

PRODUCT OVERVIEW







We have been your partner in the field for 30 years, manufacturing and developing the highest quality electrical devices..

ELKO EP employs 330 people across 15 foreign branches that exports its products to more than seventy countries. Company of the Year of the Zlín Region, Visionary of the Year and Global Exporter of the Year are just some of the awards we have received throughout the years as we consistently strive to move forward in the field of innovation and development.

Millions of relays, hundreds of smart homes and thousands of satisfied customers. This is ELKO EP; a traditional company based in the center of Europe, where development, production, logistics, and service are at the forefront of our focus. Building automation systems, smart city facilities and the Internet of Things (IoT) devices are solutions we can offer.

Facts and stats





30 % Czech

40 % Export

30 % Branches

330 **Employees** 16 500 13 000 000

INELS Manufactured installation products



10 **Branches**

Franchises

70 **Exporting** countries World leader

in production of relays



WE ARE









DEVELOPERS

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

PRODUCERS

Modern antistatic spaces, 2 × fully automated SMD production lines with 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 providing impeccable services and superior products at an affordable price.

2 relau



Timers/Relays

www.elkoep.com/relays

Time relays, auxiliary relays, installation contactors, memory and bistable relays, staircase switches, time switches, twilight and light switches, dimmers and light intensity controllers, power supplies and bell transformers, controlling and signalling devices.



Monitoring/Protection relays

www.elkoep.com/monitoring

Voltage relays 1-phase and 3-phase (undervoltage, overvoltage, phase failure, phase asymmetry and phase sequence), current relays, level relays, thermostats, light indicator of voltage, power factor and frequency monitoring.





Wireless electro-installation iNELS RF

www.elkoep.com/wireless

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.



Hotel Wireless Retrofit (HRESK)

www.elkoep.com/retrofit

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.





Wired electro-installation iNELS BUS

www.elkoep.com/wired

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.



Hospitality Hotel (GRMS)

www.elkoep.com/hospitality

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).



Building management system

www.elkoep.com/building

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.).



Lighting control

www.elkoep.com/lighting

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.





Switches and sockets

www.elkoep.com/logus90

Switches, sockets and a complete range of devices and accessories - this is the Logus90 series from the Portuguese manufacturer Efapel. 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!

1-MODULE 2-MODULE 4-MODULE 6-MODULE 3-MODULE



BOX - flush mounted

BOX-SL - push-in terminals







BOX - into the cover



into 11-Pin Socket

into the panel

or

Outdoor IP65 protection





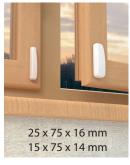






interior











in LOGUS⁹⁰ design



ARBORE

ANIMATO

PETRA









63 x 110 x 74 mm



METALLO





BASE



CRYSTAL







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 ZN - INTE BL - FLASHE	RVAL ON	ON DELAY, INTER- VAL ON, FLASHER ON first, OFF DELAY, ON/OFF delay, ME- MORY LATCH with delay, ON DELAY with control signal			ON DELAY, INTER- VAL ON, FLASHER ON/OFF first, MEMORY LATCH, OFF DELAY, SINGLE SHOT, PULSE GENE- RATOR 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
New functions	OD - OF	F 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: 100,000 operations Mechanical: 10,000,000 operations									
Dielectric strength			Be	tween power supply and	d 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"	3.5" x 0.7" x 2.5"	3.5" x 0.7" x 2.5"	3.5" x 0.7" x 2.5"	3.5" x 0.7" x 2.5"	3.5" x 0.7" x 2.5"	3.5" x 0.7" x 2.5"	3.5" x 0.7" x 2.5"			

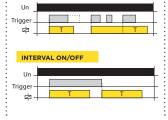
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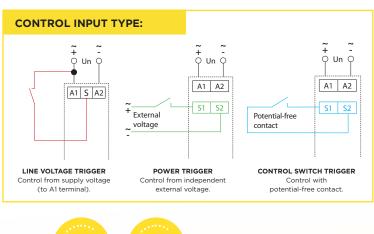












A1 A2 OFF ON pause S1 S2 Output relay 🖒 T = t1 + t2Output indication ON, timing ON OFF pause Supply indication Un Output relay 🔯 Output indication T = t1 + t2

MULTI-FUNCTION LED INDICATION:







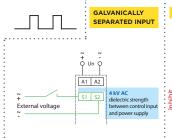


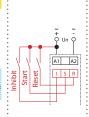
CRM-2H	CRM-121H	CRM-131H	PTRM-216K	PTRM-216T	PTRM-216KP	PTRM-216TP	PTRA-216K	PTRA-216T
Asymmetric flasher	Multi-function with GSCI	Multi-function with three inputs	Multi-functio	Multi-function with PFCI Multi-function with		vith Inhibit delay Multi-function		ith three inputs
Line Voltage Trigger	Power 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)

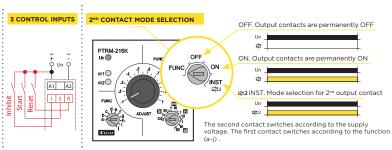
AC/DC 12-240V or AC 230V only (AC 50-60 Hz)	AC/DC 12-240V (AC 50-60 Hz)							
0.1 s - 100 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days	0.05 s - 30 days
SPDT (1x C/O) 16 A/250 V	SPDT (1x C/O) 16 A/250 V	SPDT (1x C/O) 16 A/250 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
no	no	no	yes	yes	yes	yes	yes	yes

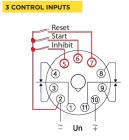
2	11	11	10	10	10	10	10	10
ASYMMETRIC FLASHER - ON FIRST ON ASYMMETRIC FLASHER - OFF FIRST	ON DELAY, INTERVAL ON, FLASHER-ON/ OFF first, MEMORY LATCH, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY	WITH CONTROL SIGNAL: ON DELAY, INTERVAL ON, FLASHER-ON first, FLASHER-OFF first, OFF DELAY, SINGLE SHOT, PULSE GENE- RATIOR O.5 s, ON/ OFF DELAY	ON DELAY, INTERVAL OFF first, OFF DELAY, GENERATOR 0.5 s, ON, LAT	SINGLE SHOT, PULSE /OFF DELAY, MEMORY			GENERATOR 0.5 s, ON	L ON, FLASHER-ON/ SINGLE SHOT, PULSE /OFF DELAY, MEMORY vith delay
-	WATCHDOG, INTERVAL ON/OFF, MEMORY LATCH WITH DELAY	WATCHDOG, INTERVAL ON/OFF, MEMORY LATCH WITH DELAY	WATCI INTERVAL		WATCI INTERVAL			HDOG, L ON/OFF

3:	5 mm DIN rail (IEC 6071	5)	11 Pin Octal Socket						
Operating: -20°C to +55°C (-4°F to 131°F) Storing: -30°C to +70°C (-22°F to 158°F)									
	Electrical: 100,000 operations Mechanical: 10,000,000 operations								
Between power	er supply and output co	ntact: 4 kV AC		Between power supply and output contact: 2.5 kV AC					
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)	
90 x 17.6 x 64 mm	90 x 17.6 x 64 mm			48 x 48 x 89 mm				48 x 48 x 79 mm	
3.5" x 0.7" x 2.5"	3.5" x 0.7" x 2.5"	3.5" × 0.7" × 2.5"	1.7″ x 1.7″ x 3.5″	1.7" x 1.7" x 3.5"				1.7″ x 1.7″ x 3.1″	















multifunction 1x output contact



multifunction 3x output contacts



multifunction with external potentiometer



energy saving relay

	of CRM-91H				
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 - 120 s
Number of functions	6	10	10	10	4
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	8411
91H. Only the 6 most used functions, 8 A changeover contact, miniUNI power		use in automation, control a stallations. 10 functions, 10	onal time relay for universal nd regulation or in house in- time ranges, multifunctional ver supply in a wide range of	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 electricity using connect- ed sensors (motion detector and magnetic door contact) in the room.
AA	□ ₩: □	■数: ■	回探回		回路:回

TIME RELAYS | multifunction, on DIN rail

MODULE



multifunction



multifunction



multifunction



multifunction



OFF DELAY

	with Inhibit (delay) 1x output contact	3x output contacts 2nd & 3rd contact selection	galvanically separated control input	3 control inputs	after power supply failure
Technical parameters	CRM-111H	CRM-113H	CRM-121H	CRM-131H	CRM-82TO
Output	Output 1x CO, 16 A		1x CO, 16 A	1x CO, 16 A	2x CO, 8 A
Housing	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, except for the flasher function, can use the control input to inhibit the delay (pause).		All functions initiated by the supply voltage, ex- cept for the flasher func- tion, can use the control input to inhibit the delay (pause). 2nd & 3rd contact mode selection.	Galvanically separated control input (Power Trigger) for control with external voltage in the range at AC / DC 12-240 V.	Three control inputs – START, INHIBIT, RESET. All functions start with triggering of control input START.	Relay is timing after power supply failure and is switched off after set time period. Two time functions: a - TRUE OFF DELAY e - ON DELAY
	■30 2000 ■3004 ■3004		回 公 20 20 20 20 20 20 20 20 20 20 20 20 20		

TIME RELAYS | single function, on DIN rail



choose from 4 functions 1x output contact

4 functions 3x output contacts



STAR / DELTA



asymmetric flasher 1x output contact



asymmetric flasher with two external potentiometers



ON DELAY function 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-MC	DULE		
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″)					
	011051111					



Ø 25 mm hole in the panel

ZR: ON DELAY

CRM-181J/UNIZR: 8038 | CRM-183J/UNIZR: 8061

ZN: INTERVAL ON

CRM-181J/UNI ZN: 8039 | CRM-183J/UNI ZN: 8060

BL: FLASHER - ON first

 $\textbf{CRM-181J/UNI BL:}\,8040 \mid \textbf{CRM-183J/UNI BL:}\,8058$

CRM-181J/UNI OD: 8041 | **CRM-183J/UNI OD:** 8059



CRM-2T/UNI: 7669 CRM-2T/230V: 8381 **CRM-2T/24-480V**: 4530

Time t1 **人** (star) 0.1 s do 100 days. Time t2 (delay) **人**/▲ 0.1 s - 1 s.



CRM-2H/UNI: 7668 CRM-2H/230V: 8395

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 flasher with possibility of time control with

external potentiom-2 time functions:

eters.

- asymmetric flasher -ON first
- asymmetric flasher OFF first.



SJR-2/UNI: 7670 **SJR-2/230V:** 8396

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 potentiometer	knob	rotary potentiometer	rotary potentiometer knob		knob
Output			2x CO,	16 A		
Housing	PLUG-IN, into 11-pin octal socket					
Control input	line voltage trigger control switch trigger 3					ART, INHIBIT, RESET)
Supply voltage (frequency)		AC/DC 12-240 V (50-60 Hz)				
Time range			50 ms - 30 day	rs (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
panel cut-out	All functions initiated by cept for the flasher funct input to inhibit the dela	ion, can use the control	Three control inputs – ST All functions start with triggering of control inp	, ,	All functions initiated by cept for the flasher func input to inhibit the dela	



into 11-pin octal socket











STAIRCASE SWITCHES |



multifunction LCD display



multifunctionLED display



standard with function ON/AUTO/OFF



multifunction extending time, signaling

	1x output contact		t contacts	ON/AUTO/OFF	before switching off
Technical parameters	CRM-100	PDR-2A	PDR-2B	CRM-4	CRM-46
Output	1x CO, 8 A	2x CC), 16 A	1x CO, 16 A	1x CO, 16 A
Housing	1-MODULE	3-MODULE		1-MODULE	1-MODULE
Supply voltage (frequency)	AC/DC 24-240 V (AC 50-60 Hz)	AC/DC 12-240 V or A	C 230 V (AC 50-60 Hz)	AC 230 V (50-60 Hz)	AC 230 V (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	ו (3.5″ x 0.7″ x 2.5″)
Order code	7453	UNI: 304 230V: 303	UNI: 306 230V: 305	7077	7491
CRM-100 H CHO S ▼	Control input B1 is controlled by the supply voltage. More accurate thanks to digital time setting.	to set the exact time (have a PDR-2A: optional second rela	ications where it is necessary visual check).	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.
		回版回 2022年 回传接			

TIME RELAYS | flush/cover 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

	on input: LED builb	on input: incurioescent builb	contactiess output	ix 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 230 V (50-60 Hz)	AC 230 V (50-60 Hz)	AC 230 V (50-60 Hz)	AC 230 V (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	
	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 en- ergy saver can be connected, only other types of loads. Glow-lamps are supported.	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 AgSnO ₂ it is also suitable for switching LED bulbs or savings.	



BOX flush mounted









DIGITAL TIME SWITCHES















1-channel

2-channels

1-channel 2-channels with astronomical program

with synchronized time (GPS) 1-channel

 $smartphone\ app$ control 2-channels

					2-citatilieis	1-Citatillei	2-chamileis	
Technical parameters	SHT-1	SHT-1/2	SHT-3	SHT-3/2	SHT-4	SHT-6G (GPSR-1)	SHT-7	
Program	We	eekly	weekl	y, yearly	weekly, yearly, astro weekly, yearly			
Replaceable battery		no	r	10	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 12-240 V or A	C 230 V (AC 50-60 Hz)	AC/DC 12-240 V or A0	C 230 V (AC 50-60 Hz)	AC 230 V (50-60 Hz)	AC 100-240 V DC 140-340 V	AC 230 V (50-60 Hz)	
Dimensions			90 x 3.	5 x 64 mm (3.5" x1.4" x	x 2.5″)			
Order code	UNI: 3043 230V: 3042	UNI: 3041 230V: 3040	UNI: 3675 230V: 3676	UNI: 2904 230V: 2901	4475	8239	3549	
MNOVATION	and weekly and ann Power backup in ca Possibility of automa	ualy (SHT-3) program. se of battery power fa atic summer / winter ti	nding on the real time: valure. Backlit LCD disp me transition. om switching, and pul	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 syn- chronized via GPS receiver.	Settings via smart- phone with NFC communication (An- droid).		
GPS receiver for SHT-6G GPSR-1								

ANALOG TIME SWITCHES |













iNELS Home NFC Setter

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	daily					
Power backup	yes (max. 100 hrs)	no	yes (max. 150 hrs)					
Minimum switching interval	15 min	30 min	3.5 hrs					
Output	1x NO, 16 A	1x CO, 16 A						
Resistive load		350	0 VA					
Inductive load		100	0 VA					
Housing	1-MODULE		2-MODULE					
Supply voltage (frequency)	AC 230 V (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.





















1x 16 A contact supply: AC 230 V



1x 16 A contact supply: UNI



3x 8 A contacts supply: AC 230 V



3x 8 A contacts supply: UNI



3x 16 A contact: 3: supply: AC/DC 24 V su



3x 16 A contacts supply: 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					
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 4x25 A
with manual
control 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 6		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.















1x NO, 16 A

2x NO/NC, 16 A

2x NO, 16 A contacts

contacts with remote control disconnection

contacts

electronic version - noiseless 1x CO, 16 A 2x CO, 16 A contact contacts

									COI	ituct	COIL	tucts		
Technical parameters	BR-2	16-10	BR-2	16-11	BR-2	16-20	BR-2	20-20	BR-2	32-20	MR	-41	MR	R-42
Output	1x NC), 16 A	1x NO+1x	1x NO+1x NC, 16 A 2x NO, 16 A 2x NO, 20 A 2x NO, 32 A), 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 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)	AC/DC 12-240 V (AC 50-60 Hz)	AC 230 V (50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)
Coil disconnector	:	x	,	<	:	×	ye	es .	yє	es	,	x	:	x
Order code	6969	6885	6970	6887	6971	6886	6972	6888	6973	6889	8248	8224	8249	8225

The state of the output contacts changes with the coil pulse. They are used mainly for switching and control of $luminaires, heating, ventilation and other devices \hbox{--} with buttons connected in parallel.}$

 $All\ relays\ can be controlled\ manually\ using\ the\ lever\ on\ the\ front\ panel\ (I-0),\ which\ also\ serves\ as\ a\ status\ signal.$ 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





TWILIGHT SWITCHES







digital with build-in time switch



for outdoor use with built-in sensor



external photosensor

			and external sensor			
Technical parameters	SOL	J-1	SOU-2	SOU-3	SKS-100,	SKS-200
Output	1x CO), 16 A	1x CO, 8 A	1x NO, 12 A	SKS-100: for use with	
Housing	1-MC	DULE	2-MODULE	box with IP65	SOU-1, LIC	-1, LIC-2
Supply voltage (frequency)	AC/DC 12-240 V AC 230 V (AC 50-60 Hz) (50-60 Hz)		AC 230 V (50-60 Hz)	AC 230 V (50-60 Hz)	SKS-200: for use with SOU-2	
Sensor	external, SKS-100		external, SKS-200	built-in		
Adjustable light intensity	1 - 50 000 lx	(in 2 ranges)	10 - 50 000 lx	1 - 100 000 lx (in 3 ranges)		
Dimensions	90 x 17.6 x 64 mn	n (3.5" x 0.7" x 2.5")	90 x 35 x 64 mm (3.5" x 1.4" x 2.5")	98 x 62 x 34 mm (3.9" x 2.4" x 1.3")	Ø 24 x 58 mm	
Order code	8046	7551	8234	4056	8073	8233
	Twilight switch (1-100 lx) or (100- 50 000 lx), which closes the output when the level falls below the set level. External sensor SKS-100 inclu- ded in the package.		Digital twilight switch with timer, i.e. the lighting level can be blocked in real time. External sensor SKS-200 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 photosen- sor SKS-100 and SKS-200 for panel or wall mount- ing, via the included bracket.	













adjustable output for voltage drop compensation, high load in small design output voltage 12 or 24 V

flush/cover mounted regulated 12-24V output voltage 12 or 24 V

Technical parameters	PS1M		PS2M PS3M		PS4M		PSB-10		PS-30R		
Output voltage	DC 12 V	DC 24 V	DC 12 V	DC 24 V	DC 12 V	DC 24 V	DC 12 V	DC 24 V	DC 12 V	DC 24 V	DC 12-24 V
Max. load	1.2 A/15 W	0.62 A/15 W	2 A/24 W	1.2 A/30 W	4.5 A/54 W	2.5 A/60 W	7.1 A/85	3.8 A/92 W	0.8 A/10 W	0.4 A/10 W	2.5-1.2 A/30 W
Housing	1-MO	1-MODULE 2-MODULE 3-MODULE 4-MODULE						В	OX	3-MODULE	
Supply voltage (frequency)		AC 100-240 V (50-60 Hz)						AC 110-250 V (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		x 58 mm .7″ x 2.6″)		x 58 mm .4″ x 2.3″)		x 58 mm .1" x 2.3")		x 58 mm !.8″ x 2.3″)	49 x 49 x 21 mm (1.9″x 1.9″x 0.8″)		90 x 52 x 65 mn (3.5" x 2" x 2.6")
	PS1M-15/2 PS2M-24/2 PS2M-30/2 Switching	PS1M-15/12V: 8047 PS3M-54/12V: 8051 PS1M-15/24V: 8048 PS3M-60/24V: 8052 PS2M-24/12V: 8049 PS4M-85/12V: 8053 PS2M-30/24V: 8050 PS4M-92/24V: 8054 Switching stabilized power supply with output voltage 12 or 24 V DC. High efficiency up to 90%. Low ripple and noise.					PSB-10- PSB-10-:		PS-30-R: 5158 Adjustable output voltage in the range of 12-24 V.		
	回於 55% 66% 同於	個 数		3.□ 2.00 3.03							

POWER SUPPLIES | AC & DC

BELL TRANSFORMERS







8 VA/24 V unstabilized



8 VA AC 8 V



8 VA AC 12 V



5-15VA 8 V 12 V

	DC 5-24 V							
Technical parameters	ZSR-30	ZNP-10-24V	ZTR-8-8	ZTR-8-12	Z	TR-15-1	2	
Output voltage	DC 5-24 V regulated DC 24 V unstabilized AC 24 V	DC 24 V unstabilized AC 24 V	AC 8 V	AC 12 V	AC 4 V	AC 8 V	AC 12 V	
Max. load	8 VA/8 W	8 VA/8 W	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 mr	m (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 6	55 mm (3.5°	″x 2″x 2.6″)	
Order code	175	408	3680 3681		3928			
	Adjustable output volt- age in the range of DC 5-24 V.	Un-stabilized AC + DC output voltage.	For powering doorbells, doo	or locks, etc.				







DIMMERS | on DIN rail



universal controlled dimmer 300 VA



staircase switch with dimming 500 VA



universal controlled dimmer 2000 VA



expanding power module for DIM-6 1000 VA

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-MO	DULE	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	n (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 10 kVA 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.	
MODULE on DIN rail					

DIMMERS | flush mounted

flush mounted





universal dimmer 4-wires



dimmer 3-wires



lighting intensity controller, controls the source directly

lighting intensity controller, controls the 0-10 V ballast

universal dimmer 6-channels 6x 150 VA (230 V)

CONTROLLING AND SIGNALING MODULES





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 1-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-13 + USS-10

USS-12 + USS-11

USS-07 + USS-00

Types of controlling and signaling units



Switch



Alternation

switch



Switch with

central position



button with



Push button with

central position



Push button

NO



Push button

NC

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















	Switch with glow lamp (red)	Switch with glow lamp (green)	Switch with glow lamp (yellow)	Signalling LED (red)	Signalling LED (green)	Signalling LED (yellow)	Signalling LED (white)
Name	USS-07	USS-08	USS-09	USS-10	USS-11	USS-12	USS-13
Order code	2468	2468	2470	2433	2434	2435	2436



flashing (red)



Signalling LED

flashing (blue)



Used to fill an empty position

	_		in the front panel
Name	USS-14	USS-15	USS-0
Order code	2489	2437	2461







Voltage monitoring relays - overview

		-		Features				Phase			Setting	j	
Туре	Design	Supply from	Phases	Monitored	N^	ņ	Failure	Sequence	Asymmetry	Delay	Hysteresis	Memory	Description
HRN-33	1-M	monitored voltage	1	AC 48 - 276 V	•	•	х	х	x	•	х	x	
HRN-63	1-M	monitored voltage	1	AC 48 - 276 V	•	•	х	х	х	•	х	x	
HRN-35	1-M	monitored voltage	1	AC 48 - 276 V	•	•	х	x	x	•	х	x	
HRN-34	1-M	monitored voltage	1	DC 6 - 30 V	•	•	х	х	х	•	х	х	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
HRN-37	1-M	monitored voltage	1	AC 24 - 150 V	•	•	х	x	х	•	х	x	(Umax).
HRN-67	1-M	monitored voltage	1	AC 24 - 150 V	•	•	х	х	х	•	х	х	
HRN-34	1-M	monitored voltage	1	DC 6 - 30 V	•	•	х	х	х	•	х	х	
HRN-64	1-M	monitored voltage	1	DC 6 - 30 V	•	•	х	х	x	•	х	х	
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	•	•	х	x	х	•	•	•	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	•	•	х	х	x	•	•	•	самансану зерагатес рожет зарру полі теазиніц тритя.
HRN-55	1-M	monitored voltage	3	AC 3 x 300 - 500 V	x	х	•	•	х	•	х	х	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	х	×	•	•	x	•	х	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	х	•	х	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	•	•	•	х	х	•	х	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	•	х	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	•	х	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
HRN-43N/230 V HRN-43N/400 V HRN-43N/24 V	3-M	AC 230 V AC/DC 24 V	3	AC 3 x 48 - 276 V	•	•	•	•	•	•	•	•	(independent/parallel). Galvanically separated power supply.
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	х	•	•	•	х	•	х	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	х	•	•	•	х	•	х	х	орениконан ечен и оне рназе навъ.
HRN-100	2-M	monitored voltage	3	$U_{LN} = 3 \sim 155 - 500 \text{ V}$ $U_{LL} = 3 \sim 90 - 288 \text{ V}$	•	•	•	•	•	•	•	•	Configurable 3 or 4-wire connection. Extensive setting options. Each output can be configured individually.







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



1-phase, mains voltage 48-276 V overvoltage = 1x output undervoltage = 1x output



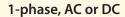
WINDOW

1-phase, mains voltage 24-150 V overvoltage and undervoltage = 1x output

HYSTERESIS

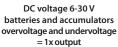
Technical parameters	HRN-33	HRN-63	HRN-35	HRN-37	HRN-67			
Type of monitored voltage	А	.C	AC	AC				
Monitored levels	undervoltage a	nd overvoltage	undervoltage and overvoltage	undervoltage and overvoltage				
Functions	WINDOW HYSTERESIS		WINDOW	WINDOW	HYSTERESIS			
Monitoring range	48-2	276 V	48-276 V	24-	150 V			
Output	1x C0), 16 A	2x CO, 16 A	1x CC), 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.	voltage.	overvoltage and under- to eliminate short-term			

VOLTAGE RELAYS | 1-phase, DC











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 Umin = % of set Umax



with three input ranges for AC / DC monitoring in 1-phase network Umin = % of nominal input

Technical parameters	HRN-34	HRN-64	HRN-41	HRN-42	
Type of monitored voltage	D	C	AC / DC		
Monitored levels	undervoltage a	and overvoltage	undervoltage and overvoltage		
Functions	WINDOW	HYSTERESIS	WINDOW		
Monitored range	6-3	0 V	3 inputs: 10-50 V; 32-160 V; 100-500 V		
Supply voltage	1x CC), 16 A	2x CO, 16 A		
Housing	1-MC	DDULE	3-MODULE		
Power supply	from monit	ored voltage	AC/DC 24 V, 230 V, 400 V	AC/DC 24 V, 230 V	
Dimensions	90 x 17.6 x 64 mn	n (3.5" x 0.7" x 2.5")	90 x 52 x 65 mm (3.5″ x 2″ x 2.6″)		
	HRN-34: 1564	HRN-64: 3063	HRN-41/24V: 4041	HRN-42/24: 4723	

1x output contact for overvoltage and undervoltage. Adjustable delay 0 - 10 s to eliminate short-term peaks in the network.

HRN-41/230V: 4721

HRN-42/230V: 4725

HRN-41/400V: 4722

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



























3 x 300-500 V 3 x 172-287 V without NEUTRAL with NEUTRAL

3 x 300-500 V

3 x 172-287 V

3 x 300-500 V 3 x 172-287 V

3 x 84 - 480 V

3 x 48 -276 V

Technical parameters	HRN-55	HRN-55N	HRN-57	HRN-57N	HRN-54	HRN-54N	HRN-43	HRN-43N	
Phase failure	•	• •		• •		•	•	•	
Phase sequence	•	•	х	х	•	•	•	•	
Adjustable overvoltage	x (fixed)	x (fixed)	•	•	•	•	•	•	
Adjustable undervoltage	x (fixed)	x (fixed)	•	•	•	•	•	•	
Asymmetry	х	х	х	х	х	х	•	•	
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	
Output	1x CO, 8 A 2x CO, 16 A								
Housing			1-MC	DULE			3-MC	DDULE	
Power supply			from monito	ored voltage			AC/DC 24 V, AC	230 V, AC 400 V	
Dimensions			90 x 17.6 x 64 mm	n (3.5" x 0.7" x 2.5")			90 x 52 x 65 mn	n (3.5" x 2" x 2.6")	
Order code	7512	7513	7514	A 7515	7498	7511	24V: 4731 230V: 4729 400V: 4730	24 V: 4731 230 V: 4733 400 V: 4734	
			日本(日 2200年以 日本(本) 日本(本)	回業 回 次表 企 回 6 新社			□ (A) □ (A) (A) (B) (A) (B) (B)		

VOLTAGE RELAYS | 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

voltage monitoring relay with 3 x 345-660 V 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	•	•	•	•	•	•	
Adjustable overvoltage	х	х	х	х	x	•	
Adjustable undervoltage	•	•		•	•	•	
Asymmetry	x	x x		х	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	$U_{LL} = 3 \sim 155-500 \text{ V}$ $U_{LN} = 3 \sim 90-288 \text{ V}$	
Supply voltage			1x C	O, 8 A			
Housing		1-MODULE		3-M0	3-MODULE		
Power supply			from monito	ored voltage			
Dimensions		90 x 17.6 x 64 mm (3.5″ x 0.7″ x 2.5″)		90 x 52 (3.5″ x	90 x 36 x 64 mm (3.5" x 1.5" x 2.6")		
Order code	3710	3711	3712	3018	3019	7122	









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



monitors undercurrent using a connected current transformer X/5 A



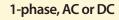
monitors overcurrent on measuring terminals in 7 ranges



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

Technical parameters	PRI-32	PRI-35	PRI-51	PRI-52			
Voltage type	AC	AC	AC	AC			
Monitored levels	overcurrent	undercurrent	overcurrent	overcurrent			
Monitored range	1 - 20 A (50-60 Hz)	0.5-5 A (50-60 Hz)	0.05 - 16 A (50-60 Hz) in 7 ranges	0.5 - 25 A (50-60 Hz)			
Output	1x CO, 8 A	1x CO, 16 A	1x CO, 8 A	1x CO, 8 A			
Housing		1-MO	DULE				
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-35: 8271 Serves to protect a motor of a pump (submersible pump) against dry running.	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.			

CURRENT RELAYS | 1-phase, AC







multifunction current monitoring, 8 functions selectable by rotary switch



with three input ranges for AC/DC current

Imin = % of set Imax

Imin = % of nominal input



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

		70 Of Set IIIIax	70 Of Hommar Input			
Technical parameters	nnical parameters PRI-34		PRI-42	PRI-53		
Voltage type	AC	AC	/ DC	AC		
Monitored levels	overcurrent and undercurrent	overcurrent a	nd undercurrent	overcurrent or undercurrent		
Function	eight, selectable by rotary switch	WIN	DOW	-		
Monitored range	0.1 - 16 A (50-60 Hz) in 3 ranges	3 inputs: 0.32-1.6 A, 1-5 A	A, 3.2-16 A (AC 50-60 Hz)	0.4-1,2 A (50-60 Hz)	2-6 A (50-60 Hz)	
Output	1x CO, 16 A	2x CC), 16 A	2x CO, 8 A		
Housing	1-MODULE	3-MC	DDULE	6-MODULE		
Power supply	AC/DC 24 - 240 V (AC 50-60 Hz)	AC/DC 24 V, AC 110 V; AC 2	30 V; AC 400 V (AC 50-60 Hz)	AC/DC 24 - 24	0 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 mr	m (3.5" x 2" x 2.6")	90 x 105 x 64 m	m (3.5" x 4.1" x 2.6")	
Order code	2A: 8282, 5A: 8283, 16A: 8284	24V: 4741 230V: 4743	24V: 4747 230V: 4745	4213	4214	
	Measures true root mean square value - TRUE RMS. Option to select functions		tage galvanically separated	AC/DC 24-240 V power supply galvanically separated from the circuit of the monitored		

TRUE RMS. Option to select functions with error state memory (Latch). Possibility to extend the current range using an external CT. Power supply and monitoring circuits are not galvanically separated.

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

AC/DC 24-240 V power supply galvanically separated from the circuit of the monitored current. Selectable function: UNDER or OVER current.

2 types according to the rated current In (1A, 5A).









LIQUID LEVEL RELAYS





for monitoring one or two levels



for monitoring one or two levels in IP65 protection



for monitoring one or two levels, or pumping of tanks



for monitoring up to 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	
Functions	2	2	8	10	
Housing	1-MODULE	вох	3-MODULE	6-MODULE	
Supply voltage (frequency)	24-240 V AC/ DC 24-240 V AC/ DC (AC 50-60 Hz) (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 50-60 Hz)	
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.	

LIQUID LEVEL RELAYS

LIQUID LEVEL SETS

PROBES AND CABLES



for controlling 5-levels in IP65 protection



set of HRH-5 relay and contactor

HRH-4



Probes





SHR-1/1-M/1-N

SHR-2

SHR-3

Wire





	-				
Technical parameters	HRH-6/DC	HRH-6/AC			
Output	1x NO	, 10 A			
Sensitivity	10 - 2	00 kΩ			
Functions	2	2			
Housing	box IP65				
Supply voltage (frequency)	DC 12-24 V (AC 50-60 Hz)	AC 230 V (AC 50-60 Hz)			
Dimensions	110 x 130 x 72 mm (4.3" x 5.1" x 2.8")				
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-4/230V 209970800023

It is a complete unit consisting of HRH-5 level relay and VS425 contactor.

Designated for an automatic operation in 1-phased and 3-phased pumps.



HRH-5



VS425 contactor



ACCESSORIES 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.

D03VV-F 3x0.75/3.2: 209970500106

Cable for probes SHR-1 and SHR-2, 3x 0.75 mm²

D05V-K 0.75/3.2: 6594

Wire for probes SHR-1 and SHR-2, $1x 0.75 \text{ mm}^2$

All types (excluding SHR-3) meet the requirements for continuous contact with a drinking











single-level thermostats

double thermostat

thermostat for monitoring temperature

digital thermostat with build in

										of motor winding	time switch
Technical parameters	TER-3A	TER-3B	TER3-C	TER-3D	TER-3E	TER-3H	TER-3F	TER-3G	TER-4	TER-7	TER-9
Monitored range	-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	-40 to 110°C	1.8 - 3.3 kΩ	-40 to 110°C
Thermosensor type			externa	I,TC/TZ			built-in	Pt100	external, TC/TZ	external, PTC	external, TC/TZ
Output				1x NO,	16 A				2x CO, 16 A	2x CO, 8 A	2x CO, 8 A
Housing				1-MOD	ULE				3-MODULE	1-MODULE	2-MODULE
Supply voltage (frequency)		AC/DC 24-240 V (AC 50-60 Hz)							AC/DC 24V, 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")
	TER-3B 38 TER-3C 38 TER-3D: 3 Simple the to + 70 ° 0	TER-3A 3839 TER-3B 3840 TER-3F: 3844 TER-3C 3841 TER-3D: 3842 TER-3H: 3846 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-4/230V: 5539 TER-4/24V: 4749 Double thermostat for monitoring and regulating the temperature. 2 inputs for TC/TZ sensor. Galvanically isolated power supply.	TER-7: 3716 It monitors motor winding temperature. PTC sensor built-in in motor winding is used as a sensing element.	TER-9/230V: 4698 TER-9/24V: 4699 Digital thermostat with 6 functions.		
Temperature sensors TC/TZ/PT100 more on page 23										回答 (E) 及传统 (E)	

THERMOSTATS | with IP65 protection











two-level thermostat in IP65 protection

single-level thermostat in IP65 protection

single-level thermostat in IP65 protection

single-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
	Window function = monitors temperature between two set levels	Transparent cover to see setting and wiring.	Selectable function: cooling/ heating. Setting of the monitored tem- perature on enclosure	Selectable function: cooling/ heating. Option of voltage or potential - free contact

THERMOSTATS, HYGROSTATS |





programmable multifunction chronothermostat



 $multifunction\ thermostat$



hygrothermostat optional functions



hygrostat

Technical parameters	21235	21236	RHT-1	RHV-1
Monitored temperature range	-9 to +35°C	-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 auto- matically control heating or air conditioning in relation to the dai- ly or weekly program and the set temperature.		Controls heating or air-condition- ing systems depending on the se- lected temperature. It is possible to connect a floor temperature sensor to automatically detect and con- nect to it.	Hygro-thermostat for temperature monitoring and control - range 0 to +60 °C and relative humidity - range 50.90 %. Sensor is part of device - designated for measuring in switchboard.	A basic hygrostat to monitor and control the relative humidity 0-90 %. Outdoor version IP65, box for wall mounting, removable lid without screws.

THERMO-VALVES

TEMPERATURE SENSORS











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:	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 lenghts: 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 lenghts: 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 lenghts: 3 m, 6 m and 12 m. PT100-3: 3613 PT100-6: 3614 PT100-12: 3615



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.







optical signalization of 3-phase network (with NEUTRAL)



for power factor monitoring in two levels



for frequency monitoring in two levels

Technical parameters	MPS-1	COS-2	HRF-10		
Circuit monitoring	3-phase	3/1-phase	1-phase		
Adjustable range	fixed levels, indicated by colored LED: yellow: 50-207 V, green: 207-265 V, red: 265-276 V	COS φ 0.1-0.99	40-60 Hz, 48-72 Hz, 320-480 Hz		
Output	-	2x CO, 16 A	2x CO, 8 A		
Housing	1-MODULE	3-MODULE			
Power supply	AC 3x400/230 V (50-60 Hz) AC /DC 24 V, AC 230 V, AC 400 V (AC 50-60 Hz)		AC 161-500 V (50/60/400 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″)			

MPS-1: 4597

Used for optical signaling of the voltage level in 3-phases. 4-wire connection - L1, L2, L3, N. Monitors phase voltages against neutral wire. LED indicator - for every phase 1 LED.

COS-2/24V: 5544 COS-2/230V: 5543 COS-2/400V: 5236

Relay monitors phase off-set between current and voltage in 3-phase or also 1-phase networks - it evaluates cos- ϕ . The relay is predestined for motor overloading /

relief monitoring.

HRF-10: 5011

The relay is designed for monitoring the frequency of AC voltage, eg in photovoltaic power plants and generators.









RF WIRELESS ELECTRO-INSTALLATION

























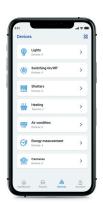




Wi-Fi













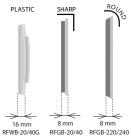






Glass touch controllers 2 or 4 buttons (ROUND edges)

Technical parameters	RFWB-20/G RFWB-40/G		RFGB-20	RFGB-20 RFGB-40		RFGB-240	
Number of channels	2	4	2	4	2	4	
Power supply	3 V battery CR 2032		2x 3 V batte	2x 3 V batteries CR 2032		2x 3 V batteries CR 2032	
Design	LOGUS	glass	glass - sharp		glass - round		
Colour	in LOGUS ⁹⁰ variations		W - white	W - white, B - black		W - white, B - black	
Dimensions	85 x 85 x 10	6 mm	94 x 94	94 x 94 x 8 mm		100 x 100 x 8 mm	
Protocol	RFIO2		RF	RFIO2		102	
Order code	8136	8098	20/B: 7679 20/W: 7678	40/B: 7681 40/W: 7680	220/B: 7684 240/B: 7686 220/W: 7683 240/W: 7685		
Wireless controller in LOGUS® design.			RFGB-20/B : 2-bu	ittons, black glass	RFGB-220/B: 2-but	tons, black glass	



Wireless controller in LOGUS³⁰ design.

Standard BASE design (white plastic), but can be combined with glass, wood, metal or stone in the frame design.

On-wall button controllers

ined with

RFGB-40/B: 4-buttons, black glass

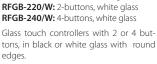
RFGB-20/W: 2-buttons, white glass

RFGB-40/W: 4-buttons, white glass

Glass touch controllers with 2 or 4

Glass touch controllers with 2 or 4 buttons, in black or white glass with sharp edges.





RFGB-240/B: 4-buttons, black glass



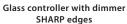


CONTROLLERS | with dimmer

outdoor

compact







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	RFOWB-20	RF KEY-40 RF		RF KE	RF KEY-60		ILOT
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	IP65	key fob			remote controller		
Colour	W - white, B - black	white	B - black	W - white	B - black	W - white	A - anthracit	W - white
Dimensions	94 x 94 x 36 mm	64 x 74 x 44 mm		64 x 25 x	x 10 mm		130 x 41	x 18 mm
Protocol	RFIO2	RFIO2		RFI	102		RF	Ю
Order code	71/B: 4178 71/W: 5983	8147	8075 8074 807		8077	8076	4516	4376



Glass controller with integrated dimmer R-L-C-ESL-LED for loads up to 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.



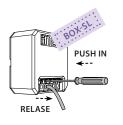








SWITCHES | flush mounted











Screwless terminals for faster wiring

Multifunction 1-channel

Single function 1-channel

Multifunction switching units with inputs for external buttons 1-channel 2-channels

Lighting control unit with detectors

Technical parameters	RFSA-61B	RFSAI-11B-SL	RFSAI-61B-SL	RFSAI-62B-SL	RFSAI-161B
Output	1x N0	O, 8 A	1x NO, 8 A	2x NO, 8 A	1x NO, 18 A
Supply voltage (frequency)	AC 230 V ((50-60 Hz)	AC 230 \	/ (50-60 Hz)	AC 230 V (50-60 Hz)
Design	BOX		BOX-SL		вох
Dimensions	49 x 49 x 21 mm		43 x 44 x 22 mm		49 x 49 x 21 mm
Protocol			RFIO2		
Order code	4995	8375	8204	8201	4934
FRANCE OF THE PARTY OF THE PART	• 6 functions • 1 output	• switch on/off • 1 output	6 functions 1 output contact 8A 1 input for external button	6 time functions 2x output contacts 8A 2 inputs for wired buttons	As RFSA-161B, but with a pre-set al- gorithm for lighting control (e.g. hotel room) based on upstream wireless detectors. Input for connecting a wire button. Part of the HRESK system.
BOX-SL flush mounted					

SWITCHES | shutters

on DIN rail











Switch unit with external input

Multifunction 1-channel

Multifunction 6-channels

Fancoil controller 6-channels

Technical parameters	RFJA-32B-SL	RFSA-61MI RFSA-61M	RFSA-66MI RFSA-66M	RFSA-166M
Output	2x NO, 8 A	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)	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-SL	1-MODULE	3-MODULE	3-MODULE
Dimensions	43 x 44 x 22 mm	90 x 17.6 x 64 mm	90 x 52 x 65 mm	90 x 52 x 65 mm
Protocol	RFIO2	RFIO2	RFIO2	RFIO2
RFJA-32B/230V: 8254		RFSA-61MI: 8154	RFSA-66MI/24V: 8156	RFSA-166M/230V: 3432



MODULE on DIN rail



wired buttons.

RFSA-61MI: 8154 **RFSA-61M:** 7721

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).





DIMMERS | flush mounted

on DIN rail



controller 0(1) - 10V

dimmer 1x 300 VA

adress



Universal dimmer 1x 600 VA



Dimmer for LED (RGB strips) 3-channels



Universal dimmer 6x 150 VA

Technical parameters	RFDAC-71B	RFDEL-71B-SL	RFDALI-32B-SL	RFDEL-71M		RFDA-73M/RGB	RFDE	L-76M		
Output	0(1) - 10 V contact 16 A	R-L-C-LED-ESL 160 VA	32x DALI units	R - L - C - LED - ESL 600 VA 300 VA		3x 5 A	R - L - C - 6x 150 VA	LED - ESL 6x 75 VA		
Supply voltage (frequency)	AC 110-230 V (50-60 Hz)	AC 230 V (50 Hz)	100-230 V (50 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	ВО	X-SL		3-MODULE		6-MO	DULE		
Dimensions	49 x 49 x 21 mm	43 x 44	x 22 mm		90 x 52	x 65 mm	90 x 105	c 65 mm		
Protocol		RFIO2			RFI	02	RFI	02		
Order code	4993	8361	8434	4897	5304	4916	8205	8209		
	Used to control de-	The light source	It should dimm	As version "RFDEL-71B", but		As version "RFDEL-71B", but		The dimmer for LED strips	Universal six-c	hannels dimmer

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

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



It should dimm As version "RFDEL-71B", but up to 32 DALI DIN rail designed inputs for external control by drivers powered potentiometer or analog from DALI BUS. voltage 0 (1) - 10 V. Configuration via



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

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 unit for outdoor use

Technical parameters RFDSC-71N		RFSC-61N	RFUS-61
Type of load	R - L - C - LED - ESL max. 300 W/150 W	1x NO, 16 A/AC	1x CO, 12 A/AC1
Supply voltage (frequency)	AC 230 V (50-60 Hz)	AC 230-250 V (50-60 Hz)	AC 230 V (50-60 Hz)
Design	socket-plug	socket-plug	IP65
Dimensions	63 x 110 x 74 mm	63 x 110 x 74 mm	136 x 62 x 34 mm
Protocol	RFIO2	RFIO2	RFIO2



French: 8359



Schuko: 8360



British: 8358





French: 8251



Schuko: 8250



British: 8252



RFUS-61/120V: 5256 RFUS-61/230V: 5853

Switching component with 1 output channel in a box with increased coverage for outdoor environments.













Level switch

Flood

Twilight

Magnetic (Window/door)

Motion

Technical parameters	RFSF-1B	RFSF-100	RFSOU-1	RFWD-100	RFMD-100
Battery power	1x 3 V battery CR 2477	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	BOX	disc box	IP65	interior	interior
Dimensions	49 x 49 x 13 mm	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	RFIO	RFIO2	RFIO	RFIO2	RFIO2
Order code	4860	7682	4707	5027	5029
FP-1 Liquid probe External probe designed for Level sensor RFSF-1B for flood monitoring, 1 m	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.	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.
cable can be extended by 30 m.					

DRY CONTACTS CONVERTERS













2 contacts converter - permanent switching

4 contacts converter battery powered

4 contacts converter AC 230 V powered

1 contact converter - permanent switching

Pulse converter

RFIM-20B	RFIM-40B/BP-SL	RFIM-40B/230-SL	RFSG-1M	RFTM-1
1x 3 V battery CR2477	batterie CR2032	AC 230V (50-60 Hz)	AC 10-230 V (50-60 Hz)	2x 1.5 batteries AAA
BOX	BOX-SL	BOX-SL	1-MODULE	BOX
49 x 49 x 13 mm	43 x 44 x 22 mm	43 x 44 x 22 mm	90 x 17.6 x 64 mm	72 x 62 x 34 mm
RFIO	RFIO2	RFIO2	RFIO2	RFIO
8281	8406	8407	8240	4315

Converts 2 potential-free inputs that can be permanently closed (switch, relay contact) to RF signal. Converts 4 potential-free inputs that can be closed for a short time (buttons) or permanently (switch, contact) on the RF signal.

RFIM-40B / BP-SL: battery supply (CR 123A) RFIM-40B / 230-SL: mains supply (AC 230V) 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 infor-

mation for control of an appliance or device. Bidirectional communication RFIO2.

Allows conversion of pulses produced by energy meters. Via LS sensors (detects flashing LEDs on the meter)or MS (magnetic sensor for water meter handle or gas meter dial). It has a terminal for connecting the pulse output (open contact, S0 terminals of the electricity meter).











TEMPERATURE CONTROL | thermostats







Covers:

AL - aluminium



Autonomous temperature controller

Thermostat for fancoil control via RFSA-166M



GE - ice

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	RFTC-50/G/BR	RFTC-150/G/BR		



IS - gray



Compatibility control



RFTC-10/G: design BASE, white cover, white frame, order code: RFTC-10/G/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 \pm 5 $^{\circ}$ 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. RFSA-6x / RFUS-61

RFTC-150/G: design BASE, white cover, white frame, order code: RFTC-150/G/BR

- thermostat for controlling the RFSA-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 LOGUS 90 frames.









MF - ivory



PE - pearl

TEMPERATURE CONTROL | sensors and actuators









Switching unit with temperature sensor

Temperature sensor

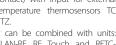
Overheating/overcooling switch unit with advanced functions

Wireless thermal head

Technical parameters	RFSTI-11B-SL	RFTI-10B	RFSTI-111B		RFATV-2	
Supply voltage (frequency)	AC 230 V	1x 3 V battery CR 2477	AC 230 V (50-60 Hz)		battery 2x 1,5 V AA	
Design	BOX-SL	В	OX		thread on the valve	
Dimensions	43 x 44 x 22 mm	49 x 49 x 13 mm	49 x 49 x 21 mm		52 x 52 x 70 mm	
Protocol	RFIO2	RFIO	RFIO2		RFIO2	
Order code	8404	3175	4915 3409		8259	
1	Switching component (16 A relay contact) with input for external temperature thermosensors TC /TZ.	The internal or external TC / TZ sensor measures the temperature in the range -20 to + 50 °C and sends it to the system device	Most suitable for hotel rooms. The components support communication with RF detectors. Range 160 m.		The wireless thermal head measures the room temperature with an internal sensor, and opens / closes the radiator valve based on the set	



Temperature sensors TC/TZ more on page 23



It can be combined with units: eLAN-RF, RF Touch and RFTC-50/G.

(eLAN-RF or RF-Touch) at regular intervals (5 min).

program in the system component.









SYSTEM UNITS



Wireless touch unit on the wall



Wireless touch unit flush mounted (eLAN-RF included)



Smart RF Gateway with LAN



Smart RF Gateway with WiFi & LAN



Repeater (socket-plug)

Technical parameters	RF Touch-W	RF Touch-2/B	eLAN-RF-103	eLAN-RF-Wi-103	RFRP-20N	
Number of connectable components*	40	70	70 70		20	
Supply voltage (frequency)	AC 100–230 V (50-60 Hz) or 12 V DC adapter	24 V DC (terminals) USB-C (external adapter) POE (through LAN)		AC 230 V (50-60 Hz)		
Design	on the wall	flush mounted	aluminum box		socket-plug	
Dimensions	94 x 94 x 24 mm	86 x 86 x 10 (37)mm	36 x 86 x 10 (37)mm 90 x 52 x 65 mm		63 x 110 x 74 mm	
Protocol	RFIO2		RFIO2		RFIO2	
Order code	5174	8266	8044 8084		French: 8423 Schuko: 8424 British: 8425	
* allow to control the units	It includes simple auto-	Like DE Touch D with	The RE Smart hox is a gate	way hetween iNELS RE com-	The signal repeater is used	

^{*} allow to control the units independently

It includes simple automation functions, such as temperature and time programs, control of RGB strips and light bulbs, quick control and more.

Like RF Touch-B with new display (diagonal 4", 480x480 px, multi touch). Communication: iNELS radio, wi-fi and LAN-Including eLAN-RF for direct or indirect (iNELS Cloud) control from iNELS app.



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 and 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.



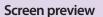
Device description

Temperature and

Safety lock

USB-C

humidity sensor



















Service Key



Internal antenna with SMA connector

AN-I



External antenna with magnetic base



External antenna with magnetic base and IP67 protection

AN-E3



nd IP67 protection

RFAF/USB

RFSAF/USB: 4503

The RFAF / USB Service Key (in conjunction with the RF_analyzer) is designed for iNELS RF Control system partners.

AN-I: 6180

Polarization: vertical Gain: 2.1 dBi Dimensions: 17 x 44 x 8,5 mm Impedance: 50 Ω Colour: black

AN-E

AN-E: 209930606056

Cable length: 3 m Polarization: vertical Gain: 5 dBi Impedance: $50 \, \Omega$ 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

Extension cable







回复测证

SMART KITS | PREPROGRAMMED FOR EASY INSTALLATION

WIRELESS SWITCH



WIRELESS SWITCH - LUXURY

- Glass touch controller
 SHARP design, white
- Switch unit with ON / OFF function (for lights, sockets, electric heating, gates,...)



2 WIRELESS SWITCHES - CLASSIC

- On-wall button controllers duo
 plastic, white
- 2 pcs switching unit with ON / OFF function (for lights, sockets, electric heating, gates,...)



2 WIRELESS SWITCHES WITH KEY-FOB

- Pocket wireless controller
 4-button, white
- 2 pcs switching unit with ON / OFF function (for lights, sockets, electric heating, gates...)



WIRELESS SWITCH SOCKET - LUXURY

- Glass touch controller
 ROUND design, black
- Wireless switch socket-plug



WIRELESS SWITCH SOCKET - CLASSIC

- On-wall button controllers plastic, white
- Wireless switch socket-plug

DIMMERS KITS



WIRELESS LIGHT DIMMER - LUXURY

- Glass touch controller -4-button, ROUND design,
- Universal dimmer for light source control (R, L, C, ESL, LED)



2 WIRELESS LIGHT DIMMERS - LUXURY

- Glass touch controller
 4-button, SHARP design,
- 2 pcs universal dimmer for light source control (R, L, C, ESL, LED)



2 WIRELESS LIGHT DIMMERS - CLASSIC

- On-wall button controllers duo - plastic, white
 2 pcs universal dimmer for
- 2 pcs universal dimmer for light source control (R, L, C, ESL, LED)



WIRELESS LIGHT DIMMER - LUXURY

- Glass touch controller
 4-button, SHARP design,
 white
- Universal dimmer for light source control (R, L, C, ESL, LED)

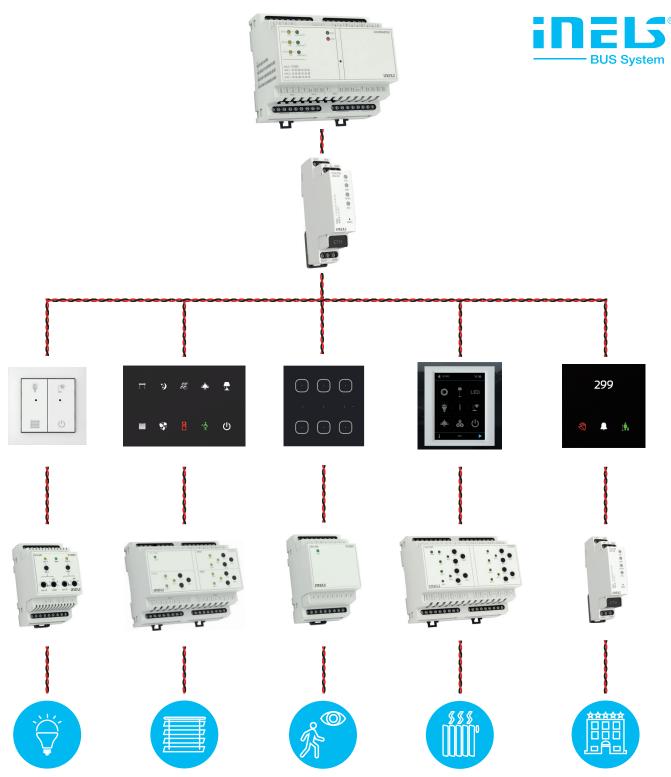


WIRELESS DIMMING SOCKET - LUXURY

- Glass touch controller
 4-button, ROUND design,
 black
- Wireless dimmable socket-plug



WIRED ELECTRO-INSTALLATIONS iNELS BUS



CENTRAL UNITS



Basic central control unit iNELS BUS



Extended central control unit iNELS BUS



Central unit for control of DALI ballasts



Superior central control unit projects using iNELS IP protocol

CU3-07M CU3-08M CU3-09M/DALI CU3-IPMASTER

Order Code: 8010

- Cu3-07M is one of the basic system control units of iNELS BUS installations.
- The unit can work independently, as an autonomous project, or it can be controlled by the CU3--IPMASTER central unit as part of a larger project.
- The unit is equipped with one BUS to which it is possible to connect up to 32 elements from the iNELS BUS portfolio.

Order Code: 8440

- CU3-08M is one of the basic system control units of iNELS BUS installations.
- The unit can work independently, as an autonomous project, or it can be controlled by the CU3-IPMAS-TER central unit as part of a larger project.
- The unit is equipped with two BUS, to which it is possible to connect a total of up to 64 elements (2x32) from the iNFI S BUS portfolio.

Order Code: 8465

- CU3-09M/DALI is a special version of the minified central unit and is designed to control DALI electronic ballasts from the iNELS system.
- The unit can work independently, as an autonomous project, or it can be controlled by the CU3-IPMASTER central unit as part of a larger project.
- The system unit is equipped with one BUS, one DALI bus and one RJ45 connector.
- Up to 32 elements from the iNELS BUS portfolio can be connected to the BUS system.
- The DALI system bus allows the control of up to 64 independent DALI ballast addresses for fluorescent, LED and other luminaires.



Order Code: 8448

- The CU3-IPMASTER central unit is a high-performance control unit designed for controlling subordinate units compatible with the iNELS IP protocol.
- CU3-IPMASTER is designed for fully autonomous control of even very large projects consisting of 1000+ subordinate central or system units. Using the iNELS IP protocol, the unit communicates with the centralized iNELS Cloud environment, which can be used to connect multiple large projects into a centrally controlled project.
- The iNELS IP protocol also allows the use of the iNELS mobile application to control all devices included in the project.
- Communication and links between individual system elements are set up in the iNLES Designer Manager configuration software environment, which is designed for Window 7, 8 and 10 systems.





SYSTEM UNITS



Power supply 30 W with BUS separator



Power supply 100 W



BUS separator from power supply



BUS separator from power supply

	separato.				
Technical parameters	PS3-30/iNELS	PS3-100/iNELS	BPS3-01M	BPS3-02M	
Output	27 V / 1A	27.6 V / 3.6 A, 12.2 V / 0.35 A	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		
Rated current	-	-	8 mA (at 27 V DC)	15 mA (at 27 V DC)	
Dimensions	90 x 52 x 65 mm	90 x 105 x 65 mm	90 x 17.6 x 64 mm		
Order code	8011	4889	3244	3243	

PS3-30/iNELS: power 30 W, integrated bus separator BPS3-01M.

PS3-100/iNELS: power 100W, inputs for connecting backup batteries 2x12V and the possibility of recharging them with adjustable current.

This separator serve for impedance separation of BUS from supply voltage

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.









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	SA3-0	012M
Number of contacts	1x NO, 16 A	2x CO, 8 A	4x CO, 16 A	6x CO, 8 A	12x N	O, 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	200	0 VA
Supply voltage (frequency)	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC	230 V 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	вох		3-MC	DDULE	6-MC	DDULE
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 ap-			4-channel switching ac-	6-channel switching actu-	12-channel sw	itching actuator

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.







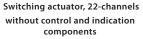




SWITCHING ACTUATORS

SHUTTER ACTUATORS







Roller shutter (blind) actuator, 2-channels (1 controller)



Roller shutter (blind) actuator, 18-channels (9 controllers)

Technical parameters	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	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



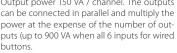
Dimming actuator 6-channels



Dimming actuator for electronic ballasts 2-channels

Technical parameters	DA3-	-22M	DA3-66M		LBC3-02M
Output	load R - L - C - LED - ESL 2x 400 VA (230 V) / 200 VA (120 V)		load 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	90 x 52 >	c65 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,	The motion detector is used to detect move-	DLS3-1 is for sensing the current luminescence

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.

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







THERMO INPUTS |







Binary input unit 8-channels



Binary input unit 14-channels



Temperature input 4-channels



Temperature input 6-channels

Technical parameters	IM3-40B	IM3-40B IM3-80B		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 2	7 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	вох		3-MODULE	BOX	3-MODULE	
Dimensions	49 x 49 x	c 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 T13-40B is designed for connecting 4x temperature sensors TC, TZ, Ni1000, PT1000 or PT100.	Temperature input unit Tl3-60M is designed for connecting 6x temperature sensors TC, TZ, Ni1000, PT1000 or PT100.	

CONVERTERS |



Analog - digital converter 6 inputs



Digital - analog converter 4 inputs

Technical parameters	ADC3-60M	DAC3-04M
Output	-	4x 0(1) - 10 V / 10 mA
Input	1x temperature, 6x analog.; 0-10 V; 0-20 mA	1x temperature
Supply voltage	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	100 mA (at 27 V DC)	50 mA (at 27 V DC)
Housing	3-MODULE	3-MODULE
Dimensions	90 x 52 x 65 mm	90 x 52 x 65 mm
Order code	3301	3256

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.





COMBINED UNITS







Room controller with PHASE dimmers



Combined actuator 10 inputs, 8 outputs



Fan coil control actuator

Technical parameters	RC3-610M/DALI	RC3-612M	IOU3-108M	FA3-612M
Output	8x NO contacts (10 A), 2x analog (0-10 V), 32/64 DALI adress	8x NO contacts (10 A), 2x analog (0-10 V), 2x PHASE dimmers (150 VA)	8x switching, 10 A	4x (0)-10V, 4x switching, 4x SSR
Input	6x digital (NO/NC)	6x digital (NO/NC)	1x temperature, 8x digital	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)	110 mA (at 27 V DC)	110 mA (at 27 V DC)	5 mA (at 27 V DC)
Housing	6-MODULE	6-MODULE	6-MODULE	6-MODULE
Dimensions	90 x 105 x 65 mm	90 x 105 x 65 mm	90 x 105 x 65 mm	90 x 105 x 65 mm
Order code	8466	8467	8188	3257
	The unit is designed to control hotel ro- oms. The unit is equipped with 6 binary inputs, of which 2 can be configured as temperature inputs and 8 independent relays with switch contacts. It also inclu- des two analog outputs and a bus for controlling up to 64 DALI ballasts.	The unit is designed to control hotel ro- oms. The unit is equipped with 6 binary inputs, of which 2 can be configured as temperature inputs and 8 independent relays with switch contacts. It also inclu- des two analog outputs and two-phase dimmer channels.	Actuator can switch the appliances, light circuits, thermodrives, etc., possibility of connecting wired buttons and temperature sensors. Outputs supports zero-crossing mode.	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











(SHARP edges)	
6 buttons	8 buttons
GSB3-60	GSB3-80

		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/B and 80/B) 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	04 04 26
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	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. Order code of all color combinations are available in the price list.	Wall controllers, 2x button, built-in temperature and humidity sensor (version H), 1x LED indication. In LOGUS ⁵⁰ design.	Wall controllers, 4x button, built-in temperature and humidity sensor (version H), 2x LED indication. In LOGUS® design.	Control unit for heating/cooling. Temperature co- rrection ±5 °C or direct input of requested tempe- rature. Built-in temperature sensor. In LOGUS® design	Wall reader with RFID can read chip cards, key fobs and control the entrace. Available in black and white color in Logus ⁹⁰ design.	Glass wall reader with RFID and buttons can read chip cards, key fobs and control the entrace. Available in black and white color in Logus® design.

HOSPITALITY SOLUTION - GRMS





Glass card reader





Glass door

bell





10 buttons

Technical parameters	GCR	3-11	GDB3-10		GSP3-100	
Number of buttons	:	3	1		10	
Supply voltage	BUS 2	7 V DC	BUS 2	7 V DC	BUS 2	7 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 brigtness sensor	internal temperature sensor, 1x external input for TC/TZ		internal temperature sensor, 1x external input for TC/	
Dimensions	94 x 94 :	4 x 36 mm 94 x 94 x 36 mm		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

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).

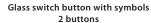






HOSPITALITY SOLUTION - GRMS















Glass switch button with symbols 6 buttons

Technical parameters	GSB3	-20/S	GSB3-40/S		GSB3-60/S	
Number of buttons	2	!	4	4	(5
Supply voltage	BUS 27	7 V DC	BUS 2	7 V DC	BUS 2	7 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 a 1x external in		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 :	c 36 mm	94 x 94 x 36 mm		94 x 94 :	c 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/B and 80/B) variants.

4 buttons

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).







HOSPITALITY SOLUTION - GRMS





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 dig	gital, brightness sensor

Order code: 5728 Order code: 3533

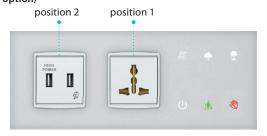
GBP3-60 is available in several designs and is very flexible and efficient solution for a wide range of projects. The following variants are available:

- 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

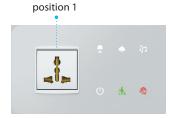


Configure bedside panel according to your request.

L (left option)

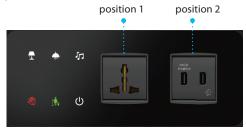


GBP3-60/WL/2F-26W-20W



GBP3-60/WL/1F-21W45W

R (right)

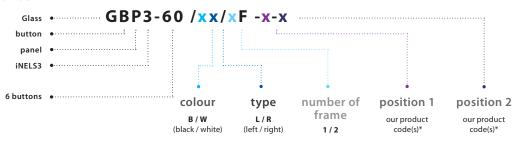


GBP3-60/BR/2F-26B-11B44B



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**.

HOSPITALITY SOLUTION - GRMS



Hotel control unit with touch screen



Glass room thermo-regulator



Glass card holder

Technical parameters	ЕНТ3	GRT3-50 GCH3-31		3-31	
Input	-	-		1x change	eover, 8 A
Number of buttons	touch screen	7	7	:	3
Supply voltage	BUS 27 V DC	BUS 2	7 V DC	BUS 2	7 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 brightn		brightne	ss 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.









converter IP =>3x infrared transmitter



gateway for connecting protocols and devices by a third party

Home Assistant GW

eLAN-IR-003

Order code: 3283

- 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, settop 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.



Third party integration server.

Order Code: 8464

- Works as a server for connecting third-party devices and integrating them into the iNELS environment.
- The server uses the open Home Assistant platform, which contains more than 1000 existing integrations. The platform is supported by its own community and the number of integrations is constantly growing. Thanks to the Open Source architecture, it is possible to create your own integration driver for new devices if necessary.
- The Home Assistant GW communicates via the iNELS IP protocol, so it can be controlled via the iNELS mobile application or the CU3-IPMASTER master.
- The Home Assistant GW uses Raspberry Pi hardware. The package also includes an SD card with a pre-installed Linux operating system and the necessary software.



INTEGRATION



converter IP =>RS-485/232



converter IP =>RS-485/232

Connection Server

eLAN-RS-485/232

Order code: 7026

- 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.
- \bullet 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.

Order code: 5803

- 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 configuratution 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 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 codes I APA P		Order code: I APA IC

Order code: LARA-R

- ${\boldsymbol{\cdot}}$ 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 an smart phone or e.g. an MP3 player. These devices are connected to a 3.5mm stereo jack audio input, located underneath the front panel.
- LARA Radio can also play audio files from central data storage.

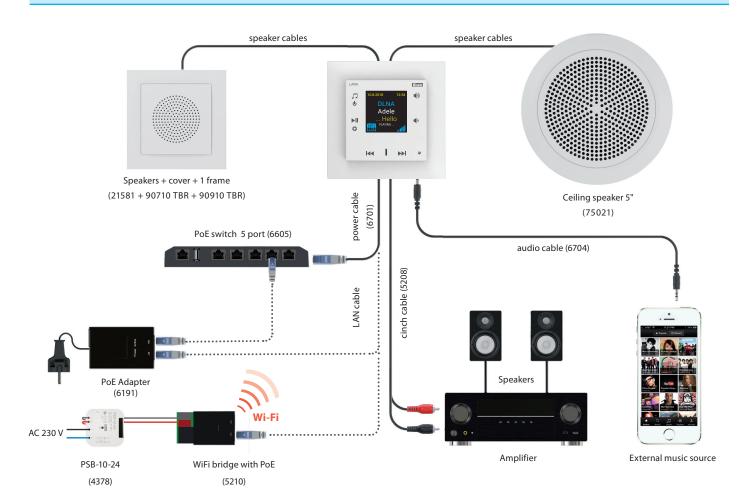
Order code: LARA-IC

- · 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

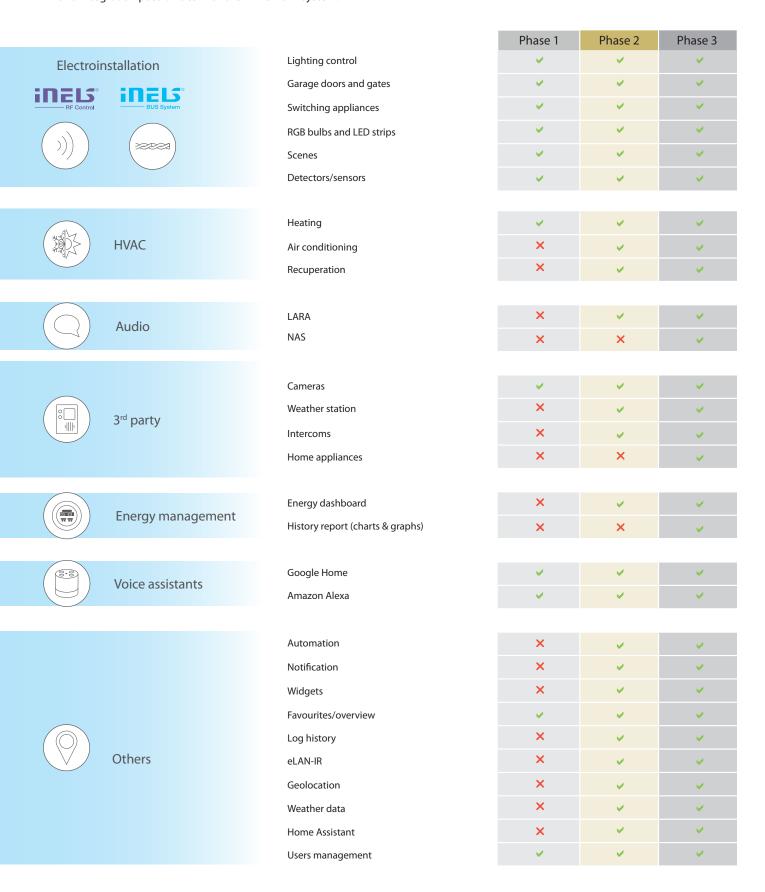


Mobile application iNELS

The application allows you to easily control connected devices such as switch sockets, dimming lights, controlling blinds or garage doors, heating circuits and compatible air conditioning. Of course there is a display of the available values such as temperature, motion status, window, door or flood detectors, or the current status of all controlled devices.

It now brings a clear Dashboard where it is possible to view the most used devices, previews of connected cameras or created scenes. With one click, you can control several devices at once.

The iNELS application will be gradually supplemented automatically with the possibility to connect new devices, new system and central units and third-party devices. With the new iNELS mobile application, enter a completely new world in the expansion of functions and integration possibilities with the iNELS 2022 system.







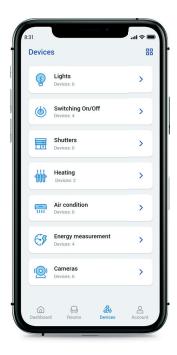




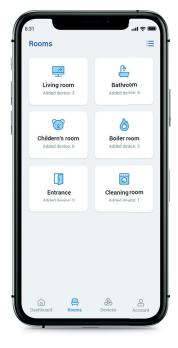


Overview

Dashboard of the state of all devices.



Device list
Control the device from anywhere.

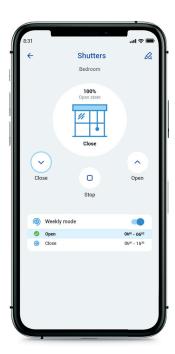


Rooms management
Settings according to individual rooms.



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.



Luxurious design for any interior



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.

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.

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.

Smart finish. Discrete shape of function.



AQUARELLA

Distinct colors. Shades that characterize the space.



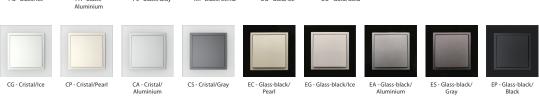
ANIMATO

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 refi nement 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.

DEVICES OVERVIEW



Switch one-pin



Switch two-pin



Switch three-pin



Rotary dimmer



Movement detector



Card switch



Button with LED lamp symbol KEY



Blinds



Switch

UNITS OF THE INELS SYSTEM IN LOGUS⁹⁰ DESIGN



Wall-mounted controller



Multifunction unit



Digital room temperature controller

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 alows mounting to instrumentation device / box.

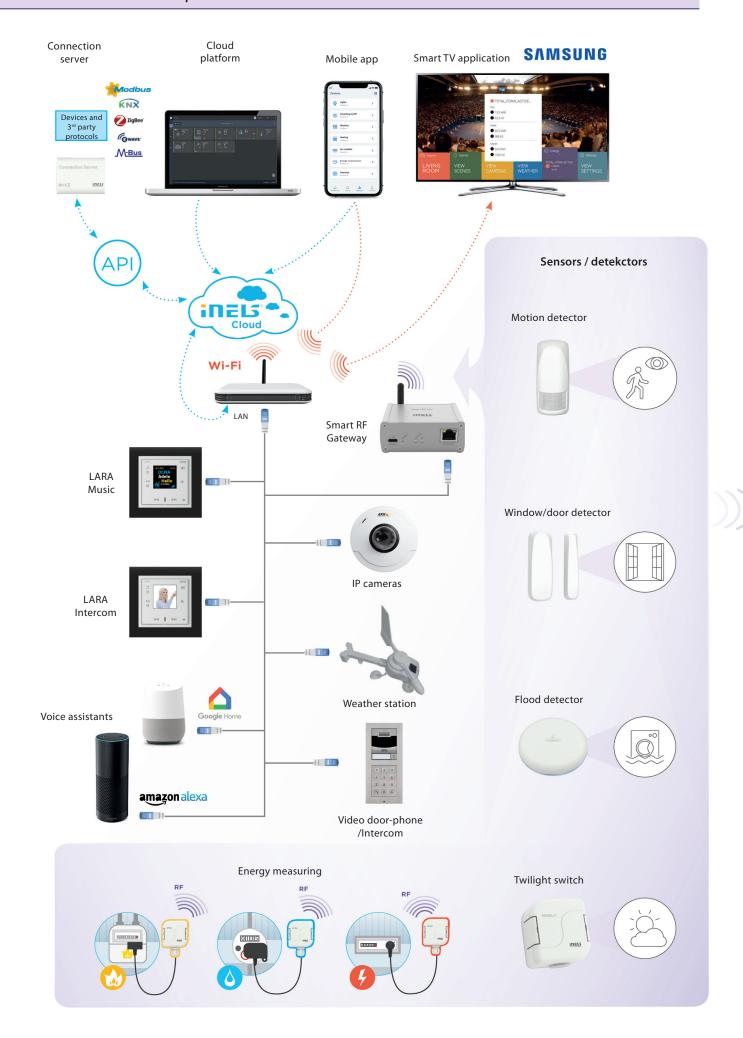


Screwless terminals provide fast and quality connection without need of instrument usage. Double terminals on every pole provide multiple connection withoutneed of extra terminals usage.



Ability to test electrical functionality of your device without disassembly.

		Order code	Box (Un)			Order code	Colour	Box (Un)
	Card-System Timer Switch 16 A - 100-240 V~	21033	1	CARD	Cover Plate for Card-System Timer Switch	90733 T	BR MF GE PE AL IS PM DU	1
OF OF	Timer Switch 16 A - 100-240 V~	21040	1	OFF	Rocker for Timer Switch	90745 T	BR MF GE PE AL IS PM DU	1
	Motion Detector - Wall Installation 1000 W - Power: 100-240 V~ - 50-60 Hz; - Compatible with any kind of load - Possibility of two external inputs: ON/AUTO and Timed	21403	10		Cover Plate for Motion	90403 T	BR MF GE PE AL IS	1
	Motion Detector - Wall Installation 400 W - Power: 100-240 V~ - 50-60 Hz; - Compatible with any kind of load - Possibility of two external inputs: ON/AUTO and Timed.	21404	10		Detector - Wall Installation	504031	PM DU	'
	Rotary Thermostat - Power: 100-240 V~ - 50-60 Hz; - Maximum load: 16A (3680W, cosφ = 1); - Compatible with any kind of load - Systems Control: Heating and/or Cooling; - Temperature settings: 5°C to 30°C; - Possibility of connecting theTC-03	21234	1		Cover Plate for Rotary Thermostat	90746 T	BR MF GE PE AL IS PM DU	1
and 5	RLC Dimmer Press Switch 100-240 V~	21218	1	0 0	Rocker for RLC Dimmer Press Switch	90747 T	BR MF GE PE AL IS PM DU	1
	White Orientation Light -Two lighting levels: L1 - 0,2 W; L2 - 0,4 W - 230 V ~ - 50-60 Hz	21388	10		Cover Plate for Orientation Light	90782 T	BR MF GE PE AL IS	20 2
	White Orientation Light with battery - Two operating functions - 230 V ~ - 50-60 Hz	21389	10		Orientation Light		PM DU	2
	Double USB Charger Type A with Output at 20° - Voltage: 100-240 V~ Frequency: 50-60 Hz Output voltage: 5 V Output current: 2.4 A Two USB type A outlets.	21384	1	L 30) J	Cover Plate for Double USB Charger Type A with outlets at 20°	90673 T	BR MF GE PE AL IS DU PM	1



Actuators 0 Switching socket Universal dimmer R - L - C - LED - ESL Switch unit for shutters Thermovalve 3 Switch unit 6-channels 5 6 Analog controller 0(1)-10 V Switch unit for outdoor use

Controllers





On wall button





Glass touch





Glass touch with dimmer



Key fob



Contact converter



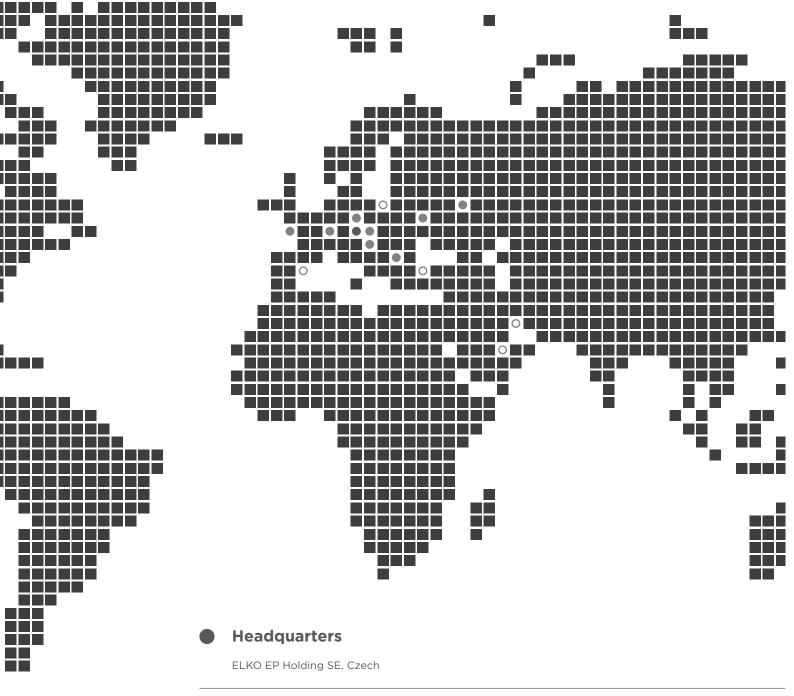
Outdoor 2-buttons controller with increased protection



Wireless touch unit



Temperature controller



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