



PRODUCT OVERVIEW

Timers/Relays

Protection and monitoring relays

iNELS RF Wireless electroinstallation

iNELS BUS Wired electroinstallation

Design switches and sockets

OVERVIEW



ELKO EP



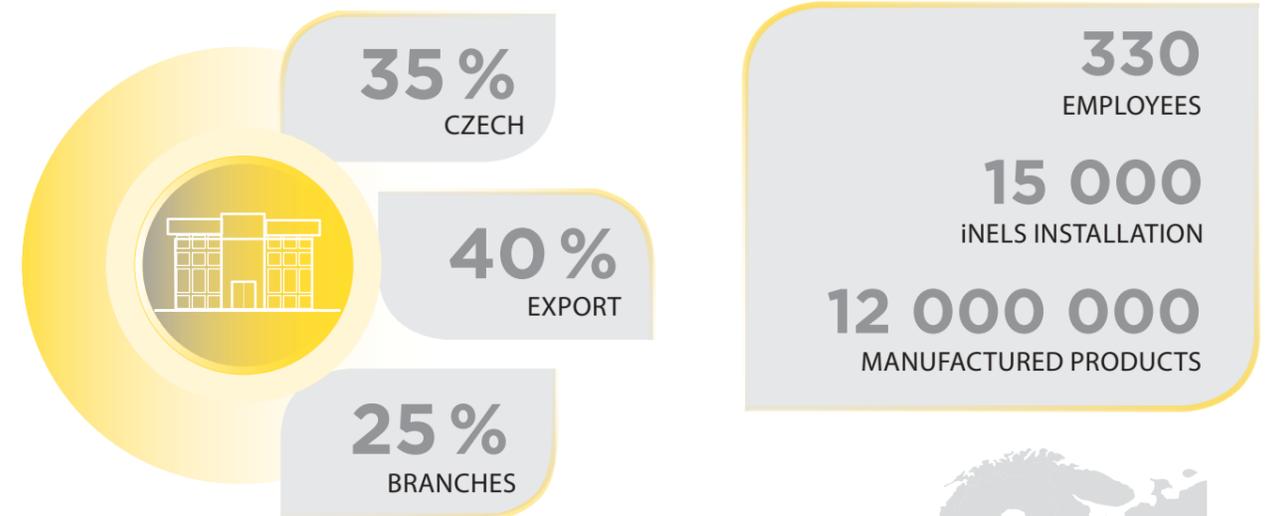
We are traditional, innovative and purely Czech development manufacturer of electronic devices and we have been your partner in the field of electroinstallations for 27 years.

ELKO EP employs about 330 people, exports its products to more than seventy countries, and has representatives in fifteen foreign branches. Company of the Year of the Zlín Region, Visionary of the Year, Global Exporter of the Year, Participation in the Czech TOP 100, these are just some of the awards received. Still, we are not finished. We are constantly striving to move forward in the field of innovation and development. That's our primary concern.

Millions of relays, thousands of satisfied customers, hundreds of our own employees, twenty seven years of research, development and production, fifteen foreign branches, one company. ELKO EP, innovative- a purely Czech company based in Holešov, where development, production, logistics, service and support go hand in hand. We primarily focus on developing and manufacturing systems for building automation in the residential, commercial and industrial sector, a wide range of Smart city facilities and the so-called Internet of Things (IoT).



Facts and stats



WE ARE

DEVELOPERS

In the new R&D center, more than 30 engineers develop new products and extend the functionality of existing products

PRODUCERS

Modern antistatic spaces, 2x fully automated SMD production lines, 2 shift operations.

SUPPORT

24 hours / 7 days / 360 days we not only provide technical support but also logistics.

SELLERS

Personal access to more than 70 sales representatives in ELKO EP Holding provides impeccable services and superior products at an affordable price.

relay

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Timers/Relays

Time relays, auxiliary relays, installation contactors, bistable relays, staircase switch, time switch clock, dimmers, power supplies, control and signalling devices. www.elkoep.com/relays



Protection and monitoring relays

Voltage relays 1-phase and 3-phase (under voltage, overvoltage, phase failure, phase asymmetry, phase sequence), current relays, power factor and frequency monitoring, thermostats, level relays. www.elkoep.com/monitoring

iNELS[®]
RF Control

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Wireless electro-installation iNELS RF

Components of smart wireless system can be easily and quickly used in existing buildings where it is not desirable to cut holes for cables (e.g. add / change a light switch when changing room layouts). However, it is also possible to assemble a complete system for apartment or house control, intelligent control of heating, blinds or scene settings. When using the eLAN-RF gateway, the entire installation can also be controlled by an application from a mobile phone, tablet or television. www.elkoep.com/wireless



Hotel Wireless Retrofit (HRESK)

Hotel Room Energy Saving Kit - is a complete solution designed primarily for existing hotel rooms and is based on the iNELS RF wireless system. It focuses on the following areas: "Energy savings": switching off all appliances when leaving the room or not overheating / not overcooling, "Comfort" - all out of bed and "Safety": bell, guest in the room, maid, visitor. www.elkoep.com/retrofit

iNELS[®]
BUS System

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Wired electro-installation iNELS BUS

The sensors and actuators, together with the central unit, which is the heart of the system, communicate via a 2-wires and enable the built up a larger installation for family houses, villas, hotels and buildings. Individual functions of elements are parameterized in iDM SW, so simple and more complex actions can be set. www.elkoep.com/wired



Hospitality Hotel (GRMS)

Guest Room Management System – is a comprehensive solution designed primarily for new hotels, guesthouses or wellness and is based on the iNELS BUS system. In the room, it resolves the control of lighting, access, temperature control and audio / video distribution. It features glass panels with touch buttons that can be combined in various ways (numbers, shape, and colours) and customized (description, logo). www.elkoep.com/hospitality



Building management system

Building Management System is the supervisor above the iNELS BUS, resp. wireless system iNELS RF. It enables not only the control of several central units (CU) or gateways (eLAN), but also the connection to other protocols that the technology brings in the building (Modbus, Bacnet, KNX, etc.). www.elkoep.com/building



Lighting control

iNELS offer a variety of lighting control solutions for all types of light sources: from simple (dimmers from the RELAY range), through wireless (iNELS RF) to sophisticated control within the iNELS BUS installation, which (except conventional R - L - C - LED dimmers) also includes units for light control via DALI and DMX bus. www.elkoep.com/lighting

LOGUS⁹⁰

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Switches and sockets

Switches, sockets and a complete range of devices and accessories - this is the Logus90 series from the Portuguese manufacturer Efael. This range is complemented by both standard plastic frames and luxury frames made of purely natural materials: real wood, metal, granite or tempered glass. Be exceptional! www.elkoep.com/logus90

1-MODULE

2-MODULE

3-MODULE

4-MODULE

6-MODULE



BOX - flush mounted



into the cover



into 11-Pin Socket

or

into the panel



48 x 48 x 89 mm



IP65 protection



139 x 139 x 56 mm



72 x 62 x 34 mm

interior



72 x 62 x 34 mm



25 x 75 x 16 mm
15 x 75 x 14 mm

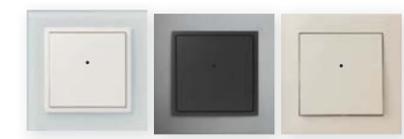


Ø 89 x 23 mm

in LOGUS⁹⁰ design



AQUARELLA ARBORE ANIMATO PETRA



CRYSTAL METALLO BASE



Quick overview of time relays



	CRM-181J	CRM-183J	CRM-161H	CRM-91H	CRM-93H	CRM-111H	CRM-113H	CRM-2T
Type	Single-function		Multi-function - ECONOMY	Multi-function BESTSELLER		Multi-function with inhibit delay		Star/delta starter
Control input type	Line Voltage Trigger	Line Voltage Trigger	Line Voltage Trigger	Line Voltage Trigger	Line Voltage Trigger	Line Voltage Trigger	Line Voltage Trigger	-

Main parameters

Supply voltage (frequency)	AC/DC 12-240V (AC 50/60 Hz)	AC/DC 12-240V (AC 50/60 Hz)	AC 24-240V and DC 24V (AC 50/60 Hz)	AC/DC 12-240V or AC 230V only (AC 50/60 Hz)	AC/DC 12-240V or AC 230V only (AC 50/60 Hz)	AC/DC 12-240V (AC 50/60 Hz)	AC/DC 12-240V (AC 50/60 Hz)	AC/DC 12-240V or AC 230V only (AC 50/60 Hz)
Time Range	0.1 s - 100 hrs	0.1 s - 100 hrs	0.1 s - 10 hrs	0.1 s - 10 days	0.1 s - 10 days	0.05 s - 30 days	0.05 s - 30 days	0.1 s - 100 days, 0.1 - 1 s
Contact Configuration and Rating	SPDT (1x C/O) 16 A/250 V	3PDT (3x C/O) 8 A/250 V	SPDT (1x C/O) 8 A/250 V	SPDT (1x C/O) 16 A/250 V	3PDT (3x C/O) 8 A/250V	1x SPDT (1x C/O) 16 A/250 V	3PDT (3x C/O) 8 A/250V	2x SPDT (2x C/O) 16 A/250 V
2 nd + 3 rd contact mode selection	no	no	no	no	no	no	yes	no

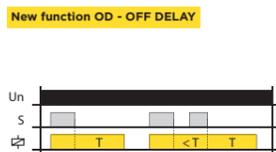
Functions

Number of function	1	1	6	10	10	11	10	1
List of function	ZR - ON DELAY ZN - INTERVAL ON BL - FLASHER - ON first		ON DELAY, INTERVAL ON, FLASHER-ON first, OFF DELAY, ON/OFF delay, MEMORY LATCH with delay, ON DELAY with control signal	ON DELAY, INTERVAL ON, FLASHER-OFF first, FLASHER ON first, OFF DELAY, SINGLE SHOT, SINGLE SHOT falling edge, ON/OFF DELAY, MEMORY LATCH, PULSE GENERATOR 0.5 s		ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, MEMORY LATCH, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY	ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, MEMORY LATCH, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY	STAR/DELTA starter
New functions	OD - OFF DELAY					WATCHDOG, INTERVAL ON/OFF, MEMORY LATCH WITH DELAY	WATCHDOG, INTERVAL ON/OFF	

General information

Mounting	35 mm DIN rail (IEC 60715)							
Temperature Range	Operating: -20°C to +55°C (-4°F to 131°F) Storing: -30°C to +70°C (-22°F to 158°F)							
Lifetime	Electrical: 50,000 operations Mechanical: 10,000,000 operations							
Dielectric strength	Between power supply and output contact 1: 4 kV AC							
Weight	61 g (2.15 oz)	61 g (2.15 oz)	61 g (2.15 oz)	61 g (2.15 oz)	82 g (2.79 oz)	61 g (2.15 oz)	82 g (2.79 oz)	79 g (2.79 oz)
Dimensions	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"

Approved by



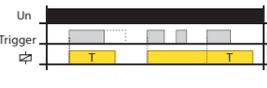
GOOD DEAL

EXTERNAL POTENTIOMETER

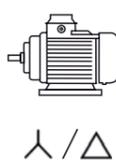
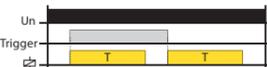


For remote time setting (CRM-91HE and CRM-2HE)

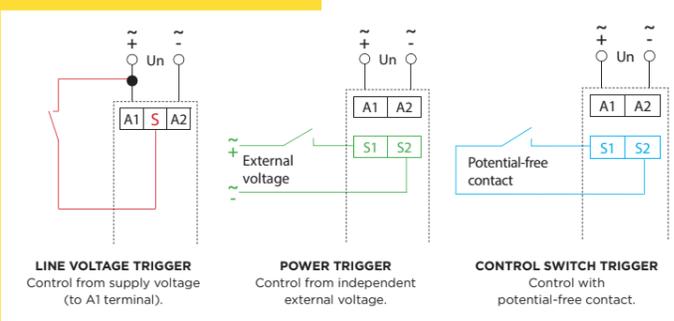
WATCHDOG



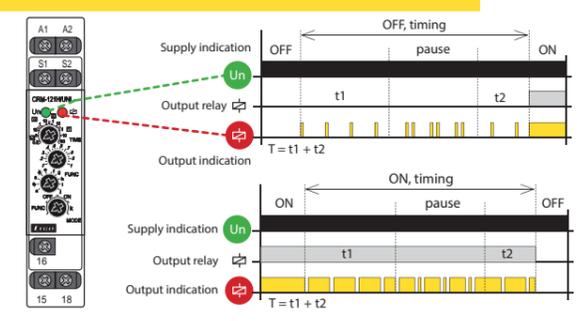
INTERVAL ON/OFF



CONTROL INPUT TYPE:



MULTI-FUNCTION LED INDICATION:

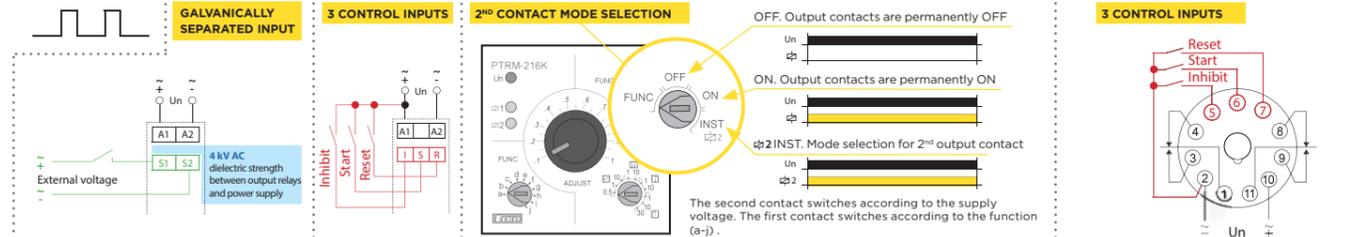


CRM-2H	CRM-121H	CRM-131H	PTRM-216K	PTRM-216T	PTRM-216KP	PTRM-216TP	PTRA-216K	PTRA-216T
Asymmetric flasher	Multi-function with GSCI	Multi-function with three inputs	Multi-function with PFCI		Multi-function with Inhibit delay		Multi-function with three inputs	
Line Voltage Trigger	Power Trigger (galvanically separated)	Three control inputs (START, INHIBIT, RESET)	Control Switch Trigger	Control Switch Trigger	Line Voltage Trigger	Line Voltage Trigger	Three control inputs (START, INHIBIT, RESET)	Three control inputs (START, INHIBIT, RESET)

Supply voltage (frequency)	AC/DC 12-240V or AC 230V only (AC 50/60 Hz)	AC/DC 12-240V (AC 50/60 Hz)							
Time Range	0.1 s - 100 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days
Contact Configuration and Rating	SPDT (1x C/O) 16 A/250 V	SPDT (1x C/O) 16 A/250 V	SPDT (1x C/O) 16 A/250 V	2x SPDT (2x C/O) 16 A/250 V	2x SPDT (2x C/O) 16 A/250 V	2x SPDT (2x C/O) 16 A/250 V	2x SPDT (2x C/O) 16 A/250 V	2x SPDT (2x C/O) 16 A/250 V	2x SPDT (2x C/O) 16 A/250 V
2 nd + 3 rd contact mode selection	no	no	no	yes	yes	yes	yes	yes	yes

Number of function	1	11	11	10	10	10	10	10	10
List of function	ASYMMETRIC FLASHER - ON FIRST or ASYMMETRIC FLASHER - OFF FIRST	ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, MEMORY LATCH, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY	ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, MEMORY LATCH, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY	ON DELAY, INTERVAL ON, FLASHER - ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH		ON DELAY, INTERVAL ON, FLASHER - ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH	ON DELAY, INTERVAL ON, FLASHER - ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH	ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH with delay	
New functions		WATCHDOG, INTERVAL ON/OFF, MEMORY LATCH WITH DELAY	WATCHDOG, INTERVAL ON/OFF, MEMORY LATCH WITH DELAY	WATCHDOG, INTERVAL ON/OFF		WATCHDOG, INTERVAL ON/OFF	WATCHDOG, INTERVAL ON/OFF	WATCHDOG, INTERVAL ON/OFF	

Mounting	35 mm DIN rail (IEC 60715)					11 Pin Octal Socket			
Temperature Range	Operating: -20°C to +55°C (-4°F to 131°F) Storing: -30°C to +70°C (-22°F to 158°F)								
Lifetime	Electrical: 50,000 operations Mechanical: 10,000,000 operations								
Dielectric strength	Between power supply and output contact: 4 kV AC					Between power supply and output contact: 2.5 kV AC			
Weight	61 g (2.15 oz)	72 g (2.57 oz)	61 g (2.17 oz)	108 g (3.85 oz)	107 g (3.82 oz)	108 g (3.85 oz)	107 g (3.82 oz)	108 g (3.85 oz)	107 g (3.82 oz)
Dimensions	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	48 x 48 x 89 mm 1.7" x 1.7" x 3.5"	48 x 48 x 79 mm 1.7" x 1.7" x 3.1"	48 x 48 x 89 mm 1.7" x 1.7" x 3.5"	48 x 48 x 79 mm 1.7" x 1.7" x 3.1"	48 x 48 x 89 mm 1.7" x 1.7" x 3.5"	48 x 48 x 79 mm 1.7" x 1.7" x 3.1"



TIME RELAYS - multifunction, on DIN rail



multifunction, economy version of CRM-91H | multifunction 1x output contact | multifunction 3x output contacts | multifunction with external potentiometer | electricity saving relay

Technical parameters	CRM-161	CRM-91H	CRM-93H	CRM-91HE	CRM-101
Output	1x CO, 8 A	1x CO, 16 A	3x CO, 8 A	1x CO, 16 A	1x CO, 16 A
Housing	1-MODULE				
Supply voltage (frequency)	AC 24-240 V and DC 24 V (AC 50/60Hz)	AC/DC 12-240 V or AC 230 V (AC 50/60 Hz)	AC/DC 12-240 V or AC 230 V (50/60 Hz)	AC/DC 12-240 V (AC 50/60 Hz)	AC/DC 12-240 V (AC 50/60 Hz)
Time range	0.1 s - 10 hrs (6 ranges)	0.1s - 10 days (10 ranges)	0.1 s - 10 days (10 ranges)	0.1 s - 10 days (10 ranges)	t1: 1 - 60 min, t2: 0.5 - 10 s
Number of functions	6	10	10	10	1
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")				
Order code	8161	UNI: 7521 230V: 7078	UNI: 7561 230V: 7562	8145	8132



Economic version of CRM-91H. Only the 6 most used functions, 8 A changeover contact, miniUNI power supply AC / DC 24-240 V + DC 24 V.

The most used multifunctional time relay for universal use in automation, control and regulation or in house installations. 10 functions, 10 time ranges, multifunctional LED signalling, universal power supply in a wide range of power supply AC / DC 12-240 V.

As a CRM-91H, but with the possibility of time control by an external potentiometer. The potentiometer is mounted in a panel, hole diameter 25 mm.

Relay for automatic switching of connected power supply using connected sensors (motion detector and magnetic door contact) in the room.



TIME RELAYS - multifunction, on DIN rail



multifunction with Inhibit (delay) 1x output contact | multifunction 3x output contacts 2nd & 3rd contact selection | multifunction galvanically separated control input | multifunction 3 control inputs | OFF DELAY without supply voltage

Technical parameters	CRM-111H	CRM-113H	CRM-121H	CRM-131H	CRM-82TO
Output	1x CO, 16 A	3x CO, 8 A	1x CO, 16 A	1x CO, 16 A	2x CO, 8 A
Housing	1-MODULE				
Supply voltage (frequency)	AC/DC 12-240 V (AC 50/60 Hz)	AC/DC 12-240 V (AC 50/60 Hz)	AC/DC 12-240 V (AC 50/60 Hz)	AC/DC 12-240 V (AC 50/60 Hz)	AC/DC 12-240 V (AC 50/60 Hz)
Time range	50 ms - 30 days (10 ranges)	50 ms - 30 days (10 ranges)	50 ms - 30 days (10 ranges)	50 ms - 30 days (10 ranges)	0.1s - 10 min (4 ranges)
Number of functions	11	10	11	11	2
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")				
Order code	7554	8063	7555	7556	7580

All functions initiated by the supply voltage outside function FLASHER can be used to inhibit the control input delay (pause).

All functions initiated by the supply voltage outside function FLASHER can be used to inhibit the control input delay (pause). 2nd & 3rd contact mode selection.

Galvanically separated control input (Power Trigger) for control of independent external voltage in the range AC / DC 12-240 V.

Three control inputs - START, INHIBIT, RESET. Mode selection - according to the set function, permanently closed, permanently open, Memory latch with delay.

Relay is timing without power supply voltage and is switched off after set period. Two time functions: a - TRUE OFF DELAY e - ON DELAY



TIME RELAYS - single function, on DIN rail



choose from 4 functions 1x output contact | choose from 4 functions 3x output contacts | STAR / DELTA starter | asymmetric flasher 1x output contact | asymmetric flasher with two external potentiometers | ON DELAY 2-channel 2x output contacts

Technical parameters	CRM-181J	CRM-183J	CRM-2T	CRM-2H	CRM-2HE	SJR-2
Output	1x CO, 16 A	3x CO, 8 A	2x CO, 16 A	1x CO, 16 A	1x CO, 16 A	2x CO, 16 A
Housing	1-MODULE					
Supply voltage (frequency)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V or AC 230 V or AC 24-480 V	AC/DC 12-240 V or AC 230 V (AC 50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V or AC 230 V (AC 50-60 Hz)
Time range	0.1s - 100 hrs (10 ranges)	0.1s - 100 hrs (10 ranges)	t1: 0.1s - 100 days, t2: 0.1s - 1s	0.1s - 100 days (10 ranges)	0.1s - 100 days (10 ranges)	0.1s - 10 days (10 ranges)
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")					



ZR: OFF DELAY
CRM-181J/UNI ZR: 8038 | CRM-183J/UNI ZR: 8061
ZN: INTERVAL ON
CRM-181J/UNI ZN: 8039 | CRM-183J/UNI ZN: 8060
BL: FLASHER - ON first
CRM-181J/UNI BL: 8040 | CRM-183J/UNI BL: 8058
OD: OFF DELAY
CRM-181J/UNI OD: 8041 | CRM-183J/UNI OD: 8059

CRM-2T/UNI: 7669
CRM-2T/230V: 1229
CRM-2T/24-480V: 4530
Time t1 (star) 0.1 s do 100 days.
Time t2 (delay) Δ/\blacktriangle 0.1 s - 1 s.

CRM-2H/UNI: 7668
CRM-2H/230V: 2420
Asymmetric flasher with independently adjustable output closing and opening time.
2 time functions:
• asymmetric flasher - ON first
• asymmetric flasher - OFF first.

CRM-2HE/UNI: 8144
Asymmetric cycler with possibility of time control with external potentiometers.
2 time functions:
• asymmetric flasher - ON first
• asymmetric flasher - OFF first.

SJR-2/UNI: 7670
SJR-2/230V: 1601
It is used for gradual (cascade) switching. 2 x independent ON DELAY outputs. Time adjustable from 0.1 s to 100 days.

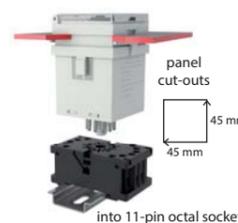


TIME RELAYS - multifunction, PLUG-IN



multifunction, 2x output contacts (2nd contact mode selection) | multifunction, 2x output contacts (2nd contact mode selection) | multifunction, 2x output contacts (2nd contact mode selection)

Technical parameters	PTRM-216TP	PTRM-216KP	PTRM-216T	PTRM-216K	PTRA-216T	PTRA-216K
Time setting	rotary selector	knob	rotary selector	knob	rotary selector	knob
Output	2x CO, 16 A					
Housing	PLUG-IN, into 11-pin octal socket					
Control input	line voltage trigger		control switch trigger		3 control inputs START, INHIBIT, RESET	
Supply voltage (frequency)	AC/DC 12-240 V (50/60 Hz)					
Time range	50 ms - 30 days (10 ranges)					
Number of functions	10					
Dimensions	48 x 48 x 79 mm	48 x 48 x 89 mm	48 x 48 x 79 mm	48 x 48 x 89 mm	48 x 48 x 79 mm	48 x 48 x 89 mm
Order code	7938	7861	7938	7557	7560	7559



TIME RELAYS - digital, on DIN rail



multifunction LCD display 1x output contact



multifunction LED display 2x output contacts

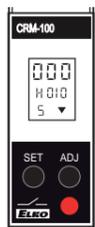


classic with function ON/AUTO/OFF



multifunction extending time, signaling before switching off

Technical parameters	CRM-100	PDR-2A	PDR-2B	CRM-4	CRM-46
Output	1x CO, 8 A	2x CO, 16 A		1x CO, 16 A	1x CO, 16 A
Housing	1-MODULE	3-MODULE		1-MODULE	1-MODULE
Supply voltage (frequency)	AC/DC 24-240V (AC 50/60 Hz)	AC/DC 12-240V or AC 230V (AC 50/60 Hz)		AC 230V (50/60 Hz)	AC 230V (50/60 Hz)
Time range	0.1 s - 999 hrs	0.01 s - 100 hrs		0.5 s - 10 min	0.5 s - 30 min
Number of functions	17	16	10	3	6
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	90 x 52 x 65 mm (3.5" x 2" x 2.6")		90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	
Order code	7453	UNI: 304 230V: 303	UNI: 306 230V: 305	7077	7491



Control input B1 is controlled by the supply voltage.

Multifunction programmable digital relay with 4-digit red LED display. It is used for applications where it is necessary to set the exact time (have a visual check).

PDR-2A: optional second relay function (16 functions)
PDR-2B: individual setting of the functions for both output contacts (10 functions).

It is used for delayed switching off of lighting on stairs, corridor, entrance ... It is controlled by the button or several buttons from several places (connected in parallel). 3 or 4 wire connection.

Smart features:
- extending time
- premature shutdown
- impulse relay
- signalling before switching OFF.
3 or 4 wire connection.



TIME RELAYS - flush mounted



multifunction 3-wire (without NEUTRAL) on input: LED bulb



multifunction 3-wire (without NEUTRAL) on input: incandescent bulb



multifunction 4-wire (with NEUTRAL) contactless output



multifunction 4-wire (with NEUTRAL) 1x output contact

Technical parameters	SMR-K	SMR-T	SMR-H	SMR-B
Output	1x triac	1x triac	1x triac	1x CO, 16 A (AgSnO ₂)
Housing	BOX	BOX	BOX	BOX
Resistive load	10 - 160 VA	10 - 160 VA	0 - 200 VA	0 - 4000 VA
Inductive load	10 - 100 VA	10 - 100 VA	0 - 100 VA	0 - 2000 VA
Supply voltage (frequency)	AC 230V (50/60 Hz)	AC 230V (50/60 Hz)		AC 230V (50/60 Hz)
Number of functions	9	9	9	10
Dimensions		49 x 49 x 13 mm (1.9" x 1.9" x 0.5")		49 x 49 x 21 mm (1.9" x 1.9" x 0.8")
Order code	4517	2910	2911	3556



BOX flush mounted

Multifunction time relay for installation in an installation box for 3-wire connection (does not require NEUTRAL). An LED bulb or energy saver can be connected in parallel to the control input.

Like the SMR-K, but in parallel to the control input, unlike the SMR-K, neither an LED bulb nor an energy saver can be connected, only other types of loads, including glow plugs.

Multifunction time relay for installation in an installation box for 4-wire connection (requires Neutral). Not suitable for switching LED bulbs.

Multifunction time relay for installation in an installation box for 4-wire connection (requires Neutral). Thanks to the switching contact AgSnO₂, it is also suitable for switching LED bulbs or savings.



STAIRCASE SWITCHES

DIGITAL TIME SWITCHES



1-channel weekly



2-channels weekly



1-channel weekly, annually



2-channels weekly, annually



with astronomical program 2-channels



with synchronized time (DCF77) 1-channel



smartphone app control 2-channels

Technical parameters	SHT-1	SHT-1/2	SHT-3	SHT-3/2	SHT-4	SHT-6 (DCFR-1)	SHT-7
Program	weekly		weekly, annually		weekly, annually, astro	weekly, annually	
Replaceable battery	no		no		yes	yes	yes
Output	1x CO, 16 A	2x CO, 16 A	1x CO, 16 A	2x CO, 16 A	2x CO, 16 A	1x CO, 16 A	2x CO, 16 A
Housing	2-MODULE						
Supply voltage (frequency)	AC/DC 12-240V or AC 230V (AC 50/60 Hz)		AC/DC 12-240V or AC 230V (AC 50/60 Hz)		AC 230V (50/60 Hz)	AC 230V (50/60 Hz)	AC 230V (50/60 Hz)
Dimensions	90 x 35 x 64 mm (3.5" x 1.4" x 2.5")						
Order code	UNI: 3043 230V: 3042	UNI: 3041 230V: 3040	UNI: 3675 230V: 3676	UNI: 2904 230V: 2901	4475	4838	3549



DFC77 receiver for SHT-6 DCFR-1

It is used to control various appliances depending on the real time: with weekly (SHT-1), and weekly and annually (SHT-3) program. Power backup in case of battery power failure. Backlit LCD display, sealable cover. Possibility of automatic summer / winter time transition. Additional functions: manual control, random switching, and pulse output.

Switches the output according to the time of sunrise and sunset based on geographical coordinates or European cities.

As SHT-3, but real time can be synchronized via DCF77 receiver.

Settings via smartphone with NFC communication (Android).



ANALOG TIME SWITCHES



with daily program and power backup



with daily program



with daily program and power backup



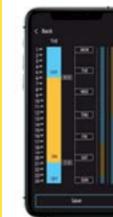
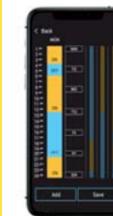
with weekly program and power backup

Technical parameters	ATS-1DR	ATS-2D	ATS-2DR	ATS-2WR
Program		daily		weekly
Power backup	yes (max. 100 hrs)	no	yes (max. 150 hrs)	yes (max. 150 hrs)
Minimum switching interval	15 min	30 min	30 min	3.5 hrs
Output	1x NO, 16 A		1x CO, 16 A	
Resistive load		3500 VA		
Inductive load		1000 VA		
Housing	1-MODULE	2-MODULE		
Supply voltage (frequency)	AC 230V (50/60 Hz)	AC 230V (50 Hz)	AC 230V (50/60 Hz)	AC 230V (50/60 Hz)
Dimensions	90 x 17.6 x 64 mm		90 x 35 x 60 mm	
Order code	8211	8212	8213	8214

A simple and inexpensive alternative to digital switches for controlling real-time heating, ventilation, cooling, lighting or pumps. With daily or weekly program. Selection of operating modes. Sealable transparent front panel cover to prevent unauthorized access.



iNELS Home NFC Setter



App download



POWER RELAYS



1x 16 A contact coil: AC 230 V 1x 16 A contact coil: AC 230 V 1x 16 A contact coil: UNI 3x 8 A contacts coil: AC 230 V 3x 8 A contacts coil: UNI 3x 16 A contact coil: AC/DC 24 V 3x 16 A contacts coil: AC 230 V

Technical parameters	VS116B/230	VS116K	VS116U	VS308K	VS308U	VS316/24	VS316/230
Output	1x CO, 16 A (AgSnO ₂)			3x CO, 8 A (AgNi)		3x CO, 16 A (AgSnO ₂)	
Housing	BOX	1-MODULE					
Coil supply voltage (frequency)	AC 230 V (50/60 Hz)	AC/DC 24 V and AC 230 V (AC 50/60 Hz)	AC/DC 12-240 V (AC 50/60 Hz)	AC/DC 24 V and AC 230 V (AC 50/60 Hz)	AC/DC 12-240 V (AC 50/60 Hz)	AC/DC 24 V (AC 50/60 Hz)	AC 230 V (50/60 Hz)
Dimensions	49 x 49 x 21 mm (1.9" x 1.9" x 0.8")	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")					
Order code	4754	codes below					

	VS116K/red: 2295	VS116U/red: 2460	VS308K/red: 2269	VS308U/red: 3010	VS316/24V red: 3577	VS316/230V red: 4471
	VS116K/green: 2261	VS116U/green: 3643	VS308K/green: 2271	VS308U/green: 3644	VS316/24V green: 3610	VS316/230V green: 4472
	VS116K/white: 2257	VS116U/white: 3848	VS308K/white: 2267	VS308U/white: 3851	VS316/24V white: 3609	VS316/230V white: 4470
	VS116K/blue: 2260	VS116U/blue: 3847	VS308K/blue: 2270	VS308U/blue: 3850	VS316/24V blue: 3611	VS316/230V blue: 4474

INSTALLATION CONTACTORS



1x20 A 2x20 A 4x25 A 4x40 A 4x63 A 4x20 A 2x20 A with manual control 4x25 A with manual control

Technical parameters	VS120	VS220	VS425	VS440	VS463	VS420	VSM220	VSM425
Max. load capacity	20 A	20 A	25 A	40 A	63 A	20 A	20 A	25 A
Number of poles	1	2	4	4	4	4	2	4
Contact configuration (NO/NC)	10, 01	20, 11, 02	40, 31, 22, 04	40, 31, 22, 04	40, 31, 22	40, 31	20, 11, 02	40, 31, 22, 04
Coil supply voltage (frequency)	AC/DC 24 V, 230 V (AC 50/60 Hz)	AC/DC 24 V, 48 V, 110 V, 230 V (AC 50/60 Hz)	AC/DC 24 V, 48 V, 110 V, 230 V (AC 50/60 Hz)	AC/DC 24 V, 110 V, 230 V (AC 50/60 Hz)	AC/DC 24 V, 48 V, 110 V, 230 V (AC 50/60 Hz)	AC 12 V, 24 V, 48 V, 110 V, 230 V (50/60 Hz)	AC 12 V, 24 V, 110 V, 230 V (50/60 Hz)	AC 12 V, 24 V, 42 V, 230 V (50/60 Hz)
Dimensions	17.5 x 85 x 60 mm	35 x 85 x 60 mm	53.3 x 84 x 60 mm	35 x 62.5 x 57 mm	17.5 x 85 x 60 mm	35 x 85 x 60 mm		

These contactors are characterized by soft-switching operation, with DC coil and rectifier, what ensures a quiet operation and running. Used to switch electrical circuits, in particular resistive loads and three-phase asynchronous motors. IP20 protection - guards providing IP40 protection of all contactor (VS420 excluded) terminals are available upon request. It is possible to connect auxiliary contact VSK-11 and VSK-20 to the contactors VS220, 425, 440, 463. Installation on DIN rail or on panel.

Like VS, but moreover slide switch allowing manual control 1-AUTO-OFF.



BISTABLE (IMPULSE) RELAYS



1x NO, 16 A contact 2x NO/NC, 16 A contacts 2x NO, 16 A contacts 2x NO, 20 A contacts with remote control 2x NO, 32 A contacts

Technical parameters	BR-216-10	BR-216-11	BR-216-20	BR-220-20	BR-232-20	MR-41	MR-42
Output	1x NO, 16 A	1x NO+1x NC, 16 A	2x NO, 16 A	2x NO, 20 A	2x NO, 32 A	1x CO, 16 A	2x CO, 16 A
Housing	1-MODULE					1-MODULE	
Coil supply voltage (frequency)	AC 120 V (60 Hz)	AC 230 V (50 Hz)	AC 120 V (60 Hz)	AC 230 V (50 Hz)	AC 120 V (60 Hz)	AC 230 V (50 Hz)	AC 230 V (50/60 Hz)
Coil disconnecter	x	x	x	yes	yes	x	x
Order code	6969	6885	6970	6887	6971	6886	6972
							6888
							6973
							6889
						1588	1589
						1590	1591

The state of the output contacts changes with the coil pulse. They can be used mainly for switching and control of luminaires, heating, ventilation and other devices - with buttons connected in parallel. All relays can be controlled manually using the lever on the front panel (I-O), which also serves as a status signal. In addition, the BR-220 and BR-232 have a switch for disconnecting the coil, as a result of which it can then only be operated with a slide switch on the front panel. In steady state (ON or OFF) it has zero consumption.

Similar to the Bistable BR relay, but thanks to the electronic design, the switching is almost noiseless. The relays remember their state even after the power failure is restored (the output is always OFF in the event of a power failure, after the power supply is restored it automatically returns to the state before the power failure).

MR-42: 2nd output option:
a) Parallel contact b) step relay



MEMORY RELAYS

TWILIGHT SWITCHES



analog with external sensor digital with time switch clock for outdoor use with built-in sensor external photo sensor

Technical parameters	SOU-1	SOU-2	SOU-3	SKS-100
Output	1x CO, 16 A	1x CO, 8 A	1x NO, 12 A	
Housing	1-MODULE		2-MODULE	
Supply voltage (frequency)	AC/DC 12-240 V (AC 50/60 Hz)	AC 230 V (50/60 Hz)	AC 230 V (50/60 Hz)	AC 230 V (50/60 Hz)
Sensor	external, SKS-100		external, SKS-100	
Adjustable light intensity	1 - 50 000 lx (in 2 ranges)		10 - 50 000 lx	
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")		90 x 35 x 64 mm (3.5" x 1.4" x 2.5")	
Order code	2101	2100	230V+sensor: 4835	4056
				8083

Twilight switch (1-100 lx) or (100-50 000 lx), which closes the output when the level falls below the set level, or light switch. External sensor SKS-100 included in the package.

Digital twilight switch with timer, i.e. the lighting level can be blocked in real time. External sensor SKS-100 included in the package.

Twilight switch (1-1000 lx), which closes the output when falling below the set level or light switch (100-100.000 lx), which closes the output when the level is exceeded.

New external photo sensor SKS-100 with photo resistor for panel or wall mounting, via the included bracket.



POWER SUPPLIES - DC



Technical parameters	PS1M		PS2M		PS3M		PS4M		PSB-10		PS-30R	
Output voltage	DC 12V	DC 24V	DC 12V	DC 24V	DC 12V	DC 24V	DC 12V	DC 24V	DC 12V	DC 24V	DC 12-24V	
Max. load	1.2A/15W	0.62A/15W	2A/24W	1.2A/30W	4.5A/54W	2.5A/60W	7.1A/85	3.8A/92W	0.8A/10W	0.4A/10W	2.5-1.2A/30W	
Housing	1-MODULE		2-MODULE		3-MODULE		4-MODULE		BOX		3-MODULE	
Supply voltage (frequency)	AC 100-240 V (50/60 Hz)								AC 110-250V (50/60 Hz)		AC 100-250 V (50/60 Hz)	
Protective circuits	overload, overvoltage and short circuit								short circuit, current and temperature overload (from 120% of rated power)			
Dimensions	90 x 18 x 58 mm (3.5" x 0.7" x 2.6")		90 x 35 x 58 mm (3.5" x 1.4" x 2.3")		90 x 52.5 x 58 mm (3.5" x 2.1" x 2.3")		90 x 70 x 58 mm (3.5" x 2.8" x 2.3")		49 x 49 x 21 mm (1.9" x 1.9" x 0.8")		90 x 52 x 65 mm (3.5" x 2" x 2.6")	

PS1M-15/12V: 8047
PS1M-15/24V: 8048
PS2M-24/12V: 8049
PS2M-30/24V: 8050
 Switching stabilized power supply with output voltage 12 or 24 V DC with the possibility of fine tuning. High efficiency up to 90%. Low warp and noise.

PS3M-54/12V: 8051
PS3M-60/24V: 8052
PS4M-85/12V: 8053
PS4M-92/24V: 8054

PSB-10-12: 4502
PSB-10-24: 4378
 Stabilized power supply for mounting in the installation box.

PS-30-R: 5158
 Adjustable output voltage in the range of 12-24 V.



POWER SUPPLIES - AC & DC

BELL TRANSFORMERS



Technical parameters	ZSR-30	ZNP-10-24V	ZTR-8-8	ZTR-8-12	ZTR-15-12		
Output voltage	DC 5-24 V regulated DC 24 V unregulated AC 24 V	DC 24 V unregulated AC 24 V	AC 8 V	AC 12 V	AC 4 V	AC 8 V	AC 12 V
Max. load	8 VA	8 VA	8 VA	8 VA	5 VA	10 VA	15 VA
Housing	3-MODULE	3-MODULE	2-MODULE		3-MODULE		
Supply voltage (frequency)	AC 230 V (50/60 Hz)	AC 230 V (50/60 Hz)	AC 230 V (50 Hz)				
Protections	short circuit and current overload	-	short circuit (on primary winding)				
Dimensions	90 x 52 x 65 mm (3.5" x 2" x 2.6")		90 x 36 x 64 mm (3.5" x 1.5" x 2.6")			90 x 52 x 65 mm (3.5" x 2" x 2.6")	
Order code	175	408	3680	3681	3928		

ZSR-30: Adjustable output voltage in the range of DC 5-24 V.

ZNP-10-24V: Un-stabilized AC + DC output voltage.

ZTR-8-8, ZTR-8-12, ZTR-15-12: For powering doorbells, door locks, etc.



DIMMERS - on DIN rail



Technical parameters	DIM-15	DIM-2	DIM-6	DIM6-3M-P
Dimmable loads	R - L - C - ESL - LED	R - L - LED	R - L - C - LED	R - L - C - LED
Output	2x MOSFET	1x triac	4x MOSFET	2x MOSFET
Output loads	300 VA	R: 10-500 VA, L: 10-250 VA	2000 VA	1000 VA
Protections	overheating and overload	overheating	overheating and overload	overheating and overload
Housing	1-MODULE		6-MODULE	3-MODULE
Supply voltage (frequency)	AC 230 V (50 Hz)	AC 230 V (50 Hz)	AC 230 V (50 Hz)	AC 230 V (50 Hz)
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")		90 x 105 x 65 mm (3.5" x 4.1" x 2.6")	90 x 52 x 65 mm (3.5" x 2" x 2.6")
Order code	4069	DIM-2: 1247 DIM-2-1h: 3574	3691	3910



The type of light source is set with a switch on the front panel. Setting the minimum brightness with the potentiometer on the front panel eliminates the flickering of some types of energy-saving light bulbs (ESL) and LED.

The gradual increase of brightness, deceleration and duration of illumination can be set by potentiometers on the panel:

- rise and falling length: 1 - 40 s
- light duration: 0 - 20 min
- brightness: 10 - 100%

The dimmer can be controlled in several ways: with buttons, an external potentiometer, and an analog signal 0(1)-10 V or with the iNELS BUS system. Power expandable up to 10kVA DIM6-3M-P modules.

Expansion module for DIM-6. 8 of these modules expand the power of the DIM-6 up to 10,000 VA.



DIMMERS - flush mounted

- on DIN rail



Technical parameters	SMR-M	SMR-S	LIC-1	LIC-2	RFDEL-76M
Dimmable loads	R - L - C - ESL - LED	R - L - LED	R - L - C - ESL - LED	voltage output 0 (1) - 10 V	R - L - C - ESL - LED
Output	2x MOSFET	1x triac	2x MOSFET	1x NO, 16 A	12x MOSFET
Output loads	160 VA	R: 10-300 VA, L: 10-150 VA	300 VA	4000 VA	6x 150W (230V) / 6x 75W (120V)
Protections	overheating and overload	fuse	overheating and overload	-	overheating and overload
Housing	BOX		1-MODULE		
Supply voltage (frequency)	AC 230 V (50 Hz)	AC 230 V (50 Hz)	AC 230 V (50 Hz)	AC 100-250 V (50 Hz)	230 V (50 Hz) or AC 120 V (60 Hz)
Dimensions	49x49x21 mm (1.9"x1.9"x0.8")	49x49x13 mm (1.9"x1.9"x0.5")	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")		90 x 105 x 65 mm (3.5" x 4.1" x 2.6")
Order code	4377	2351	4493	4531	8205



The type of light source is set with a switch on the instrument panel.

3-wire connection (without NEUTRAL), but minimum load 10W.

It automatically maintains the intensity of artificial lighting in the room according to an external outdoor light sensor.

As LIC-1, but at the output a continuous analog signal 0 (1)-10V for controlling electric ballasts.

Universal 6-channel dimmer with an output of 900 VA. The outputs can be connected in parallel and multiply the power at the expense of the number of outputs. Control with wired buttons or wireless iNELS RF.





USS-ZM
Basic module

USS

Designated for switching, control and signaling of auxiliary and power circuits.
 USS - "Do-it-yourself" = various types of switching and signaling units can be "snapped" in the basic module.
 Units are supplied separately, individual configurations are assembled by the user. It is possible to place up to two units into one MODULE (for example 2x switch, 2x signalling lights or combinations) = when compared with competitors it is saving place in a switch board.
 Operating temperature -20 to +55°C.



Example of combinations



USS-01 + USS-03 USS-07 + USS-11 USS-11 + USS-01



USS-10 + USS-00 USS-10 + USS-11 USS-07 + USS-00

Types of controlling and signalling units



Name	USS-01	USS-02	USS-03	USS-04	USS-05	USS-06/S	USS-06/R
Order code	2462	2463	2464	2465	2466	2467	3637



Name	USS-07	USS-08	USS-09	USS-10	USS-11	USS-12	USS-13
Order code	2468	2468	2470	2433	2434	2435	2436



Name	USS-14	USS-15	USS-0
Order code	2489	2437	2461



USS-ZM
2457



PROTECTION AND MONITORING RELAYS

Monitoring relays - overview

Type	Design	Supply from	Features				Phase			Setting			Description	
			Phases	Monitored range	> U	< U	Failure	Sequence	Asymmetry	Delay	Hysteresis	Memory Errors		
HRN-33	1-M	monitored voltage	1	AC 48 - 276 V	•	•	x	x	x	•	x	x	For all types, the delay is adjustable from 0 - 10 seconds (to eliminate short-term outages or peaks). The lower voltage level (Umin) is set in % of the upper level (Umax).	
HRN-63	1-M	monitored voltage	1	AC 48 - 276 V	•	•	x	x	x	•	x	x		
HRN-35	1-M	monitored voltage	1	AC 48 - 276 V	•	•	x	x	x	•	x	x		
HRN-34	1-M	monitored voltage	1	DC 6 - 30 V	•	•	x	x	x	•	x	x		
HRN-37	1-M	monitored voltage	1	AC 24 - 150 V	•	•	x	x	x	•	x	x		
HRN-67	1-M	monitored voltage	1	AC 24 - 150 V	•	•	x	x	x	•	x	x		
HRN-34	1-M	monitored voltage	1	DC 6 - 30 V	•	•	x	x	x	•	x	x		
HRN-64	1-M	monitored voltage	1	DC 6 - 30 V	•	•	x	x	x	•	x	x		
HRN-41/230 V HRN-41/400 V HRN-41/24 V	3-M	AC 230 V AC 400 V AC/DC 24 V	1	AC/DC 50 V AC/DC 160 V AC/DC 500 V	•	•	x	x	x	•	•	•		Second relay function (independent or parallel). Galvanically separated power supply from measuring inputs.
HRN-42/230 V HRN-42/24 V	3-M	AC 230 V AC/DC 24 V	1	AC/DC 50 V AC/DC 160 V AC/DC 500 V	•	•	x	x	x	•	•	•		
HRN-55	1-M	monitored voltage	3	AC 3 x 300 - 500 V	x	x	•	•	x	•	x	x	Power supply from all phases, i.e. the relay function is preserved even if one phase fails.	
HRN-55N	1-M	monitored voltage	3	AC 3 x 172 - 287 V	x	x	•	•	x	•	x	x	Power supply L1-N, i.e. the relay also monitors the neutral wire interruption.	
HRN-57	1-M	monitored voltage	3	AC 3 x 300 - 500 V	•	•	•	x	x	•	x	x	Power supply from all phases, i.e. the relay function is preserved even if one phase fails.	
HRN-57N	1-M	monitored voltage	3	AC 3 x 172 - 287 V	•	•	•	x	x	•	x	x	Power supply L1-N, i.e. the relay also monitors the neutral wire interruption, replacement for HRN-52.	
HRN-54	1-M	monitored voltage	3	AC 3 x 300 - 500 V	•	•	•	•	x	•	x	x	If the supply voltage falls below 60% of Un (OFF lower level), the relay will immediately disconnects with no delay. Power supply from all phases, i.e. the relay function is preserved even if one phase fails.	
HRN-54N	1-M	monitored voltage	3	AC 3 x 172 - 287 V	•	•	•	•	x	•	x	x	If the supply voltage falls below 60% of Un (OFF lower level), the relay will immediately disconnects with no delay. Power supply L1-N, i.e. the relay also monitors the neutral wire interruption.	
HRN-43/230 V HRN-43/400 V HRN-43/24 V	3-M	AC 230 V AC 400 V AC/DC 24 V	3	AC 3 x 84 - 480 V	•	•	•	•	•	•	•	•	2 output relays, functions of the second relay may be selected (independent/parallel). Galvanically separated power supply.	
HRN-43N/230 V HRN-43N/400 V HRN-43N/24 V	3-M	AC 230 V AC 400 V AC/DC 24 V	3	AC 3 x 48 - 276 V	•	•	•	•	•	•	•	•		
HRN-56/208 HRN-56/240 HRN-56/400	1-M	monitored voltage	3	AC 3 x 125 - 276 V AC 3 x 144 - 276 V AC 3 x 240 - 460 V	x	•	•	•	x	•	x	x	Thanks to the power supply from all three phases, the relay is operational even if one phase fails.	
HRN-56/480 HRN-56/575	3-M	monitored voltage	3	AC 3 x 228 - 550 V AC 3 x 345 - 660 V	x	•	•	•	x	•	x	x		
HRN-100	2-M	monitored voltage	3	U _{un} = 3 ~ 155 - 500 V U _{ll} = 3 ~ 90 - 288 V	•	•	•	•	•	•	•	•	Configurable 3 or 4-wire connection. Extensive setting options. Each output can be configured individually.	

MONITORING RELAYS - voltage, 1-phase, AC



1-phase, mains voltage 48-276 V overvoltage and undervoltage = 1x output
1-phase, mains voltage 48-276 V overvoltage = 1x output undervoltage = 1x output
1-phase, mains voltage 24-150 V overvoltage and undervoltage = 1x output WINDOW HYSTERESIS

Technical parameters	HRN-33	HRN-63	HRN-35	HRN-37	HRN-67
Type of monitored voltage	AC		AC	AC	
Monitored levels	undervoltage and overvoltage		undervoltage and overvoltage	undervoltage and overvoltage	
Functions	WINDOW	HYSTERESIS	WINDOW	WINDOW	HYSTERESIS
Monitoring range	48-276 V		48-276 V	24-150 V	
Output	1x CO, 16 A		2x CO, 16 A	1x CO, 16 A	
Housing	1-MODULE				
Power supply	from monitored voltage				
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")				
Order code	1563	3062	1565	3061	3064

1x common output contact for overvoltage and undervoltage. Adjustable delay 0 - 10 s to eliminate short-term peaks in the network.
 2x independent output contacts, separately for overvoltage and undervoltage. Adjustable delay 0 - 10 s to eliminate short-term peaks in the network.
 1x output contact for overvoltage and undervoltage. Adjustable delay 0 - 10 s to eliminate short-term peaks in the network.



MONITORING RELAYS - voltage, 1-phase, DC

- voltage, 1-phase, AC or DC



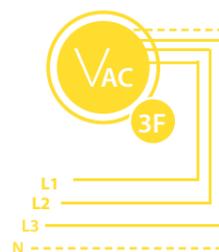
DC voltage 6-30 V batteries and accumulators overvoltage and undervoltage = 1x output
DC voltage 6-30 V batteries and accumulators overvoltage and undervoltage = 1x output
with three input ranges for AC / DC monitoring in 1-phase network
with three input ranges for AC / DC monitoring in 1-phase network

Technical parameters	HRN-34	HRN-64	HRN-41	HRN-42
Type of monitored voltage	DC		AC / DC	
Monitored levels	undervoltage and overvoltage		undervoltage and overvoltage	
Functions	WINDOW	HYSTERESIS	WINDOW	HYSTERESIS
Monitored range	6-30 V		3 inputs: 10-50 V; 32-160 V; 100-500 V	
Supply voltage	1x CO, 16 A		2x CO, 16 A	
Housing	1-MODULE		3-MODULE	
Power supply	from monitored voltage		AC/DC 24 V, 230 V, 400 V	AC/DC 24 V, 230 V
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")		90 x 52 x 65 mm (3.5" x 2" x 2.6")	

HRN-34: 1564
 1x output contact for overvoltage and undervoltage. Adjustable delay 0 - 10s.
 HRN-64: 3063
 HRN-41/24V: 4041
 HRN-41/230V: 4721
 HRN-41/400V: 4722
 HRN-42/24: 4723
 HRN-42/230V: 4725
 Independent supply voltage galvanically separated from the measured one, optional function of the 2nd relay, optional hysteresis 5% / 10%, Memory function.



MONITORING RELAYS - voltage, 3-phases

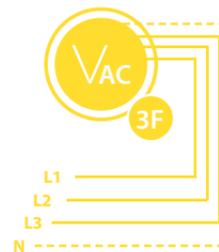


3 x 300-500 V without NEUTRAL
3 x 172-287 V with NEUTRAL
3 x 300-500 V without NEUTRAL
3 x 172-287 V with NEUTRAL
3 x 300-500 V without NEUTRAL
3 x 172-287 V with NEUTRAL
3 x 84 - 480 V without NEUTRAL
3 x 48 - 276 V with NEUTRAL

Technical parameters	HRN-55	HRN-55N	HRN-57	HRN-57N	HRN-54	HRN-54N	HRN-43	HRN-43N
Phase failure	•	•	•	•	•	•	•	•
Phase sequence	•	•	x	x	•	•	•	•
Overvoltage	x (fixed)	x (fixed)	•	•	•	•	•	•
Undervoltage	x (fixed)	x (fixed)	•	•	•	•	•	•
Asymmetry	x	x	x	x	x	x	•	•
Monitored range	AC 3 x 300-500 V	AC 3 x 172-287 V	AC 3 x 300-500 V	AC 3 x 172-287 V	AC 3 x 300-500 V	AC 3 x 172-287 V	AC 3 x 84 - 480 V	AC 3 x 48 - 276 V
Supply voltage	1x CO, 8 A						2x CO, 16 A	
Housing	1-MODULE						3-MODULE	
Power supply	from monitored voltage						AC/DC 24 V, AC 230 V, AC 400 V	
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")						90 x 52 x 65 mm (3.5" x 2" x 2.6")	
Order code	7512	7513	7514	7515	7498	7511	24V: 4731 230V: 4729 400V: 4730	24 V: 4731 230 V: 4733 400 V: 4734



MONITORING RELAYS - voltage, 3-phases



3 x 125-276 V
monitors 3 phases (without NEUTRAL) with adjustable undervoltage level 3 x 144-276 V
3 x 240-460 V
3x 228-550 V
3 x 345-660 V
voltage monitoring relay with LCD display

Technical parameters	HRN-56/208	HRN-56/240	HRN-56/400	HRN-56/480	HRN-56/575	HRN-100
Phase failure	•	•	•	•	•	•
Phase sequence	•	•	•	•	•	•
Overvoltage	x	x	x	x	x	•
Undervoltage	•	•	•	•	•	•
Asymmetry	x	x	x	x	x	•
Monitored range	AC 3x 125-276 V	AC 3x 144-276 V	AC 3x 240-460 V	AC 3x 228-550 V	AC 3x 345-660 V	U _{LL} = 3 ~ 155-500 V U _{LN} = 3 ~ 90-288 V
Supply voltage	1x CO, 8 A					
Housing	1-MODULE			3-MODULE		2-MODULE
Power supply	from monitored voltage					
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")			90 x 52 x 65 mm (3.5" x 2" x 2.6")		90 x 36 x 64 mm (3.5" x 1.5" x 2.6")
Order code	3710	3711	3712	3018	3019	7122



MONITORING RELAYS - current, 1-phase, AC



monitors the overcurrent of the conductor through the hole in the front panel



monitors undercurrent connected to measuring inputs



monitors overcurrent on measuring terminals in 7 ranges



monitors the overcurrent of the conductor through the hole in the body of the device

Technical parameters	PRI-32	PRI-50	PRI-51	PRI-52
Voltage type	AC	AC	AC	AC
Monitored levels	overcurrent	undercurrent	overcurrent	overcurrent
Monitored range	1 - 20 A (50/60 Hz)	2 - 6 A (50/60 Hz)	0.05 - 16 A (50/60 Hz) in 7 ranges	0.5 - 25 A (50/60 Hz)
Output type	1x CO, 8 A	1x CO, 8 A	1x CO, 8 A	1x CO, 8 A
Housing	1-MODULE			
Supply voltage (frequency)	AC 24-240 V, DC 24 V (AC 50/60 Hz)	AC/DC 24-240 V (AC 50/60 Hz)	AC 24-240 V, DC 24 V (AC 50/60 Hz)	AC 230 V (50/60 Hz)
Dimensions	90 x 17.6 x 80.5 mm (3.5" x 0.7" x 3.2")		90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	

PRI-32: 2196
Monitor current level in single-phase AC circuits. The device has also in-built current transformer on the front panel.



PRI-50: 4208
It is used, for example, to monitor the operation of pumps, interrupts of radiators or lighting.



Choose from 7 ranges:
PRI-51/0.5A: 7037 (AC 0.05-0.5A)
PRI-51/1A: 7038 (AC 0.1-1A)
PRI-51/2A: 7039 (AC 0.2-2A)
PRI-51/5A: 7040 (AC 0.5-5A)
PRI-51/8A: 7041 (AC 0.8-8A)
PRI-51/0.1-10A: 7072 (AC 0.1-10A)
PRI-51/16A: 7045 (AC 1.6-16A)



PRI-52: 3655
Used to indicate the current flow, e.g. to monitor wire heating cables, rod heating elements, to monitor the consumption of engines... Hole for threaded conductor passes through the body of device.



MONITORING RELAYS - current, 3-phases, AC - current, 1-phase, AC or DC



monitors overcurrent and undercurrent in 3-phases circuits
2x output contacts



monitors overcurrent or undercurrent in AC or DC circuits in 3 ranges, 2x independent output contacts
WINDOW



HYSTERESIS

Technical parameters	PRI-53	PRI-41	PRI-42
Voltage type	AC	AC / DC	
Monitored levels	overcurrent and undercurrent	overcurrent and undercurrent	overcurrent and undercurrent
Function	-	WINDOW	HYSTERESIS
Monitored range	0.4-1,2 (50/60 Hz) 2-6 A (50/60 Hz)	3 inputs: 0.1-1.6 A, 0.3-5 A, 1-16 A (AC 50/60 Hz)	3 inputs: 0.32-1.6 A, 1-5 A, 3.2-16 A (AC 50/60 Hz)
Output type	2x CO, 8 A	2x CO, 16 A	
Housing	6-MODULE	3-MODULE	
Voltage range	AC/DC 24 - 240 V (AC 50/60 Hz)	AC 110 V; AC 230 V; AC 400 V; AC/DC 24 V (AC 50/60 Hz)	
Dimensions	90 x 105 x 64 mm (3.5" x 4.1" x 2.6")	90 x 52 x 65 mm (3.5" x 2" x 2.6")	
Order code	4213 4214	24V: 4741 230V: 4743	24V: 4747 230V: 4745

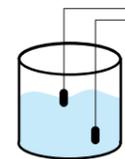
AC/DC 24-240 V power supply galvanically separated from the circuit of the monitored current. Adjustable function: UNDER or OVER current. 2 types according to the rated current In (1A, 5A).



Independent supply voltage galvanically separated from the measured one, optional function of the 2nd relay, optional hysteresis 5% / 10%, Memory function.



LEVEL MONITORING RELAY



for monitoring one or two levels



for monitoring one or two levels in IP65 protection



for checking one or two levels, or pumping of tanks



for monitoring 6-levels each probe has its own output contact

Technical parameters	HRH-5	HRH-7	HRH-8	HRH-9
Output	1x CO, 8 A	1x CO, 16 A	2x CO, 16 A	6x NO, 10 A
Sensitivity	5-100 kΩ	5-100 kΩ	5-100 kΩ	10-470 kΩ
Number of functions	2	2	8	10
Housing	1-MODULE	BOX	1-MODULE	6-MODULE
Supply voltage (frequency)	24-240 V AC/ DC (AC 50/60 Hz)	24-240 V AC/DC (AC 50/60 Hz)	AC/DC 24 V; AC 110 V; AC 230 V; AC 400 V (AC 50/60 Hz)	AC/DC 24-240 V (AC 50/60Hz)
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	139 x 139 x 56 mm (5.5 x 5.5 x 2.2")	90 x 52 x 65 mm (3.5" x 2" x 2.6")	90 x 105 x 65 mm (3.5" x 4.1" x 2.6")
Order code	8093	4947	230V: 5542 24V: 5556	8133

The relay is designed for monitoring the level of conductive fluids with the option of selecting functions: pump-up or pump-down. Optionally set configurations: single-level or double level switch.



Suitable to operate/work in harsh conditions due to the high degree of protection IP65. The same functions as for HRH-5.



Within one device, the following configurations can be selected:
- 2x one-level monitoring (in separate tanks)
- 1x two-level monitoring (in one tank)
- pumping from one tank to another.



Each of the six probes has its own output contact. Optional function of each probe independently:
- pump-up
- pump-down
- including optional delay. Automatic and manual calibration.



LEVEL MONITORING RELAY

LEVEL MONITORING SETS

PROBES AND CABLES



for controlling five levels in IP65 protection

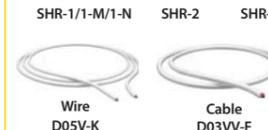


set of HRH-5 relay and contactor



set of HRH-5, contactor and motor starter

Probes



Technical parameters	HRH-6/DC HRH-6/AC	HRH-4	HRH-MS-VS-4A	ACCESSORIES
Output type	1x NO, 10 A	There are Level sets placed in switch-board with IP65 protection (protected against dust and against water jets).		
Sensitivity	10 - 200 kΩ	SHR-1-M: 209970800002 brass sensor. SHR-1-N: 209970800001 stainless steel sensor. SHR-2: 209970800003 Stainless steel sensor in PVC housing with hanging cord. Seal with IP67 grommet. SHR-3: 209970800004 Stainless steel sensor. for use in harsh and industrial environments.		
Number of functions	2	Designated for an automatic operation in 1-phased and 3-phased pumps.		
Housing	box IP65	HRH-MS-VS-4A: 5071 Level switch HRH-5 with installation contactor VS425-40 (25 A contact) and with motor starter MS18 2.5-4 A.		
Voltage range (frequency)	DC 12-24 V or AC 230 V (AC 50/60 Hz)	D03VV-F 3x0.75/3.2: 209970500106 Cable for probes SHR-1 and SHR-2, 3x 0.75 mm2 with a certification for drinking water.		
Dimensions	110 x 130 x 72 mm (4.3" x 5.1" x 2.8")	D05V-K 0.75/3.2: 6594 Wire for probes SHR-1 and SHR-2, 1x 0.75 mm2 with a certification for drinking water.		
Order code	3740 3699	Device monitors 5 levels by using six probes (one probe is common). Level indication by six LED's on the front panel of the device.		



HRH-5 | VS425 contactor



HRH-5 | VS425 contactor | Motor starter





single-level thermostats

double thermostat

thermostat for monitoring temperature of motor winding

digital thermostat with time switch clocks

Technical parameters	TER-3A	TER-3B	TER-3C	TER-3D	TER-3E	TER-3H	TER-3F	TER-3G	TER-4	TER-7	TER-9	
Monitored ranges	-30 to 10°C	0 to 40°C	30 to 70°C	0 to 60°C	0 to 60°C	-15 to 45°C	0 to 60°C	0 to 60°C	optional: -40 to 110°C	1.8 - 3.3 kΩ	-40 to 110°C	
Thermosensor type	external, TC/TZ							built-in	Pt100	external, NTC	external, PTC	external, TC/TZ
Output	1x NO, 16 A								2x CO, 16 A	2x CO, 8 A	2x CO, 8 A	
Housing	1-MODULE								3-MODULE	1-MODULE	2-MODULE	
Supply voltage (frequency)	AC/DC 24-240 V (AC 50/60 Hz)								AC/DC 24 V, AC 230 V (AC 50/60 Hz)	AC/DC 24 V-240 V (AC 50/60 Hz)	AC/DC 24 V, AC 230 V (AC 50/60 Hz)	
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")								90 x 52 x 65 mm (3.5" x 2" x 2.6")	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	90 x 35 x 64 mm (3.5 x 1.4 x 2.5")	

Temperature sensors TC/TZ more on page 23

TER-3A 3839
TER-3B 3840
TER-3C 3841
TER-3D 3842

Simple thermostat for monitoring and regulating the temperature in 8 ranges from -30 to +70 °C. Possibility of setting the "heating" / "cooling" function. Choice of external temperature sensors TC/TZ with double insulation in standard lengths of 3, 6 and 12 m. **TER-3F**: the sensor is part of the device.

TER-3E: 3843
TER-3F: 3844
TER-3G: 3845
TER-3H: 3846

TER-4/230V: 5539
TER-4/24V: 4749
Double thermostat for monitoring and regulating the temperature. 2 inputs for NTC sensor. Galvanically isolated power supply.

TER-7: 3716
It monitors motor winding temperature. PTC sensor in-built in motor winding is used as a sensing element.

TER-9/230V: 4698
TER-9/24V: 4699
Digital thermostat with 6 functions and in-built time switch.



programmable multifunction chronothermostat



multifunction thermostat



hygrothermostat optional functions



hygrosstat

Technical parameters	21235	21236	RHT-1	RHV-1
Monitored temperature range	-9 to +35°C	-9 to +35°C	0 to +60°C	-
Monitored humidity range	-	-	50 to 90°C	0 to 90 %
Output	1x CO, 16 A	1x CO, 16 A	1x NO, 16 A	1x NO, 12 A
Housing	LOGUS ⁹⁰	LOGUS ⁹⁰	1-MODULE	IP65
Supply voltage (frequency)	AC 100-240 V (50/60 Hz)	AC 100-240 V (AC 50/60 Hz)	AC/DC 24-240 V (AC 50/60 Hz)	AC 230 V (50/60 Hz)
Dimensions	KU68 box	KU68 box	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	153 x 62 x 34 mm (6" x 2.4" x 1.3")
Order code	21235	21236	5045	4058

Allows you to manually or automatically control heating or air conditioning in relation to the daily or weekly program and the set temperature.

Controls heating or air-conditioning systems depending on the selected temperature. It is possible to connect a floor temperature sensor to automatically detect and connect to it.

Hygro-thermostat for temperature monitoring and control - range 0 to +60 °C and relative humidity 0-90 %. Sensor is part of device - designated for measuring in switchboard.

A basic hygrosstat to monitor and control the relative humidity 0-90 %. Outdoor version IP65, box for wall mounting, removable lid without screws.



two-level thermostat in IP65 protection



one-level thermostat in IP65 protection



one-level thermostat in IP65 protection



one-level thermostat for outdoor use with IP65 protection

Technical parameters	TEV-1	TEV-2	TEV-3	TEV-4
Monitored range	-20 to +20°C	-20 to +20°C	+5 to +35°C	-30 to +60 °C
Thermosensor type	external TC/TZ			built-in
Output	1x CO, 16 A			1x NO, 12 A
Housing	enclosure IP65			IP65
Supply voltage (frequency)	AC 230 V (50/60 Hz)			AC 230 V (50/60 Hz)
Dimensions	110 x 135 x 66 mm (4.33" x 5.3" x 6.6")			153 x 62 x 34 mm (6" x 2.4" x 1")
Order code	2912	2925	2926	4057



energy saving digital radiator thermo-valve



thermo-drive



for range 0 to 70°C PVC insulation



for range -40 to +125°C silicone insulation



for range -30 to +200°C double isolation

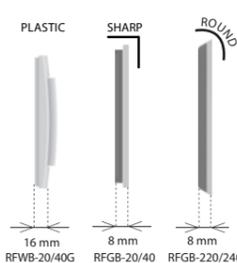
ATV-1	TELVA-2	TC	TZ	Pt100
ATV-1 : 6088 This energy-saving digital radiator thermo-valve is a programmable regulation device for various heaters, but mainly radiators. Intervals of heating and energy-saving operation can be set using a freely adjustable time program. 8 individually programmable switching times per day: - 4 heating intervals - 4 energy-saving intervals. The device features very quiet operation and long battery life (up 5 years). Quick and easy installation.	TELVA-2 230V, NO : 8196 TELVA-2 230V, NC : 8197 TELVA-2 24V, NO : 8198 TELVA-2 24V, NC : 8199 Thermodriver Telva-2 is a suitable control unit for a wide range of thermostatic valves. Visual indicator of valve position. Design: NO - without voltage open NC - without voltage closed	NTC thermistor 12 kΩ. 4 cable lengths: 10 cm, 3 m, 6 m and 12 m. TC-0 : 209970800010 TC-3 : 209970800011 TC-6 : 209970800012 TC-12 : 209970800013	NTC thermistor 12 kΩ. 4 cable lengths: 11 cm, 3 m, 6 m and 12 m. TZ-0 : 209970800014 TZ-3 : 209970800015 TZ-6 : 209970800016 TZ-12 : 209970800017	PTC sensor. 3 cable lengths: 3 m, 6 m and 12 m. PT100-3 : 3613 PT100-6 : 3614 PT100-12 : 3615





Wireless wall controllers 2 buttons, 4 buttons, Glass touch controllers 2 or 4 buttons (SHARP edges), Glass touch controllers 2 or 4 buttons (ROUND edges)

Technical parameters	RFWB-20/G	RFWB-40/G	RFGB-20	RFGB-40	RFGB-220	RFGB-240
Number of channels	2	4	2	4	2	4
Power supply	3 V battery CR 2032		2x 3 V batteries CR 2032		2x 3 V batteries CR 2032	
Design	LOGUS ⁹⁰		glass - sharp		glass - round	
Colour	in LOGUS ⁹⁰ variations		W - white, B - black		W - white, B - black	
Dimensions	85 x 85 x 16 mm		94 x 94 x 8 mm		100 x 100 x 8 mm	
Protocol	RFIO2		RFIO2		RFIO2	
Order code	8136	8098	20/B: 7679 20/W: 7678	40/B: 7681 40/W: 7680	220/B: 7684 220/W: 7683	240/B: 7686 240/W: 7685



Wireless controller in LOGUS⁹⁰ design. Standard BASE design (white plastic), but can be combined with glass, wood, metal or stone in the frame design.
RFWB enables communication (RFIO2) and can thus communicate with the CU3-02M.

RFGB-20/B: 2-buttons, black glass
RFGB-40/B: 4-buttons, black glass
RFGB-20/W: 2-buttons, white glass
RFGB-40/W: 4-buttons, white glass
Glass touch controllers with 2 or 4 buttons, in black or white glass with sharp edges.
RFGB-220/B: 2-buttons, black glass
RFGB-240/B: 4-buttons, black glass
RFGB-220/W: 2-buttons, white glass
RFGB-240/W: 4-buttons, white glass
Glass touch controllers with 2 or 4 buttons, in black or white glass with round edges.

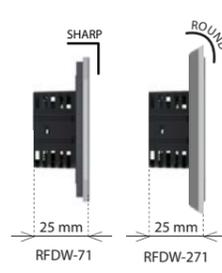


CONTROLLERS - with dimmer - outdoor - keychains



Glass controller with dimmer SHARP edges, ROUND edges, Outdoor 2-buttons controller, Key fob - 4 buttons black, white, Key fob - 6 buttons black, white, Controller with display anthracit, white

Technical parameters	RFDW-71	RFDW-271	RFOWB-20	RF KEY-40	RF KEY-60	RF PILOT			
Number of channels	4		2	4	6	40			
Power supply	AC 230 V or 120 V AC		3 V battery CR 2032	3 V battery CR 2032		2x batteries 1.5 V AAA/R03			
Design	glass sharp	glass round	IP65	key fob		remote controller			
Colour	W - white, B - black		white	B - black	W - white	B - black	W - white		
Dimensions	94 x 94 x 36 mm	100 x 100 x 36 mm	64 x 74 x 44 mm	64 x 25 x 10 mm		130 x 41 x 18 mm			
Protocol	RFIO2		RFIO2	RFIO2		RFIO			
Order code	71/B: 4178 71/W: 5983	271/B: 8042 271/W: 7695	8147	8075	8074	8077	8076	4516	4376



Glass controller with integrated dimmer R - L - C - ESL - LED for loads up to 160 VA (for 230 V). 4 buttons can control the dimmer or other iNELS RF wireless units. Flush mounted in the installation box.

Wireless pushbutton controller with IP65 protection designed for outdoor and humid environments.

Controller in the size of a keychain comes in black and white colour. 4 or 6 buttons allows you to control an unlimited number of units.

Remote controller with OLED display allows to control up to 40 units. Provides the ability to divide elements into Rooms, Favourites or Scenes.



Technical parameters	RFSA-11B	RFSA-61B	RFSAI-161B	RFSA-62B	RFSAI-62B	
Output	1x NO, 16 A		1x NO, 12 A	2x NO, 8 A		
Supply voltage (frequency)	AC/DC 12-24 V (50/60 Hz), AC 120 V (60Hz) or AC 230 V (50/60 Hz)		AC 230 V (50/60 Hz)	AC 120 V (60 Hz)	AC/DC 12-24 V (50/60 Hz), AC 120 V (60Hz) or AC 230 V (50/60 Hz)	
Design	BOX					
Dimensions	49 x 49 x 21 mm					
Protocol	RFIO2					
Order code	24V: 5139 120V: 4302 230V: 5000	24V: 5146 120V: 5740 230V: 4995	4934	3404	24V: 5189 120V: 5182 230V: 4996	120V: 7494 230V: 4999



- switch on/off
- 1 output

- 6 functions
- 1 output

As RFSA-161B, but with a pre-set algorithm for lighting control (e.g. hotel room) based on upstream wireless detectors. Input for connecting a wire button. Part of the HRESK system.

- 6 functions
- 2 outputs

- 6 time functions
- 2 outputs 3 A
- 2 inputs for wired buttons



SWITCHES - shutters - on DIN rail



Technical parameters	RFJA-32B	RFSA-61MI	RFSA-61M	RFSA-66MI	RFSA-66M	RFSA-166M
Output	2x NO, 8 A	contactless		1x CO, 16 A	3x CO / 3x NO, 8 A	3x CO / 3x NO, 8 A
Supply voltage (frequency)	230 V AC (50/60 Hz)	120 V AC (60 Hz)	5-24 V DC	110-230 V AC (50/60 Hz)	AC 110-230 V (50/60 Hz), or AC/DC 12-24 V SELV	AC 110-230 V (50/60 Hz)
Design	BOX		1-MODULE	3-MODULE		3-MODULE
Dimensions	49 x 49 x 21 mm	49 x 49 x 13 mm	90 x 17.6 x 64 mm	90 x 52 x 65 mm	90 x 52 x 65 mm	90 x 52 x 65 mm
Protocol	RFIO2		RFIO2	RFIO2		RFIO2



RFJA-32B/24V: 5768
RFJA-32B/120V: 7492
RFJA-32B/230V: 7466
2 independent outputs for control of two-way motors: garage doors, gates, blinds, shutters, ...
Inputs for connecting external control wired buttons.

RFSA-61MI: 8154
RFSA-61M: 5234
MI - integrated antenna
M - SMA connector for external antenna.
AN-I antenna is part of the unit.

RFSA-66MI/24V: 8156
RFSA-66MI/110-230V: 8155
RFSA-66M/24V: 5291
RFSA-66M/110-230V: 7723
MI - integrated antenna
M - SMA connector for external antenna.
AN-I antenna is part of the package.

RFSA-166M/230V: 3432
Fancoil control:
• heating / cooling mode
• 3 speed levels
The last channel can be switched by any appliance (e.g. lights). It is controlled by the RFTC-150/G thermostat.
It can have detectors in front (window / door openers (RFWD-100)).





Analog controller
0(1) - 10V



Universal dimmer
1x 160 VA



Universal dimmer
1x 600 VA



Dimmer for LED
(RGB strips)
3-channels



Universal dimmer
6x 150 VA

Technical parameters	RFDAC-71B	RFDEL-71B	RFDEL-71M	RFDA-73M/RGB	RFDEL-76M
Output	0(1) - 10 V contact 1 VA	R - L - C - LED - ESL 160 VA 80 VA	R - L - C - LED - ESL 600 VA 300 VA	3x 5 A	R - L - C - LED - ESL 6x 150 VA 6x 75 VA
Supply voltage (frequency)	AC 110-230 V (50/60 Hz)	AC 230 V (50 Hz) AC 120 V (60 Hz)	AC 230 V (50 Hz) AC 120 V (60 Hz)	DC 12-24 V stabilized	AC 230 V (50 Hz) AC 120 V (60 Hz)
Design	BOX		3-MODULE		6-MODULE
Dimensions	49 x 49 x 21 mm		90 x 52 x 65 mm		90 x 105 x 65 mm
Protocol	RFIO2		RFIO2		RFIO2
Order code	4993	4994 5222	4897 5304	4916	8205 8209

Used to control devices with analog control voltage 0 (1) -10V. Included is a relay contact to turn off the ballast light.



The light source is selected by a switch on the front panel, potentiometer for minimum brightness, input for wired button.



As version "RFDEL-71B", but DIN rail designed inputs for external control by potentiometer or analog voltage 0 (1) - 10 V.



The dimmer for LED strips is used for independent control of 3 single-colour LED strips or one RGB LED strip.



Universal six-channels dimmer with an output of 150 VA / 75 VA channel. The outputs can be connected in parallel and multiply the power at the expense of the number of outputs (up to 900 VA / 230 V) when connecting all 6 outputs together.



SOCKETS - dimming

- switching



Dimming socket-plug



Switching socket-plug



Switching socket with increased protection

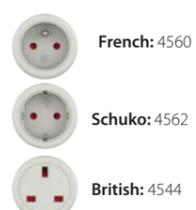


Switching unit for outdoor use

Technical parameters	RFDSC-71	RFSC-61	RFOSC-61	RFUS-61
Type of load	R - L - C - LED - ESL max. 300 W/150 W	1x NO, 16 A/AC	1x NO, 16 A/AC	1x CO, 12 A/AC1
Supply voltage (frequency)	AC 230 V (50/60 Hz) or AC 120 V (60 Hz)	AC 230-250 V or AC 120 V (50/60 Hz)	AC 230-250 V or AC 120 V (50/60 Hz)	AC 230-250 V or AC 120 V (50/60 Hz)
Design	socket-plug	socket-plug	socket IP65	IP65
Dimensions	60 x 120 x 80 mm	60 x 120 x 80 mm	64 x 74 x 53 mm	136 x 62 x 34 mm
Protocol	RFIO	RFIO	RFIO2	RFIO2



French: 4594
Schuko: 4595
British: 4546



French: 4560
Schuko: 4562
British: 4544



RFOSC-61: 8062
Switching socket in IP65 design is intended for installation in an outdoor environment.



RFUS-61/120V: 5256
RFUS-61/230V: 5853
Switching component with 1 output channel in a box with increased coverage for outdoor environments.



DETECTORS



Flood



Twilight



Magnetic
(Window/door)



Motion

Technical parameters	RFSF-100	RFSOU-1	RFWD-100	RFMD-100
Battery power	2x batteries 1.5 V AAA	2x batteries 1.5 V AAA	1x 3 V battery CR 2032	2x batteries 1.5 V AAA
Design	disc box	IP65	interior	interior
Dimensions	Ø 89 x 23 mm	72 x 62 x 34 mm	25 x 75 x 16 mm / 15 x 75 x 14 mm	72 x 62 x 34 mm
Protocol	RFIO2	RFIO	RFIO2	RFIO2
Order code	7682	4707	5027	5029

The flood detector is used to detect water leaks - activation occurs when the contacts located on the bottom of the detector are flooded.



2 functions in 1 unit:
Twilight switch
for range 1-1.000 lx or
Light switch
for the range 100-100,000 lx

Setting the values of the potentiometers inside.
Enclosure with increased IP65 protection for demanding environments.



Main device (wider part) and Magnet (narrower part) glued to the moving parts (door, window, gate...).

Activation occurs when the detector is moved away from the magnet.



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

Detection angle 105°
Detection distance max: 12 m
Working height: 2.4 m

Integrated light sensor and tamper against unwanted opening of the cover.



LEVEL SWITCHES

DRY CONTACTS CONVERTERS



Level switch



Liquid probe



2 contacts converter
- permanent switching



4 contacts converter
- button switching



1 contact converter
- permanent switching

Technical parameters	RFSF-1B	FP-1	RFIM-20B	RFIM-40B	RFSG-1M
Battery power	1x 3 V battery CR 2477		1x 3 V battery CR2477	2x 3 V batteries CR2032	AC 10-230 V (50/60 Hz)
Design	BOX		BOX		1-MODULE
Dimensions	49 x 49 x 13 mm		49 x 49 x 13 mm		90 x 17.6 x 64 mm
Protocol	RFIO		RFIO	RFIO2	RFIO2
Order code	4860	6563	4175	8134	4284

Conductivity probes (recommended FP-1) can be connected to the INPUT terminals to monitor flooding or the level in the tank. When activated, it sends a command to the actuator or eLAN.



External probe designed for Level sensor RFSF-1B for flood monitoring. 1 m cable can be extended by 30 m.

Converts 2 potential-free inputs that can be permanently closed (switch, relay contact) to RF signal.



Converts 4 potential-free inputs that can be permanently closed (switch, relay contact) to RF signal. Thanks to bidirectional communication should work with CU3-02M or eLAN-RF-103.



This wireless contact converter is especially appropriate for wireless transmission of information on switching HDO. Thanks to the network supply, it can also be used for partial transmission of information for control of an appliance or device. Bidirectional communication RFIO2.





Simple temperature controller



Autonomous temperature controller



Thermostat for fancoil control via RFSAs-166M

Covers:



AL - aluminium



GE - ice



IS - gray



MF - ivory



PE - pearl

Technical parameters	RFTC-10/G	RFTC-50/G	RFTC-150/G
Battery power	2 x 1.5 V battery AAA		
Design	LOGUS ⁹⁰		
Dimensions	85 x 85 x 16 mm / 94 x 94 x 16 mm		
Protocol	RFIO		
Order code	RFTC-10/G/BR/BR	RFTC-50/G/BR	RFTC-150/G/BR

RFTC-10/G: design BASE, white cover, white frame, **order code:** RFTC-10/G/BR/BR*
- used for temperature measurement (in the range of 0 to 55 °C) and correction of the pre-set temperature in RF Touch or eLAN-RF system devices in the range of ± 5 °C.

RFTC-50/G: design BASE, white cover, white frame, **order code:** RFTC-50/G/BR
- is a separate thermostat that allows wireless control of up to 4 switching elements, eg. RFSAs-6x / RFUS-61 / RFSTI-11B.

RFTC-150/G: design BASE, white cover, white frame, **order code:** RFTC-150/G/BR
- thermostat for controlling the RFSAs-166M switching component for fan coil control.
Thermostat **covers** are available in: Pearl (PE), Ivory (MF), Gray (IS), Ice (GE) and Aluminium MF(AL) colour. It is thus possible to combine them with all LOGUS⁹⁰ frames.

Compatibility control

	RFTC-10/G	RFTC-50/G	RFTC-150/G
RF Touch	✓	x	x
eLAN-RF	✓	x	x
RFSAs-6x	✓	✓	x
RFSTI-11B	x	✓	x
RFSAs-166M	x	x	✓



TEMPERATURE CONTROL - sensors and actuators



Switching unit with temperature sensor



Temperature sensor



Overheating/overcooling switch unit with advanced functions



Thermo-drive

Technical parameters	RFSTI-11B	RFTI-10B	RFSTI-111B		TELVA-2	
Supply voltage (frequency)	AC 230 V, AC 120 V, AC/DC 12-24V (AC 50/60 Hz)	1x 3 V battery CR 2477	AC 230 V (50/60 Hz)	AC 120 V (60 Hz)	AC 24 V	AC 230 V (50/60 Hz)
Design	BOX	BOX	BOX		valve thread	
Dimensions	49 x 49 x 21mm	49 x 49 x 13 mm	49 x 49 x 21 mm		63 x 42 x 45 mm	
Protocol	RFIO2	RFIO	RFIO2		wired	
Order code	24V: 5241 120V: 5239 230V: 5235	3175	4915	3409	24V/NO: 8199 24V/NC: 8198	230V/NO: 8196 230V/NC: 8197

Switching component (16 A relay contact) with input for external temperature thermosensors TC /TZ. It can be combined with units: eLAN-RF, RF Touch and RFTC-50/G.

The internal or external TC / TZ sensor measures the temperature in the range -20 to + 50 °C and sends it to the system device (eLAN-RF or RF-Touch) at regular intervals (5 min).

Most suitable for hotel rooms. The components support communication with RF detectors. Range 160 m.

The thermal actuator is designed to open or close valves in heating, cooling or air conditioning systems. It is maintenance free and works completely silently.

Options:
- open without voltage (NO)
- closed without voltage (NC).

Temperature sensors TC/TZ more on page 23



Wireless touch unit on the wall



Wireless touch unit flush mounted



Smart RF Gateway with LAN

INNOVATION



Smart RF Gateway with WiFi & LAN



Repeater (socket-plug)

Technical parameters	RF TOUCH/W	RF TOUCH/B	eLAN-RF-103	eLAN-RF-Wi-103	RFRP-20
Number of connectable components*	40	40	70	70	20
Supply voltage (frequency)	AC 100-230 V (50-60 Hz) or 12 V DC adapter	AC 100-230 V (50-60 Hz)	adapter 5V DC / 1A		AC 230-250 V (50-60 Hz) or 120 V (60 Hz)
Design	on the wall	flush mounted	aluminum box		socket-plug
Dimensions	94 x 94 x 24 mm	94 x 94 x 36 mm	90 x 52 x 65 mm		60 x 120 x 80 mm
Protocol	RFIO2		RFIO2		RFIO
Order code	available at the price list		8044	8084	French: 4510 Schuko: 4547 British: 4548

* allow to control the units independently

A wireless control unit with a 3.5" touch screen (as well as applications for telephones) which is the superior, but not mandatory controller for wireless components and detectors of the iNELS RF system. It includes simple automation functions, such as temperature and time programs, control of RGB strips and light bulbs, quick control and more.

The RF Smart box is a gateway between iNELS RF components and applications: smartphone, tablet, watch, television, voice assistants (Google Home & Alexa) and other third party devices. Allows remote control: direct or via Cloud. It is available in two versions:
a) eLAN-RF-103: LAN communication
b) eLAN-RF-Wi-103: LAN communication with WiFi in AP mode or in Client mode.

The signal repeater is used to increase the range between the controller and the component by up to 200 meters. It is designed for signal transmission to up to 20 components.



Colour options

Exploded view



black/white



chrome/gray



white/ice



glass/gray



red/aluminium



aluminium/gray



titan/ice



cover



between the frame



device with display



frame



RFAF/USB	AN-I	AN-E	AN-E3	Extension cable
RFAF/USB: 4503 The RFAF / USB Service Key (in conjunction with the RF_analyzer) is designed for iNELS RF Control system partners.	AN-I: 6186 Polarization: vertical Gain: 2.1 dBi Dimensions: 17 x 44 x 8,5 mm Impedance: 50 Ω Colour: black	AN-E: 6056 Cable length: 3 m Polarization: vertical Gain: 5 dBi Impedance: 50 Ω Colour: black Dimensions: Ø 30 x 280 mm	AN-E3: 8219 Cable length: 3 m Polarization: vertical Gain: 3 dBi Impedance: 50 Ω Colour: black Dimensions: Ø 50 x 88 mm	EC-10: 8191 SMA connectors (male/female) Cable length: 10 m Colour: white

RF SETS Combination of controllers and units



RFSET-SW2-Z1	RFSET-SK-Z1	RFSET-SW-F1	RFSET-SK-F1	RFSET-SMK-F1
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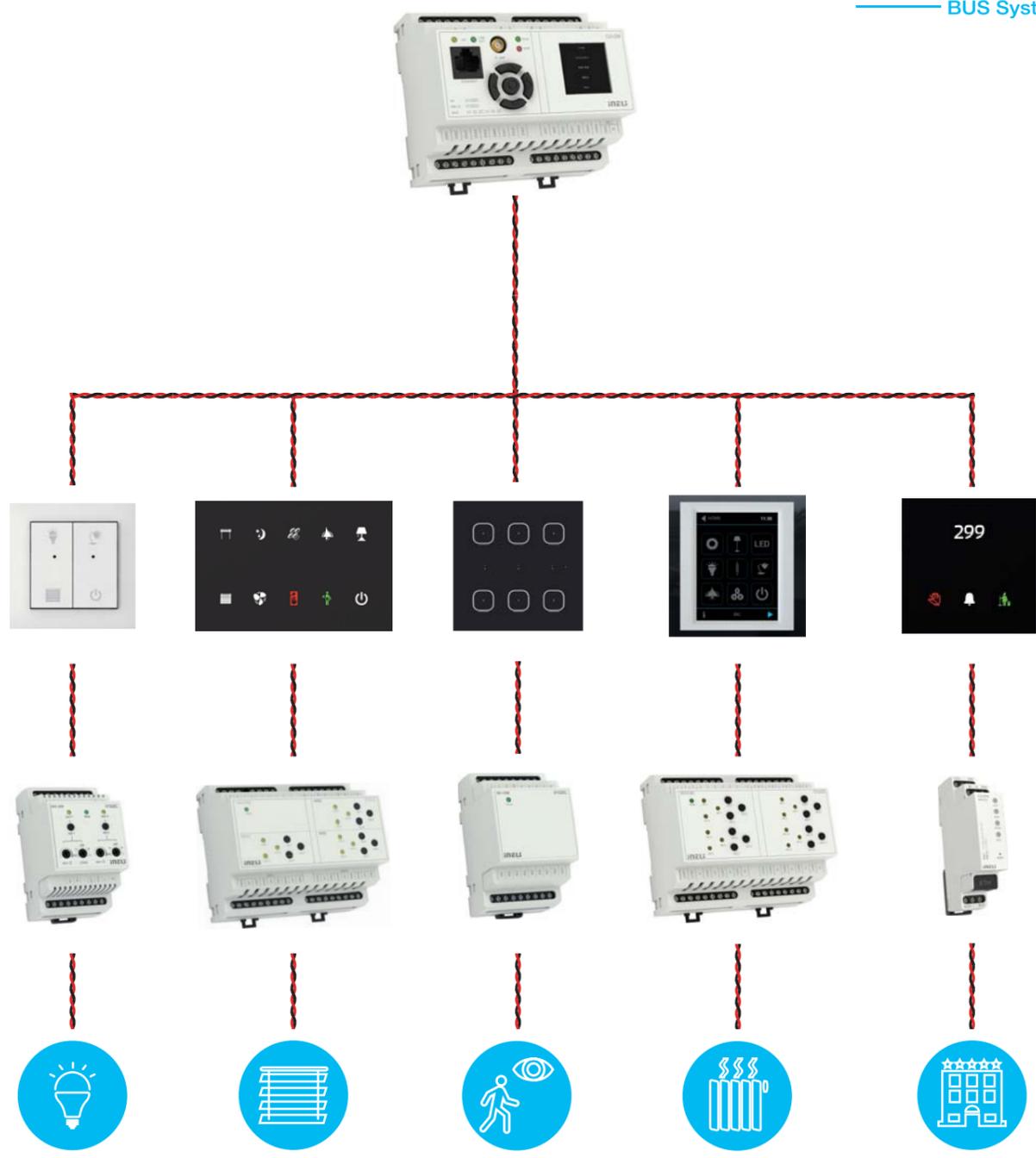
RFSET-SW2-Z1: 4155 EN/CZ	RFSET-SK-Z1: 4156 EN/CZ	RFSET-SW-F1: 4165	RFSET-SK-F1: 4166	RFSET-SMK-F1: 4180
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Basic sets, indicated as RFSET-xxxx-Z1, are designed to satisfy the most common user requirements. Basic RF sets are combined with receivers: RFSA-11B.

Multifunction sets, under the designation RFSET-xxxx-F1, provide the user with comfort in the form of rich options in functions and selection of from up to seven preset programs of actuators. Multifunctional sets are combined with the receivers: RFSA-61B, RFSA- 61M.



WIRED ELECTRO-INSTALLATIONS iNELS BUS



CENTRAL UNITS



Central units are the brain of the iNELS BUS system, a "mediator" between user's programming environment and controllers, units and actuators connected to the BUS.

CU3-01M	CU3-02M	CU3-05M	CU3-06M	CU3-07M
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Order code CU3-01M: 3222
Order code CU3-02M: 3239

- CU3-01M and CU3-02M are central units of the iNELS system and mediators, between user software interface and controllers, units and actuators connected to the BUS.
- It's possible to directly connect up to 2 lines of BUSes in to CU3-01M and CU3-02M, and on each BUS we can connect up to 32 iNELS3 units.
- The main difference between CU3-02M and CU3-01M is that CU3-02M is moreover equipped by RF module which enables communication with selected units from iNELS RF Control system.
- User's project and retentive data are stored in a non-volatile internal memory hereby data are backed up without the supply voltage. Real time clock (RTC) backup for 10 days.
- Power supply controlling system - network voltage and the status of the backup battery.
- Possibility of setting time synchronization via NTP server.
- The RJ45 Ethernet port's connector is located on the front panel of the unit, the transmission speed is 100 Mbps.
- For CU3-01M (02M) it is possible to use 4 potential-free inputs for connecting external controllers (buttons, switches, sensors, detectors, etc.) and 2 analog inputs 0 - 30V.
- CU3-01M (02M) comes with OLED display that shows the current status and enables settings (network settings, date, time, service) of the central unit CU3-01M (02M).
- Movement in the menu CU3-01M (02M) using arrows on the front panel.
- CU3-01M (02M) in 6-MODULE are designed for mounting into a switchboard on the EN60715 DIN rail.



Order code CU3-05M: 8118
Order code CU3-06M: 7611

- CU3-05M and CU3-06M are new and more powerful central units of the iNELS system. They are an intermediary between the user program, controllers, units and actuators. With new, faster processors, you can handle even the most complex tasks literally instantly.
- Up to two BUS lines can be connected directly to the CU3-05M and CU3-06M. Each BUS line can take up to 32 iNELS3 units.
- Additional units can be connected to the system via expansion unit MI3-02M, which is connected to the CU3 via the EBM system bus.
- CU3-06M is additionally equipped with an RF module enabling communication with selected units from iNELS RF Control system. This is how you can extend your existing installation without cutting into the wall.
- Possibility to set time synchronization via NTP server.
- The RJ45 Ethernet port connector is located on the bottom of the unit, the transfer rate is 100 Mbps.



Order code: 8010

- MiniCU CU3-07M is a small central unit for managing small projects such as a hotel room, small apartment or cottage.
- Configuration is performed by software iNELS Designer and manager - iDM3.
- The unit can work as a stand-alone master for installation or as a slave for the superior CU3-0xM.
- You can connect up to 32 iNELS3 units on the CU3-07M.
- iNELS BUS units can be connected.



SYSTEM UNITS



Power supply 30 W with BUS separator

Power supply 100 W

External master BUS

BUS separator from power supply

GSM communicator

Technical parameters	PS3-30/iNELS	PS3-100/iNELS	MI3-02M	MI3-02M/ETH	BPS3-01M	BPS3-02M	GSM3-01M
Output	27 V / 1A	27.6 V / 3.6 A, 12.2 V / 0.35 A	2x BUS iNELS3	2x BUS iNELS3	1x BUS	2x BUS	-
Supply voltage (frequency)	100-250 V AC (50/60 Hz)	100-250 V AC (50/60 Hz)	BUS 27 V DC		BUS 27 V DC		BUS 27 V DC
Rated current	-	-	25 mA (at 27 V DC)	75 mA (at 27 V DC)	8 mA (at 27 V DC)	15 mA (at 27 V DC)	250 mA (at 27 V DC)/max.1A
Dimensions	90x52x65 mm	90x105x65 mm	90x17.6x64 mm		90x17.6x64 mm		90x52x65 mm
Order code	8011	4889	3241	3489	3244	3243	3242

PS3-30/iNELS: power 30 W, integrated bus separator BPS3-01M.
PS3-100/iNELS: power 100 W, inputs for connecting backup batteries 2x12V and the possibility of recharging them with adjustable current.

MI3-02M: expands the system by 2 bus, i.e. by 2x 32 units, connection to CU3 via EBM bus.
MI3-02M/ETH: expands the system by 2 bus, i.e. by 2x32 units, connection to CU3 via ethernet.

This separator serve for impedance separation of BUS from supply voltage power.

BPS3-01M: allows you to connect one BUS with max. load 3 A.
BPS3-02M: allows you to connect two separate BUS1 and BUS2 with max. load 1 A for each line.

It serves for communication with the iNELS system via commands sent in short SMS messages from mobile phone GSM. Communicator connects to the central unit CU3 via the EBM system BUS.



SWITCHING ACTUATORS



Switching actuator 1-channel

Switching actuator 2-channels

Switching actuator 4-channels

Switching actuator 6-channels

Switching actuator 12-channels

Technical parameters	SA3-01B	SA3-02B	SA3-04M	SA3-06M	SA3-012M
Number of contacts	1x NO, 16 A	2x CO, 8 A	4x CO, 16 A	6x CO, 8 A	12x NO, 8 A
Switching current	16 A / AC1	8 A / AC1	16 A / AC1	8 A / AC1	8 A / AC1
Switching output	4000 VA	2000 VA	4000 VA / AC1, 384 W/DC	2000 VA / AC1, 192 W/DC	2000 VA
Supply voltage (frequency)	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC	230V AC (50/60 Hz) 120 V AC (60 Hz)
Rated current from BUS	30 mA (at 27 V DC)	50 mA (at 27 V DC)	70 mA (at 27 V DC)	60 mA (at 27 V DC)	5 mA (at 27 V DC)
Housing	BOX		3-MODULE		6-MODULE
Dimensions	49 x 49 x 21 mm		90 x 52 x 65 mm		90 x 105 x 65 mm
Order code	3235	3236	3238	3287	3246 3302

1-channel/2-channel switching actuator for switching appliances, e.g. lighting, thermo drives and sockets. 1x temperature input TC / TZ.

4-channel switching actuator for switching appliances and controlling blinds, 4x changeover contact 16 A, LED signalling of relay status, manual control.

6-channel switching actuator for switching appliances, lighting and thermo drives, 6x changeover contact 8 A, LED signalling of relay status, manual control.

12-channel switching actuator for switching appliances, lighting and thermo drives, 12x switching contact 8 A, LED signalling of relay status, manual control.



SWITCHING ACTUATORS

SHUTTER ACTUATORS



Switching actuator, 22-channels with control and indication components

without control and indication components

Shutter actuator 2-channels

Shutter actuator for 9 motors

Technical parameters	SA3-022M	EA3-022M	JA3-02B/DC	JA3-018M
Number of contacts	20x NO + 1x CO with blocking (for shutters)		DC 1x 12-24 V	9x CO with blocking
Switching current	according to the output (6 A/10 A)		0.85 A	4 A/AC15
Switching output	according to the output		-	1000 VA
Supply voltage (frequency)	BUS 27 V DC		BUS 27 V DC	100-250 V AC (50/60 Hz)
Rated current from BUS	100 mA (at 27 V DC)		60 mA (at 27 V DC)	5 mA (at 27 V DC)
Housing	6-MODULE		BOX	6-MODULE
Dimensions	90 x 105 x 65 mm		49 x 49 x 13 mm	90 x 105 x 65 mm
Order code	3526	3523	3271	7446

Actuator for controlling light circuits, appliances, thermo drives and 1 shutter (2 relays with blocking). Unit is equipped with 20x switching outputs and 1x changeover contact for controlling blinds or shutters.

Actuator for controlling blinds, rollers, shutters and other motors powered by 24 V DC. Unit has 2x analog or 2x digital input.

Actuator designed for controlling rollers, shutters, blinds, awnings, garage door on entrance gates. This unit can control up to 9 motors.



DIMMING ACTUATORS



Dimming actuator
2-channels



Dimming actuator
6-channels



Dimming actuator for electronic ballasts
2-channels

Technical parameters	DA3-22M		DA3-66M		LBC3-02M
Output	R - L - C - LED - ESL 400 VA (230 V) / 200 VA (120 V)		R - L - C - LED - ESL 150 VA (230 V) / 75 VA (120 V)		2x 0(1)-10 V 2x CO, 16 A
Input	2x wire buttons, 1x temperature		6x wire buttons		-
Supply voltage (frequency)	230 V AC (50/60 Hz)	120 V AC (60 Hz)	230 V AC (50 Hz)	120 V AC (60 Hz)	BUS 27 V DC
Rated current from BUS	5 mA (at 27 V DC)		100 mA (at 27 V DC)		60 mA (at 27 V DC)
Housing	3-MODULE		6-MODULE		3-MODULE
Dimensions	90x52x65 mm		90 x 105 x 65 mm		90 x 52 x 65 mm
Order code	3262	3303	8206	7445	3268

2-channel actuator for dimming ESL, LED and RLC loads, 2x 400 VA, 2x input for wired button, 1x input for temperature sensor TC/TZ.



Output power 150 VA / channel. The outputs can be connected in parallel and multiply the power at the expense of the number of outputs (up to 900 VA when all 6 inputs for wired buttons).



Analog 2-channel actuator for dimming electronic ballasts. This unit has 2x analog output 0(1)-10 V, 2x changeover contacts 16 A, LED signalization of relay status.



LIGHTING CONTROL



Gateway
iNELS-DALI/DMX



Combined
detector



Luminescence
sensor

Technical parameters	EMDC-64M	DMD3-1	DLS3-1
iNELS BUS/EBM	EBM	BUS	BUS
DALI/DMX BUS	64 channels / 64 channels	yes/no	yes/no
Supply voltage	AC 230 V (50/60 Hz), max. 100 mA	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	-	18 mA (at 27 V DC)	12 mA (at 27 V DC)
Housing	3-MODULE	ceiling mounting	IP65 box
Dimensions	90 x 52 x 65 mm	Ø 76 x 73 mm	96 x 62 x 34 mm
Order code	5030	5751	5750

The converter supplies the DALI BUS - 16 V, 250 mA. The EMDC-64M unit is designed to control electronic DALI ballasts and DMX receivers from the iNELS system. It allows controlling of up to 64 independent electronic DALI ballasts or 64 independent DMX receivers.



The motion detector is used to detect movement in the area using the passive infrared scanning spectrum for detection. Integrated luminescence sensor can be used for sensing current luminescence at the point of installation of the unit. This unit can be installed also on DALI BUS.



DLS3-1 is for sensing the current luminescence in the place of installation of the unit. The DLS3-1 is supplied in IP65 protection box and can be installed outdoors. The unit supports DALI BUS.



THERMO INPUTS AND CONVERTERS



Binary input unit
4-channels



Binary input unit
8-channels



Binary input unit
14-channels



Temperature input
4-channels



Temperature input
6-channels

Technical parameters	IM3-40B	IM3-80B	IM3-140M	TI3-40B	TI3-60M
Number of inputs	4x binary	8x binary	14x binary	4x temperature	6x temperature
Temperature sensors	1x TC/TZ		-	TC, TZ, Ni1000, Pt1000, Pt100	TC, TZ, Ni1000, Pt1000, Pt100
Supply voltage	BUS 27 V DC		BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	20 mA (at 27 V DC)		25 mA (at 27 V DC)	20 mA (at 27 V DC)	45mA (at 27 V DC)
Housing	BOX		3-MODULE	BOX	3-MODULE
Dimensions	49 x 49 x 13 mm		90 x 52 x 65 mm	49 x 49 x 13 mm	90 x 52 x 65 mm
Order code	3231	3232	3245	3269	3289

This unit is designed for connection of 4 or 8 devices with potential-free contacts (PIR, button, etc.), 1x temperature input for TC/TZ sensor, output for powering detectors by 12 V DC/75 mA.



This input module connects up to 14 devices with potential-free contact (PIR, button etc.). 14x binary input, output for powering detectors by 12 V DC/150 mA.



Temperature input unit TI3-40B is designed for connecting 4x temperature sensors TC, TZ, Ni1000, PT1000 or PT100.



Temperature input unit TI3-60M is designed for connecting 6x temperature sensors TC, TZ, Ni1000, PT1000 or PT100.



THERMO INPUTS AND CONVERTERS



Combined actuator
10 inputs, 8 outputs



Analog - digital converter
6 inputs



Digital - analog converter
4 inputs



Fan coil control actuator

Technical parameters	IOU3-108M	ADC3-60M	DAC3-04M	FA3-612M
Output	8x switching, 10 A	-	4x 0(1) - 10 V / 10 mA	4x (0)-10V, 4x switching, 4x SSR
Input	1x temperature, 8x digital	1x temperature, 6x analog.; 0-10 V; 0-20 mA	1x temperature	3x analog, 3x digital
Supply voltage	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	110 mA (at 27 V DC)	100 mA (at 27 V DC)	50 mA (at 27 V DC)	5 mA (at 27 V DC)
Housing	6-MODULE	3-MODULE	3-MODULE	6-MODULE
Dimensions	90 x 105 x 65 mm	90 x 52 x 65 mm	90 x 52 x 65 mm	90 x 105 x 65 mm
Order code	8188	3301	3256	3257

Actuator can switch the appliances, light circuits, thermodrives, etc., possibility of connecting wired buttons and temperature sensors. Outputs supports zero-crossing mode.



Analog signal converter is iNELS3 device which converts analog to digital signal (e.g. for weather station connection), 6x analog input, 2x temperature input for TC or TZ sensor.



Converter from a digital signal to an analog voltage signal 0(1)-10 V, for controlling electronic ballasts, thermo drives, etc, 4-channel, 1x temperature input for TC/TZ sensor.



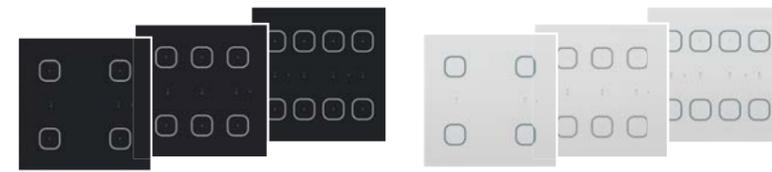
Actuator is designed to control fan coil units using analog/digital inputs and analog/relay outputs. The unit has 3 analog inputs and 3 galvanically separated digital inputs.



WALL UNITS AND CONTROLLERS



Control unit with touch screen



Glass switch button controllers (SHARP edges)
4 buttons 6 buttons 8 buttons

Technical parameters	EST3	GSB3-40	GSB3-60	GSB3-80
Number of buttons	2x2 / 2x3 / 3x3 / 3x4	4	6	8
Supply voltage	BUS 27 V DC	BUS 27 V DC		
Rated current from BUS	150 mA (at 27 V DC)	25-40 mA (at 27 V DC)		
Internal temp. sensor	-	yes		
Inputs	-	2x temperature or 2x digital		
Dimensions	94 x 94 x 36 mm	94 x 94 x 36 mm		
Order code	in the pricelist	40/B: 3290 40/W: 3295	60/B: 3291 60/W: 3298	80/B: 3292 80/W: 3299

EST3 is equipped with a 3.5" color touch screen. On the screen you can have 2x2, 2x3, 3x3 or 3x4 buttons for controlling anything. In Logus⁹⁰ design.

The glass switch with touch buttons in series GSB3 is a design element (controller) in the system iNELS3 with elegant and comfortable control options. Controllers are available in black (e.g. GSB3-40/B, 60/B and 80/B) and white (e.g. GSB3-40/W, 60/W and 80/W) variants.



WALL UNITS AND CONTROLLERS



Wall switch button 2 buttons



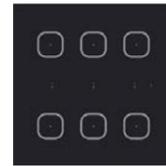
Wall switch button 4 buttons



Digital room thermo-regulator



Wall card reader 2 buttons



Glass wall card reader 6 buttons

Technical parameters	WSB3-20, WSB3-20H	WSB3-40, WSB3-40H	IDRT3-1	WMR3-21	GMR3-61
Number of buttons	2	4	2 (for temperature correction)	2	6
Supply voltage	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	25 mA (at 27 V DC)	25 mA (at 27 V DC)	20 mA (at 27 V DC)	50 mA (at 27 V DC)	50 mA (at 27 V DC)
Internal temp. sensor	yes	yes	yes	-	yes
Inputs	2x temperature or 2x digital	2x temperature or 2x digital	2x temperature or 2x digital	-	-
Dimensions plastic	85.6 x 85.6 x 42 mm	85.6 x 85.6 x 42 mm	85.6 x 85.6 x 42 mm	85.6 x 85.6 x 42 mm	94 x 94 x 36 mm
Dimensions other materials	94 x 94 x 36 mm	94 x 94 x 36 mm	94 x 94 x 50 mm	94 x 94 x 36 mm	
Order code - electronics*	20: 3234* 20H: 3247*	40: 3233* 40H: 3304*	device + cover: IDRT3-1/BR**	3275*	61/B: 5585 61/W: 5579

* Covers and frames for the devices must be ordered separately
** Frame must be ordered separately.

Wall controllers, 2x button, built-in temperature and humidity sensor (version H), 1x LED indication. In LOGUS⁹⁰ design.

Wall controllers, 4x button, built-in temperature and humidity sensor (version H), 2x LED indication. In LOGUS⁹⁰ design.

Control unit for heating/cooling. Temperature correction ±5 °C or direct input of requested temperature. Built-in temperature sensor. In LOGUS⁹⁰ design.

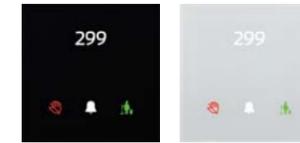
Wall reader with RFID can read chip cards, key fobs and control the entrance. Available in black and white color in Logus⁹⁰ design.

Glass wall reader with RFID and buttons can read chip cards, key fobs and control the entrance. Available in black and white color in Logus⁹⁰ design.

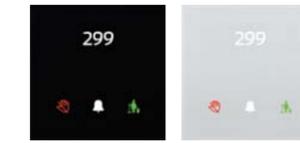


Order code of all color combinations are available in the price list.

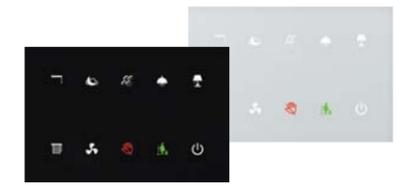
HOSPITALITY SOLUTION - GRMS



Glass card reader



Glass door bell



Glass switch panel 10 buttons

Technical parameters	GCR3-11	GDB3-10	GSP3-100
Number of buttons	3	1	10
Supply voltage	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	100-130 mA (at 27 V DC)	100-130 mA (at 27 V DC)	100-130 mA (at 27 V DC)
Inputs	internal temperature and brightness sensor	internal temperature sensor, 1x external input for TC/TZ	internal temperature sensor, 1x external input for TC/TZ
Dimensions	94 x 94 x 36 mm	94 x 94 x 36 mm	142 x 94 x 36 mm
Order code	11/B: 5747 11/W: 5748	10/B: 5726 10/W: 5727	100/B: 5628 100/W: 5632

Glass card reader GCR3-11 is designed for reading smart cards, which are intended to enter the hotel room or any other part of the building. The GCR3-11 unit is a design component of the iNELS system and is available in elegant black (GCR3-11/B) and white (GCR3-11/W) variants.

Glass info panel GDB3-10 is part of a comprehensive series of glass iNELS control units for guest room management system (GRMS), and is used to indicate the requested status of guest room - "Do Not Disturb" and "Make Up Room". It is available in elegant black (GCR3-11/B) and white (GCR3-11/W) variants.

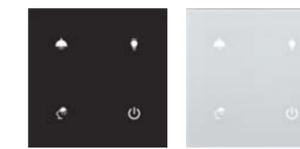
The GSP3-100 is equipped with ten touch buttons whose functions can be easily adjusted. Button symbols can be changed and adapted to the client's requirements upon a request. The buttons can be backlit in red, green, blue, yellow, pink, turquoise and white. The panel is available in elegant black (GSP3-100/B) and white variants (GSP3-100/W).



HOSPITALITY SOLUTION - GRMS



Glass switch button with symbols 2 buttons



Glass switch button with symbols 4 buttons



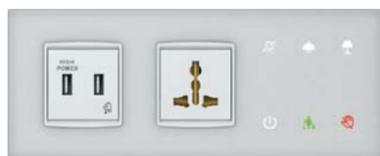
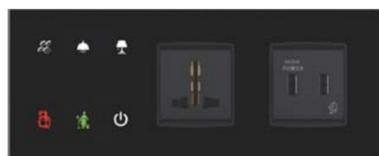
Glass switch button with symbols 6 buttons

Technical parameters	GSB3-20/S	GSB3-40/S	GSB3-60/S
Number of buttons	2	4	6
Supply voltage	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	27-35 mA (at 27 V DC)	27-35 mA (at 27 V DC)	27-35 mA (at 27 V DC)
Inputs	internal temperature and brightness sensor, 1x external input for TC/TZ	internal temperature and brightness sensor, 1x external input for TC/TZ	internal temperature and brightness sensor, 1x external input for TC/TZ
Dimensions	94 x 94 x 36 mm	94 x 94 x 36 mm	94 x 94 x 36 mm
Order code	20/SB: 5621 20/SW: 5622	40/SB: 5623 40/SW: 5624	60/SB: 3291 60/SW: 3298

The glass switch with touch buttons in series GSB3 is a design element (controller) in the system iNELS3 with elegant and comfortable control options. Controllers are available in black (e.g. GSB3-40/B, 60/B and 80/B) and white (e.g. GSB3-40/W, 60/W and 80/W) variants.

The glass switch with touch buttons with symbols in GSB3 series are equipped with two, four or six touch buttons, the functions of buttons can be easily adjusted. Button symbols can be changed and adapted to the client's requirements upon a request. The buttons can be backlit in red, green, blue, yellow, pink, turquoise and white. Touch panels are a design components of the iNELS3 system and are available in elegant black (GSB3-20/SB, GSB3-40/SB, GSB3-60/SB) and white variants (GSB3-20/SW, GSB3-40/SW, GSB3-60/SW).





Glass bedside panel
- right and left

Technical parameters	GBP3-60R	GBP3-60L
Number of buttons	6	
Supply voltage	BUS 27 V DC	
Rated current from BUS	25-50 mA (at 27 V DC)	
Measurement	1x external input for TC/TZ or 1x digital, brightness sensor	

Order code: 5728

Order code: 3533

GBP3-60 is available in several designs and is very flexible and efficient solution for a wide range of projects.

The following variants are available:

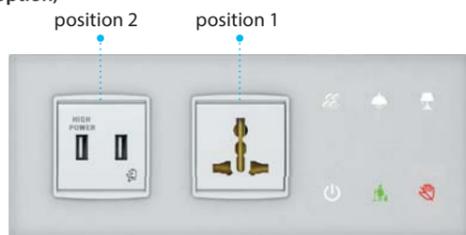
- Left / right design providing the same comfort of control from both sides of the bed.
 - Accessories like power sockets, network sockets, HDMI or USB can be easily added in the bedside panel by changing the VIMAR modules.
 - Black / white elegant design suitable for almost any interior.
- GBP3-60 can be equipped with a number of modules, eg:
- AC power sockets: UNI, Schuko, French, British.
 - other types of modules: 2xUSB, USB, LAN, HDMI



GBP3 variants

Configure bedside panel according to your request.

L (left option)



GBP3-60/WL/2F-26W-20W

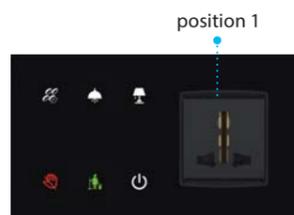
R (right)



GBP3-60/BR/2F-26B-11B44B

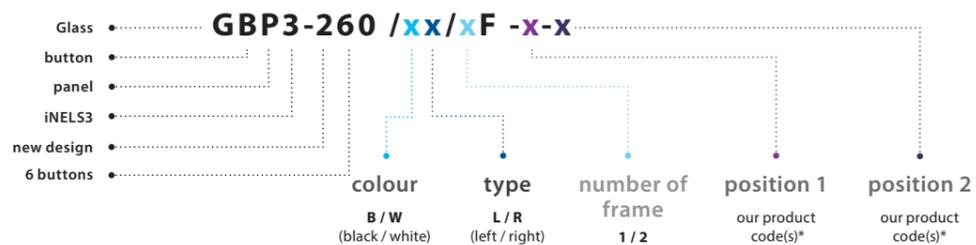


GBP3-60/WL/1F-21W45W



GBP3-60/BR/1F-26B

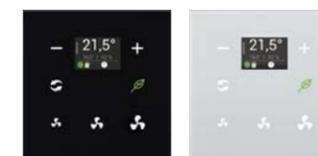
Part number



* In case of 1-MODULE choice it is necessary to pick 2x 1-module to fill up the 1 position, for example GBP3-60/WL-21W45W.



Hotel control unit with touch screen



Glass room thermo-regulator



Glass card holder

Technical parameters	EHT3	GRT3-50	GCH3-31
Input	-	-	1x changeover, 8 A
Number of buttons	touch screen	7	3
Supply voltage	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	150 mA (at 27 V DC)	85 mA (at 27 V DC)	100-120 mA (at 27 V DC)
Measurement	-	internal thermometer and humidity sensor, 1x external input for TC/TZ or 1x digital	brightness sensor
Dimensions	94 x 94 x 36 mm	94 x 94 x 36 mm	142 x 94 x 36 mm
Order code	available in the price list	50/B: 5630 50/W: 5634	31/B: 5627 31/W: 3494

The control unit with touch screen EHT3 is a suitable control element for iNELS3 in places where it is required to control multiple devices. The unit replaces multiple controllers and reduces the number of switches on the wall. In LOGUS[®] design.



Glass room thermo-regulator GRT3-50 is part of a comprehensive range of glass iNELS3 control units for guest room management system (GRMS) and serves to regulate the temperature in the room. Thermo-regulator is also equipped with 3 symbols for controlling fancoil speed.



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.





iTP 10"

eLAN-IR-003

Order code: 3538

Order code: 3283

- 10" touch panel designed to control iNELS.
- Black aluminum frame chassis in combination with glass.
- Integrated speakers and microphone are primarily designed for intercom operation.
- Connection to the local area network can be done via Ethernet connection with PoE power supply - Active PoE (IEEE 802.3af).
- Android for iHC (iNELS Home Control).
- Update of applications is managed online.
- The panel also includes a cover that also serves as a mounting frame.

- The applications iHC-MAIR and iHC-MIIR provide universal control for all audio/video devices (including air conditioning).
- The application directly control the eLAN-IR over the network.
- The intuitive application environment makes it simple for anyone to control.
- What all can you control? Home theater, TV, DVD or Blue-ray player, amplifier, set-top box, satellite receiver, air-conditioning, projector and more.
- It can control up to 100 arbitrary commands with various controllers that you normally have at home.
- The scenes function - you can perform multiple functions simultaneously by a single command (e.g. you are going to bed you and switch off all AV appliances in the entire home with a single press).
- It is possible to integrate into a single application an unlimited number of IR boxes, meaning that in one application you can have eLAN-IR in the living room, children's rooms, etc.
- It is also possible to control remotely from anywhere using a Wi-Fi network (e.g. from work or vacation).
- Thanks to auto-IP acquisition from the DHCP server, you don't need to set up a network configuration again.
- You can connect three IR lenses to the smart IR box eLAN-IR-003 for three directions of controlling.



System units



eLAN-RS-485/232

Connection Server

Order code: 7026

Order code: 5803

- The eLAN-RS485/232 allows you to control air-condition from your smart phone, tablet, or it can read a data from electronic security systems (Jablotron, Paradox).
- The eLAN-RS485/232 is connected to the router or switch and communicates with a smartphone over the network.
- Intuitive application environment offers centralized control from one place.
- If you don't have a fixed IP address, the converter will automatically get it from the DHCP server.
- Power converter with 10-27 V DC adapter is included
- Possibility of PoE 24 V DC.
- You need a Connection Server (to communicate with the application) to install.
- Set up via web interface.

- The connection server is providing a communication between iNELS BUS System with the third party devices, smartphone or tablet.
- The iHC application's environment enables us to control all these technologies from just one app.
- If Connection server is present in the installation, you can control your household with the smartphone app, check your CCTV system, regulate the air-conditioning, control Miele appliances or control recuperation.
- It also allows the communication with the domestic voice intercom 2N. It can also arrange the information from the weather station GIOM or data from energy meters (electricity, water, gas), which is visualized in clear graphs.
- Connection server uses the Raspberry Pi hardware and the apps requires a license which is paired with the MAC address of the device.
- As a part of the package, we also included SD card where we previously installed Linux OS and its needed software equipment.
- The configuration is happening on its own web interface, where the default IP address is not fixed. (The IP address is assigned from the DHCP server and it's needed to be known when we're connected to the network).



Music and internet radio player



Music and internet radio player with intercom and videophone features

Technical parameters

LARA Radio

LARA Intercom

Power supply	Passive PoE 24 V DC/1.25 A	Passive PoE 24 V DC/1.25 A
Min. /max. input	1.4 W / 26 W (peak at maximum playback performance)	1.4 W / 26 W (peak at maximum playback performance)
Display	Color OLED, Resolution: 128 x 128 pixels	Color OLED, Resolution: 128 x 128 pixels
Microphone	no	yes

Order code: LARA-R

- Music and internet radio player - all in the dimension of a switch and a luxurious LOGUS⁹⁰ 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 a 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.

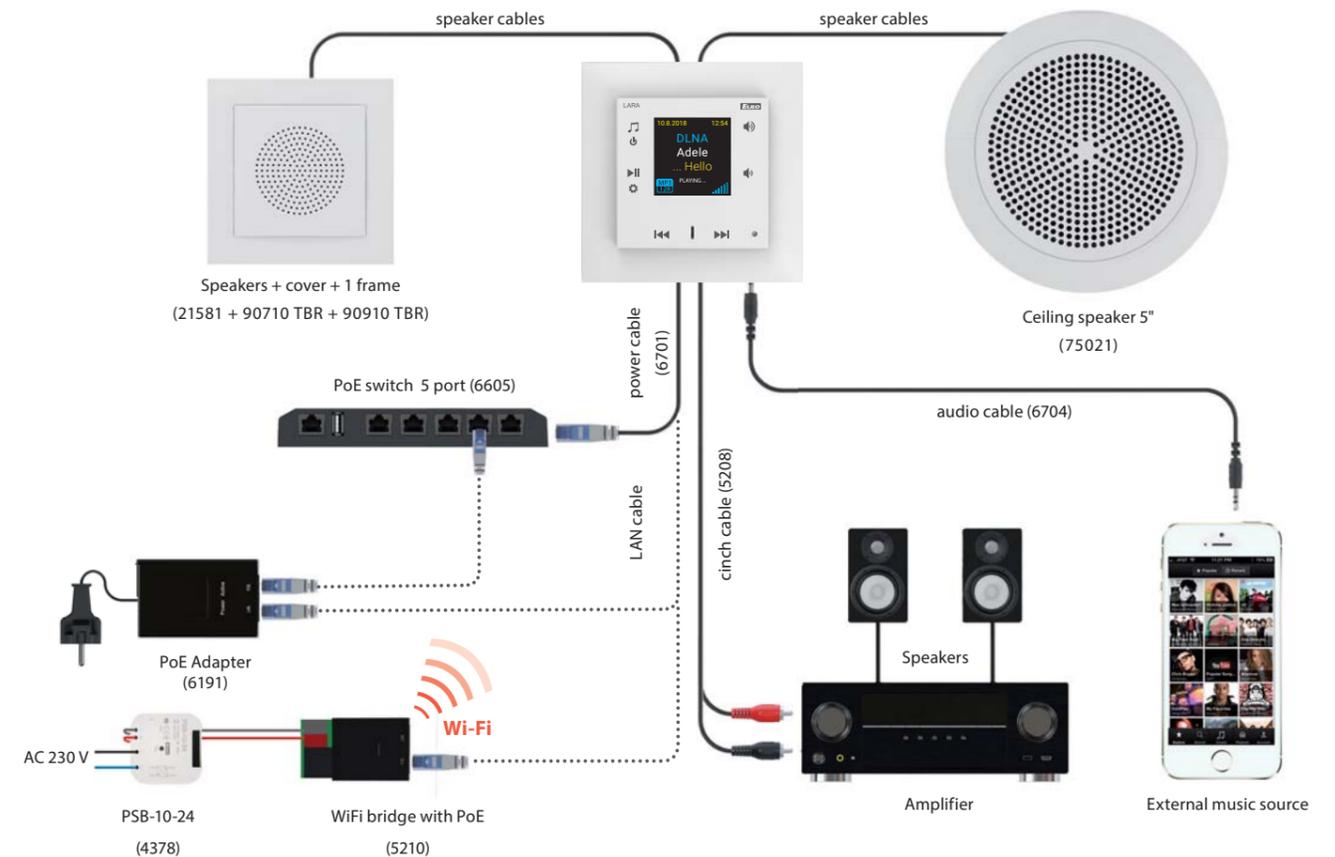


Order code: LARA-IC

- LARA Intercom offers users 5 different functions and expands even more options to LARA Radio - music players and internet radio stations within the range of LOGUS⁹⁰ switch designs.
- LARA Intercom provides an extra functionality and videophone intercom.
- Thanks to videophone function, now it is possible to have a voice communication between LARA and IP intercoms. So if someone ring the doorbell, you can see the picture of the visitor on the screen. Controlling of electronic door lock from LARA is the easiest thing.
- LARA Intercom is equipped with an OLED colored display with the size of 1.5", which is used to transfer images and sounds from the door camera properly.



Wiring example



Replaces the original application:

- iNELS Home Control Mobile and iNELS Home Control Tablet (for CU3 series and Connection Server)
- iNELS Home RF Control (for eLAN-RF)
- iNELS Home Control IR Mobile (for eLAN-IR)
- LARA Dio (for LARA player)

and combines them into one.

This revolutionary application allows not only the control of all the above devices and elements, but also the setting of simple events (scenes) directly by the user - across iNELS systems.

It also integrates the control of 3rd party devices (cameras, intercoms, home appliances). Allows direct connection to the device or connection via iNELS.Cloud, including voice assistant control.

New features are configurable notifications, an optional dashboard or definable roles (rights) for individual users.

Electroinstallation






- Lighting control
- Garage doors and gates
- Switching appliances
- RGB bulbs and LED strips
- Scenes
- Detectors/sensors



HVAC

- Heating
- Air conditioning
- Recuperation



Audio

- LARA
- NAS



3rd party

- Cameras
- Weather station
- Intercoms
- Home appliances



Energy management

- Energy dashboard
- History report (charts & graphs)



Voice assistants

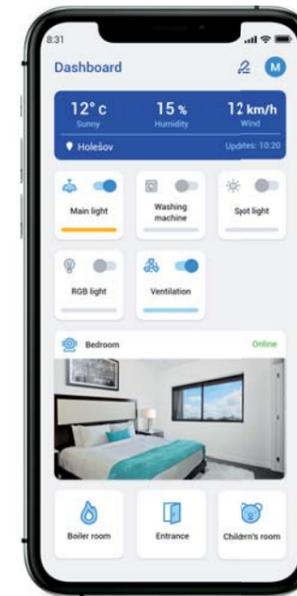
- Google Home
- Amazon Alexa



Others

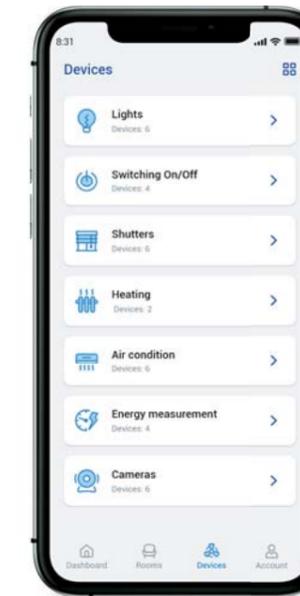
- Automation
- Notification
- Widgets
- Favourites/overview
- Log history
- eLAN-IR
- Geolocation
- Weather data
- Conrad Connect
- Users management

	Silver	Gold	Platinum
Lighting control	✓	✓	✓
Garage doors and gates	✓	✓	✓
Switching appliances	✓	✓	✓
RGB bulbs and LED strips	✓	✓	✓
Scenes	✓	✓	✓
Detectors/sensors	✓	✓	✓
Heating	✓	✓	✓
Air conditioning	✗	✓	✓
Recuperation	✗	✓	✓
LARA	✗	✓	✓
NAS	✗	✗	✓
Cameras	✓	✓	✓
Weather station	✗	✓	✓
Intercoms	✗	✓	✓
Home appliances	✗	✗	✓
Energy dashboard	✗	✓	✓
History report (charts & graphs)	✗	✗	✓
Google Home	✓	✓	✓
Amazon Alexa	✓	✓	✓
Automation	✗	✓	✓
Notification	✓	✓	✓
Widgets	✓	✓	✓
Favourites/overview	✓	✓	✓
Log history	✗	✓	✓
eLAN-IR	✗	✓	✓
Geolocation	✗	✓	✓
Weather data	✗	✓	✓
Conrad Connect	✓	✓	✓
Users management	✓	✓	✓



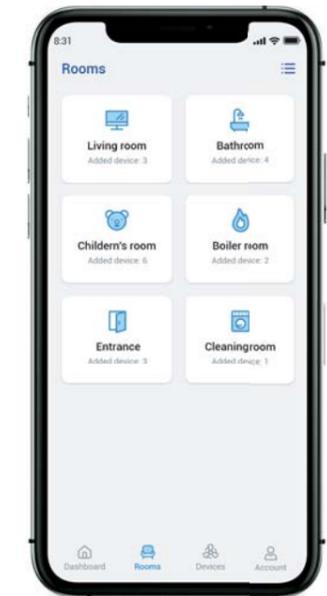
Overview

Dashboard of the state of all devices.



Device list

Control the device from anywhere.



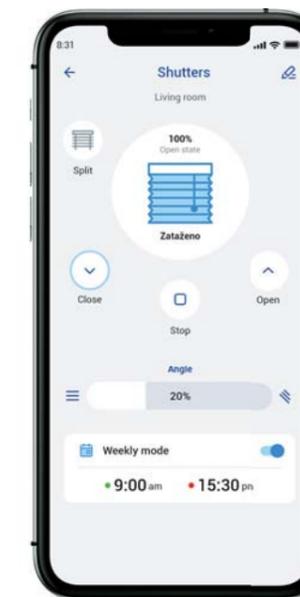
Rooms management

Settings according to individual rooms.



Colour setting

Easy adjustment of the light scene with one touch - switching, dimming, colour.



Shutters/Blinds

Possibility of individual or joint control of shading technology.



Temperature

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

Switches and sockets

Luxurious design for any interior



Switches and sockets

DESIGN LINES

We offer you switches, sockets and accessories in standard design, plastic or metallic, but you are also sure to be enchanted by the luxurious designs of frames made from natural materials: solid wood, metal, granite or hardened glass - crystal.

You will see quality not only in the visible parts of the covers, but also in the switch mechanism itself. The mechanisms excel for their many features that make installation quick and easy, and guarantee safe operation. Thanks to their special design, they can even deal with potential wall unevenness.

The frame is complemented by a button cover in the shades of pearl, aluminum or e.g. dark gray or ice - where many combinations come alive based on the customer's wishes and personal taste. Not just their refined design, but also long service life and resilience are the hallmarks of these switches.

BASE

Smart finish. Discrete shape of function.



AQUARELLA

Distinct colors. Shades that characterize the space.



ANIMATO

Large selection of colors, modern design and pleasant price.



CRYSTAL

Brightness and clarity. Shades that bring the shine of crystals into a honed experience.



METALLO

Distinction and modern feel. The refinement and brightness of metal enhance the value of the surroundings, and lend inspiration to great moments.



ARBORE

Selection of natural materials. Warm shades of wood with their varying structures create a room full of happiness and sincere comfort.



PETRA

The beauty and stability of nature. Stone with its uneven patterns, shaped by time and nature, represent the sense of firm and unending existence.

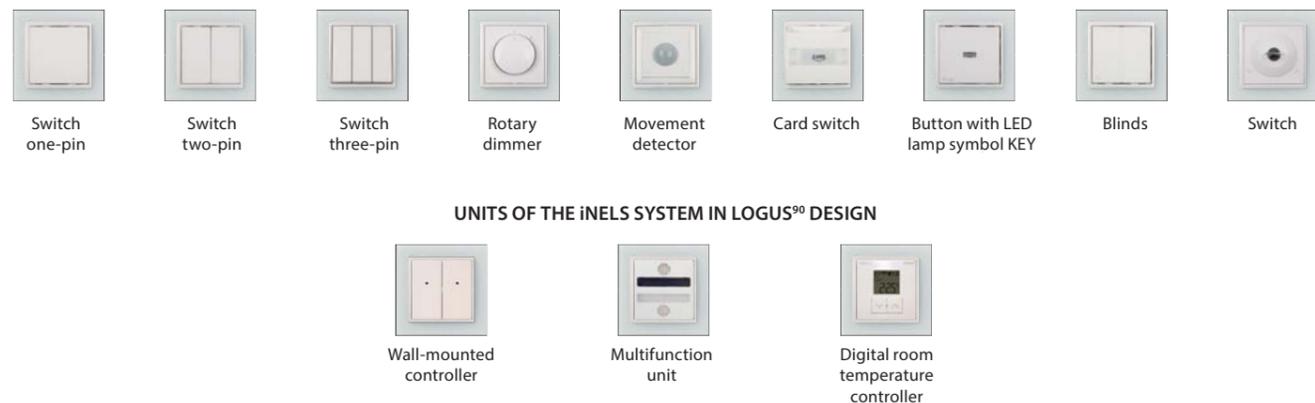


The entire design series are available from 1 frame up to 4 frames. The BASE and AQUARELLA series are available from 1 frame up to 5 frames. Horizontal or vertical position of the frame is possible thanks to their symmetrical shape.

Device covers in red, orange, green for hospital environments.

LOGUS⁹⁰

DEVICES OVERVIEW



DEVICES OVERVIEW

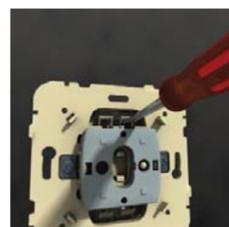
- switches
- switches with lock
- time switches
- over-switches
- rotary switches
- dimming switches
- two-pole switch
- pushbuttons
- switch, pulling switch
- orientation lighting
- shutters controllers
- shutters controllers with IR sensor
- digital time switch motion detectors
- card switch
- standard socket
- sockets Schuko, EURO-USA
- RJ45 connectors
- data sockets Cat 5, Cat 6
- sockets radio, TV, satellite, data
- telephone sockets
- double button (2NO+2NC)
- programmable thermostat (space/floor)
- simple thermostat (space/floor) with infrared control automatic relay for controlling blinds
- multimedia sockets

ADVANTAGES MECHANISMS

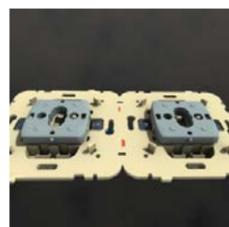
Mechanism are made of special alloy of non-flammable plastics that prevent in destruction or damage of device body thanks to their strenght and elasticity. The plastic design of the mechanism simultaneously ensures safe insulation from conductive parts of installation. The mounting frame is an integral part of the device. The device is compact, lightweight and enables easy and quick installation without using any tools.



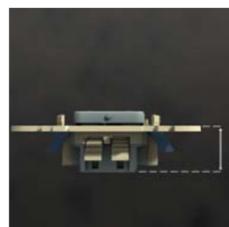
Quick Clips allow installation to adjust the frame on an uneven wall (two positions for the "snap" frame). Inequality walls will allow the deal and floating fingerboard.



Ability to test electrical functionality of your device without disassembly.



Shaped edge of the body mechanism to align the mounting multiple devices.



Depth 20 mm only allows mounting to instrumentation device / box.

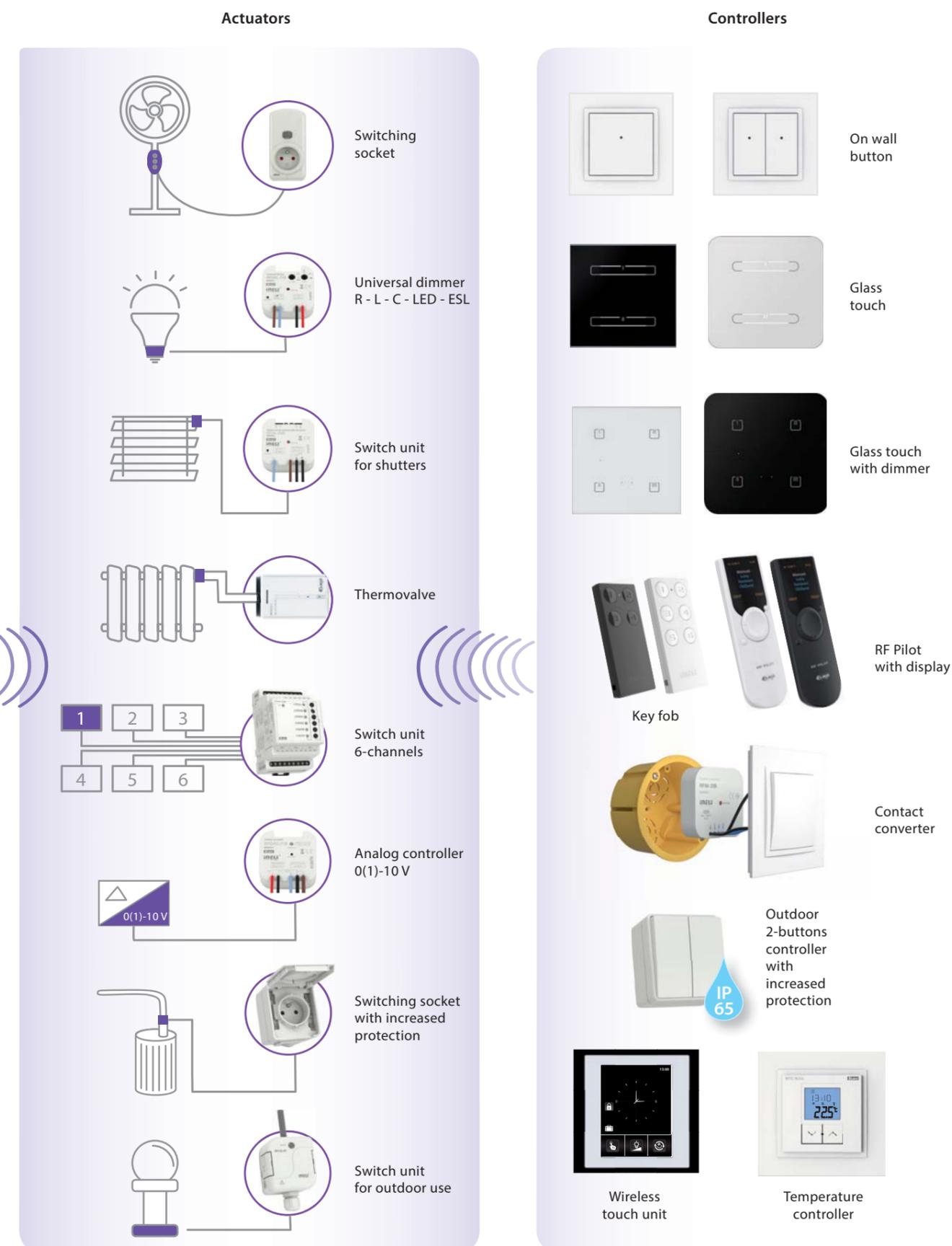
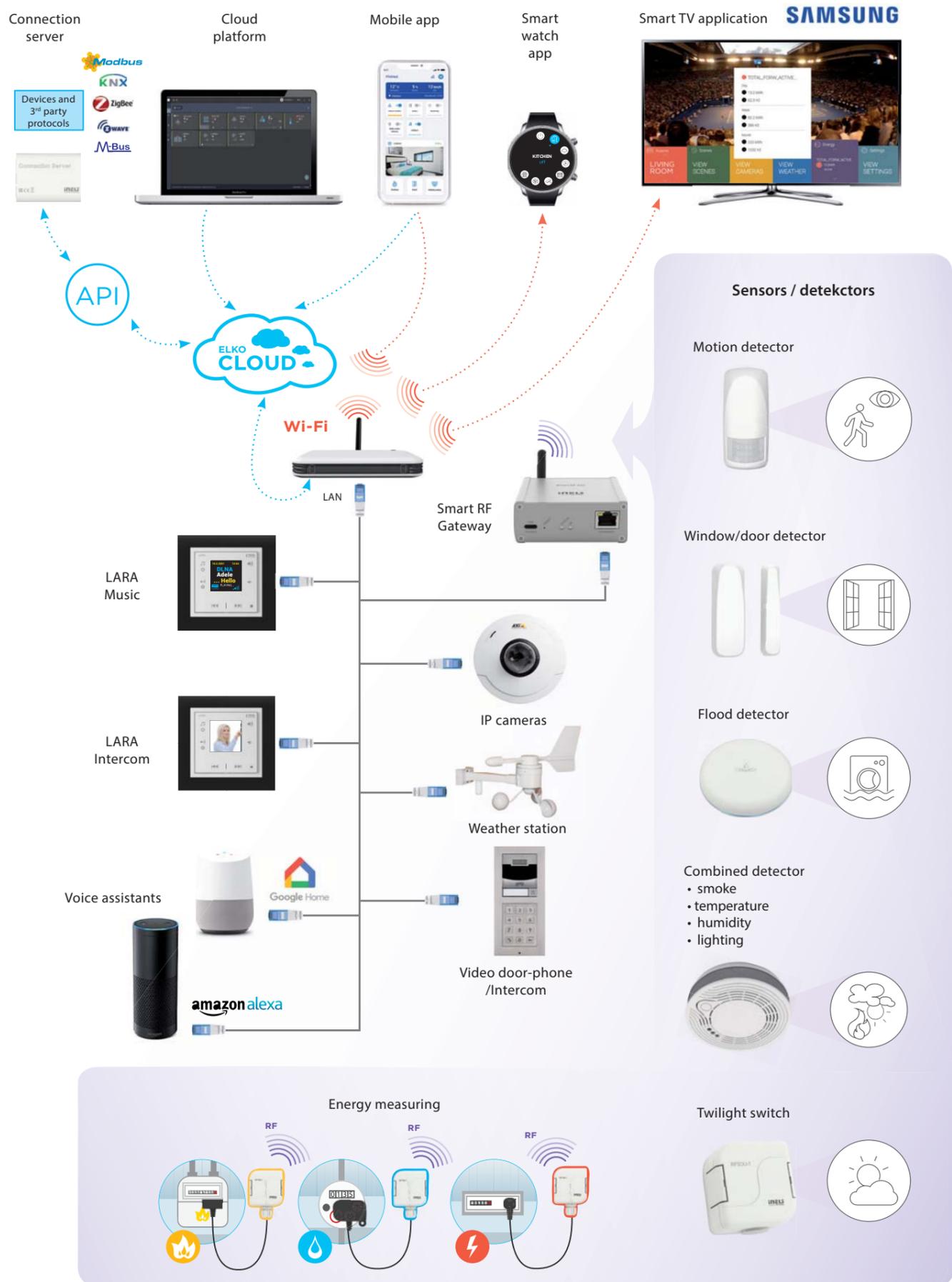


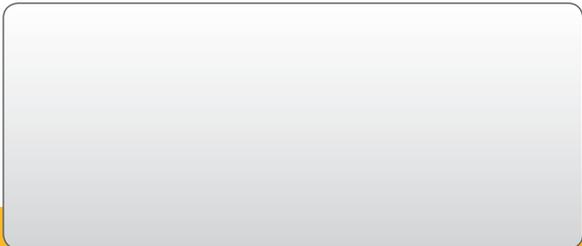
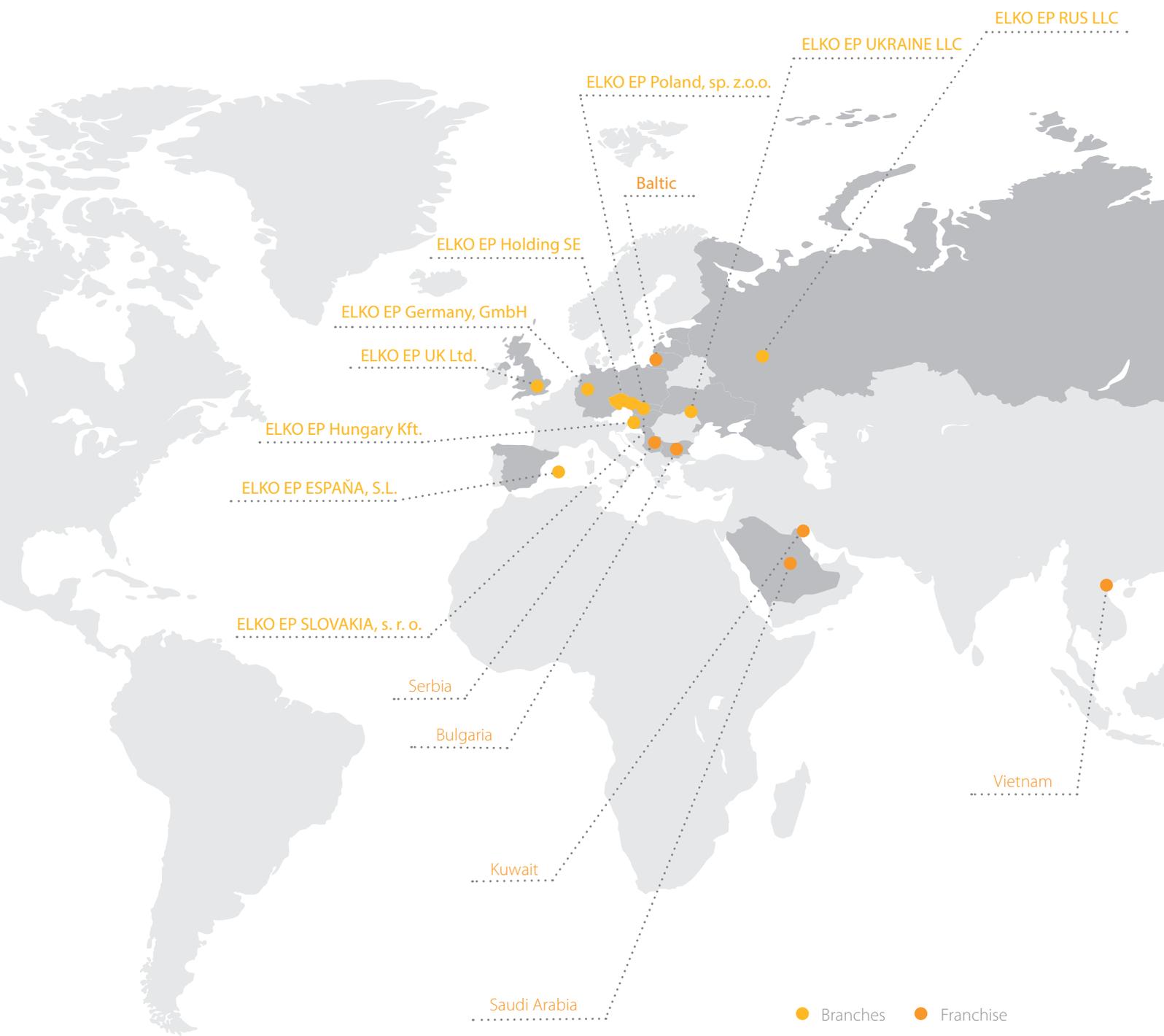
Screwless terminals provide fast and quality connection without need of instrument usage. Double terminals on every pole provide multiple connection without need of extra terminals usage.



Ability to test electrical functionality of your device without disassembly.

	Order code	Box (Un)		Order code	Colour	Box (Un)
	21033	1		90733 T	BR MF GE PE AL IS PM DU	1
	21040	1		90745 T	BR MF GE PE AL IS PM DU	1
	21403	10		90403 T	BR MF GE PE AL IS PM DU	1
	21404	10				
	21234	1		90746 T	BR MF GE PE AL IS PM DU	1
	21218	1		90747 T	BR MF GE PE AL IS PM DU	1
	21388	10		90782 T	BR MF GE PE AL IS PM DU	20 2
	21389	10				
	21384	1		90673 T	BR MF GE PE AL IS DU PM	1





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