
- SA3-012M is a switching actuator containing 12 independent relays with NO potentialless contacts, with the fact that switches the same potential.
- Maximal loadability of contacts is 8 A/2000 VA/AC1.
- Each of the twelve output contacts are individually controllable and addressable.
- Actuator SA3-012M is powered by an AC voltage 230 V. The unit SA3-012M/120 V is powered by AC voltage 120 V AC.
- BUS is galvanically separated from the internal circuits of unit.
- LED on front panel signalizes state of each output.
- Contact status of each relay can be changed separately and manually by control buttons on a front panel.
- SA3-012M is normally supplied in the option AgSnO$_2$ contact material.
- SA3-012M in design 6-MODULE is designed to be mounted into a switchboard, onto DIN rail EN60715.

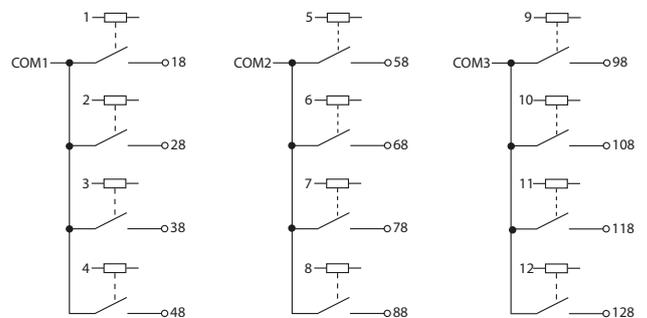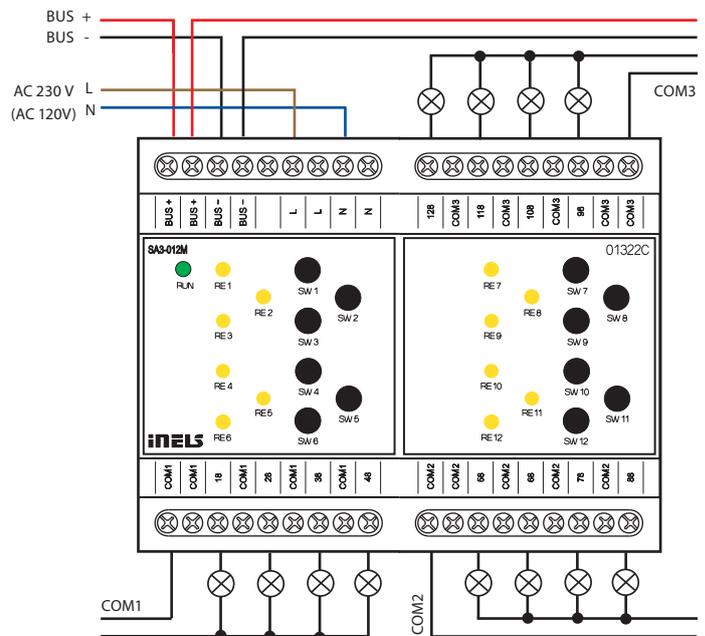| Technical parameters	SA3-012M	SA3-012M/120V
Outputs		
Output:	12x NO 8 A/AC1	
Switched voltage:	250 V AC, 24 V DC	
Switched output:	2000 VA/AC1, 192 W/DC	
Peak current:	10 A	
Output relays separated from all internal circuits:	reinforced Insulation (Cat. II surges by EN 60664-1)	
Isolation between relay outputs COM1, COM2 and COM3:	reinforced Insulation (Cat. II surges by EN 60664-1)	
Isolates. voltage open relay contact:	1 kV	
Max. current of one common terminal:	16 A	
Minimal switched current:	100 mA/10 V DC	
Switching frequency without load:	300 min^{-1}	
Switching frequency with rated load:	15 min^{-1}	
Mechanical life:	1x 10^7	
Electrical life AC1:	1x 10^5	
Output indication:	12 x yellow LED	
Communication		
Installation BUS:	BUS	
The installation BUS is separated from all internal circuits:	reinforced Insulation (Cat. II surges by EN 60664-1)	
Status indication unit:	green LED RUN	
Power supply		
Voltage of BUS/tolerance/ nominal current:	27 V DC, -20/+10 %, 5mA	
Supply voltage of power section (relay) tolerance/ nominal current:	AC 230 V (50 Hz), -15/+10 %, 20 mA	AC 120 V (60 Hz), -15/+10 %, 40 mA
Dissipated power:	max. 6 W	max. 5 W
Connection		
Terminal:	max. 2.5 mm^2/1.5 mm^2 with sleeve	
Operating conditions		
Operating temperature:	-20 to +55 °C	
Storing temperature:	-30 to +70 °C	
Protection degree:	IP20 device, IP40 mounting in the switchboard	
Overvoltage category:	II.	
Pollution degree:	2	
Operating position:	any	
Installation:	switchboard on DIN rail EN 60715	
Design:	6-MODULE	
Dimensions and weight		
Dimensions:	90 x 105 x 65 mm	
Weight:	310 g	

Connection

EAN code
SA3-02M: 8595188132374

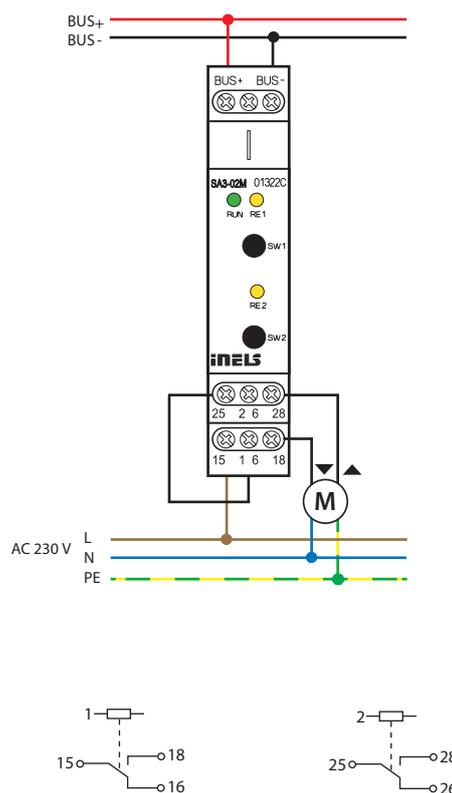| Technical parameters	SA3-02M
Outputs	
Output:	2x changeover 16 A/AC1
Switching voltage:	250 V AC, 24 V DC
Switching load:	4000 VA/AC1, 384 W/DC
Surge current:	30 A; max. 4 s. at duty cycle 10%
Output relays separated from all internal circuits:	reinforced Insulation (Cat. II surges by EN 60664-1)
Isolation between relay outputs RE1 and RE2:	reinforced Insulation (Cat. II surges by EN 60664-1)
Isolates. voltage open relay contact:	1 kV
Minimal switching current:	100 mA
Switching frequency/no load:	1200 min^{-1}
Switching frequency/rated load:	6 min^{-1}
Mechanical lifetime:	3x 10^7
Electrical lifetime AC1:	0.7x 10^5
Outputs indication:	2x yellow LED
Communication	
Installation BUS:	BUS
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 4 W
Rated current:	50 mA (at 27 V DC), from BUS
Status indication unit:	green LED RUN
Connection	
Terminal:	max. 2.5 mm^2/1.5 mm^2 with sleeve
Operating conditions	
Air humidity:	max. 80 %
Operating temperature:	-20 to +55 °C
Storing temperature:	-30 to +70 °C
Protection degree:	IP20 device, IP40 mounting in the switchboard
Overvoltage category:	II.
Pollution degree:	2
Operation position:	any
Installation:	switchboard on DIN rail EN 60715
Design:	1-MODULE
Dimensions and weight	
Dimensions:	90 x 17.6 x 64 mm
Weight:	82 g

- Actuator SA3-02M is designed for switching two various appliance and loads with potentialless contact.
- SA3-02M is a switching actuator containing 2 independent relays with changeover potentialless contacts.
- Maximum load per contact is 16 A/4000 VA/AC1.
- Each of the two output contacts are individually controllable and addressable.
- Both relays are individually decorated input terminals, and therefore can switch various independent potentials.
- The actuator is designed for switching up to two various appliances and loads relay output (potentialless contact).
- Thanks to changeover contacts, it can be used to control one 230 V power (such as blinds, shutters or awnings) with appropriate bridging, the contacts can secure hardware blocking the possibility of simultaneous switching of the phase on both outputs, see example of connection.
- LEDs on the front panel signal the status of each output.
- Contact status of each relay can be changed separately and manually by control buttons on the front panel.
- Switching actuators SA3 are normally supplied in the option AgSnO$_2$ contact material.
- SA3-02M in 1-MODULE version is designed for mounting into a switchboard, on DIN rail EN60715.
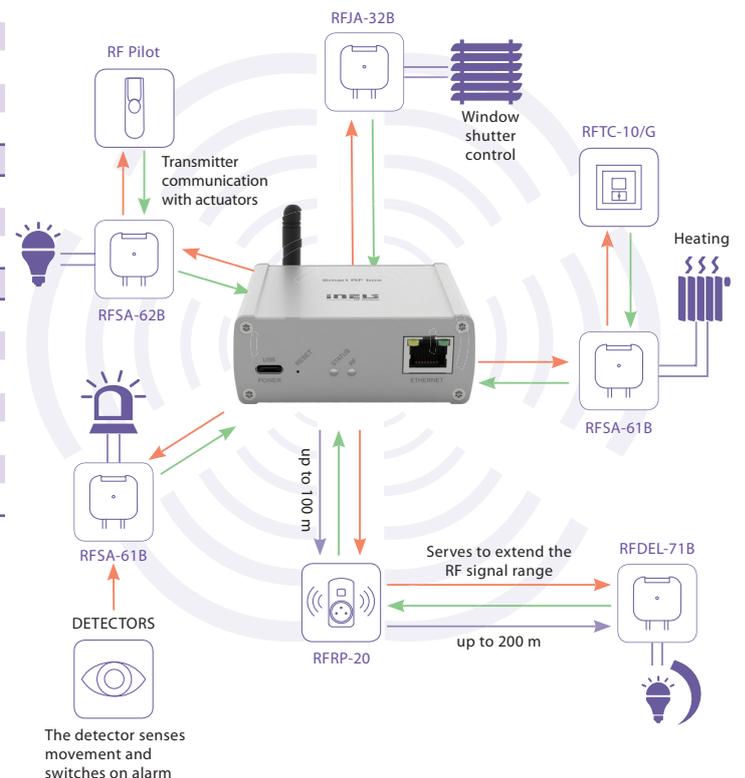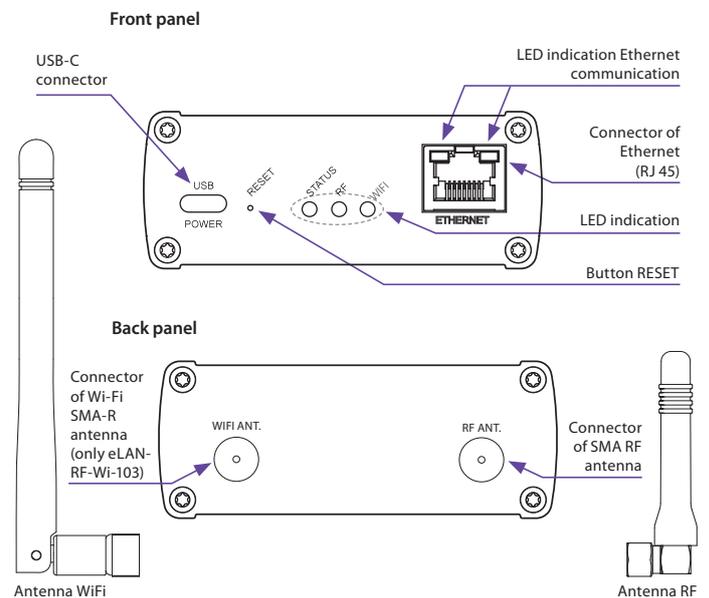
Connection

INNOVATION

Technical parameters	eLAN-RF-103	eLAN-RF-Wi-103
Interface RF Control		
Communication protocol:	RFIO, RFIO2	
Broadcasting frequency:	866–922 MHz (for more information see p. 76)	
Signal transfer method:	two-way addressed message	
Output for antenna:	SMA connector*	
Antenna RF:	AN-I 1 dB	
Indications RF communications:	1x green RF LED	
Range:	in open space up to 100 m	
Interface Ethernet		
ETH operating status indicator:	green LED	
ETH communication indicator:	yellow LED	
Communications interface:	100 Mbps (RJ45)	
Preset IP address:	DHCP	
Interface Wi-Fi		
Standard:	x	IEEE 802.11 b/g/n/2.4 GHz
Wi-Fi Security:	x	WEP, WPA-PSK, WPA2-PSK
Frequency range Wi-Fi:	x	R-SMA connector*
Antenna Wi-Fi:	x	WiFi 2.4 GHz 1 dB
Indications Wi-Fi communication:	x	1x green LED Wi-Fi
Range:	x	up to 20 m
Wi-Fi network mode:	x	SOFT-AP/Client
Power supply		
Supply voltage / current:	5V DC/0.5A	5V DC/1A
Power source:	110 - 230 V AC/5 V DC - 2A (connector USB-C)	
Button RESET		
- short press:	restart the device	
- press> 5s:	reset network settings	
- press> 10s:	reset to factory settings	
Indication LED STATUS		
- green:	normal mode	
- red:	error condition	
- orange:	initialization/start	
Other data		
Operating temperature:	-20 to +50 °C	
Storage temperature:	-25 to +70 °C	
Protection:	IP20	
Contamination degree:	2	
Working position:	any	
Dimensions:	90 x 52 x 65 mm	
Weight:	136 g	146 g

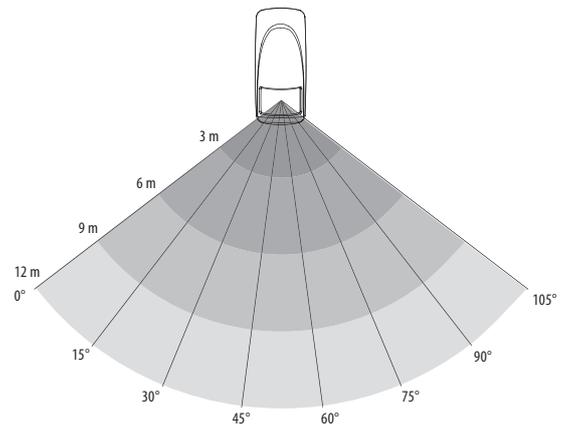* Max Tightening Torque for antenna connector is 0.56 Nm.

—— Command to execute function
—— Function execution feedback

- The Smart RF Box is a gateway between iNELS RF elements and applications for smartphones, tablets, watches, televisions, voice assistants (Google Home & Alexa) and other third-party devices.
- It is produced in two versions:
  a) eLAN-RF-103: LAN communication
  b) eLAN-RF-Wi-103: LAN communication with WiFi in AP (Access Point) mode with direct connection of the smartphone to eLAN-RF-Wi-103 or in Client mode (connection to the home WiFi network by connecting the smartphone via home wireless router).
- It communicates from up to 70 iNELS RF elements, processes set programs for automatic control.
- Thanks to two-way communication, it displays the current status of individual elements.
- Powered by 5 V DC/2A adapter, USB-C connector (included).
- Configuration is done via the iHC application.
- 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, see accessories on page 75. For the eLAN-RF-Wi-103 version, a WiFi antenna is included in the package.

Device description

Front panel

USB-C connector
LED indication Ethernet communication
Connector of Ethernet (RJ 45)
LED indication
Button RESET

Back panel

Connector of Wi-Fi SMA-R antenna (only eLAN-RF-Wi-103)
Connector of SMA RF antenna
Antenna WiFi
Antenna RF

RF Pilot
RFJA-32B
Window shutter control
RFTC-10/G
Heating
Transmitter communication with actuators
RFSA-62B
RFSA-61B
RFSA-61B
DETECTORS
The detector senses movement and switches on alarm
up to 100 m
RFRP-20
Serves to extend the RF signal range
up to 200 m
RFDEL-71B

Technical parameters	RFMD-100
Power supply:	2x 1.5 V AA batteries
Battery life:	up to 1 year, according to the number of activations
Drained battery indicator:	yes
Control	
Communication protocol:	RFIO
Frequency:	866–922 MHz (for more information see p. 76)
Repeater function:	no
Detection angle:	105°
Detection distance:	max. 12 m
Recommended working height:	max. 2.4 m
Other data	
Working temperature:	-10 to +50°C
Protection:	IP20
Colour:	white
Dimension:	46 x 105 x 43 mm
Weight:	57 g

- The motion detector PIR is used to detect persons moving inside the building interior.
- Use:
  - in combination with a switching unit for automatic control of lighting or triggering an alarm.
  - by means of the Smart RF box, detection can be displayed on your smart phone in the form of a notification; alarms are stored in the history, which is visualized in the application iHC.
- Sensitivity settings of the PIR detector for eliminating unwanted triggering.
- Integrated lighting sensor, thanks to which you can set the detector's reaction time.
- Option of activation/deactivation of the LED indicator on the detector cover.
- Anti-tamper function: an alarm is triggered if there is an unauthorized interference to detector.
- Power supply: 2x 1.5 V AA batteries, the battery life is around 1 year.
- "Low Battery" Alerts by double LED flashing or on iHC App.
- The detectors are compatible with switching components marked with the RFIO2 communication protocol and the eLAN-RF system components.
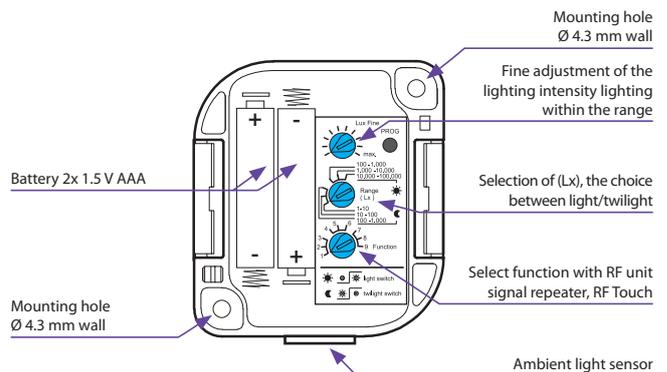- Communication frequency with bidirectional protocol RFIO.

Detection field

Technical parameters	RFWD-100
Power supply:	1x 3 V CR 2032 battery
Drained battery indicator:	yes
Control	
Communication protocol:	RFIO
Frequency:	866–922 MHz (for more information see p. 76)
Repeater function:	no
Other data	
Working temperature:	-10 to +50°C
Protection:	IP20
Colour:	white
Dimension:	25 x 75 x 16 mm
Magnet dimension:	15 x 75 x 14 mm

- The Window/Door detector is used to detect opening where activation occurs when the magnet and the sensor become separated.
- Use:
  - in combination with the switching unit for automatic light control (cellar, garage, etc.), or switching on a GSM gate
  - by means of the Smart RF box, detection can be displayed on your smart phone in the form of a notifi cation; alarms are stored in the history, which is visualized in the application iHC.
- Anti-tamper function: an alarm is triggered if there is an unauthorized interference to detector.
- Power supply: 1x 3 V CR 2032 battery, the battery life is around 1 year, thanks to the ability to turn off the LED indicator it is possible to extend up to 3 years.
- "Low Battery" Alerts on Your iHC App.
- The detectors are compatible with switching components marked with the RFIO2 communication protocol and the eLAN-RF system components.
- Communication frequency with bidirectional protocol RFIO.

IP 65

- The twilight switch measures the light intensity and based on a set value, it sends the command to switch on the lights or pull the blinds up or down.
- It can be combined with multifunctional switching units and blind switches.
- 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 (2x 1.5 V AAA batteries - 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.
- The increased IP65 protection is suited to mounting on the wall or into the rural environment.

Device description

Technical parameters	RFSOU-1
Power supply:	2 x 1.5 AAA batteries
Battery Life:	Appr. 2 years, according to the number of controlled units
Setting the range of light levels	
Function ☾ (twilight switch)	
- Range 1:	1 to 10 lx
- Range 2:	10 to 100 lx
- Range 3:	100 to 1.000 lx
Function ☀ (light switch)	
- Range 1:	100 to 1 000 lx
- Range 2:	1 000 to 10 000 lx
- Range 3:	10 000 to 100 000 lx
Function setting:	rotary switch
The level of lighting gently:	0.1 to 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
Control	
Communication protocol:	RFIO
Frequency:	866–922 MHz (for more information see p. 76)
Repeater function:	no
Range:	in open 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)

Mounting hole Ø 4.3 mm wall
Fine adjustment of the lighting intensity lighting within the range
Battery 2x 1.5 V AAA
Selection of (Lx), the choice between light/twilight
Select function with RF unit signal repeater, RF Touch
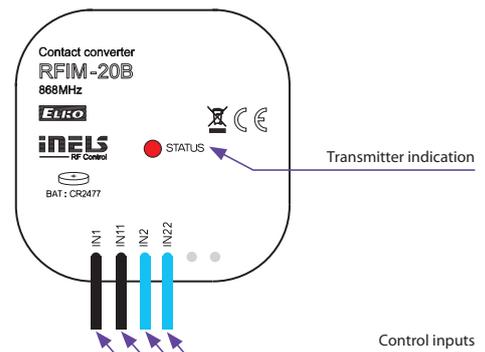Mounting hole Ø 4.3 mm wall
Ambient light sensor

- **RFIM-20B:** the wireless contact converter changes your existing wired button/switch to a wireless one.
  - two inputs enable control of two units independent.
  - battery power supply (1x 3 V CR 2477 battery - included in the supply) with battery life of around 5 years based on frequency of use.
  - contact can be permanently closed (does not drain on the battery).
- **RFIM-40B:** the wireless contact converter changes your existing wired button to a wireless one.
  - four inputs enable control of four units independently.
  - battery power supply (2x 3 V CR 2032 batteries) with battery life of around 5 years based on frequency of use (included in the supply).
  - button control (input must not be permanently closed)
- It can be used to transmit information on switching on the contact (detector, button, technology, logic output).
- 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 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.
- The BOX design lets you mount it right in an installation box under the button or switch.
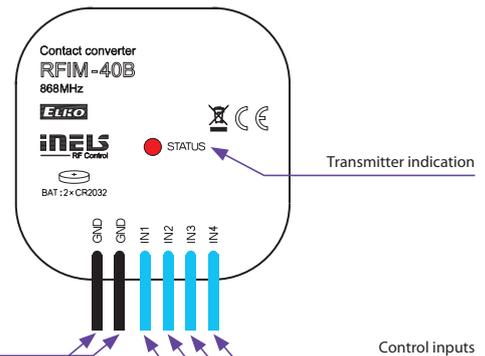
Technical parameters	RFIM-20B	RFIM-40B
Supply voltage:	1x 3 V CR 2477 battery	2x 3 V CR 2032 batteries
Battery life:	5 years based of frequency use	
Transmission indication / function:	orange LED	red LED
Number of inputs:	2	4
Input switching time:	Permanent input connection (contact)	Short-tem input connection (button)

Control

Communication protocol:	RFIO
Frequency:	866–922 MHz (for more information see p. 76)
Repeater function:	no
Signal transmission method:	unidirectionally addressed message
Range:	in open space up to 200 m

Other data

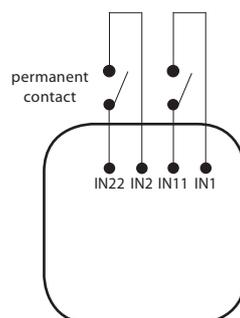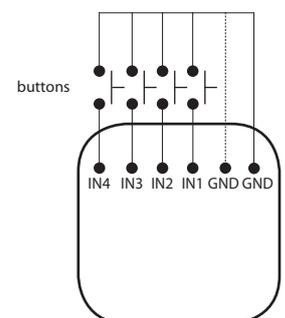|		
Operating temperature:	-10 to +50 °C	
Operating position:	any	
Terminals (CY wire, cross-section):	4 x 0.75 mm^2	6 x 0.75 mm^2
Length of terminals:	90 mm	
Resist.of connection between terminals		
- for switched on button:	< 300 Ω	
- for disconnected contact:	> 10 kΩ	
Mounting:	free at lead-in wires	
Protection:	IP30	
Contamination degree:	2	
Dimensions:	49 x 49 x 13 mm	
Weight:	45 g	50 g
Open contact voltage:	pulse 12 V	3 V
Length of cable to contact:	max. 100 m	
	of parallel lines	max. 5 m
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)	

Device description

RFIM-20B

Transmitter indication

Control inputs

RFIM-40B

Transmitter indication

GND

Control inputs

Connection

RFIM-20B

permanent contact

IN22 IN2 IN11 IN1

RFIM-40B

buttons

IN4 IN3 IN2 IN1 GND GND

- RFTC-50/G is a separate thermostat that allows wireless control of up to 4 multifunctional switching components, e.g. RFSA-6x, RFUS-61, RFSTI-11B.
- Temperature measurement with built-in sensor in the range of 0.55 ° C, temperature setting in the range of 0 to + 55 ° C in the weekly program.
- The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, day of the week, current time, etc.
- Battery power (2x 1.5 V AAA batteries - 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.
- Colour combination of temperature unit in design of frames LOGUS⁹⁰ (plastic, glass, wood, metal, stone).

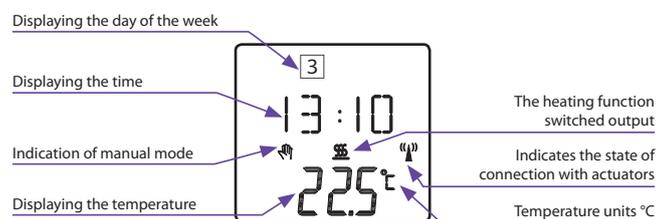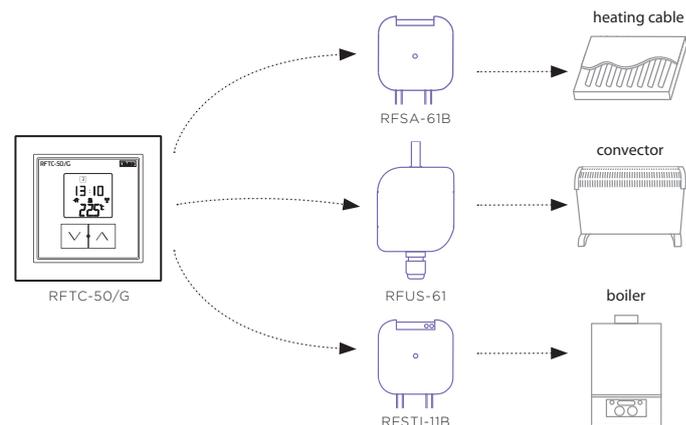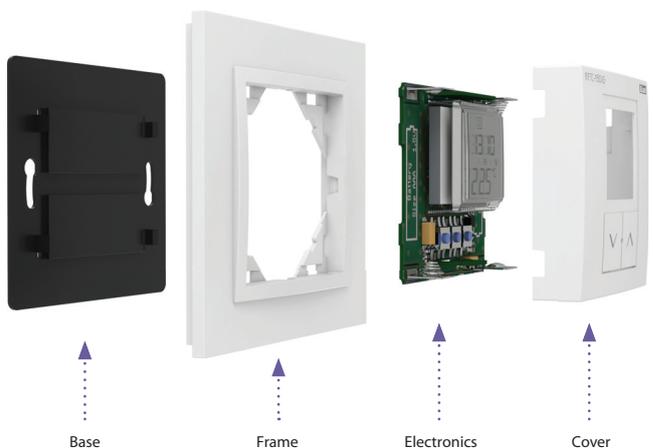| Technical parameters	RFTC-50/G
Supply voltage:	2x 1.5 V AAA batteries
Battery life:	1 year based on frequency of use according to the number of controlling actuators
Temperature correction:	2 buttons ∨ / ∧
Temperature offset:	± 5 °C
Display:	LCD, characters / see Display description
Backlighting:	active 10 s after pressing
Transmission indication/function:	symbols
Temperature measurement:	1x internal sensor
Temp. measurement range and accuracy:	0 to +55 °C; 0.3 °C of the range
Control	
Communication protocol:	RFIO
Frequency:	866–922 MHz (for more information see p. 76)
Repeater function:	no
Signal transmission method:	bidirectionally addressed message
Range:	in open space up to 100 m
Minimum control distance:	20 mm
Other data	
Max. number of control. RFSA-6x:	4
Program:	Weekly
Operating temperature:	0 to + 55 °C
Operating position:	on the wall
Mounting:	by gluing/screwing
Protection:	IP30
Contamination degree:	2
Dimensions frame - plastic:	85 x 85 x 20 mm
- 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 directive R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)

Compatibility				
RF Touch	eLAN-RF	RFSA-6 x	RFSTI-11B	RFATV-1
–	–	✓	✓	–

Device description

Base   Frame   Electronics   Cover

PE - Pearl   MF - Ivory   IS - Gray   GE - Ice   AL - Aluminium

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

RFTC-50/G

RFSA-61B → heating cable
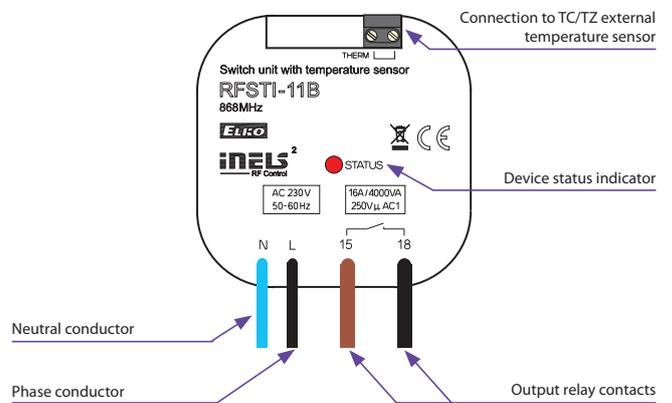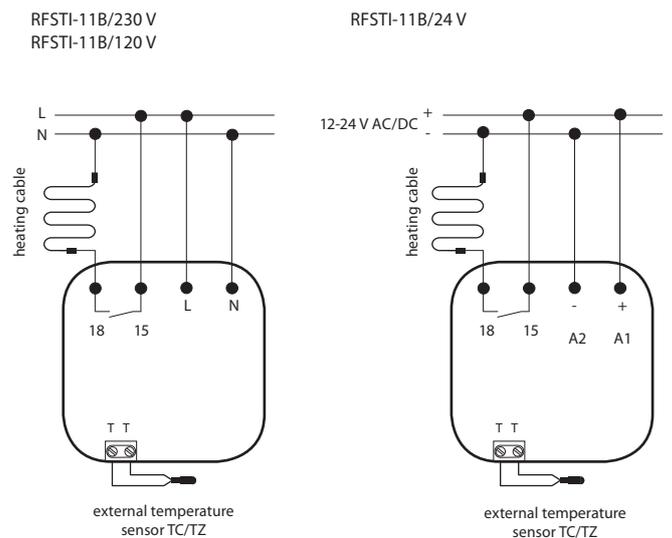
RFUS-61 → convector

RFSTI-11B → boiler

- 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 to 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.
- It enables connection of the switched load up to 16 A (4 000 W).
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
- External sensor TC (-20 to +80 °C) or TZ (-40 to +125 °C) for length of 3 m, 6 m, 12 m. For more information see „Accessories" on page 43.

Device description

| | Connection to TC/TZ external temperature sensor |
| Device status indicator |
| Neutral conductor |
| Phase conductor |
| Output relay contacts |

Technical parameters	RFSTI-11B/230V	RFSTI-11B/120V	RFSTI-11B/24V
Supply voltage:	230 V AC	120 V AC	12-24 V AC/DC
Supply voltage frequency:	50-60 Hz	60Hz	50-60Hz
Apparent input:	7 VA/cos φ = 0.1		-
Dissipated power:	0.7 W		
Supply voltage tolerance:	+10 %; -15 %		
Temperature measurement input:	1x external TZ/TC temperature sensor input ⚠		
Temp. measurement range and accuracy:	-20 to +50 °C; 0.5 °C of the range		
Output			
Number of contacts:	1x switching (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		
Max. DC switching power:	500 mW		
Mechanical service life:	3×10^7		
Electrical service life (AC1):	0.7×10^5		
Control			
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	yes		
Range:	in open space 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:	IP30		
Overvoltage category:	III.		
Contamination degree:	2		
Outlets (CY wire, cross-section, length):	2 x 0.75 mm^2, 2 x 2.5 mm^2, 90 mm		
Dimensions:	49 x 49 x 21 mm		
Weight:	46 g		
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)		

⚠ Temperature sensor input is at the supply voltage potential.

Connection

RFSTI-11B/230 V
RFSTI-11B/120 V

RFSTI-11B/24 V

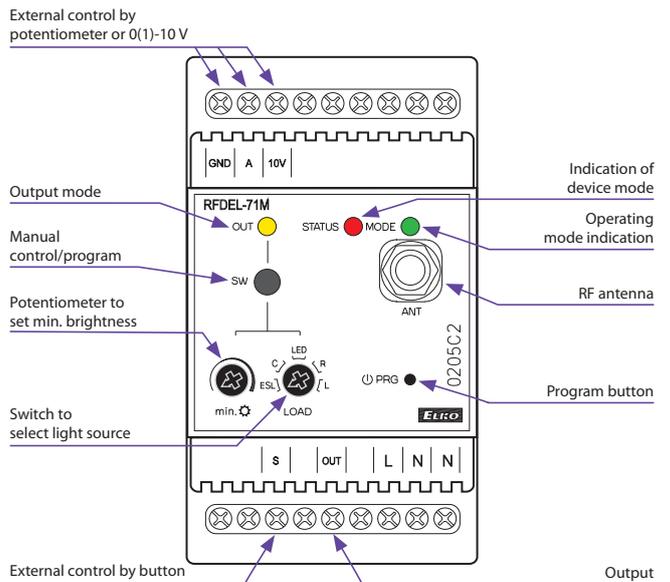external temperature sensor TC/TZ

external temperature sensor TC/TZ

- The universal modular dimmer is used to regulate light sources:
  R – classic lamps (resistive load)
  L – halogen lamps with wound transformer (inductive load)
  C – halogen lamps with electronic transformer (capacity load)
  ESL – dimmable energy-efficient fluorescent lamps
  LED – LED light sources equiped with LED.
- Control can be performed by:
  a) detectors, Controllers and System units iNELS RF Control
  b) by control signal 0(1)-10 V
  c) potentiometer
  d) existing button in the installation.
- 6 light functions - smooth increase or decrease with time setting 2 s -30 min. Function description can be found on page 75.
- 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.
- The programming button on the controller is also used for manual control of the output.
- 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, see accessories on page 69.
- Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
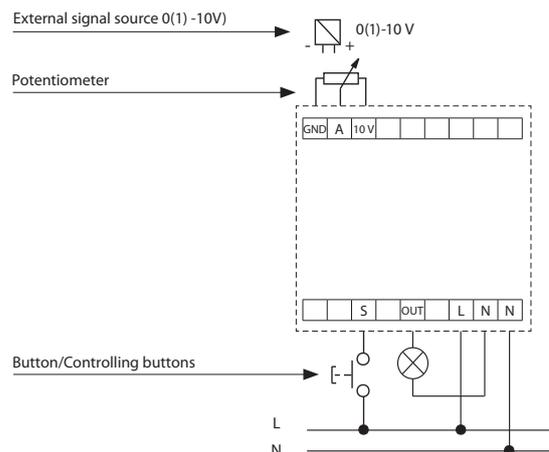- The unit's three-module design with switchboard mounting.

Technical parameters	RFDEL-71M/230V	RFDEL-71M/120V
Supply voltage:	230 V AC	120 V AC
Supply voltage frequency:	50 Hz	60 Hz
Apparent power:	2.5 VA	1.1 VA
Dissipated power:	0.8 W	0.6 W
Supply voltage tolerance:	+10/-15 %	
Output		
Dimmed load:	R,L,C, LED, ESL	
Contactless:	2 x MOSFET	
Load capacity:*	max. 600 W	max. 300 W*
Control		
Wireless:	up to 32 channels (buttons)	
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	yes	
Range:	in open space up to 160 m	
Manual control:	SW (ON/OFF) button	
External button:	max. 50 m cable	
Glow lamps connection:	no	
Analog control:	potentiometer or 0 (1) - 10 V	
RF Antenna:	AN-I included (SMA connector**)	
Other data		
Operating temperature:	-20 to + 35 °C	
Storage temperature:	-30 to +70°C	
Operating position:	vertical	
Mounting:	DIN rail EN 60715	
Protection:	IP20 under normal conditions	
Overvoltage category:	II.	
Contamination degree:	2	
Cross-section of connecting wires:	max. 1x 2.5, max. 2x 1.5/with a hollow max. 1x 2.5	
Dimensions:	90 x 52 x 65 mm	
Weight:	125 g	
Related standards:	EN 607 30-1 ed.2	

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

** Max. Tightening Torque for antenna connector is 0.56 Nm.

Device description

External control by potentiometer or 0(1)-10 V

GND A 10V

Output mode

Manual control/program

Potentiometer to set min. brightness

Switch to select light source

External control by button

RFDEL-71M

OUT   STATUS MODE

SW

ANT

min. ☼   LOAD   PRG

S   OUT   L   N   N

Indication of device mode

Operating mode indication

RF antenna

Program button

Output

Connection and external control options

External signal source 0(1) -10V)

0(1)-10 V

Potentiometer

GND A 10 V

S OUT L N N

Button/Controlling buttons

L

N

- The device with analog output 0(1) -10 V is used to control devices, luminaires, thermal actuators and thermal heads - which are equipped with such an input.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- Potential free analog output 0(1) -10 V, contact relay 16 A.
- 6 light functions - smooth increase or decrease with time setting 2 s - 30 min. Function description can be found on page 75.
- The analog controller may be controlled by up to 25 channels.
- The programming button on the controller is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.

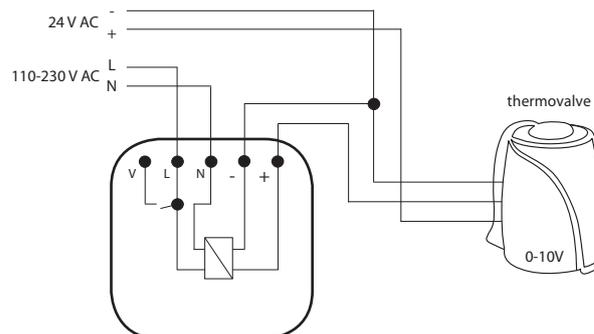| Technical parameters	RFDAC-71B
Supply voltage:	110 - 230 V AC
Supply voltage frequency:	50 - 60 Hz
Apparent input:	3 VA
Dissipated power:	1.2 W
Supply voltage tolerance:	+10/-15 %
Control	
Potential-free analog output / max. current:	0(1)-10 V/10 mA
Rated current:	1x AgSnO$_2$, switches the phase conductor
Switching power:	16 A / AC1
Switching power:	4000 VA/AC1
Switching voltage:	250 V AC1
Mechanical service life:	3×10^7
Electrical service life:	0.7×10^5
Indication:	red LED/green LED
Output selection:	0(1)-10V/PROG button
Control	
Wireless:	up to 25 channels (buttons)
Communication protocol:	RFIO2
Frequency:	866–922 MHz (for more information see p. 76)
Repeater function:	yes
Manual control:	button PROG (ON/OFF)
Range:	in open space up to 200 m
Minimal control distance:	20 mm
Other data	
Operating temperature:	-15 to + 50 °C
Operating position:	any
Mounting:	plug into a socket
Protection:	IP30
Overvoltage category:	III.
Contamination degree:	2
Terminals (CY wire, cross-section):	3 x 0.75 mm^2, 2 x 2.5 mm^2
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)

Device description

Connection

Connection example: dimming of fluorescent tubes with dimmable ballast
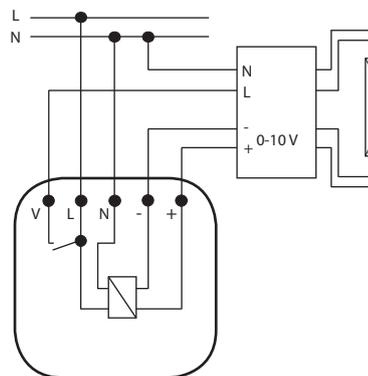

Connection example: with thermo valve

| Technical parameters	RFDEL-71B/230V	RFDEL-71B/120V
Supply voltage:	230 V AC	120 V AC
Supply voltage frequency:	50 Hz	60 Hz
Apparent power:	1.1 VA	
Dissipated power:	0.8 W	
Supply voltage tolerance:	+10/-15 %	
Connection:	4-wire, with "NEUTRAL"	
Output		
Dimmed load:	R,L,C, LED, ESL	
Contactless:	2 x MOSFET	
Load capacity:*	max. 160 W	max. 80 W
Control		
Wireless:	up to 25 channels (buttons)	
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	yes	
Range:	in open space up to 160 m	
Manual control:	button PROG (ON/OFF), external button	
Glow lamp connection:	no	
Other data		
Operating temperature:	-20 to + 35°C	
Storage temperature:	-30 to +70°C	
Operating position:	any	
Mounting:	free at lead-in wires	
Protection:	IP30 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	

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

- The universal built-in dimmer is used to regulate light sources:
  R – classic lamps (resistive load)
  L – halogen lamps with wound transformer (inductive load)
  C – halogen lamps with electronic transformer (capacity load)
  ESL – dimmable energy-efficient fluorescent lamps
  LED – LED light sources equiped with LED.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- 6 light functions - smooth increase or decrease with time setting 2 s - 30 min. Function description can be found on page 75.
- 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 25 channels.
- 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.
- Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or light cover.

Device description
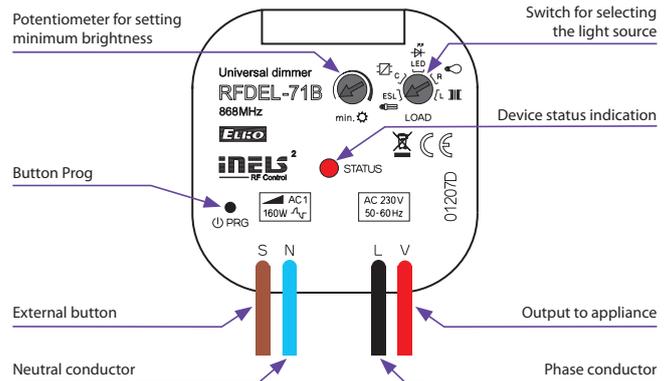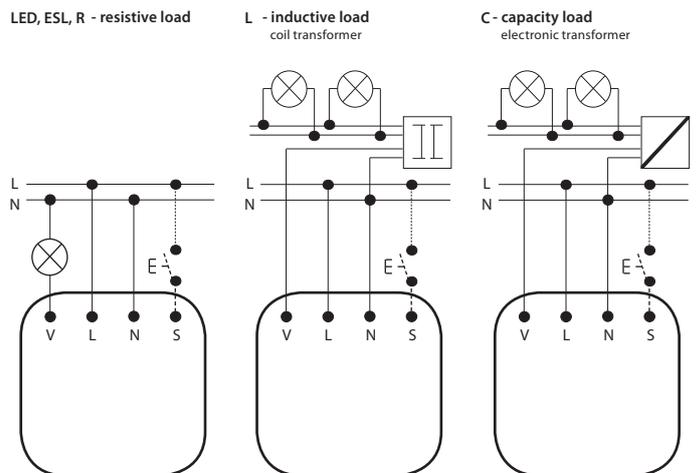
Connection

- The switched socket with 16 A output channel is used to control fans, lamps, heaters and appliances, which are connected by a 16 A power cord.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- Multi-function design – button, impulse relay and time function of delayed ON or OFF with time setting of 2 s - 60 min. Function description can be found on page 74.
- The switched socket may be controlled by up to 32 channels .
- Thanks to the socket design, installation is simple by direct insertion into the existing socket.
- The programming button on the socket is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.
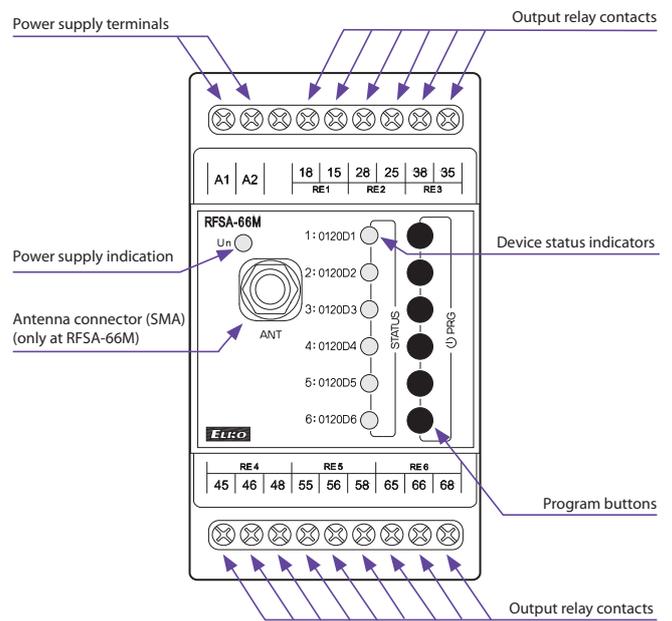
Produced in 3 designs of sockets/plugs:

French	Schuko	British
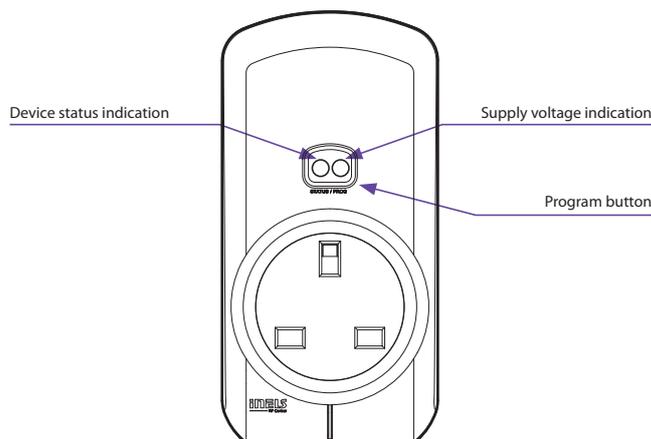
Technical parameters	RFSC-61/230V	RFSC-61/120V
Supply voltage:	230 - 250 V AC	120 V AC
Supply voltage frequency:	50-60 Hz	60 Hz
Apparent power:	6 VA	
Dissipated power:	0.7 W	
Supply voltage tolerance:	+10 %; -15 %	
Output		
Number of contacts:	1x switching (AgSnO$_2$)	
Rated current:	16 A / AC1	
Switching 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:	500 mW	
Mechanical service life:	3x10^7	
Electrical service life (AC1):	0.7x10^5	
Control		
Wireless:	up to 32 channels (buttons)	
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	no	
Manual control:	button PROG (ON/OFF)	
Range:	in open space up to 200 m	
Other data		
Operating temperature:	-15 to + 50 °C	
Working position:	any	
Mounting:	plug into a socket	
Protection:	IP30	
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)	

Device description

Device status indication

Supply voltage indication
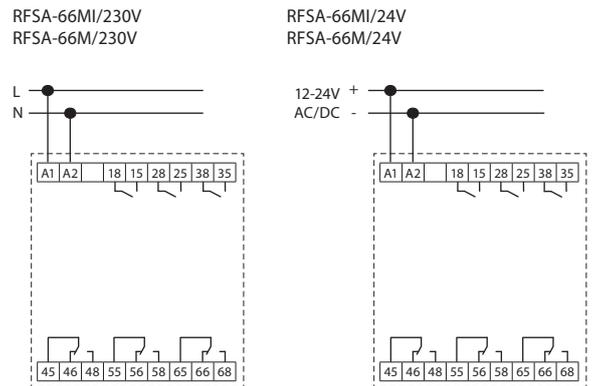
Program button

NEW

- **RFSA-66M:** the switching unit with 6 output channels 8 A is used for independent control of up to 6 appliances, sockets or lights.
  - the three-module design of the unit into a switchboard).
  - each of the channels may be controlled by up to 25 channels.
  - 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, see accessories on page 75.
- **RFSA-66MI:** same design and function as RFSA-61M, but with integrated antenna. It is suitable for placement in cabinets with plastic doors.
- 6 function: button, impulse relay and time function of delayed start or return with time setting range of 2 s - 60 min. Function description can be found on page 74.
- The programming button on the unit is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.

Technical parameters	RFSA-66MI/ 230V	RFSA-66MI/ 24V	RFSA-66M/ 230V	RFSA-66M/ 24V
Supply voltage:	110-230V AC	12-24V AC/DC	110-230V AC	12-24V AC/DC
SELV:	no	yes	no	yes
Supply voltage frequency:	AC 50-60 Hz			
Apparent input:	min. 2 VA/ max. 5 VA	-	min. 2 VA/ max. 5 VA	-
Dissipated power:	min. 0.5W/ max. 2.5W	max. 1.8 W	min. 0.5W/ max. 2.5W	max. 1.8 W
Supply voltage tolerance:	+10%/-25 %			
Output				
Number of contacts:	3x changeover, 3x switching			
Rated current:	8 A/AC1			
Switching power:	2000 VA/AC1			
Peak current:	10 A/<3 s			
Switching voltage:	250 V AC1			
Contact material:	$AgSnO_2$			
Mechanical service life:	$1x10^7$			
Electrical service life (AC1):	$1x10^5$			
Control				
Wireless:	up to 25 channels (buttons)			
Communication protocol:	RFIO2			
Frequency:	866–922 MHz (for more information see p. 76)			
Repeater function:	yes			
Manual control:	PROG (ON/OFF) button			
Range:	in open space up to 200 m			
RF Antenna:	integrated	AN-I *	integrated	AN-I *
Other data				
Operating temperature:	-15 °C to + 50 °C			
Operating position:	any			
Mounting:	DIN rail EN 60715			
Protection:	IP20 from the front panel			
Overvoltage category:	III.			
Contamination degree:	2			
Connecting conductor cross-section (mm²):	max. 1x 2.5, max. 2x 1.5/ with a hollow max. 1x 2.5			
Dimensions:	90 x 17.6 x 64 mm			
Weight:	171 g		179 g	
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)			

AN-I * included (SMA connector), max Tightening Torque for antenna connector is 0.56 Nm.

Device description

Power supply terminals

Output relay contacts

Power supply indication

Antenna connector (SMA) (only at RFSA-66M)

Device status indicators

Program buttons

Output relay contacts

Connection

RFSA-66MI/230V
RFSA-66M/230V

RFSA-66MI/24V
RFSA-66M/24V

- 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.
- **RFJA-32B/230V (120V):** relay contacts 2x 8 A (2x 2000 W), with the possibility of connecting external buttons. The relays block each other (only one direction of movement at a time).
- **RFJA-32B/24VDC:** contactless quiet switching with the ability to connect existing buttons. The drive is controlled by changing the polarity.
- Short presses (<2 s) of the controller enable tilting of lamellas, and a long press (>2 s) enables you to draw the blinds up or down to the end position.
- Each of the units may be controlled by up to 25 channels.
- 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 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or motor drive cover.

Technical parameters

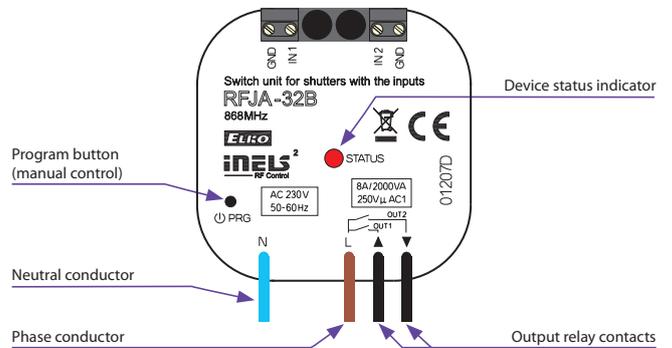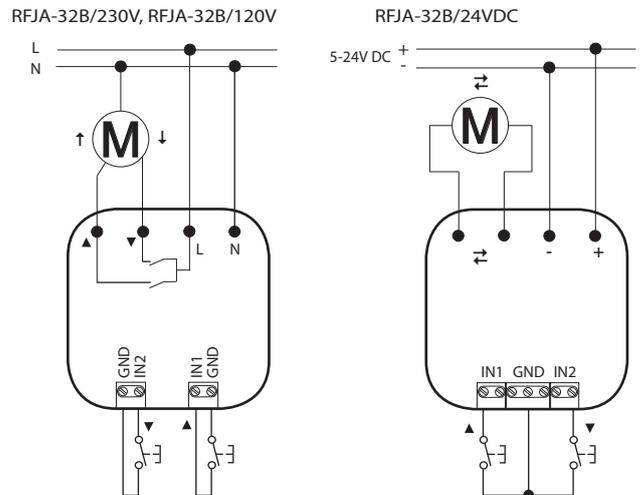| Technical parameters	RFJA-32B/230V	RFJA-32B/120V	RFJA-32B/24V
Supply voltage:	230 V AC	120 V AC	5 - 24V DC
Supply voltage frequency:	50 - 60 Hz	60 Hz	x
Apparent input:	7 VA/cos φ = 0.1	7 VA/cos φ = 0.1	x
Dissipated power:	0.7 W	0.7 W	x
Power without load:	x		0.5 W
Power under load:	x		20 W
Supply voltage tolerance:	+10 %; -15 %		
Input			
Input:	2x switch or GND		
Output			
Number of contacts:	2 x switching (AgSnO$_2$)		contactless
Rated current:	8 A/AC1		1 A
Switching power:	2000 VA/AC1		x
Peak current:	10 A/<3 s		1.5 A/<3 s
Switching voltage:	250 V AC1		5-24 V DC*
Mechanical service life:	1x10^7		x
Electrical service life (AC1):	1x10^5		x
Control			
Wireless:	up to 25 channels (buttons)		
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	yes		
Manual control:	PROG (STOP, ▲, STOP, ▼)		
External button:	max. 12 m wire ⚠ **		
Range:	in open space up to 100 m		
Other data			
Operating temperature:	-15 to + 50 °C		
Operating position:	any		
Mounting:	free at lead-in wires		
Protection:	IP30		
Overvoltage category:	III.		
Contamination degree:	2		
Terminals:	0.5 - 1 mm²		
Terminals (CY wire, cross section):	4 x 0.75 mm²		
Length of terminals:	90 mm		
Dimensions:	49 x 49 x 21 mm		49 x 49 x 13 mm
Weight:	46 g		22 g
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)		

* Identical with supply voltage.

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

⚠ The external button inputs are at the potential of the main supply voltage.

Device description

Device status indicator

Program button (manual control)

Neutral conductor

Phase conductor

Output relay contacts

Function description

1. Short presses (<2 s) of the control allow the slats to be tilted.
2. When the control button is pressed >2 s shutters move up (▲) or down (▼) until reaching the final position. The travel time of the blinds is set with the programming button.
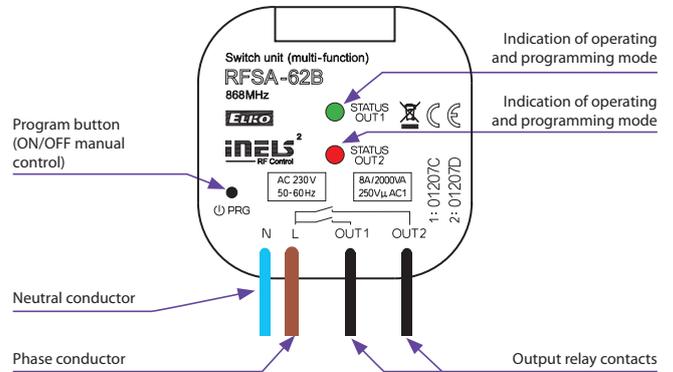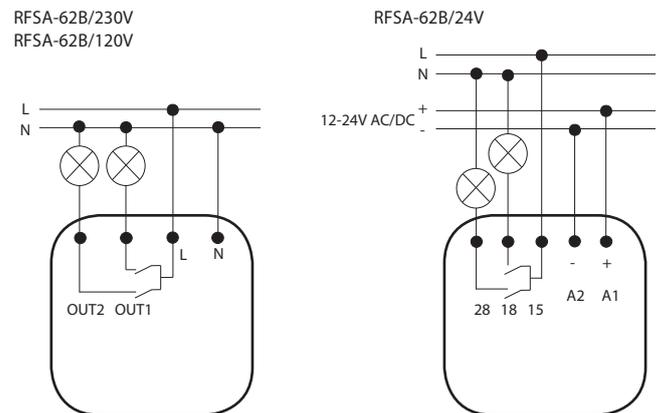
Connection

RFJA-32B/230V, RFJA-32B/120V

RFJA-32B/24VDC

- The switching unit with 2 output channels 8A used to control two independent appliances.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- Function: button, impulse relay and time function of delayed start and return with time setting range of 2 s - 60 min. Function description can be found on page 74.
- Each of the channels may be controlled by up to 12 channels.
- The programming button on the unit is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 100 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO2.
- The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.
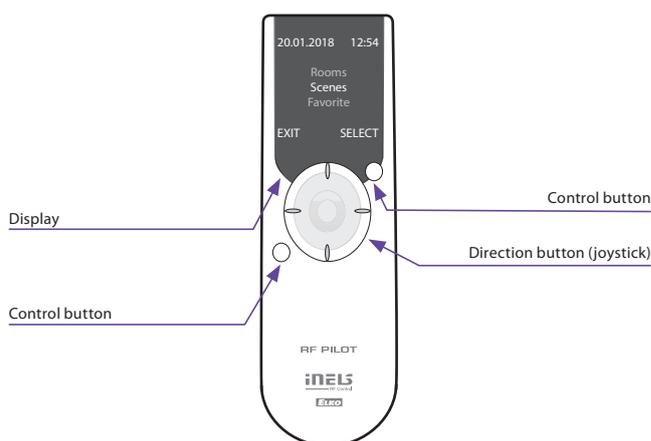
Device description

Technical parameters	RFSA-62B/230V	RFSA-62B/120V	RFSA-62B/24V
Supply voltage:	230 V AC	120 V AC	12-24 V AC/DC
Supply voltage frequency:	50-60 Hz	60Hz	50-60Hz
Apparent input:	7 VA/cos φ = 0.1	7 VA/cos φ = 0.1	-
Dissipated power:	0.7 W	0.7 W	0.7 W
Supply voltage tolerance:	+10 %; -15 %		
Output			
Number of contacts:	2 x switching (AgSnO$_2$)		
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):	1x10^5		
Control			
Wireless:	each of the outputs up to 12 channels (buttons)		
Communication protocol:	RFIO2		
Frequency:	866–922 MHz (for more information see p. 76)		
Repeater function:	yes		
Manual control:	button PROG (ON/OFF)		
Range:	in open space up to 100 m		
Other data			
Operating temperature:	-15 to + 50 °C		
Operating position:	any		
Mounting:	free at lead-in wires		
Protection:	IP30		
Overvoltage category:	III.		
Contamination degree:	2		
Terminals (CY wire, cross-section):	1x 2.5 mm^2, 3x 0.75 mm^2		1x2.5, 4x0.75mm^2
Length of terminals:	90 mm		
Dimensions:	49 x 49 x 21 mm		
Weight:	46 g		
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)		

Connection

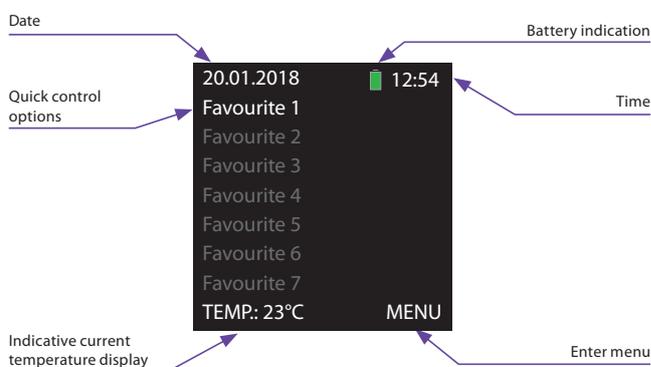RFSA-62B/230V
RFSA-62B/120V

RFSA-62B/24V

- The Remote RF controller with display is a central controller for switching electrical appliances and equipment, dimming lights, controlling blinds, etc.
- Designed in white and anthracite with colour OLED display.
- 4 directional joystick + 2 buttons for intuitive operation.
- Option of setting light scenes, where with a single press, you can control up to 40 units at once.
- Display of room temperature, battery status, date and time directly on display.
- The Favorites mode lets you preset the most frequently used devices on the home screen.
- 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.
- Battery power (2x 1.5 V AAA batteries - included in supply) with battery life of around 3 years based on frequency of use and type of batteries.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.

Technical parameters	RF Pilot/W	RF Pilot/A
Display		
Type:	colour 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	
Power supply		
Power supply:	2 x 1.5 V AAA batteries/R03	
Battery life:	approx. 3 years, according to the frequency of use and battery type	
Control		
Range:	in open space up to 200 m	
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Other data		
Operating temperature:	0 to +55 °C	
Storage temperature:	-20 to +70 °C	
Colour design:	white	anthracite
Protection:	IP20	
Operating position:	any	
Dimensions:	130 x 41 x 18 mm	
Weight:	61 g	
Related standards:	EN 60730-1	

Device description

Display

Control button

Control button

Direction button (joystick)

RF Pilot

Display description

Colour LED display

Date

Battery indication

Quick control options

Time

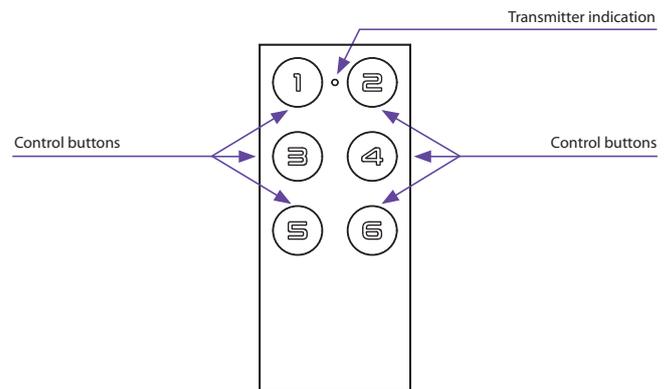Indicative current temperature display

Enter menu

Controllers

- Key fob -sized remote control, available in black and white.
- When pressing the button, it sends a set signal (ON/OFF, dimming, time switching OFF/ON, blinds up/down).
- **RF KEY-40:** four buttons enable control of four units independently.
- **RF KEY-60:** six buttons enable control of four units independently.
- Battery power supply (3 V CR 2032 battery - included in the supply) with battery life of around 5 years based on frequency of use.

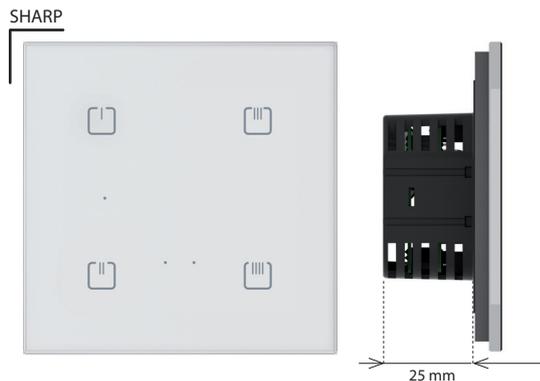| Technical parameters	RF KEY-40	RF KEY-60
Supply voltage:	3 V CR 2032 battery	
Battery life:	around 5 years based on frequency of use	
Transmission indication:	red LED	
Number of buttons:	4	6
Communication protocol:	RFIO	
Transmitter frequency:	866–922 MHz (for more information see p. 76)	
Signal transmission method:	unidirectionally addressed message	
Range:	in open space up to 200 m	
Other data		
Operating temperature:	-10 to +50 °C	
Operating position:	any	
Colour design:	white, black	
Protection:	IP20	
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)	

Device description

Transmitter indication

Control buttons

Control buttons

Variants

RF KEY-40/W

RF KEY-60/W

RF KEY-40/B

RF KEY-60/B

RFDW-71/W, RFDW-71/B | Glass touch controller

Controllers

SHARP

25 mm

- Glass touch controller with integrated dimming component which serves to regulate light sources:
  R – classic lamps (resistive load)
  L – halogen lamps with wound transformer (inductive load)
  C – halogen lamps with electronic transformer (capacity load)
  ESL – dimmable energy-efficient fluorescent lamps
  LED – LED light sources (230 V) equipped with LED.
- 4 channel switch version allows you to control the integrated dimmer as well as other components of the installation.
- They can be combined with detectors, controllers, iNELS RF Control or system components.
- 6 light functions - smooth increase or decrease with time setting 2 s - 30 min. Function description can be found on page 75.
- 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 25 channels.
- The programming button on the controller is also used for manual control of the output.
- Memory status can be pre-set in the event of a power failure.
- Range up to 160 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
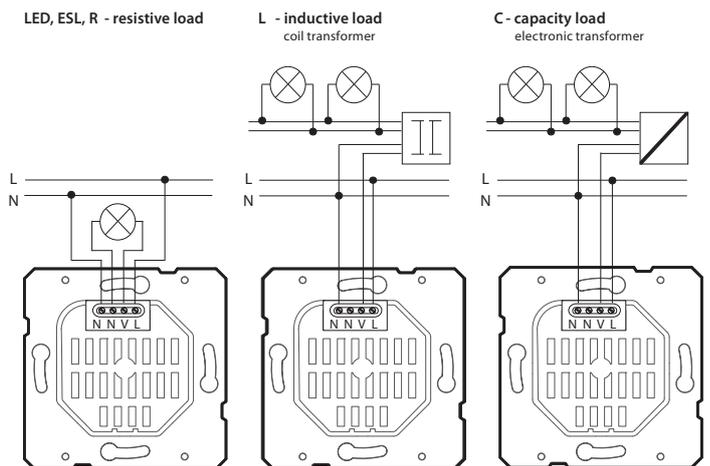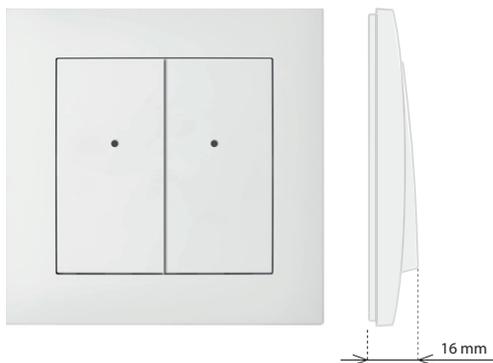- Communication frequency with bidirectional protocol RFIO2.

Technical parameters	RFDW-71/230V	RFDW-71/120V
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 %	
Dimmed load:	R,L,C, LED, ESL	
Input		
Temperature measuring:	YES, built-in temperature sensor	
Scope and accuracy of temp. measurement:	0 to +55°C; 0.3°C from the range	
Output		
Contactless:	2 x MOSFET	
Load capacity:*	max. 160 W	max. 80 W
Control		
Wireless:	up to 25 channels (buttons)	
Communication protocol:	RFIO2	
Frequency:	866–922 MHz (for more information see p. 76)	
Repeater function:	yes	
Manual control:	4 touch keys, button PROG	
Indications touch keys:	red/green LED	
Indications PROG:	colour adjustable prog. mode	
Range:	in open space up to 160 m	
Connection		
Terminals:	0.5 - 1 mm²	
Other data		
Operating temperature:	-20 to + 35°C	
Storing temperature:	-30 to +70°C	
Protection degree:	IP20	
Overvoltage category:	II.	
Pollution degree:	2	
Operation position:	any	
Installation:	into installation box	
Dimensions:	94 x 94 x 36 mm	
Weight:	155 g	

* See page 79 for the load chart for each light source.

Colour variants

RFDW-71/B

RFDW-71/W

Connection

LED, ESL, R - resistive load

L - inductive load
coil transformer

C - capacity load
electronic transformer

The output can be controlled by up to 25 separate buttons (external RF Controller).

RFWB

RF KEY

The buttons can control an umlimited number of RF devices.

RFJA

RFSC

RFDW-71

- On-wall button 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 (3 V CR 2032 battery - included in the supply) with battery life of around 5 years based on frequency of use.
- Range up to 200 m (in open space), if the signal is insufficient between the controller and unit, use the signal repeater RFRP-20 or protocol component RFIO2 that support this feature.
- Communication frequency with bidirectional protocol RFIO.

16 mm

Technical parameters	RFWB-20/G	RFWB-40/G
Supply voltage:	3 V CR 2032 battery	
Battery life:	around 5 years based on frequency of use	
Transmission indication:	red LED	
Number of buttons:	2	4
Communication protocol:	RFIO	
Frequency:	866–922 MHz (for more information see p. 76)	
Signal transmission method:	unidirectionally addressed message	
Range:	in open space up to 200 m	
Other data		
Operating temperature:	-10 to +50 °C	
Operating position:	any	
Mounting:	glue/screws	
Protection:	IP20	
Contamination degree:	2	
Dimensions frame		
- plastic:	85 x 85 x 16 mm	
- metal, glass, wood, granite:	94 x 94 x 16 mm	
Weight (plastic):*	38 g	39 g
Related standards:	EN 60669, EN 300 220, EN 301 489 R&TTE Directive, Order. No 426/2000 Coll. (Directive 1999/EC)	

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

RFWB-40/G

Device description

Transmitter indication

Control buttons

Base   Frame   Electronics   Cover
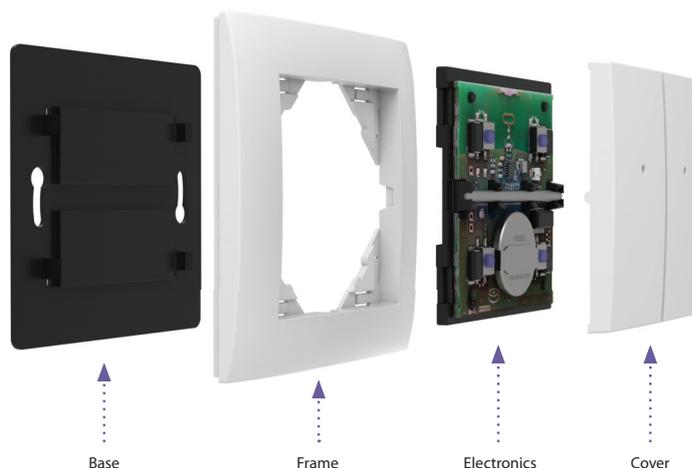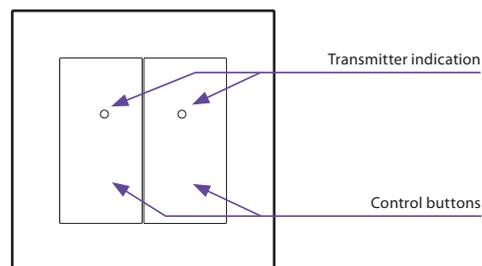
LOGUS⁹⁰

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.

AQUARELLA

ARBORE

ANIMATO

PETRA

CRYSTAL

METALLO

BASE