CU3-03M | Central unit

EAN code
CU3-03M: 8595188132404

Technical parameters	CU3-03M
LED Indication	
Green LED RUN:	Indication of the operating state of the unit
Red LED ERR:	Unit error indication
TFT display	displays the current status and settings
Type:	color TFT
Resolution:	240x240/1:1 aspect ratio
Visible area:	26x26 mm
Controlling:	using arrows
The internal real-time clock:	accuracy: 1s/day at 23 °C
Inputs	
Inputs:	8x DIN GS 12-230 V AC/DC
	(over common COM terminal)
	4x DIN voltage or current
	(with adjustable switching in current mode)
	7x AIN/DIN voltage or current
	(with adjustable switching in current mode)
Communication	
BUS	
Maximum number of units:	max. 32 units to one BUS line
Maximum cable length:	max. 500 m (depends on power loss)
3x Ethernet	
Connector:	RJ45 on the underside of the product
Communication speed:	100 Mbps
Indication of the Ethernet:	3x green - Ethernet communication
	3x yellow - Ethernet speed 100 Mbps
The default IP address (ETH3):	192.168.1.1 (the IP address can be changed in the menu using the display and buttons)
DALI master:	up to 64 master units, max. 64 slave units
Maximum number of units:	max. 64 mA (external source connection possible)
Internal power supply:	Bus power supply
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Rated current:	110 mA (at 27 V DC)
Operating conditions	
Working temperature:	-20 to +55 °C
Storage temperature:	-25 to +70 °C
Humidity:	max. 80%
Degree of protection:	IP20 devices, IP40 with cover in the switchboard
Overvoltage category:	II.
Degree of pollution:	2
Operating position:	any
Installation:	to the switching board on the EN60715 DIN rail
Design:	6-MODULE
Terminal:	max. 2.5 mm^2
Dimensions and weight	
Dimensions:	90 x 105 x 65 mm
Weights:	257 g

- CU3-03M is a new, enhanced version of CU3-01M and CU3-02M.
- The new HW equipment allows communication with the DALI bus to connect up to 64 electronic ballasts (the internal power supply of the CU3-03M is capable of supplying connected ballasts up to a nominal value of 64 mA).
- RF Communication Interface for Controlling Wireless Receivers iNELS RF Control (the current list of supported receivers is available in the iNELS Installation Guide).
- The CU3-03M is equipped with three Ethernet ports, one for Ethernet (100 Mbps) connections and two for CU3-03M controllers.
- The CU3-03M has a TFT display that shows the current status and allows some basic unit parameters such as network setup, date, time, or service.
- The movement in the CU3-03M menu is possible by using the directional buttons on the front panel.
- CU3-03M in 6-MODULE are designed for mounting into a switchboard on the EN60715 DIN rail.

iNELS RF Control interface for CU3-03M

Communication protocol:	RF Touch Compatible
Transmitting frequency:	866 MHz/868 MHz/916 MHz
Signal transmission methods:	bidirectionally addressed message
Output for RF antenna:	SMA connector*
RF antenna:	1 dB (part of package)
Free space range:	up to 100 m

DIN = digital input
AOUT = analogue output
AIN = analogue input
GS = galvanically isolated

* Max Tightening Torque for antenna connector is 0.56 Nm.

CU3-07M | Central unit miniCU

NEW

EAN code
mini CU3-07M: 8595188176262

Technical parameters	CU3-07M
Indication LED STATUS	
Green LED RUN:	Flashing - communication with BUS, ON - no communication
Red LED ERR:	Flashing - no project, ON - unit STOP
Communication	
BUS	
Indication (LED BUS):	green - unit status indication
	red - BUS fault indication
Maximum number of units:	max. 32 units to one BUS line
Maximum cable length:	max. 500 m (depends on power loss)
BUS RS-485	
Indication (LED RS 485):	green - indication communication
	red - fault indication
Maximum cable length:	max. 500 m
Ethernet	
Connector:	RJ45
Communication speed:	100 Mbps
Indication of the Ethernet	green - Ethernet communication
(LED ETH):	yellow - Ethernet speed 100 Mbps
The default IP address:	192.168.1.1
Button RESET	
Restart:	short press
Reset (Factory Reset):	press the button to apply power,
	release the button 10s after power is applied
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Rated current:	55 mA (at 27 V DC)
Operating conditions	
Operating temperature:	-20 to +55 °C
Storage temperature:	-25 to +70 °C
Humidity:	max. 80%
Protection degree:	IP20 devices, IP40 with cover in the switchboard
Overvoltage category:	II.
Pollution degree:	2
Operating position:	any
Installation:	to the switching board on the EN60715 DIN rail
Design:	1-MODULE
Terminal:	max. 2.5 mm²
Dimensions and weight	
Dimensions:	94 x 17.6 x 64 mm
Weight:	72 g

- CU3-07M is a small central unit of 1M size for managing small projects such as a hotel room, small apartment or cottage.
- Configuration is performed by software iNELS designer and manager iDM3, or is possible to use superior control by ASCII communication with CU3.
- The unit can work as a stand-alone master for installation or as a slave for the superior CU3-0xM.
- The CU3-07M is equipped with one BUS branch to which up to 32 iNELS BUS units can be connected.
- For communication and configuration, the unit is equipped with an RJ45 connector with a 100Mbps Ethernet port.
- For ModBus communication, eg with Fancoils and Thermostats in the hotel room, the unit is equipped with RS-485 bus.
- CU3-07M in 1-MODULE version is designed for mounting into a switchboard, on DIN rail EN60715.

SHARP

EAN code
GSB3-20/SB: 8595188156219
GSB3-40/SB: 8595188156233
GSB3-60/SB: 8595188156257

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

Technical parameters	GSB3-20/S	GSB3-40/S	GSB3-60/S
Inputs			
Temperature measuring:	YES, built-in temperature sensor		
Scope and accuracy of temp. measurement:	0 to +55°C; 0.3°C from the range		
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		
Illuminance sensor:	1 to 100 000 Lx		
Buttons			
Number of control buttons:	2	4	6
Type:	Capacitive		
Indication:	Coloured illuminated symbol		
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:	25-35 mA	25-43 mA	25-50 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:	154 g		

- Glass touch controllers with symbols GSB3-20/S, GSB3-40/S and GSB3-60/S are part of a comprehensive range of glass iNELS control units and can be advantageously used in all projects for example as a part of guest room management system (GRMS).
- GSB3-20/S is equipped with two, GSB3-40/S with four and GSB3-60/S six touch buttons whose functions can easily modify by the software.
- 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.
- Glass touch panel is a design component of the iNELS system and is available in elegant black (GSB3-20/SB, GSB3-40/SB, GSB3-60/SB) and white (GSB3-20/SW, GSB3-40/SW, GSB3-60/SW) versions.
- All versions are in the size of the module (94x94 mm) from the line of luxury switches and sockets LOGUS[90] and are therefore fully in line with the design of frames for the sockets of this series, where you can just as for the controllers choose white and black glass frames.
- The glass touch controllers is equipped with an integrated temperature sensor. It is also equipped with two analog-to-digital inputs (AIN/DIN), which can be used to connect two potential-free contacts or one external temperature sensor TC/TZ (for example temperature measurement of the floor).
- The glass touch controllers are also equipped with a sensor of ambient light intensity. Based on information from the sensor it can switch backlight of symbols or perform various actions in the iDM3 software, for example also switch the lighting circuits in the room.
- Advantages over conventional switches/buttons are saving space, signalling the state of any system output, the ability to measure temperature as well as the ability to connect external buttons or detectors.
- Each button can control any actuator (appliance) in the system. Also, you can assign each button a different function or macro (set of functions). It is therefore possible to use one button to control several appliances at once.
- GSB3-20/S, GSB3-40/S, and GSB3-60/S are designed for mounting into an installation box.

Radio   Music   Video-telephone   Intercom   Audiozone

- A music and Internet radio player - all in the dimension of a switch and a luxurious LOGUS[90] design.
- LARA Radio - when connected to the Internet, it can play streaming radio stations and you can store up to 40 of them. But you can also select from thousands of radio stations from across the globe, which provide data for correct connection.
- LARA Radio can play content from an external music source, which can be an smart phone or e.g. an MP3 player. These devices are connected to a 3.5mm stereo jack audio input, located underneath the front panel.
- LARA Radio can also play audio files from central data storage, onto which Logitech Media Server is installed. This LARA function can therefore be used within the complex iNELS system or as an entirely independent home automation device. When used within iNELS, control is a part of the complex application iHC. If using with NAS data storage, the application LARA NAS App is available.
- Touch control is performed on the device front panel (six capacity buttons available), or LARA Dio.
- The basic device settings (network connection, language, audio input) are performed via the display and a simple menu controlled from capacity buttons on the device front cover. Further settings (selection of stations, connection with the server, updating firmware, etc.) are configured via computer and the software LARA Configurator.
- LARA Radio is equipped with an OLED colored display with the size of 1.5". The display also shows basic information about playing music, which also serves the orientation in the menu settings, etc.
- LARA Radio has an integrated amplifier with 2x 10 W output, thus greatly facilitating device installation in places where such output suffices. LARA is used e.g. to provide premium sound to the kitchen, bathrooms, waiting rooms, offices, reception desks, entrance halls, operating rooms or wellness facilities.
- LARA is powered by PoE with maximum voltage level 27 V DC/ 1000 mA. So connecting and communicating with just one cable (UTP) is a major advantage.
- For LARA, an entire series of accessories is ready for connection (PoE adapters, PoE switches), speakers (in a frame, walls or ceilings) and installation (cables, box, etc.).
- Complies with standards IEEE 802.3u (100BASE-Tx).
- Automatic cable crossing detection of Ethernet cable - MDIX.

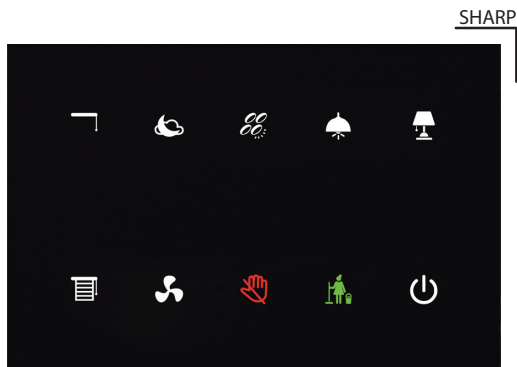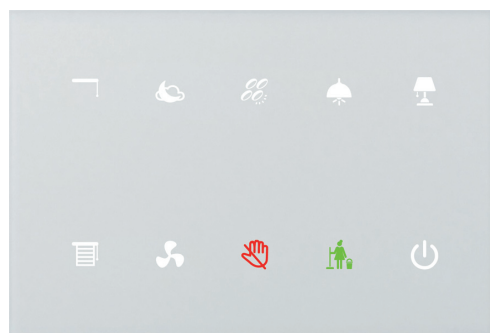| Technical parameters	LARA Radio
Internet Radio	
Supported data transfer formats:	mp3, ogg, acc
Control/Settings	
Front panel:	touchscreen buttons
Communication Ethernet:	via PC setting up and communicating SW LARA Configurator
Button RESET:	restart product/ reset product to factory settings
Interface ethernet	
Communications interface:	10/100 Mbps
Connector:	RJ45
Max. cable length UTP with power:	50 m
Display	
Type:	color OLED
Resolution:	128 x 128 pixels
Visible surface:	26 x 26 mm
Power supply	
Supply:	POE 24 V DC/1.25 A
Min. input:	1.4 W
Max. input:	26 W (peak at maximum playback performance)
Amplifier	
Amplifier:	stereophonic class D with digital output control
Max. amplifier output:	2 x10 W/8 Ω
Inputs/Outputs	
Microphone:	NO
Audio input:	3.5 stereo jack
Audio output 1:	terminals LINE OUT (used for external amplifier)*
Audio output 2:	terminals OUT L/OUT R (speaker output from int. amplifier)
Connection	
Terminal block:	0.5 - 1 mm²
Other data	
Working temperature:	0 to + 55 °C
Protection degree:	IP20
Overvoltage category:	II.
Pollution degree:	2
Installation:	in an installation box
Dimensions and weight	
Dimensions:	
- plastic:	85 x 85 x 46 mm
- metal, glass, wood, granite:	94 x 94 x 46 mm
Weight:	209 g (plastic frame)

* The cable from the LINE OUT terminals must be shielded, max. length should not exceed 5 m.

GSP3-100 | Glass switch panel

SHARP

EAN code*
GSP3-100/B: 8595188156288
GSP3-100/W: 8595188156325

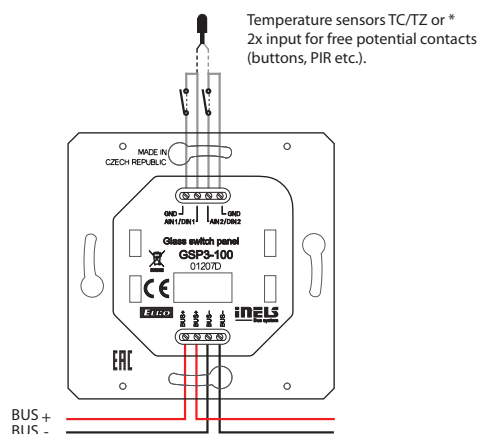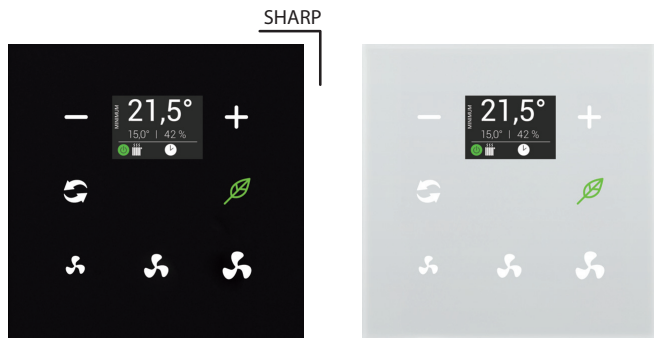The picture of device is illustrative, the icons (symbols) are configurable by the customer.

Technical parameters	GSP3-100
Inputs	
Temperature measuring:	YES, built-in temperature sensor
Scope and accuracy of temp. measurement:	0 to +55°C; 0.3°C from the range
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:	10
Type:	Capacitive
Indication:	Coloured illuminated symbol
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:	25-65 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:	142 x 94 x 36 mm
Weight:	208 g

- Glass Touch Panel GSP3-100 is part of a comprehensive iNELS series of units for the management of the hotel rooms (GRMS), but the unit can be used wherever it is required to control multiple devices from one location.
- GSP3-100 is equipped with ten touch buttons whose functions can easily be edited using the software.
- The graphics of individual symbols are possible based on consultations with manufacturers to change and adapt to the requirements of the investor.
- Individual symbols can be any one of seven backlight colours - red, green, blue, yellow, pink, turquoise and white.
- Glass touch panel is a design component of the INELS system and is available in elegant black (GSP3-100/B) and white (GSP3-100/W) versions.
- Compared with standard glass touchscreen controllers with symbols GSB3-20/SB, GSB3-20/SW, GSB3-40/SB, GSB3-40/SW, GSB3-60/SB and GSB3-60/SW the GSP3-100 is one and a half times the width.
- The touch panel is equipped with an integrated temperature sensor. It is also equipped with two analogue-to-digital inputs (AIN/DIN), which can be used to connect two potential free contacts or one external temperature sensor TC/TZ (e.g. For measuring the temperature of the floor).
- The touch panel is also equipped with an ambient light intensity sensor. Based on information from the sensor it can light up indicative illumination symbols or perform various actions with the iDM3 software, e.g. To also switch the lighting circuits in the room.
- Advantages over conventional switches/buttons is saving space, signalling the state of any system output, the ability to measure temperature and an option to connect external pushbuttons or detectors.
- Each button can control any actuator (appliance) in the system. Also, you can assign a different function or macro (set of functions) to each button. It is therefore possible to use one button to control several appliances.
- GSP3-100 is designed for mounting into an installation box.

Connection

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

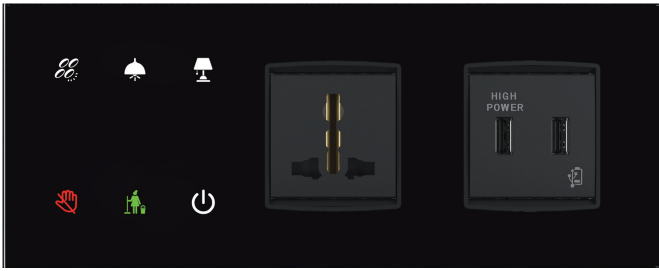| Technical parameters	GRT3-50
Inputs	
Temperature measuring:	YES, built-in temperature sensor
Scope and accuracy of temp. measurement:	0 to +55°C; 0.3°C from the range
Humidity measurement:	YES
Humidity measurement range:	0 to 99% RH
Humidity measurement accurancy:	± 3 % Relative humidity
Inputs:	2x 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 mm^2
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.
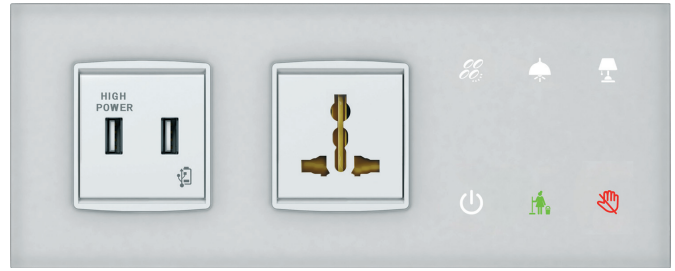- GRT3-50 are designed for mounting into an installation box.

Connection

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

MADE IN
CZECH REPUBLIC

GND
AIN1 / DIN1

GND
AIN2 / DIN2

Glass room thermoregulator
GRT3-50
01207D

BUS+ BUS+
BUS-   BUS-

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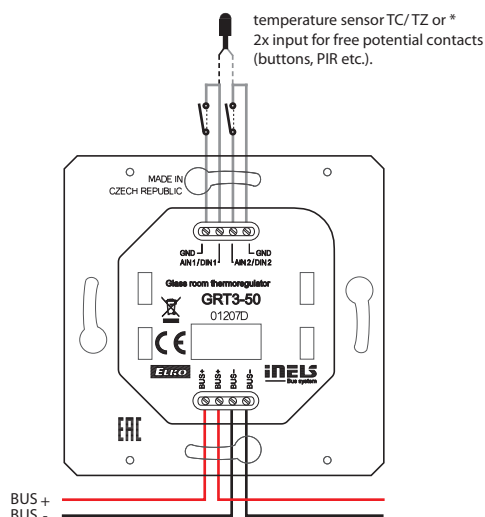
* The choice is made in iDM3 for each unit separately.

SHARP

GBP3-60/BR/2F

EAN code*

GBP3-60/WL/2F

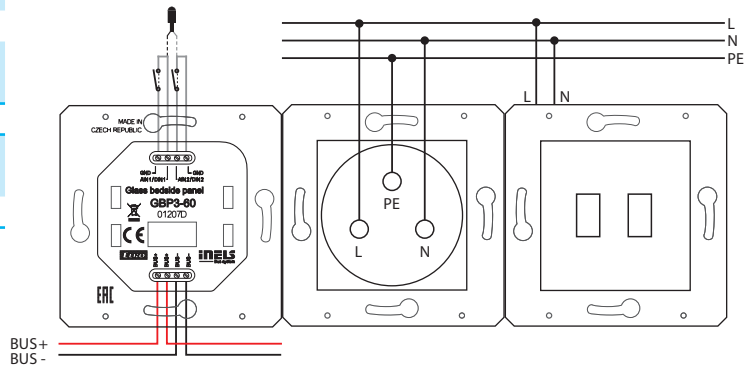The picture of device is illustrative, the icons (symbols) and wiring accessories are configurable by the customer.

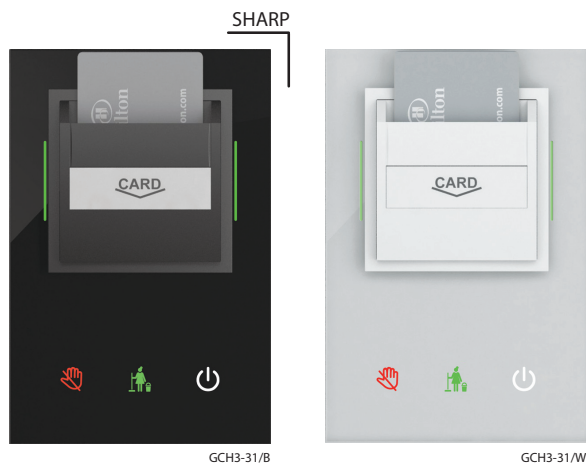| Technical parameters	GBP3-60
Inputs	
Inputs:	2x AIN/DIN
Resolution:	by setting 10-bit
External temperature sensor:	YES, the connection between AIN1/DIN1 and AIN2/DIN2
Type of external sensor:	TC/TZ
Temperature measurement range:	-20°C to +120°C
Temperature measurement accuracy:	0.5°C from the range
Illuminance sensor:	1 to 100 000 Lx
Buttons	
Number of control buttons:	6
Type:	Capacitive
Indication:	Coloured illuminated symbol
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:	25-50 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:	GBP3-60/1F: 165 x 94 x 36 mm, GBP3-60/2F: 236 x 94 x 36 mm
Weight:	according to the selected module

* Order codes are available in the iNELS price list.

- Glass bedside panel GBP3-60 is part of a comprehensive range of iNELS control units for guest room management system (GRMS). Bedside panel is composed from three modules, of which one is module of touch buttons and two are modules to power for example mobile devices.
- The GBP3-60 is available in several designs, making it a very flexible and effective solution for a variety of projects. The following variants are available:
  - left/right version provides the same ease of operation from both sides of the bed.
  - 2-module (1F)/3-module (2F) design enables you to add a touch module with one or two power supply modules, network connection or multimedia.
  - black/white elegant design suitable for almost any interior.
- GBP3-60 panel is equipped with six customizable touch buttons whose function can be software adapted to the requirements of the investor. Of course there is the possibility of using the "Master OFF", then you can select functions for switching and dimming of lighting, shading control, different scenarios etc.
- Printing is possible to customize to the investor requirements.
- GBP3-60 can be equipped with a number of modules, for example.
  - power AC sockets: French, British, Multi, and Shockproof
  - other types of modules: USB, LAN, Media
- The GBP3-60 panel is equipped with an ambient light sensor.
- Individual symbols can be illuminated in one of three colours - red, green and blue.
- GBP3-60/1F is designed for mounting into a double mounting box, GBP3-60/2F to a triple mounting box (distance between the centres of each of openings is 71 mm).

Connection

GBP3-60/xR/2F-23x-20x

L
N
PE

MADE IN CZECH REPUBLIC

Glass bedside panel
GBP3-60
01207D

iNELS

EAC

PE

L   N

BUS+
BUS –

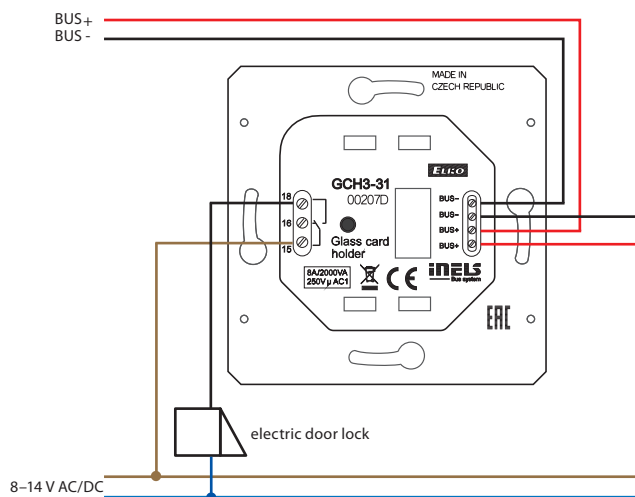# GCH3-31 | Glass card holder

SHARP

GCH3-31/B

GCH3-31/W

EAN code*   The picture of device is illustrative, the icons (symbols) are configurable by the customer.

- Glass card holder GCH3-31 is part of a comprehensive range of glass iNELS control units for guest room management system (GRMS).
- GCH3-31 serves for inserting the RFID card into the holder, whereby the system acquires the information about whether the hotel guest is present in the room. With this information it is possible to ensure for example Exit function with relation to energy savings in the absence of a guest in the room.
- Glass card holder is a design component of the iNELS system and is available in elegant black (GCH3-31/B) and white (GCH3-31/W) version.
- The GCH3-31 component is equipped with an RFID reader and is thus able to identify the specific hotel card inserted. Power saving function in the absence of a guest cannot be bypassed by simply inserting business cards into the holder.
- GCH3-31 supports RFID media with a carrier frequency of 13.56 MHz. Supported card types are MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1).
- The unit is also equipped with three touch buttons that can be used for example to set room status "Do Not Disturb" or "Make Up Room". This condition is then signalled to the glass card reader GCR3-11 or glass info panel GDB3-10 which are placed before the entrance to the room. Information may be sent directly to the hotel reception.
- Card holder printing is possible to customize to the investor requirements. The logo of the hotel can be shown for example. Likewise, it is also possible to adapt the card printing.
- The GCH3-31 unit is equipped with an 8 A relay output and an $AgSnO_2$ contact.
- Individual symbols can be illuminated in one of seven colours - red, green, blue, yellow, pink, turquoise and white.
- GCH3-31 are designed for mounting into an installation box.

Technical parameters	GCH3-31
Input	
Illuminance sensor:	1 to 100 000 Lx
Buttons	
Number of control buttons:	3
Typ:	Capacitive
Indication:	Coloured illuminated symbol
RFID readers	
Supported frequencies:	13.56 MHz
Card Type:	MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1)
Outputs	
Signalling:	Do Not Disturb, Make Up Room
Output:	1x changeover 8 A/$AgSnO_2$
Acustic output:	piezo-changer
Tactile output:	Vibration motor
Switching voltage:	230 V AC/30 V DC
Switching output:	2000 VA/AC1; 240 W/DC
Peak current:	20 A/<3s
Insulation voltage between relay outputs and internal circuits:	3.75 kV, SELV according to EN 60950
Minimal switched current:	10 mA/10 V
Switching frequency without load:	300 min^{-1}
Switching frequency with rated load:	10 min^{-1}
Mechanical life:	1x 10^7
Electrical life AC1:	1x 10^5
Communication	
Installation BUS:	BUS
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 2 W
Rated current:	100-120 mA (at 27 V DC), from BUS
Connection	
Data:	terminals, 0.5 - 1 mm²
Network:	max. 2.5 mm²/1.5 mm² with sleeve
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:	142 x 94 x 36 mm
Weight:	210 g

Connection

BUS+
BUS -

MADE IN CZECH REPUBLIC

GCH3-31
00207D
BUS-
BUS-
BUS+
BUS+
Glass card holder
8A/2000VA
250Vµ AC1

electric door lock

8–14 V AC/DC

* Order codes of all colours are available in the iNELS price list.
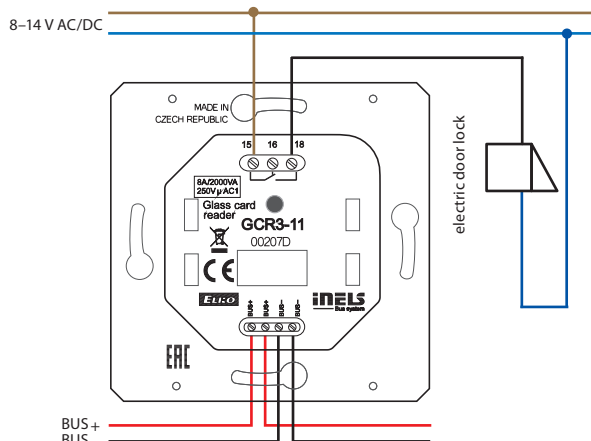
SHARP

299

✋ 🔔 🚶

299

✋ 🔔 🚶

EAN code
GCR3-11/B: 8595188157476
GCR3-11/W: 8595188157483

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

Technical parameters	GCR3-11
Input	
Illuminance sensor:	1 to 100 000 Lx
Buttons	
Number of control buttons:	3
Type:	Capacitive
Indication:	Coloured illuminated symbol
RFID readers	
Supported frequencies:	13.56 MHz
Card Type:	MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1)
Outputs	
Signalling:	Do Not Disturb, Make Up Room
Output:	1x changeover 8 A/AgSnO$_2$
Acustic output:	piezo-changer
Tactile output:	Vibration motor
Switching voltage:	230 V AC/30 V DC
Switching output:	2000 VA/AC1; 240 W/DC
Peak current:	20 A/<3s
Insulation voltage between relay outputs and internal circuits:	3.75 kV, SELV according to EN 60950
Minimal switched current:	10 mA/10 V
Switching frequency without load:	300 min^{-1}
Switching frequency with rated load:	10 min^{-1}
Mechanical life:	1x 10^7
Electrical life AC1:	1x 10^5
Communication	
Installation BUS:	BUS
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 0.5 W
Rated current:	100-130 mA (at 27 V DC), from BUS
Connection	
Data:	terminals, 0.5 - 1 mm^2
Network:	max. 2.5 mm^2/1.5 mm^2 with sleeve
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:	161 g

- Glass RFID card reader GCR3-11 is part of a comprehensive range of glass iNELS control units and can be advantageously used in all projects, e.g. guest room management system (GRMS).
- GCR3-11 card reader is designed for reading smart cards, which are intended to enter the hotel room or any other part of the building.
- GCR3-11 supports RFID media with a carrier frequency of 13.56 MHz. Supported card types MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1).
- The GCR3-11 is a design component of the iNELS system and is available in elegant black (GCR3-11/B) and white (GCR3-11/ W) variants.
- Input card reader is the first device of guest room management system (GRMS), with which the hotel guest comes into contact first and therefore was designed with an emphasis on representative design.
- Printing is possible to customize to the investor requirements. The room number as well as the logo of the hotel can be also printed on each component.
- The controller is also equipped with touch button with function of bell and with two icons to indicate the status of guest requests, e.g. "Do Not Disturb" and "Make Up Room", whose state guest can set from multi-function touch panel EHT3, glass card holder GCH3-31, glass switch buttons GSB3-20/S, GSB3-40/S, GSB3-60/S or such GSP3-100 glass switch panel.
- Individual symbols can be illuminated in one of seven colours - red, green, blue, yellow, pink, turquoise and white.
- Reader GCR3-11 is equipped with an 8 A relay output with AgSnO$_2$ contact for door lock control.
- Reader GCR3-11 is equipped with a sensor for ambient light intensity. Based on information from the sensor it can e.g. switch the lighting circuits in the corridor.
- All versions are in the size of the module (94x94 mm) from the line of luxury switches and sockets LOGUS^{90} and are therefore fully in line with the design of frames for the sockets of this series, where you can just as for the controllers choose white and black glass frames.
- GCR3-11 are designed for mounting into an installation box.

Connection

8–14 V AC/DC

MADE IN
CZECH REPUBLIC

15 16 18

8A/2000VA
250Vp/AC1
Glass card
reader
GCR3-11
00207D

ELKO   iNELS

EAC

BUS +
BUS -

electric door lock

GRT3-250 | Glass room thermo-regulator

NEW

ROUND

24.5°
SET 22.0°

24.5°
SET 22.0°

EAN code   The picture of device is illustrative, the icons (symbols) are configurable by the customer.
GRT3-250/B: 8595188176569
GRT3-250/W: 8595188176576

- Glass room thermo-regulator GRT3-250 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.
- GRT3-250 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 "+".
- GRT3-250 is also suitable for controlling fan coils and fan speed can be easily adjusted by using the touch buttons with symbols.
- Thermo-regulator GRT3-250 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 iN-ELS system and is available in elegant black (GRT3-250/B) and white (GRT3-250/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.
- GRT3-250 are designed for mounting into an installation box.

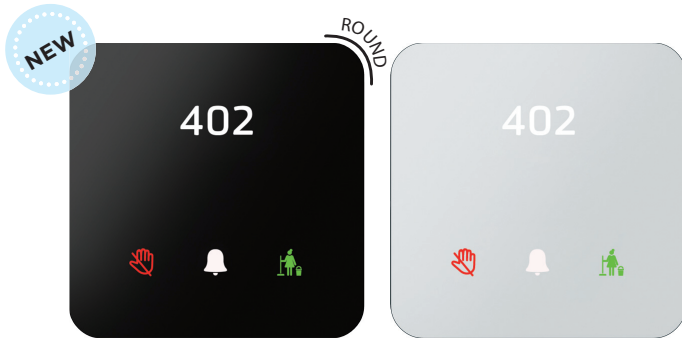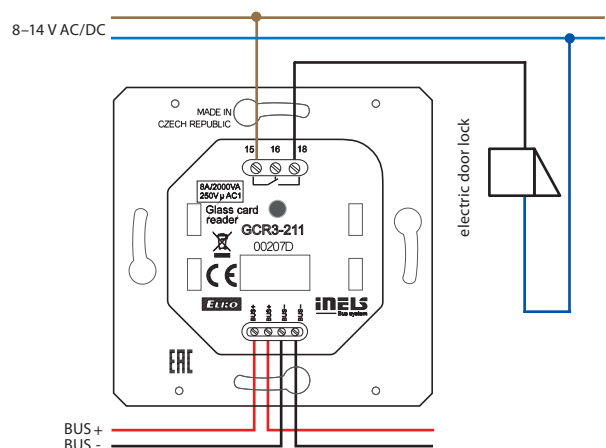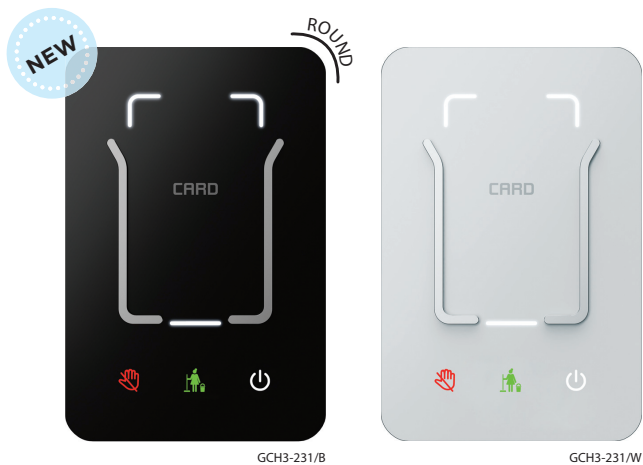| Technical parameters	GRT3-250
Inputs	
Temperature measuring:	YES, built-in temperature sensor
Scope and accuracy of temp. measurement:	0 to +55°C; 0.3°C from the range
Humidity measurement:	YES
Humidity measurement range:	0 to 99% RH
Humidity measurement accurancy:	± 3 % Relative humidity
Inputs:	2x 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 mm^2
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:	100 x 100 x 36 mm
Weight:	156 g

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
GRT3-250
01207D

BUS+ BUS+ BUS- BUS-

Elko   iNELS
            Bus system

EAC

BUS +
BUS -

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

NEW

ROUND

402

402

EAN code
GCR3-211/B: 8595188176422
GCR3-211/W: 8595188176439

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

Technical parameters	GCR3-211
Input	
Illuminance sensor:	1 to 100 000 Lx
Buttons	
Number of control buttons:	3
Type:	Capacitive
Indication:	Coloured illuminated symbol
RFID readers	
Supported frequencies:	13.56 MHz
Card Type:	MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1)
Outputs	
Signalling:	Do Not Disturb, Make Up Room
Output:	1x changeover 8 A/AgSnO$_2$
Acustic output:	piezo-changer
Tactile output:	Vibration motor
Switching voltage:	230 V AC/30 V DC
Switching output:	2000 VA/AC1; 240 W/DC
Peak current:	20 A/<3s
Insulation voltage between relay outputs and internal circuits:	3.75 kV, SELV according to EN 60950
Minimal switched current:	10 mA/10 V
Switching frequency without load:	300 min^{-1}
Switching frequency with rated load:	10 min^{-1}
Mechanical life:	1x 10^7
Electrical life AC1:	1x 10^5
Communication	
Installation BUS:	BUS
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 0.5 W
Rated current:	100-130 mA (at 27 V DC), from BUS
Connection	
Data:	terminals, 0.5 - 1 mm^2
Network:	max. 2.5 mm^2/1.5 mm^2 with sleeve
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:	100 x 100 x 36 mm
Weight:	161 g

- Glass RFID card reader GCR3-211 is part of a comprehensive range of glass iNELS control units and can be advantageously used in all projects, e.g. guest room management system (GRMS).
- GCR3-211 card reader is designed for reading smart cards, which are intended to enter the hotel room or any other part of the building.
- GCR3-211 supports RFID media with a carrier frequency of 13.56 MHz. Supported card types MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1).
- The GCR3-211 is a design component of the iNELS system and is available in elegant black (GCR3-211/B) and white (GCR3-211/W) variants.
- Input card reader is the first device of guest room management system (GRMS), with which the hotel guest comes into contact first and therefore was designed with an emphasis on representative design.
- Printing is possible to customize to the investor requirements. The room number as well as the logo of the hotel can be also printed on each component.
- The controller is also equipped with touch button with function of bell and with two icons to indicate the status of guest requests, e.g. "Do Not Disturb" and "Make Up Room", whose state guest can set from multi-function touch panel EHT3, glass card holder GCH3-31, glass switch buttons GSB3-220/S, GSB3-240/S, GSB3-260/S or such GSP3-2100 glass switch panel.
- Individual symbols can be illuminated in one of seven colours - red, green, blue, yellow, pink, turquoise and white.
- Reader GCR3-211 is equipped with an 8 A relay output with AgSnO$_2$ contact for door lock control.
- Reader GCR3-211 is equipped with a sensor for ambient light intensity. Based on information from the sensor it can e.g. switch the lighting circuits in the corridor.
- All versions are in the size of the module (100x100 mm) from the line of luxury switches and sockets LOGUS^{90} and are therefore fully in line with the design of frames for the sockets of this series, where you can just as for the controllers choose white and black glass frames.
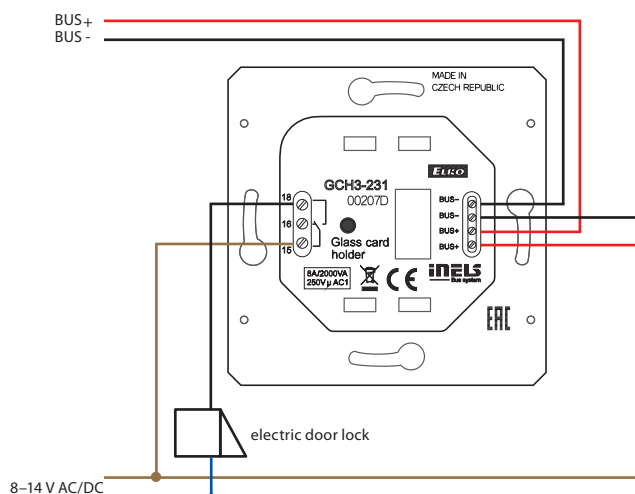- GCR3-211 are designed for mounting into an installation box.

Connection

8–14 V AC/DC

MADE IN CZECH REPUBLIC

15 16 18

8A/2000VA 250V μ AC1
Glass card reader
GCR3-211
00207D

CE

ELKO

iNELS
Bus system

EAC

electric door lock

BUS +
BUS -

GCH3-231 | Glass card holder

NEW
ROUND

GCH3-231/B   GCH3-231/W

EAN code*   The picture of device is illustrative, the icons (symbols) are configurable by the customer.

- Glass card holder GCH3-231 is part of a comprehensive range of glass iNELS control units for guest room management system (GRMS).
- GCH3-231 serves for inserting the RFID card into the holder, whereby the system acquires the information about whether the hotel guest is present in the room. With this information it is possible to ensure for example Exit function with relation to energy savings in the absence of a guest in the room.
- Glass card holder is a design component of the iNELS system and is available in elegant black (GCH3-231/B) and white (GCH3-231/W) version.
- The GCH3-231 component is equipped with an RFID reader and is thus able to identify the specific hotel card inserted. Power saving function in the absence of a guest cannot be by passed by simply inserting business cards into the holder.
- GCH3-231 supports RFID media with a carrier frequency of 13.56 MHz. Supported card types are MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1).
- The unit is also equipped with three touch buttons that can be used for example to set room status "Do Not Disturb" or "Make Up Room". This condition is then signalled to the glass card reader GCR3-11 or glass info panel GDB3-210 which are placed before the entrance to the room. Information may be sent directly to the hotel reception.
- Card holder printing is possible to customize to the investor requirements. The logo of the hotel can be shown for example. Likewise, it is also possible to adapt the card printing.
- The GCH3-231 unit is equipped with an 8 A relay output and an $AgSnO_2$ contact.
- Individual symbols can be illuminated in one of seven colours - red, green, blue, yellow, pink, turquoise and white.
- GCH3-231 are designed for mounting into an installation box.

Technical parameters	GCH3-231
Input	
Illuminance sensor:	1 to 100 000 Lx
Buttons	
Number of control buttons:	3
Typ:	Capacitive
Indication:	Coloured illuminated symbol
RFID readers	
Supported frequencies:	13.56 MHz
Card Type:	MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1)
Outputs	
Signalling:	Do Not Disturb, Make Up Room
Output:	1x changeover 8 A/AgSnO$_2$
Acustic output:	piezo-changer
Tactile output:	Vibration motor
Switching voltage:	230 V AC/30 V DC
Switching output:	2000 VA/AC1; 240 W/DC
Peak current:	20 A/<3s
Insulation voltage between relay outputs and internal circuits:	3.75 kV, SELV according to EN 60950
Minimal switched current:	10 mA/10 V
Switching frequency without load:	300 min^{-1}
Switching frequency with rated load:	10 min^{-1}
Mechanical life:	1x 10^7
Electrical life AC1:	1x 10^5
Communication	
Installation BUS:	BUS
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 2 W
Rated current:	100-120 mA (at 27 V DC), from BUS
Connection	
Data:	terminals, 0.5 - 1 mm²
Network:	max. 2.5 mm²/1.5 mm² with sleeve
Operating conditions	
Relative humidity:	max. 80 %
Operating temperature:	-20to +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:	150 x 100 x 36 mm
Weight:	210 g

Connection

BUS+
BUS -

MADE IN CZECH REPUBLIC

ELKO

GCH3-231
00207D

Glass card holder

BUS-
BUS-
BUS+
BUS+

8A/2000VA
250Vμ AC1

iNELS
bus system

EAC

electric door lock

8–14 V AC/DC

* Order codes of all colours are available in the iNELS price list.

GSP3-2100 | Glass switch panel

NEW

ROUND

EAN code*
GSP3-2100/B: 8595188176583
GSP3-2100/W: 8595188176590
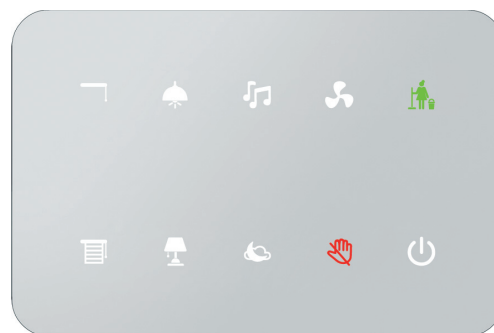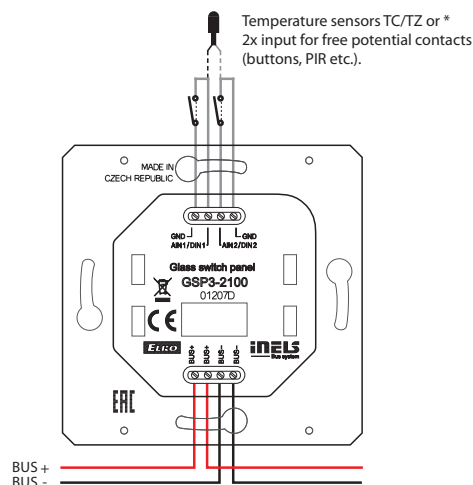

The picture of device is illustrative, the icons (symbols) are configurable by the customer.

Technical parameters	GSP3-2100
Inputs	
Temperature measuring:	YES, built-in temperature sensor
Scope and accuracy of temp. measurement:	0 to +55°C; 0.3°C from the range
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:	10
Type:	Capacitive
Indication:	Coloured illuminated symbol
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:	25-65 mA (at 27 V DC), from BUS
Connection	
Terminals:	0.5 - 1 mm^2
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:	150 x 100 x 36 mm
Weight:	208 g

- Glass Touch Panel GSP3-2100 is part of a comprehensive iNELS series of units for the management of the hotel rooms (GRMS), but the unit can be used wherever it is required to control multiple devices from one location.
- GSP3-2100 is equipped with ten touch buttons whose functions can easily be edited using the software.
- The graphics of individual symbols are possible based on consultations with manufacturers to change and adapt to the requirements of the investor.
- Individual symbols can be any one of seven backlight colours - red, green, blue, yellow, pink, turquoise and white.
- Glass touch panel is a design component of the INELS system and is available in elegant black (GSP3-2100/B) and white (GSP3-2100/W) versions.
- Compared with standard glass touchscreen controllers with symbols GSB3-220/SB, GSB3-220/SW, GSB3-240/SB, GSB3-240/SW, GSB3-260/SB and GSB3-260/SW the GSP3-2100 is one and a half times the width.
- The touch panel is equipped with an integrated temperature sensor. It is also equipped with two analogue-to-digital inputs (AIN/DIN), which can be used to connect two potential free contacts or one external temperature sensor TC/TZ (e.g. For measuring the temperature of the floor).
- The touch panel is also equipped with an ambient light intensity sensor. Based on information from the sensor it can light up indicative illumination symbols or perform various actions with the iDM3 software, e.g. To also switch the lighting circuits in the room.
- Advantages over conventional switches/buttons is saving space, signalling the state of any system output, the ability to measure temperature and an option to connect external pushbuttons or detectors.
- Each button can control any actuator (appliance) in the system. Also, you can assign a different function or macro (set of functions) to each button. It is therefore possible to use one button to control several appliances.
- GSP3-2100 is designed for mounting into an installation box.

Connection

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

BUS +
BUS -

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

NEW
ROUND

EAN code
GSB3-220/SB: 8595188176408
GSB3-240/SB: 8595188176323
GSB3-260/SB: 8595188176361

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

Technical parameters	GSB3-220/S	GSB3-240/S	GSB3-260/S
Inputs			
Temperature measuring:	YES, built-in temperature sensor		
Scope and accuracy of temp. measurement:	0 to +55°C; 0.3°C from the range		
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		
Illuminance sensor:	1 to 100 000 Lx		
Buttons			
Number of control buttons:	2	4	6
Type:	Capacitive		
Indication:	Coloured illuminated symbol		
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:	25-35 mA	25-43 mA	25-50 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:	100 x 100 x 36 mm		
Weight:	154 g		

- Glass touch controllers with symbols GSB3-220/S, GSB3-240/S and GSB3-260/S are part of a comprehensive range of glass iNELS control units and can be advantageously used in all projects for example as a part of guest room management system (GRMS).
- GSB3-220/S is equipped with two, GSB3-240/S with four and GSB3-260/S six touch buttons whose functions can easily modify by the software.
- 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.
- Glass touch panel is a design component of the iNELS system and is available in elegant black (GSB3-220/SB, GSB3-240/SB, GSB3-260/SB) and white (GSB3-220/SW, GSB3-240/SW, GSB3-260/SW) versions.
- All versions are in the size of the module (100x100 mm) from the line of luxury switches and sockets LOGUS[90] and are therefore fully in line with the design of frames for the sockets of this series, where you can just as for the controllers choose white and black glass frames.
- The glass touch controllers is equipped with an integrated temperature sensor. It is also equipped with two analog-to-digital inputs (AIN/DIN), which can be used to connect two potential-free contacts or one external temperature sensor TC/TZ (for example temperature measurement of the floor).
- The glass touch controllers are also equipped with a sensor of ambient light intensity. Based on information from the sensor it can switch backlight of symbols or perform various actions in the iDM3 software, for example also switch the lighting circuits in the room.
- Advantages over conventional switches/buttons are saving space, signalling the state of any system output, the ability to measure temperature as well as the ability to connect external buttons or detectors.
- Each button can control any actuator (appliance) in the system. Also, you can assign each button a different function or macro (set of functions). It is therefore possible to use one button to control several appliances at once.
- GSB3-220/S, GSB3-240/S, and GSB3-260/S are designed for mounting into an installation box.

Wired electro-installation

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)

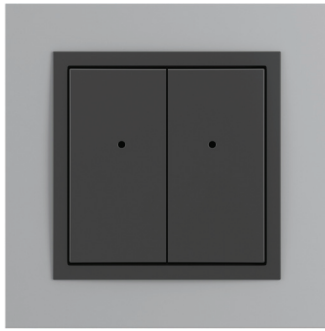| Technical parameters	IDRT3-1
Inputs	
Temperature measuring:	YES, built-in thermo sensor
Range/accuracy of temp. measuring:	0 to +55°C; 0.3°C from range
Heating/cooling circuit correction:	±3, ±4 or ± 5 °C
Manual ontrol of heating/ cooling circuit:	2 x buttons
External temperature sensor:	YES, the connection 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)

- 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.

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 -
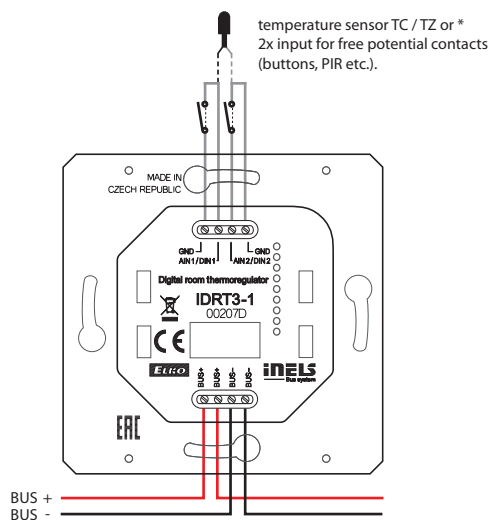
* The choice is made in iDM3 for each unit separately.
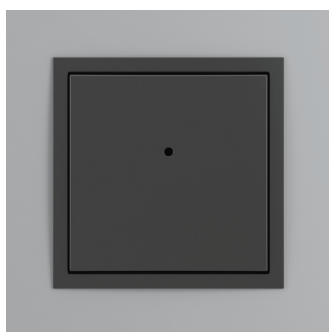
EAN code
WSB3-20: 8595188132343
WSB3-20H: 8595188132473

Technical parameters	WSB3-20	WSB3-20H
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:	2	
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 ext. sensor:	TC/TZ	
Temperature 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:	1	
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 controllers with low-upstroke control WSB3-20 and WSB-20H are the main and most frequently used units (controller) in the iNELS system.
- Built-in micro-buttons with low upstroke offer elegant and easy control.
- Wall switches WSB3-20 and WSB3-20H are available in two-channel version.
- Double color (red/green) LED diode indicates either status of controlled appliances or status of any sensor or actuator in the system.
- Wall buttons in WSB3 series are compatible with both types of frames LOGUS⁹⁰ (85.6 x 85.6 or 94 x 94 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).
- Wall button WSB3-20H is comparable to the WSB3-20 but additionally equipped with a relative humidity meter, and for better access of air to the sensor can be used with 99621T including accessories 99622 (Vista MT) and 99,623 (Vista IRMT), instead of the housing cover 99601T.
- 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 sensorTC/TZ or *
2x input for free potential contacts
(buttons, PIR etc.).

MADE IN
CZECH REPUBLIC

GND AIN1/DIN1   GND AIN2/DIN2

Wall switch button
WSB3
00207D

CE

Eti:o   iNELS

EAC

BUS+ BUS- BUS+ BUS-

+ BUS
- BUS

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

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.
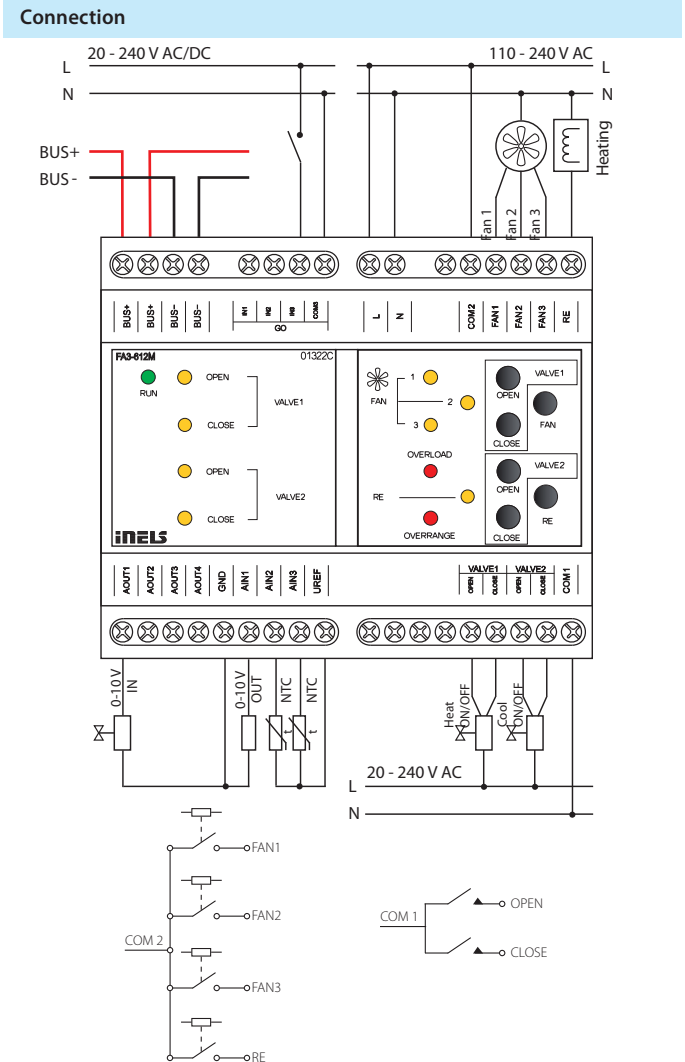- Each controller is equipped with a temperature sensor. It is also equipped with two analog/digital inputs (AIN/DIN), which can be used to connect two potentialless contacts or one external temperature sensor TC/TZ (e.g. for measuring floor temperature).
- Compared to standard wall buttons WSB3-20 and 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.

EAN code
WMR3-21: 8595188132756

Technical parameters	WMR3-21
Inputs	
Number of control buttons:	2
RFID readers	
Supported frequencies:	13.56 MHz
Card Type:	MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1)
Outputs	
Output:	1x changeover 8 A/AgSnO$_2$
Indication:	two-color LED (red, green)
Acustic output:	piezo-changer
Switching voltage:	230 V A/30 V DC
Switching output:	2000 VA/AC1; 240 W/DC
Peak current:	20 A/<3s
Insulation voltage between relay outputs and internal circuits:	3.75 kV, SELV according to EN 60950
Minimal switched current:	10 mA/10 V
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
Communication	
Installation BUS:	BUS
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 0.5 W
Rated current:	50 mA (at 27 V DC), from BUS
Connection	
Data:	terminals, 0.5 - 1 mm^2
Network:	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
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:	68 g (without frame)

- WMR3-21 is a wall-mounted card reader that is designed for read contactless media (smart cards, key chains, etc.), which are used for controlling access to buildings or their parts.
- With the glass controller WMR3-21 users will appreciate the easy of control using two push buttons, which can be assigned different control functions lighting, shading, scenes, heating, etc.
- WMR3-21 reader can be used to control the security system (locking/unlocking) access system (opening doors, gates, etc.) or appliances (based on assigned rights).
- WMR3-21 supports RFID media with the carrier frequency of 13.56 MHz. Supported card types MIFARE Ultralight, DESFire 2K (EV1), DESFire 4K (EV1) .
- WMR3-21 is also equipped with 8 A relay output with changeover contact AgSnO$_2$, by which controlled devices can be switched directly (or any actuator in the system can be set in software iDM3).
- Indication two-color LED in the controller cover can indicate not only the status of controlled appliance, but also the status of any sensor or actuator in the system.
- Wall card reader WMR3-21 is compatible with both types of frames LOGUS^{90} (85.6 x 85.6 or 94 x 94 mm), therefore you can combine them with double and triple frames and classic products of the series.

Connection

FA3-612M | Fan Coil Control Actuator
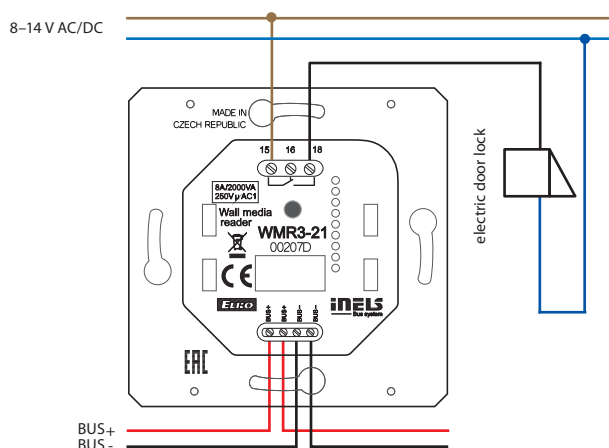
EAN code

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:	approx. 150 kΩ
- for current ranges:	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.

IM3-140M | Binary input unit, 14-channel
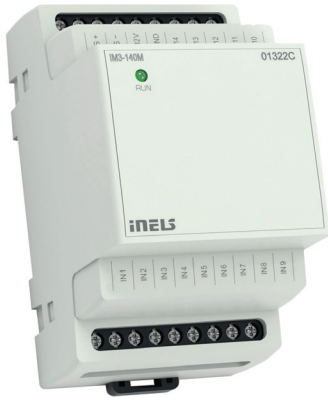
EAN code
IM3-140M: 8595188132459

- Binary input unit IM3-140M is designed to connect up to 14 devices with potentialless contact (such as switches, buttons of other designs, fire and glass detectors and others).
- Inputs IN1 - IN7 can be balanced.
- Contacts of external devices connected to the inputs of the drive can be NO or NC - Input parameters are configured in the software iDM3.
- Inputs must be configured as balanced or double balanced - in an internal Electronic security system configured in iDM3 software.
- The unit generates a supply voltage of 12 V DC/150 mA for powering external detectors, so it can power PIR detectors, fire and gas detectors.
- Active use 12 V DC output for powering detectors increases the nominal consumption units from BUS (see technical data).
- The unit can be used for counting pulses of energy meters with pulse output.
- IM3-140M in 3-module is designed for switchboard mounting on DIN rail EN60715.

Technical parameters	IM3-140M
Inputs	
Input:	14x NO or NC against GND (-)
	IN1 - IN7 -are balanced inputs
Max. frequency pulse reading:	20 Hz
Outputs	
Output (power supply 12 V for sensors):	12 V DC/150 mA
Communication	
Installation BUS:	BUS
Data transfer indication:	green LED
Power supply	
Supply voltage/tolerance:	27 V DC, -20/+10 %
Dissipated power:	max. 1 W
Rated current:	25 mA (at 27 V DC), from BUS
Rated current for full load on output 12 V DC:	100 mA
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
Operating position:	any
Installation:	into a switchboard rail to DIN EN 60715
Design:	3-MODULE
Dimensions and weight	
Dimensions:	90 x 52 x 65 mm
Weight:	104 g

Connection

Balanced input

Simple:

Double:
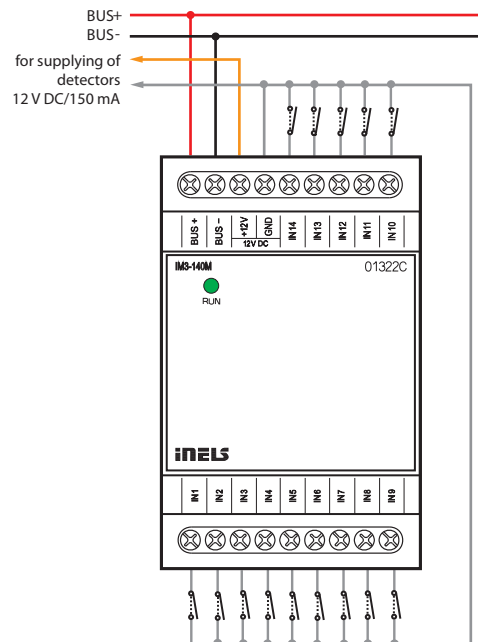
DA3-22M | Universal dimming actuator, 2-channel
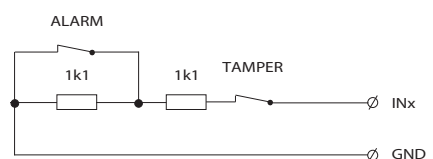
EAN code
DA3-22M: 8595188132626
DA3-22M/120V: 8595188133036

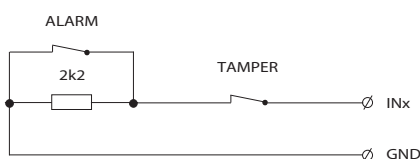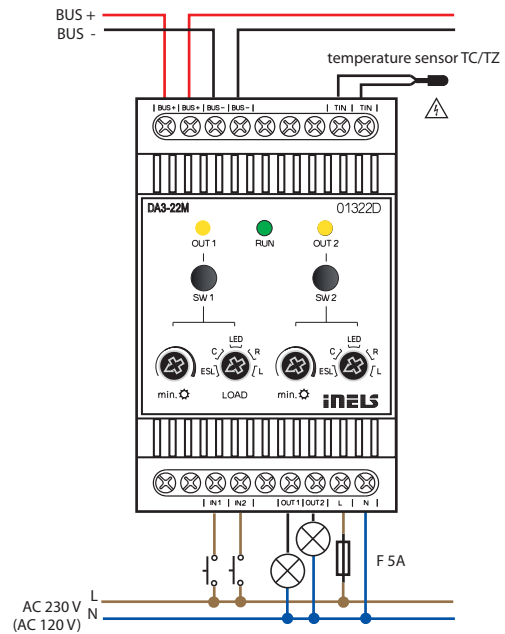| Technical parameters		DA3-22M	DA3-22M/120V
Inputs			
Input:	⚠	2x inputs, switching potential L*	
Temperature measuring:	⚠	YES, input for external thermo sensor TC/TZ	
Scope and accuracy of temp. measurement:		-20 to +120°C; 0.5°C from the range	
Number of control buttons:		2x buttons	
		4x potenciometers 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.

- 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.

Connection

Types of connectable loads

type of source	symbol	description
R resistive		ordinary light bulb, halogen lamp
L inductive		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

SA3-06M | 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 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:	3-MODULE
Dimensions and weight	
Dimensions:	90 x 52 x 65 mm
Weight:	160 g

Connection

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