

PRODUCT OVERVIEW



Monitoring / Protection relays

Timers / Relays

Wireless electro-installation iNELS

Wired electro-installation iNELS

Design switches & sockets



ELKO EP

ELKO EP have been your partner in the field for 30 years, developing and manufacturing the highest quality electronic devices for electroinstallation as well as smart system for residential and building automation.

ELKO EP employs more than 330 people across 15 foreign branches and exports its products to more than seventy countries. Company of the Year, Visionary of the Year, Superbrands 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, thousands of smart homes, hundreds of buildings and many satisfied customers - This is ELKO EP; a traditional company based in the center of Europe, where own development, production, logistics, and service are at the forefront of our focus.

Facts and stats



30 %

Czech

40 %

export

30 %

branches



WORLDWIDE

11 branches
6 franchises
70 export countries

350

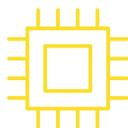
employees
in holding

30 000 +

iNELS
installations

30 000 000 +

manufactured
products



R&D

continuously
innovative

MANUFACTURER

fully automated
complete proces

SUPPORT

24 / 7 / 365

World leader
in DIN rail relays production



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, liquid level relays, thermostats, voltage indicator, power factor and frequency monitoring relays.



Wireless electro-installation iNELS

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 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.



Smart kits

elkoep.com/smart-kits

Smart Kits are pre-packaged sets of our most popular wireless control devices from the iNELS Wireless product range. The devices in the set are paired and ready for immediate assembly. Kits are divided according to their main functions, so customers can easily choose from the following categories: Wireless switch, Wireless dimming, Wireless shutter control and others.



Wired electro-installation iNELS

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).

1-MODULE

2-MODULES

3-MODULES

4-MODULES

6-MODULES



BOX - flush mounted

BOX-SL - screw-less terminals

BOX - into the cover



into 8/11-Pin socket

or

into the panel

outdoor housing (IP65 protection)



interior

in LOGUS⁹⁰ design



AQUARELLA

ARBORE

ANIMATO

PETRA



METALLO

BASE



CRYSTAL



Quick overview of time relays



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

Main parameters

	CRM-181J	CRM-183J	CRM-161	CRM-91H	CRM-93H	CRM-111H	CRM-113H	CRM-2T
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

	CRM-181J	CRM-183J	CRM-161	CRM-91H	CRM-93H	CRM-111H	CRM-113H	CRM-2T
Number of function	1	1	6	10	10	11	10	1
List of function	ZR - ON DELAY ZN - INTERVAL ON BL - FLASHER - ON first		ON DELAY, INTERVAL ON, FLASHER ON first, OFF DELAY, ON/OFF delay, MEMORY LATCH with delay, ON DELAY with control signal	ON DELAY, INTERVAL ON, FLASHER-OFF first, FLASHER ON first, OFF DELAY, SINGLE SHOT, SINGLE SHOT falling edge, ON/OFF DELAY, MEMORY LATCH, PULSE GENERATOR 0.5 s		ON DELAY, INTERVAL ON, FLASHER ON/OFF first, MEMORY LATCH, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY	ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, MEMORY LATCH, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY	STAR/Delta
New functions	OD - OFF DELAY		-	-	-	WATCHDOG, INTERVAL ON/OFF, MEMORY LATCH WITH DELAY	WATCHDOG, INTERVAL ON/OFF	-

General information

Mounting	35 mm DIN rail (IEC 60715)							
Temperature Range	Operating: -20°C to +55°C (-4°F to 131°F) Storing: -30°C to +70°C (-22°F to 158°F)							
Lifetime	Electrical: 100,000 operations Mechanical: 10,000,000 operations							
Dielectric strength	Between power supply and output contact 1: 4 kV AC							
Weight	61 g (2.15 oz)	61 g (2.15 oz)	61 g (2.15 oz)	61 g (2.15 oz)	82 g (2.79 oz)	61 g (2.15 oz)	82 g (2.79 oz)	79 g (2.79 oz)
Dimensions	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"	90 x 17.6 x 64 mm 3.5" x 0.7" x 2.5"

Approved by



New function OD - OFF DELAY



GOOD DEAL

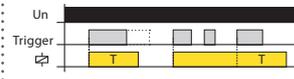


EXTERNAL POTENTIOMETER

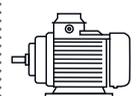
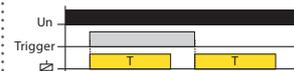


For remote time setting (CRM-91HE and CRM-2HE)

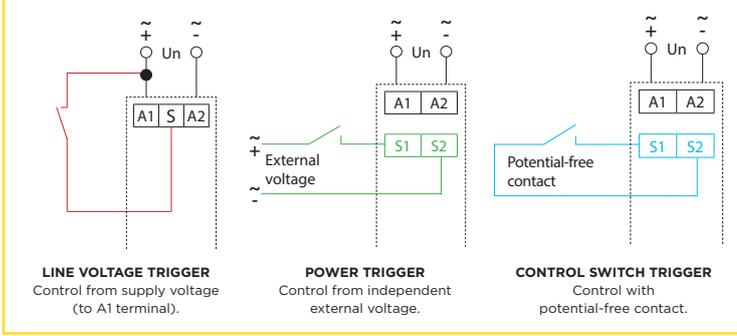
WATCHDOG



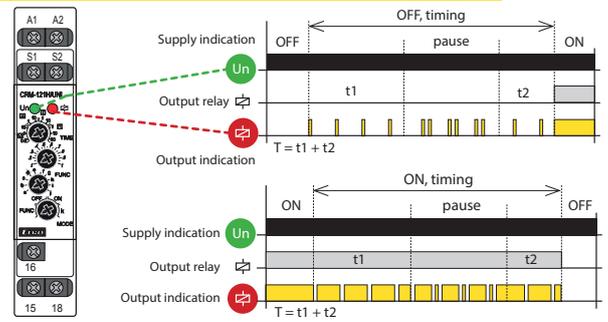
INTERVAL ON/OFF



CONTROL INPUT TYPE:



MULTI-FUNCTION LED INDICATION:

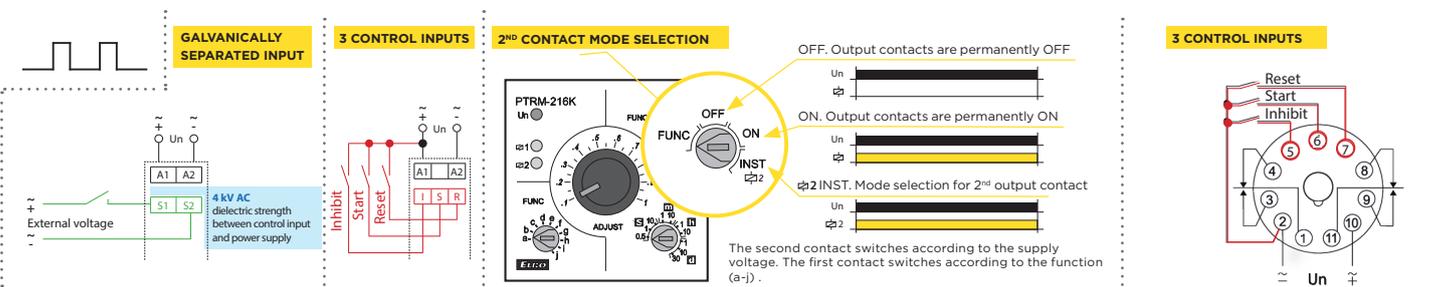


CRM-2H	CRM-121H	CRM-131H	PTRM-216K	PTRM-216T	PTRM-216KP	PTRM-216TP	PTRA-216K	PTRA-216T
Asymmetric flasher	Multi-function with GSCI	Multi-function with three inputs	Multi-function with PFCI		Multi-function with inhibit delay		Multi-function with three inputs	
Line Voltage Trigger	Power Trigger (galvanically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

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 or ASYMMETRIC FLASHER - OFF FIRST	ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, MEMORY LATCH, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY WATCHDOG, INTERVAL ON/OFF, MEMORY LATCH WITH DELAY	WITH CONTROL SIGNAL: ON DELAY, INTERVAL ON, FLASHER-ON first, FLASHER-OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY WATCHDOG, INTERVAL ON/OFF, MEMORY LATCH WITH DELAY	ON DELAY, INTERVAL ON, FLASHER - ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH WATCHDOG, INTERVAL ON/OFF	ON DELAY, INTERVAL ON, FLASHER - ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH WATCHDOG, INTERVAL ON/OFF	ON DELAY, INTERVAL ON, FLASHER - ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH WATCHDOG, INTERVAL ON/OFF	ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH with delay WATCHDOG, INTERVAL ON/OFF	ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH with delay WATCHDOG, INTERVAL ON/OFF	ON DELAY, INTERVAL ON, FLASHER-ON/OFF first, OFF DELAY, SINGLE SHOT, PULSE GENERATOR 0.5 s, ON/OFF DELAY, MEMORY LATCH with delay WATCHDOG, INTERVAL ON/OFF

35 mm DIN rail (IEC 60715)				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 supply and output contact: 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	90 x 17.6 x 64 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	48 x 48 x 79 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"	1.7" x 1.7" x 3.5"	1.7" x 1.7" x 3.1"	1.7" x 1.7" x 3.5"	1.7" x 1.7" x 3.1"	1.7" x 1.7" x 3.5"	1.7" x 1.7" x 3.1"



TIME RELAYS multifunction, on DIN rail



multifunction,
economy version
of CRM-91H



multifunction
1x output contact



multifunction
3x output contacts



multifunction
1x output contact
novelty

Technical parameters	CRM-161	CRM-91H	CRM-93H	CRM-91H-SL
Output	1x CO, 8 A	1x CO, 16 A	3x CO, 8 A	1x CO, 16 A
Housing	1-MODULE			
Supply voltage (frequency)	AC 24-240 V and DC 24 V (AC 50-60 Hz)	AC/DC 12-240 V or AC 230 V (AC 50-60 Hz)	AC/DC 12-240 V or AC 230 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)	0.1s - 10 days (10 ranges)
Number of functions	6	10	10	10
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	8481



MODULE
on DIN rail

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



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



Same as CRM-91H but with screwless terminals for quick connection and higher shock resistance.



TIME RELAYS multifunction, on DIN rail



multifunction
3x output contacts
novelty



multifunction with external
potentiometer



multifunction
1x solid state output

Technical parameters	CRM-93H-SL	CRM-91HE	CRM-9S
Output	3x CO, 8 A	1x CO, 16 A	1x triac, 1.5 A
Housing	1-MODULE		
Supply voltage (frequency)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)	AC 12-240 V (50-60 Hz)
Time range	0.1 s - 10 days (10 ranges)	0.1 s - 10 days (10 ranges)	0.1 s - 10 days (10 ranges)
Number of functions	10	10	10
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")		
Order code	8482	8145	8506

Same as CRM-93H but with screwless terminals for quick connection and higher shock resistance.



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.



Same as CRM-91H only with non-contact output (triac). The advantage of contactless output is noiselessness and extreme durability.





multifunction with Inhibit (delay)
1x output contact



multifunction 3x output contacts
2nd & 3rd contact selection



multifunction galvanically separated control input



multifunction 3 control inputs

Technical parameters	CRM-111H	CRM-113H	CRM-121H	CRM-131H
Output	1x CO, 16 A	3x CO, 8 A	1x CO, 16 A	1x CO, 16 A
Housing	1-MODULE			
Supply voltage (frequency)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V (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)
Number of functions	11	10	11	11
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")			
Order code	7554	8063	7555	7556
	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, except for the flasher function, 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 of AC / DC 12-240 V.	Three control inputs – START, INHIBIT, RESET. All functions start with triggering of control input START.



with supply voltage disconnection
1x output contact



with supply voltage disconnection
3x output contacts



energy-saving time relay

Technical parameters	CRM-71TO	CRM-72TO	CRM-101
Output	1x CO, 16 A	2x CO, 8 A	1x CO, 16 A
Housing	1-MODULE		
Supply voltage (frequency)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)
Time range	0.1s - 10 min (4 ranges)	0.1s - 10 min (4 ranges)	t1 = 0.5 – 120 s; t2 = 1 – 60 m
Number of functions	4	4	4
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")		
Order code	8951	8952	8411
	Relay is capable of withstanding power failure meanwhile still controlling the output with delay according to the selected function. Four functions with supply voltage disconnection: a - TRUE OFF DELAY b - TRUE SINGLE SHOT c - TRUE INTERVAL ON d - TRUE INTERVAL ON/OFF	As CRM-71TO but with two changeover output contacts, 8 A	Relay for automatic switching of electricity using connected sensors (motion detector and magnetic door contact) in the room.

TIME RELAYS single function, on DIN rail



choose from
4 functions
1x output contact



choose from
4 functions
3x output contacts



STAR / DELTA
timer



asymmetric flasher
1x output contact



asymmetric flasher
with two external
potentiometers



2-channel
ON DELAY function
2x output contacts



emergency
light tester

Technical parameters	CRM-181J	CRM-183J	CRM-2T	CRM-2H	CRM-2HE	SJR-2	CRM-48					
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	1x CO, 16 A					
Housing	1-MODULE											
Supply voltage (frequency)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 12-240 V or AC 230 V (AC 50-60 Hz)	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)	AC 230 V (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)	10m - 180m (6 ranges)					
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")											
external potentiometer	<p>ZR: ON DELAY CRM-181J ZR: 8038 CRM-183J ZR: 8061</p> <p>ZN: INTERVAL ON CRM-181J ZN: 8039 CRM-183J ZN: 8060</p> <p>BL: FLASHER - ON first CRM-181J BL: 8040 CRM-183J BL: 8058</p> <p>OD: OFF DELAY CRM-181J OD: 8041 CRM-183J OD: 8059</p>  		<p>CRM-2T/UNI: 7669 CRM-2T/230V: 8381</p> <p>Time t1 λ (star) 0.1 s do 100 days. Time t2 (delay) λ / Δ 0.1 s - 1 s.</p> 		<p>CRM-2H/UNI: 7668 CRM-2H/230V: 8395</p> <p>Asymmetric flasher with independently adjustable output closing and opening time. 2 time functions: • asymmetric flasher - ON first • asymmetric flasher - OFF first.</p> 		<p>CRM-2HE/UNI: 8144</p> <p>As CRM-2H/UNI but with possibility of time control with external potentiometers.</p> 		<p>SJR-2/UNI: 7670 SJR-2/230V: 8396</p> <p>It is used for gradual (cascade) switching. 2 x independent ON delay outputs. Time adjustable from 0.1 s to 100 days.</p> 		<p>CRM-48: 9122</p> <p>Serves for automatic testing of emergency lighting with the button on the panel. ZERO CROSS feature</p> 	



mounted in
 \varnothing 25 mm hole
in the panel

TIME RELAYS multifunction, PLUG-IN



11-pin octal socket



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

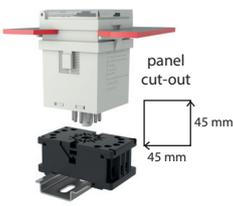


multifunction, 2x output contacts
(2nd contact mode selection)



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

Technical parameters	PTRM-216TP	PTRM-216KP	PTRM-216T	PTRM-216K	PTRA-216T	PTRA-216K
Fine time setting	rotary potentiometer	knob	rotary potentiometer	knob	rotary potentiometer	knob
Output	2x CO, 16 A					
Housing	PLUG-IN, into 11-pin octal socket					
Control input	line voltage trigger		control switch trigger		3 control inputs (START, INHIBIT, RESET)	
Supply voltage (frequency)	AC/DC 12-240 V (50-60 Hz)					
Time range	50 ms - 30 days (10 ranges)					
Number of functions	10					
Dimensions	48 x 48 x 79 mm (1.9" x 1.9" x 3.1")	48 x 48 x 89 mm (1.9" x 1.9" x 3.5")	48 x 48 x 79 mm (1.9" x 1.9" x 3.1")	48 x 48 x 89 mm (1.9" x 1.9" x 3.5")	48 x 48 x 79 mm (1.9" x 1.9" x 3.1")	48 x 48 x 89 mm (1.9" x 1.9" x 3.5")
Order code	7938	7861	7938	7557	7560	7559
panel cut-out	<p>All functions initiated by the supply voltage, except for the flasher function, can use the control input to inhibit the delay (pause).</p>  		<p>Three control inputs - START, INHIBIT, RESET. All functions start with triggering of control input START.</p>  		<p>All functions initiated by the supply voltage, except for the flasher function, can use the control input to inhibit the delay (pause).</p>  	



into 11-pin octal socket



**multifunction
LCD display
1x output contact**



**multifunction
LED display
2x output contacts**

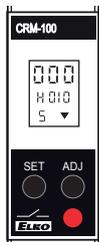


**standard with function
ON/AUTO/OFF**



**multifunction
extending time, signaling
before switching off**

Technical parameters	CRM-100	PDR-2A	PDR-2B	CRM-4	CRM-47
Output	1x CO, 8 A	2x CO, 16 A		1x CO, 16 A	1x CO, 16 A
Housing	1-MODULE	3-MODULE		1-MODULE	1-MODULE
Supply voltage (frequency)	AC/DC 24-240V (AC 50-60 Hz)	AC/DC 12-240V or AC 230V (AC 50-60 Hz)		AC 230V (50-60 Hz)	AC 230V (50-60 Hz)
Time range	0.1 s - 999 hrs	0.01 s - 100 hrs		0.5 s - 10 min	0.5 s - 30 min
Number of functions	17	16	10	3	6
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	90 x 52 x 65 mm (3.5" x 2" x 2.6")		90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	
Order code	7453	UNI: 304 230V: 303	UNI: 306 230V: 305	7077	9121



Control input B1 is controlled by the supply voltage.

More accurate thanks to digital time setting.



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

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



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



Functions:
- staircase switch with/without signalization (time extending)
- memory latch
- memory latch with delay ZERO CROSS feature



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



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



**multifunction
4-wire (with NEUTRAL)
contactless output**



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

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



BOX
flush mounted

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



Like the SMR-K, but in parallel to the control input, unlike the SMR-K, neither an LED bulb nor an energy saver can be connected, only other types of loads.
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 AgSnO₂, it is also suitable for switching LED bulbs or savings.



DIGITAL TIME SWITCHES



1-channel



2-channels



1-channel



2-channels

Technical parameters	SHT-1	SHT-1/2	SHT-13	SHT-13/2
Program	weekly, yearly		daily, weekly, yearly, astro	
Replaceable battery	no		yes	
Output	1x 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 AC 230 V (AC 50-60 Hz)		AC/DC 24-240 V (AC 50-60 Hz)	
Dimensions	90 x 35 x 64 mm (3.5" x 1.4" x 2.5")			
Order code	UNI: 3043 230V: 3042	UNI: 3041 230V: 3040	8907	8485
	<p>It is used to control various appliances depending on the real time: weekly and yearly program. Battery power backup in case of power failure. Backlit LCD display, sealable cover. Possibility of automatic summer / winter time transition. Additional functions: manual control, random switching, and pulse output.</p>		<p>Our newest time switch with all time programs and new features e. g. pulse/cycle output, PIN code protection and many more.</p> <p>Web server:</p> <ul style="list-style-type: none"> • internet time synchronization • backup possibilities • setup and manual control 	

ANALOG TIME SWITCHES

with daily program
and power backup

with daily program

with daily program
and power backupwith weekly program
and power backup

Technical parameters	ATS-1DR	ATS-2D	ATS-2DR	ATS-2WR
Program		daily		weekly
Power backup	yes (max. 100 hrs)	no	yes (max. 150 hrs)	yes (max. 150 hrs)
Minimum switching interval	15 min	30 min	30 min	3.5 hrs
Output	1x NO, 16 A		1x CO, 16 A	
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	8217	8212	8218	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: 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: supply: AC/DC 24 V 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 24V and AC 230V (AC 50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 24V and AC 230V (AC 50-60 Hz)	AC/DC 12-240 V (AC 50-60 Hz)	AC/DC 24 V (AC 50-60 Hz)	AC 230 V (50-60 Hz)
Dimensions	49 x 49 x 21 mm (1.9" x 1.9" x 0.8")	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")					
Order code	4754	codes below					

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

INSTALLATION CONTACTORS



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

Technical parameters	VS120	VS220	VS325/VS425	VS340/VS440	VS363/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, 120 V, 230 V (AC 50/60 Hz)	AC/DC 24 V, 48 V, 120 V, 230 V (AC 50/60 Hz)	AC/DC 24 V, 48 V, 120 V, 230 V (AC 50/60 Hz)	AC/DC 24 V, 120 V, 230 V (AC 50/60 Hz)	AC/DC 24 V, 48 V, 120 V, 230 V (AC 50/60 Hz)	AC 12 V, 24 V, 48 V, 120 V, 230 V (50/60 Hz)	AC 12 V, 24 V, 120 V, 230 V (50/60 Hz)	AC 12 V, 24 V, 42 V, 230 V (50/60 Hz)
Dimensions	17.5 x 85 x 60 mm		35 x 85 x 60 mm	53.3 x 84 x 60 mm		35 x 62.5 x 57 mm	17.5 x 85 x 60 mm	35 x 85 x 60 mm

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

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

BISTABLE (IMPULSE) RELAYS

MEMORY RELAYS



1x NO, 16 A
contact



2x NO/NC, 16 A
contacts



2x NO, 16 A
contacts



2x NO, 20 A
contacts
with remote control
disconnection



2x NO, 32 A
contacts



electronic version - noiseless
1x CO, 16 A
contact



2x CO, 16 A
contacts

Technical parameters	BR-216-10		BR-216-11		BR-216-20		BR-220-20		BR-232-20		MR-41		MR-42	
Output	1x NO, 16 A		1x NO+1x NC, 16 A		2x NO, 16 A		2x NO, 20 A		2x NO, 32 A		1x CO, 16 A		2x CO, 16 A	
Housing	1 -MODULE										1-MODULE			
Coil supply voltage (frequency)	AC 120 V (60 Hz)	AC 230 V (50 Hz)	AC 120 V (60 Hz)	AC 230 V (50 Hz)	AC 120 V (60 Hz)	AC 230 V (50 Hz)	AC 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 12-240V (AC 50-60 Hz)	AC 230 V (50-60 Hz)	AC/DC 12-240V (AC 50-60 Hz)
Coil disconnector	x		x		x		yes		yes		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 - 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



analog
with external sensor



digital
with build-in time switch
and external sensor



for outdoor use
with built-in sensor



external
photosensor

Technical parameters	SOU-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 SOU-1, LIC-1	
Housing	1-MODULE		2-MODULE		box with IP65		SKS-200: for use with SOU-2	
Supply voltage (frequency)	AC/DC 12-240 V (AC 50-60 Hz)	AC 230 V (50-60 Hz)	AC 230 V (50-60 Hz)		AC 230 V (50-60 Hz)			
Sensor	external, SKS-100		external, SKS-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 mm (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 included 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 photosensor SKS-100 and SKS-200 for panel or wall mounting, via the included bracket.



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

flush/cover mounted
output voltage
12 or 24 V

regulated
12-24 V

Technical parameters	PS1M		PS2M		PS3M		PS4M		PSB-10		PS-30-R
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-MODULE		2-MODULE		3-MODULE		4-MODULE		BOX		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	90 x 18 x 58 mm (3.5" x 0.7" x 2.6")		90 x 35 x 58 mm (3.5" x 1.4" x 2.3")		90 x 52.5 x 58 mm (3.5" x 2.1" x 2.3")		90 x 70 x 58 mm (3.5" x 2.8" x 2.3")		49 x 49 x 21 mm (1.9" x 1.9" x 0.8")		90 x 52 x 65 mm (3.5" x 2" x 2.6")
	PS1M-15/12V: 8047 PS1M-15/24V: 8048		PS2M-24/12V: 8049 PS2M-30/24V: 8050		PS3M-54/12V: 8051 PS3M-60/24V: 8052		PS4M-85/12V: 8053 PS4M-92/24V: 8054		PSB-10-12: 4502 PSB-10-24: 4378		PS-30-R: 5158 Regulated output voltage in the range of 12-24 V.
	Switching stabilized power supply with output voltage 12 or 24 V DC. High efficiency up to 90%. Low ripple and noise.										

POWER SUPPLIES analog AC & DC

BELL TRANSFORMERS



8 VA/DC 5-24 V
regulated



8 VA/24 V
unregulated



8 VA
AC 8 V



8 VA
AC 12 V



5-15VA
8 V 12 V

Technical parameters	ZSR-30	ZNP-10-24V	ZTR-8-8	ZTR-8-12	ZTR-15-12		
Output voltage	DC 5-24 V, stabilized DC 24 V, unregulated AC 24 V	DC 24 V, unregulated AC 24 V	AC 8 V	AC 12 V	AC 4 V	AC 8 V	AC 12 V
Max. load	8 VA/8 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 mm (3.5" x 2" x 2.6")		90 x 36 x 64 mm (3.5" x 1.5" x 2.6")			90 x 52 x 65 mm (3.5" x 2" x 2.6")	
Order code	8484	408	3680	3681	3928		
	Regulated output voltage in the range of DC 5-24 V.	Unregulated AC + DC output voltage.	For powering doorbells, door 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 ²	R - L - LED ¹	R - L - C - LED ²	R - L - C - LED ²
Output	2x MOSFET	1x triac	4x MOSFET	2x MOSFET
Output loads	300 VA	R: 10-500 VA, L: 10-250 VA	2000 VA	1000 VA
Protections	overheating and overload	overheating	overheating and overload	overheating and overload
Housing	1-MODULE		6-MODULE	3-MODULE
Supply voltage (frequency)	AC 230 V (50 Hz)	AC 230 V (50 Hz)	AC 230 V (50 Hz)	AC 230 V (50 Hz)
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")		90 x 105 x 65 mm (3.5" x 4.1" x 2.6")	90 x 52 x 65 mm (3.5" x 2" x 2.6")
Order code	4069	DIM-2: 1247 DIM-2-1h: 3574	3691	3910



MODULE
on DIN rail

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



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

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



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



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



DIMMERS flush mounted

on DIN rail



universal dimmer
4-wires
(with NEUTRAL)



dimmer
3-wires
(without NEUTRAL)



lighting intensity
controller, controls
the source directly



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

Technical parameters	SMR-M	SMR-S	LIC-1	RFDEL-76M
Dimmable loads	R - L - C - ESL - LED ²	R - L - LED ¹	R - L - C - ESL - LED ²	R - L - C - ESL - LED ²
Output	2x MOSFET	1x triac	2x MOSFET	12x MOSFET
Output loads	160 VA	R: 10-300 VA, L: 10-150 VA	300 VA	6x 150 VA (230V) / 6x 75 VA (120V)
Protections	overheating and overload	fuse	overheating and overload	overheating and overload
Housing	BOX		1-MODULE	6-MODULE
Supply voltage (frequency)	AC 230 V (50 Hz)	AC 230 V (50 Hz)	AC 230 V (50 Hz)	230 V (50 Hz) or AC 120 V (60 Hz)
Dimensions	49x49x21 mm (1.9"x1.9"x0.8")	49x49x13 mm (1.9"x1.9"x0.5")	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	90 x 105 x 65 mm (3.5" x 4.1" x 2.6")
Order code	4377	2351	4493	230V: 8205 120V: 8209



BOX
flush mounted

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



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



It automatically maintains the intensity of artificial lighting in the room according to an external outdoor light sensor SKS-100.



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



¹LED¹ - dimmable LED bulbs, designed for dimmers with phase-controlled rising edge (triac dimmers)

²LED² - dimmable LED bulbs designed for dimmers with phase or phase-to-phase phase control (dimmers with MOSFET)



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



Switch + push button with central position



Push button with central position



Push button NO



Push button NC

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



Switch with glow lamp (red)



Switch with glow lamp (green)



Switch with glow lamp (yellow)



Signaling LED (red)



Signaling LED (green)



Signaling LED (yellow)



Signaling LED (white)

Name	USS-07	USS-08	USS-09	USS-10	USS-11	USS-12	USS-13
Order code	2471	2472	2470	2433	2434	2435	2436



Signaling LED flashing (red)



Signaling 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



USS-ZM
2457



PROTECTION AND MONITORING RELAYS

Voltage monitoring relays - overview

Type	Design	Supply from	Galvanically isolated	Features				Phase			Setting				Description	
				Phases	Monitored range	$>U$	$<U$	$\geq U$	Failure	Sequence	Asymmetry	Delay	Restart delay	Hysteresis		Memory
HRN-31 HRN-31/2	1-M	monitored voltage	x	1	AC 48 - 276 V	•	•	•	x	x	x	•	x	•	•	All types have 9 functions in total. The delay is adjustable from 0 - 10 seconds (to eliminate short-term outages or peaks). The lower voltage level (Umin) is set in % of the upper level (Umax). HRN-3x, PMR1-3x: 1x output contact HRN-3x/2, PMR1-3x/2: 2x output contact Old types replacement: HRN-33 > HRN-31 HRN-34 > HRN-36 HRN-35 > HRN-32/2 HRN-37 > HRN-39 HRN-32/2: separated output contact for overvoltage and undervoltage
HRN-32/2	1-M	monitored voltage	x	1	AC 48 - 276 V	•	•	•	x	x	x	•	x	•	•	
HRN-36 HRN-36/2	1-M	monitored voltage	x	1	DC 6 - 30 V	•	•	•	x	x	x	•	x	•	•	
HRN-39 HRN-39/2	1-M	monitored voltage	x	1	AC 24 - 150 V	•	•	•	x	x	x	•	x	•	•	
PMR1-31 PMR1-31/2	8-PIN	monitored voltage	x	1	AC 48 - 276 V	•	•	•	x	x	x	•	x	•	•	
PMR1-36 PMR1-36/2	8-PIN	monitored voltage	x	1	DC 6 - 30 V	•	•	•	x	x	x	•	x	•	•	
PMR1-39 PMR1-39/2	8-PIN	monitored voltage	x	1	AC 24 - 150 V	•	•	•	x	x	x	•	x	•	•	
HRN-41/UNI HRN-41/400 V	3-M	AC/DC 24-240 V AC 400 V	•	1	AC/DC 50 V AC/DC 160 V AC/DC 500 V	x	x	•	x	x	x	•	x	•	•	Second relay function (independent or parallel). Galvanically separated power supply from measuring inputs. HRN-41: lower level for undervoltage (Umin) is set in % from the set upper level (Umax) HRN-42: lower level for undervoltage (Umin) is set in % of the nominal value of the selected input, as for the upper level (Umax)
HRN-42/UNI HRN-42/400 V	3-M	AC/DC 24-240 V AC 400 V	•	1	AC/DC 50 V AC/DC 160 V AC/DC 500 V	x	x	•	x	x	x	•	x	•	•	
HRN-55	1-M	monitored voltage	x	3	AC 3 x 300 - 500 V	x	x	• (fixed)	•	•	x	•	x	x	x	Power supply from all phases, i.e. the relay function is preserved even if one phase fails.
HRN-55N	1-M	monitored voltage	x	3	AC 3 x 172 - 287 V	x	x	• (fixed)	•	•	x	•	x	x	x	Power supply L1-N, i.e. the relay also monitors the neutral wire interruption.
HRN-57	1-M	monitored voltage	x	3	AC 3 x 300 - 500 V	x	x	•	•	x	x	•	x	x	x	Power supply from all phases, i.e. the relay function is preserved even if one phase fails.
HRN-57N	1-M	monitored voltage	x	3	AC 3 x 172 - 287 V	x	x	•	•	x	x	•	x	x	x	Power supply L1-N, i.e. the relay also monitors the neutral wire interruption, replacement for HRN-52.
HRN-54	1-M	monitored voltage	x	3	AC 3 x 300 - 500 V	x	x	•	•	•	x	•	x	x	x	If the supply voltage falls below 60% of Un (OFF lower level), the relay will immediately disconnects with no delay. Power supply from all phases, i.e. the relay function is preserved even if one phase fails.
HRN-54N	1-M	monitored voltage	x	3	AC 3 x 172 - 287 V	x	x	•	•	•	x	•	x	x	x	If the supply voltage falls below 60% of Un (OFF lower level), the relay will immediately disconnects with no delay. Power supply L1-N, i.e. the relay also monitors the neutral wire interruption.
HRN-43/UNI HRN-43/400 V	3-M	AC/DC 24-240 V AC 400 V	•	3	AC 3 x 84 - 480 V	x	x	•	•	•	• (+ OFF)	•	x	•	•	2 output relays, functions of the second relay may be selected (independent/parallel). Galvanically separated power supply.
HRN-43N/UNI HRN-43N/400 V	3-M	AC/DC 24-240 V AC 400 V	•	3	AC 3 x 48 - 276 V	x	x	•	•	•	• (+ OFF)	•	x	•	•	
HRN-56/208 HRN-56/240 HRN-56/400	1-M	monitored voltage	x	3	AC 3 x 125 - 276 V AC 3 x 144 - 276 V AC 3 x 240 - 460 V	x	•	x	•	•	x	•	x	x	x	Thanks to the power supply from all three phases, the relay is operational even if one phase fails.
HRN-56/480 HRN-56/575	3-M	monitored voltage	x	3	AC 3 x 228 - 550 V AC 3 x 345 - 660 V	x	•	x	•	•	x	•	x	x	x	
HRN3-70	3-M	monitored voltage	x	3	AC 3 x 190 - 500 V	x	x	• (o-fixed)	•	•	• (+ OFF)	•	•	x	•	Selectable nominal voltage from 190 to 500 V. Adjustable restart delay from 1 to 300 s. Two output contacts, changeover 16 A. * (o-fixed) = over voltage value is fixed (110% from selected range).
PMR3-70	8-PIN	monitored voltage	x	3	AC 3 x 190 - 500 V	x	x	• (o-fixed)	•	•	• (+ OFF)	•	•	x	•	
HRN3-80	1-M	monitored voltage	x	3	AC 3 x 208 - 480 V	x	•	x	•	•	• (+ OFF)	•	x	x	x	Selectable nominal voltage from 208 to 480 V.
HRN3-81	1-M	monitored voltage	x	3	AC 3 x 208 - 480 V	x	x	x	•	•	• (+ OFF)	•	x	x	x	Works in range from 208 to 480 V.
HRN-100	2-M	monitored voltage	x	3	$U_{Li} = 3 \sim 155 - 500 V$ $U_{L1N} = 3 \sim 90 - 288 V$	•	•	•	•	•	•	•	•	•	•	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/2x output



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



1-phase, mains voltage 24-150 V
overvoltage and undervoltage = 1x/2x output

Technical parameters	HRN-31 HRN-31/2 PMR1-31 PMR1-31/2		HRN-32/2	HRN-39 HRN-39/2 PMR1-39 PMR1-39/2	
Type of monitored voltage	AC/DC		AC/DC	AC/DC	
Monitored levels	multifunction		multifunction	multifunction	
Functions	nine, selectable by rotary switch				
Monitoring range	48-276 V		48-276 V	24-150 V	
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	1x CO, 16 A 2x CO, 16 A
Housing	1-MODULE	PLUG-IN (8-pin)	1-MODULE	1-MODULE	PLUG-IN (8-pin)
Power supply	from monitored voltage				
Dimensions	48 x 48 x 79 mm (1.9" x 1.9" x 3.15")		90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	48 x 48 x 79 mm (1.9" x 1.9" x 3.15")	
Order code	8494 8438	8865 8536	8539	8496 8493	8868 8869



8-pin octal socket

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



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



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



VOLTAGE RELAYS 1-phase, DC

1-phase, AC or DC



DC voltage 6-30 V
batteries and accumulators
overvoltage and undervoltage
= 1x/2x output



with three input ranges for AC / DC
monitoring in 1-phase network
U_{min} = % of set U_{max}



with three input ranges for AC / DC
monitoring in 1-phase network
U_{min} = % of nominal input

Technical parameters	HRN-36 HRN-36/2		PMR1-36 PMR1-36/2	HRN-41	HRN-42
Type of monitored voltage	DC		DC	AC/DC	
Monitored levels	multifunction		multifunction	undervoltage and overvoltage	
Functions	nine, selectable by rotary switch		nine, selectable by rotary switch	one	
Monitored range	6-30 V		6-30 V	3 inputs: 10-50 V; 32-160 V; 100-500 V	
Supply voltage	1x CO, 16 A 2x CO, 16 A	1x CO, 16 A 2x CO, 16 A	1x CO, 16 A 2x CO, 16 A	2x CO, 16 A	
Housing	1-MODULE	PLUG-IN, into 8-pin octal socket	PLUG-IN, into 8-pin octal socket	3-MODULE	
Power supply	from monitored voltage			AC/DC 24-240 V, AC 400 V	
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")		48 x 48 x 79 mm (1.9" x 1.9" x 3.15")	90 x 52 x 65 mm (3.5" x 2" x 2.6")	

HRN-36: 8495
HRN-36/2: 8255

PMR1-36: 8866
PMR1-36/2: 8867

HRN-41/UNI: 8529

HRN-42/UNI: 8530
HRN-42/400 V: 4726

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



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

VOLTAGE RELAYS 3-phases



Technical parameters	HRN-55	HRN-55N	HRN-57	HRN-57N	HRN-54	HRN-54N	HRN-43	HRN-43N
Phase failure	•	•	•	•	•	•	•	•
Phase sequence	•	•	x	x	•	•	•	•
Adjustable overvoltage	x (fixed)	x (fixed)	•	•	•	•	x	x
Adjustable undervoltage	x (fixed)	x (fixed)	•	•	•	•	x	x
Asymmetry	x	x	x	x	x	x	x	x
Monitored range	AC 3 x 300-500 V	AC 3 x 172-287 V	AC 3 x 300-500 V	AC 3 x 172-287 V	AC 3 x 300-500 V	AC 3 x 172-287 V	AC 3 x 84-480 V	AC 3 x 48-276 V
Output	1x CO, 8 A						2x CO, 16 A	
Housing	1-MODULE						3-MODULE	
Power supply	from monitored voltage						AC/DC 24-240 V, AC 400 V	
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")						90x52x65 mm (3.5"x2"x2.6")	
Order code	7512	7513	7514	7515	7498	7511	UNI: 8531 400V: 4730	UNI: 8532 400 V: 4734

VOLTAGE RELAYS 3-phases



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	x	x	x	x	x	•
Adjustable undervoltage	•	•	•	•	•	•
Asymmetry	x	x	x	x	x	•
Monitored range	AC 3x 125-276 V	AC 3x 144-276 V	AC 3x 240-460 V	AC 3x 228-550 V	AC 3x 345-660 V	$U_{LL} = 3 \sim 155-500 V$ $U_{LN} = 3 \sim 90-288 V$
Output	1x CO, 8 A					2x CO, 5 A
Housing	1-MODULE			3-MODULE		2-MODULE
Power supply	from monitored voltage					
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")			90 x 52 x 65 mm (3.5" x 2" x 2.6")		90 x 36 x 64 mm (3.5" x 1.5" x 2.6")
Order code	3710	3711	3712	3018	3019	7122



Technical parameters	HRN3-70	PMR3-70	HRN3-80	HRN3-81
Phase failure	•	•	•	•
Phase sequence	•	•	•	•
Adjustable overvoltage	x (fixed)	x (fixed)	x	x
Adjustable undervoltage	•	•	•	x
Asymmetry	• (+OFF)	• (+OFF)	• (+OFF)	• (+OFF)
Monitored range	190-500 V	190-500 V	208-480 V	208-480 V
Output	2x CO, 16 A	2x CO, 16 A	1x CO, 16 A	1x CO, 16 A
Housing	3-MODULE	PLUG-IN, into 8-pin octal socket	1-MODULE	1-MODULE
Power supply	from monitored voltage			
Dimensions	90 x 52 x 65 mm (3.5" x 2" x 2.6")	48 x 48 x 79 mm (1.9" x 1.9" x 3.1")	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	
Order code	8883	8528	8881	8882

Selectable nominal voltage from 190 to 500 V. Adjustable restart delay from 1 to 300 s. Two output contacts, changeover 16 A.

Selectable nominal voltage from 208 to 480 V.

Works in range from 208 to 480 V.



SPECIAL RELAYS signalization power factor frequency



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.



CURRENT RELAYS 1-phase, AC



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-MODULE			
Supply voltage (frequency)	AC 24-240 V, DC 24 V (AC 50-60 Hz)	AC/DC 24-240 V (AC 50-60 Hz)	AC 24-240 V, DC 24 V (AC 50-60 Hz)	AC 230 V (50-60 Hz)
Dimensions	90 x 17.6 x 80.5 mm (3.5" x 0.7" x 3.2")		90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	
	<p>PRI-32: 8278</p> <p>Monitor current level in single-phase AC circuits. The device has also in-built current transformer on the front panel.</p> 	<p>PRI-35: 8271</p> <p>Serves to protect a motor of a pump (submersible pump) against dry running.</p> 	<p>Choose from 7 ranges:</p> <p>PRI-51/0.5A: 7037 (AC 0.05-0.5A)</p> <p>PRI-51/1A: 7038 (AC 0.1-1A)</p> <p>PRI-51/2A: 7039 (AC 0.2-2A)</p> <p>PRI-51/5A: 7040 (AC 0.5-5A)</p> <p>PRI-51/8A: 7041 (AC 0.8-8A)</p> <p>PRI-51/0.1-10A: 7072 (AC 0.1-10A)</p> <p>PRI-51/16A: 7045 (AC 1.6-16A)</p> 	<p>PRI-52: 3655</p> <p>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.</p> 

CURRENT RELAYS 1-phase, AC

1-phase, AC & DC

3-phase, AC



multifunction current monitoring, 8 functions selectable by rotary switch

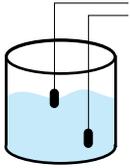


with three input ranges for AC/DC current
 $I_{min} = \% \text{ of set } I_{max}$
 $I_{min} = \% \text{ of nominal input}$



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

Technical parameters	PRI-34	PRI-41	PRI-42	PRI-53
Voltage type	AC	AC / DC		AC
Monitored levels	multifunction	overcurrent and undercurrent		overcurrent or undercurrent
Function	eight, selectable by rotary switch	one		two
Monitored range	0.1 - 16 A (50-60 Hz) in 5 ranges	3 inputs: 0.32-1.6 A, 1-5 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 CO, 16 A		2x CO, 8 A
Housing	1-MODULE	3-MODULE		6-MODULE
Power supply	AC/DC 24 - 240 V (AC 50-60 Hz)	AC/DC 24-240 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")	90 x 52 x 65 mm (3.5" x 2" x 2.6")		90 x 105 x 64 mm (3.5" x 4.1" x 2.6")
Order code	1A: 8896, 2A: 8282, 5A: 8283, 8A: 8897, 16A: 8284	UNI: 8534	UNI: 8535	4213 4214
	<p>Measures true root mean square value - 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.</p> 	<p>Independent supply voltage galvanically separated from the measured one, optional function of the 2nd relay, optional hysteresis 5% / 10%, Memory function.</p>  		<p>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).</p> 



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	BOX	3-MODULE	6-MODULE
Supply voltage (frequency)	24-240 V AC/ DC (AC 50-60 Hz)	24-240 V AC/DC (AC 50-60 Hz)	AC/DC 24V; 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
	<p>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.</p> 	<p>Suitable to operate/work in harsh conditions due to the high degree of protection IP65. The same functions as for HRH-5.</p> 	<p>Within one device, the following configurations can be selected:</p> <ul style="list-style-type: none"> - 2x one-level monitoring (in separate tanks) - 1x two-level monitoring (in one tank) - pumping from one tank to another. 	<p>Each of the six probes has its own output contact. Optional function of each probe independently:</p> <ul style="list-style-type: none"> - 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

Probes



SHR-1-M/1-N

SHR-2

SHR-3



Wire D05V-K



Cable D03VV-F

Technical parameters	HRH-6/DC HRH-6/AC	HRH-4	ACCESSORIES
Output	1x NO, 10 A	<p>HRH-4/230V 209970800023</p> <p>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.</p>	<p>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.</p>
Sensitivity	10 - 200 kΩ		<p>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 mm²</p>
Functions	2		
Housing	box IP65		
Supply voltage (frequency)	DC 12-24 V 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		
	<p>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.</p> 	 <p>HRH-5 VS425 contactor</p> 	<p>All types (excluding SHR-3) meet the requirements for continuous contact with a drinking water.</p>

THERMOSTATS on DIN rail



single-level thermostats

double thermostat

monitoring temperature of motor winding

digital with build in 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..10°C	0..40°C	30..70°C	0..60°C	0..60°C	-15..45°C	0..60°C	0..60°C	-40..110°C	1.8 - 3.3 kΩ	-40..110°C
Thermosensor type	external, TC/TZ						built-in	Pt100	external, TC/TZ	external, PTC	external, TC/TZ
Output	1x NO, 16 A						2x CO, 16 A		2x CO, 16 A	2x CO, 8 A	2x CO, 8 A
Housing	1-MODULE						3-MODULE		1-MODULE	1-MODULE	2-MODULE
Supply voltage (frequency)	AC/DC 24-240 V (AC 50-60 Hz)						AC/DC 24-240 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)	AC/DC 24 V, AC 230 V (AC 50-60 Hz)
Dimensions	90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")						90 x 52 x 65 mm (3.5" x 2" x 2.6")		90 x 17.6 x 64 mm (3.5" x 0.7" x 2.5")	90 x 35 x 64 mm (3.5 x 1.4 x 2.5")	



Temperature sensors TC/TZ/PT100 more on page 26

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

TER-3E: 3843
TER-3F: 3844
TER-3G: 3845
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/UNI: 8533
 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.



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 .. +20°C	-20 .. +20°C	+5 .. +35°C	-30 .. +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 temperature on enclosure

Selectable function: cooling/heating. Option of voltage or potential - free contact





programmable multifunction
chronothermostat



multifunction thermostat



hygrothermostat
optional functions



hygrostat

Technical parameters	21235	21236	RHT-1	RHV-1
Monitored temperature range	-9 .. +35°C	-9 .. +35°C	0 .. +60°C	-
Monitored humidity range	-	-	50 - 90%	0 - 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	8208	8207

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

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

Hygro-thermostat for temperature monitoring and control - range 0 to +60 °C and relative humidity - 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 -20 .. +80°C
PVC insulation



for range -40 .. +125°C
silicone insulation



for range -30 .. +200°C
double silicone insulation

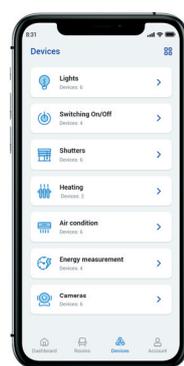
ATV-1	TELVA-2	TC	TZ	Pt100
<p>ATV-1: 6088</p> <p>This energy-saving digital radiator thermo-valve is a programmable regulation device for various heaters, but mainly radiators. Intervals of heating and energy-saving operation can be set using a freely adjustable time program.</p> <p>8 individually programmable switching times per day:</p> <ul style="list-style-type: none"> - 4 heating intervals - 4 energy-saving intervals. <p>The device features very quiet operation and long battery life (up 5 years). Quick and easy installation.</p>	<p>TELVA-2 230V, NO: 8196 TELVA-2 230V, NC: 8197 TELVA-2 24V, NO: 8198 TELVA-2 24V, NC: 8199</p> <p>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</p>	<p>NTC thermistor 12 kΩ. 4 cable lengths: 10 cm, 3 m, 6 m and 12 m.</p> <p>TC-0: 209970800010 TC-3: 209970800011 TC-6: 209970800012 TC-12: 209970800013</p>	<p>NTC thermistor 12 kΩ. 4 cable lengths: 11 cm, 3 m, 6 m and 12 m.</p> <p>TZ-0: 209970800014 TZ-3: 209970800015 TZ-6: 209970800016 TZ-12: 209970800017</p>	<p>PTC sensor. 3 cable lengths: 3 m, 6 m and 12 m.</p> <p>PT100-3: 3613 PT100-6: 3614 PT100-12: 3615</p>



INEL



WIRELESS ELECTRO-INSTALLATION





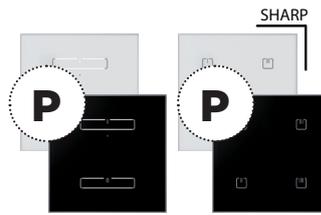
LOGUS⁹⁰



On-wall button controllers
2 buttons



4 buttons

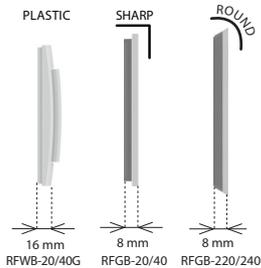


Glass touch controllers
2 or 4 buttons (SHARP edges)



Glass touch controllers
2 or 4 buttons (ROUND edges)

Technical parameters	RFWB-20/G	RFWB-20/GB	RFWB-40/G	RFWB-40/GB	RFGB-20	RFGB-40	RFGB-220	RFGB-240
Number of channels	2		4		2	4	2	4
Power supply	3 V battery CR 2032				2x 3 V batteries CR 2032		2x 3 V batteries CR 2032	
Design	LOGUS ⁹⁰				glass - sharp		glass - round	
Colour	in LOGUS ⁹⁰ variations				W - white, B - black		W - white, B - black	
Dimensions	85 x 85 x 16 mm				94 x 94 x 8 mm		100 x 100 x 8 mm	
Protocol	RFIO				RFIO		RFIO	
Order code	8502	9161	8489	9162	20/B: 8512 20/W: 8513	40/B: 8488 40/W: 8514	220/B: 8518 220/W: 8517	240/B: 8516 240/W: 8515



Wireless controller in LOGUS⁹⁰ design. Standard BASE design (white plastic), but can be combined with glass, wood, metal or stone in the frame design.

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

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

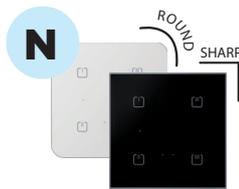


with relays

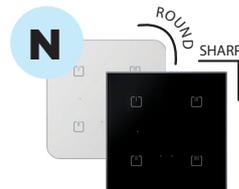
with dimmer

key fob

pilot



Glass touch controller
with output relays



Glass touch controller
with dimmer



Key fob - 4 buttons
black white Key fob - 6 buttons
black white



Controller with display
anthracit white

Technical parameters	RFSW-62 262	RFDW-71 271	RF KEY-40	RF KEY-60	RF PILOT
Number of channels	4		4	6	40
Power supply	230 V AC / 50-60 Hz		3 V battery CR 2032		2x batteries 1.5V AAA/R03
Design	glass sharp / round		key fob		remote controller
Colour	W - white, B - black		B - black W - white B - black W - white		A - anthracit W - white
Dimensions	94 x 94 x 41mm		64 x 25 x 10 mm		130 x 41 x 18 mm
Protocol	RFIO2		RFIO		RFIO
Order code	62/B: 8870 262/B: 8890 62/W: 8891 262/W: 8892	71/B: 8824 271/B: 8893 71/W: 8894 271/W: 8895	8503 8504	8490 8505	4516 4376



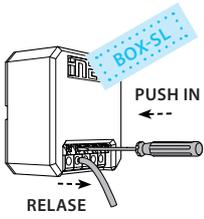
The glass design controller with two output relays is used to control appliances and lights.

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.

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.





Screwless terminals for faster wiring



Multifunction 1-channel



Single function 1-channel



Multifunction switching units with inputs for external buttons 1-channel



Multifunction switching units with inputs for external buttons 1-channel



Multifunction switching units with inputs for external buttons 2-channels

Technical parameters	RFSFA-61B	RFSAI-11B-SL	RFSAI-61B-SL	RFSAI-61BPF-SL	RFSAI-62B-SL
Output	1x NO, 8 A	1x NO, 8 A	1x NO, 8 A	1x NO, 8 A	2x NO, 8 A (Total)
Supply voltage (frequency)	AC 230 V (50-60 Hz)				
Design	BOX	BOX-SL			
Dimensions	49 x 49 x 21 mm	43 x 44 x 22 mm			
Protocol	RFIO2				
Order code	4995	8375	8204	8910	8201



BOX-SL flush mounted

- 6 functions
- 1 output



- switch on/off
- 1 output



- 6 functions
- 1 output contact 8A
- 1 input for external button



- 6 functions
- 1 output contact 8A
- 1 input for external button
- galvanically separated



- 6 time functions
- 2x output contacts 8A
- 2 inputs for wired buttons



SWITCH UNITS shutters

on DIN rail

socket



Switch unit for shutters



Multifunction 1-channel



Multifunction 6-channels



Switching socket-plug

Technical parameters	RFJA-32B-SL	RFSFA-61MI RFSFA-61M	RFSFA-66MI RFSFA-66M	RFSFC-61N
Output	2x NO, 8 A	1x CO, 16 A	3x CO / 3x NO, 8 A	1x NO, 16 A/AC
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 230-250 V (50-60 Hz)
Design	BOX-SL	1-MODULE	3-MODULE	socket-plug
Dimensions	43 x 44 x 22 mm	90 x 17.6 x 64 mm	90 x 52 x 65 mm	63 x 110 x 74 mm
Protocol	RFIO2	RFIO2	RFIO2	RFIO2

RFJA-32B-SL: 8254
2 independent outputs for control of two-way motors: garage doors, gates, blinds, shutters, ...
Inputs for connecting external control wired buttons.



RFSFA-61MI: 8154
RFSFA-61M: 7721
MI - integrated antenna
M - SMA connector for external antenna.
AN-I antenna is part of the unit.



RFSFA-66MI/24V: 8156
RFSFA-66MI/110-230V: 8906
RFSFA-66M/24V: 5291
RFSFA-66M/110-230V: 8905
MI - integrated antenna
M - SMA connector for external antenna.
AN-I antenna is part of the package.



French: 8251



Schuko: 8250

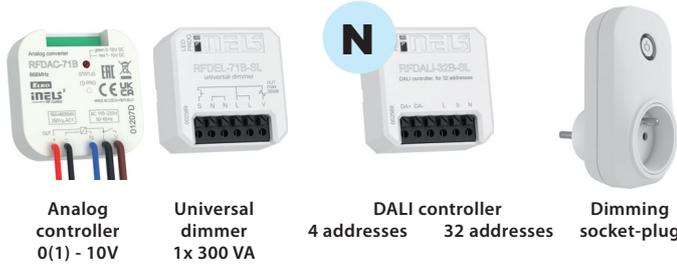


British: 8252



DIMMERS flush mounted

on DIN rail



Technical parameters	RFDAC-71B	RFDDEL-71B-SL	RFDALI-04B-SL	RFDALI-32B-SL	RFDSC-71N	RFDEL-71M	RFDAL-73M/RGB	RFDDEL-76M
Output	0(1) - 10 V contact 16 A	R - L - C - LED - ESL 160 VA	4x DALI units	32x DALI units	R, L, C, LED, ESL	R - L - C - LED - ESL 600 VA 300 VA	3x 5 A	R - L - C - LED - ESL 6x 150 VA 6x 75 VA
Supply voltage (frequency)	AC 110-230 V (50-60 Hz)	AC 230 V (50 Hz)	100-230 V (50 Hz)		AC 230 V (50-60 Hz)	AC 230 V (50 Hz) AC 120 V (60 Hz)	DC 12-24 V stabilized	AC 230 V (50 Hz) AC 120 V (60 Hz)
Design	BOX	BOX-SL			socket-plug	3-MODULE		6-MODULE
Dimensions	49 x 49 x 21 mm	43 x 44 x 22 mm			63x110x74 mm	90 x 52 x 65 mm		90 x 105 x 65 mm
Protocol	RFIO2				RFIO2	RFIO2		RFIO2
Order code	4993	8361	8527	8434	-	4897 5304	4916	8205 8209

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



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



It should dimm up to 4 / 32 DALI drivers powered from DALI BUS. Configuration via bluetooth from the app.



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



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



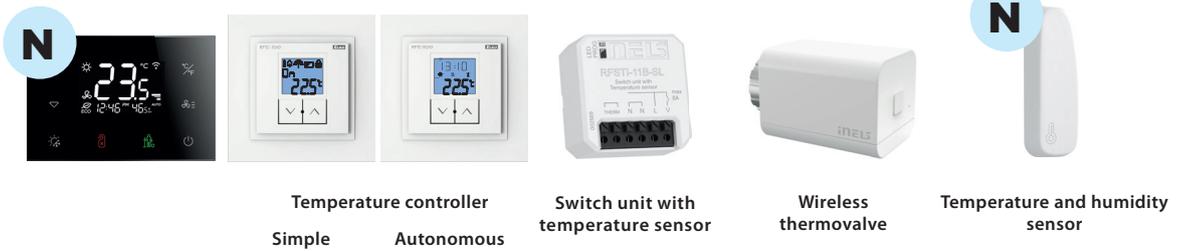
Universal six-channels dimmer with an output of 150 VA / 75 VA channel. The outputs can be connected in parallel and multiply the power at the expense of the number of outputs (up to 900 VA / 230 V) when connecting all 6 outputs together.



TEMPERATURE CONTROL

Compatibility control

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



Technical parameters	RFTC-3	RFTC-10/G	RFTC-50/G	RFSTI-11B-SL	RFATV-2	RFTI-20
Supply voltage (frequency)	110 - 230V AC	2 x 1.5 V battery AAA		AC 230 V	battery 2x 1,5 V AA	2x 3 V CR 2032 battery
Design	EU/BS box	LOGUS ⁹⁰		BOX-SL	thread on the valve	interior
Dimensions	120x80x27 mm	85 x 85 x 16 mm / 94 x 94 x 16 mm		43 x 44 x 22 mm	52 x 52 x 70 mm	75 x 25 x 14 mm
Protocol	RFIO2	RFIO		RFIO2	RFIO	RFIO
Order code	3/W: 8915 3/B: 8914	RFTC-10/G/BR	RFTC-50/G/BR	8404	8259	3401

RFTC-3 Glass Touch thermostat for fancoils, to control 2 and 4 pipe fancoils or chillers, 3x relays for fan speed control, 2x relays for heating/cooling, 0-10V for proportional control of valves. Hospitality buttons DND, MUR or others.



RFTC-10/G: design BASE, white order code: RFTC-10/G/BR - used for temperature measurement and correction of the pre-set temperature in heating cucrites of ± 5 °C. RFTC-50/G: design BASE, white order code: RFTC-50/G/BR - separate thermostat for wireless control up to 4 switch units like RFSA-6x / RFUS-61 / RFSTI-11B.



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



Wireless thermovalve measures the room temperature with an internal sensor, and opens / closes the radiator valve based on the set program in the system component.



With an integrated digital sensor, it measures temperature and humidity in the range of -10 to +50 °C and at regular intervals of 20 min. sends it to the system device (eLAN-RF, RF-Touch).





**4 contacts converter
battery powered**



**4 contacts converter
AC 230 V powered**



**Input contact
converter**



Pulse converter

Technical parameters	RFIM-40B/BP-SL	RFIM-40B/230V-SL	RFSG-1M	RFTM-1
Battery power	batterie CR2032	AC 230V (50-60 Hz)	AC 10-230 V (50-60 Hz)	2x 1.5 batteries AAA
Design	BOX-SL	BOX-SL	1-MODULE	BOX
Dimensions	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
Protocol	RFIO	RFIO2	RFIO2	RFIO
Order code	8406	8407	8240	4315

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 information 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, 50 terminals of the electricity meter).



DETECTORS



**Flood
detector**



**Window/door
detector**



**Motion
detector**



**Motion detector
for ceiling mounting**

Technical parameters	RFSF-100	RFWD-100	RFMD-100	RFMD-200
Battery power	2x batteries 1.5 V AAA	1x 3 V battery CR 2032	2x batteries 1.5 V AA	2x 1.5 V AA batteries
Design	disc box	interior	interior	interior
Dimensions	Ø 89 x 23 mm		72 x 62 x 34 mm	46 x 105 x 43 mm
Protocol	RFIO	RFIO	RFIO	RFIO
Order code	7682	5027	5029	8919

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

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.

The motion detector PIR is used to detect presence persons moving inside the building interior. Suitable for flat ceiling mounting



OUTDOOR UNITS



Twilight switch



Switch unit with increase protection



Outdoor 2-buttons controller



Wireless hydrostatic level sensor

Technical parameters	RFSOU-1	RFUS-61	RFOWB-20	RFSLT-S3
Battery power	2x batteries 1.5 V AAA	AC 230V (50-60 Hz)	3 V battery CR 2032	Battery (lithium cell, 3V6-AA-LS)
Design	IP65	IP65	IP65	IP65
Dimensions	72 x 62 x 34 mm	136 x 62 x 34 mm	64 x 74 x 44 mm	136 x 62 x 34 mm
Protocol	RFIO	RFIO2	RFIO	RFIO
Order code	4707	-	8147	8399

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.



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



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



Measures the level of liquids based on the principle of hydrostatic pressure measurement. Consists of a communication unit in a plastic case with IP65 protection placed above the surface and a stainless steel pressure probe connected by a cable lowered to the bottom of the tank. The standard length of the probe cable is 3m or 9m.



HOTEL RETROFIT (HRESK)



Infront of door hotel room unit

Glass touch wireless controller with symbols



Thermostat for fancoil control via RFSFA-166M



Switch unit for fancoil control



Lighting control unit with detectors



Overheating/overcooling switch unit with advanced functions

Technical parameters	RFGS-30/SB SW	RFSW-62/SB SW	RFTC-150/G	RFSFA-266M	RFSAL-161B	RFSSTI-111B
Supply voltage	230 V AC / 50-60 Hz or 24 V AC / DC		2 x 1.5 V battery AAA	110-230 V AC	1x NO, 12A AC1	AC 230 V (50-60 Hz)
Design	W - white, B - black		LOGUS ⁹⁰	3-MODULE	BOX	BOX
Dimensions	94 x 94 x 39 mm		85 x 85 x 16 mm / 94 x 94 x 16 mm	90 x 52 x 65 mm	49 x 49 x 21 mm	49 x 49 x 21 mm
Protocol	RFIO2		RFIO	RFIO2	RFIO2	RFIO2
Order code	8920 9127	8925 8948	RFTC-150/G/BR	8978	4934	4915 3409

In connection with the RFSW-62/S room unit (or RFTC-3 thermostat), it is used to signal the status of MUR, green LED and DND, red LED. MUR and DND buttons are interlocked. Includes a bell button for controlling a room bell connected to the switched output.

The wireless glass remote control with symbols is used for:

- Control of iNELS Wireless units (lighting, blinds or curtains)
- Control of the RFGS-30/S in front of door unit for MUR/DND
- Switching of 2x light circuits (built-in relays)

Thermostat for controlling the RFSFA-266M switching component for fan coil control. Thermostat covers are available in:

- Pearl (PE), Ivory (MF), Gray (IS), Ice (GE) and Aluminium MF(AL) colour.

It is thus possible to combine them with all LOGUS90 frames.

Thanks to the 5-channel design of the switching component it can control the heating/cooling mode and 3 speed levels. The RFSFA-266M wireless switch unit can be combined with the RFTC-4 or RFTC-150.

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

The component measures temperature in the range of 15 to 35 °C with external sensor and on the basis of the set temperature switches air conditioning. Most suitable for hotel rooms.





Wireless touch unit



Smart RF Gateway



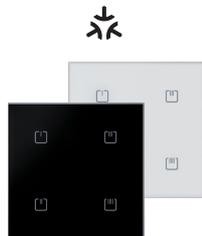
Repeater to extend the range

Technical parameters	RF TOUCH-2/BE	RF TOUCH-2/BR	eLAN-RF-103	RFRP-20N
Number of connectable units*	up to 70		up to 70	up to 20
Supply voltage (frequency)	24 V DC (terminals) USB-C (external adapter) Poe (through LAN) - only /BE version		adapter 5V DC / 1A	AC 230 V (50-60 Hz)
Design	flush mounted		aluminum box	socket-plug
Dimensions	86 x 86 x 10 (37)mm		90 x 52 x 65 mm	63 x 110 x 74 mm
Protocol	RFIO2			
Order code	8266	8974	8044	French: 8423 Schuko: 8424 British: 8425
* allow to control the units independently	Central unit with a 4" capacitive display. It works as a switch for most appliances and also controls heating, lights, and shades. It can control your smart home from one place. The user interface comes from the new intuitive app iNELS.		Smart RF Gateway is 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: eLAN-RF-103: LAN communication	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.

MATTER DEVICES



On-wall button controller
4 buttons MATTER



Glass touch controllers
4 buttons, sharp MATTER



Switch unit with inputs for
external buttons MATTER



Universal dimmer
MATTER



Window/Door
detector MATTER



Motion detector for
ceiling mounting
MATTER

Technical parameters	RFWB-40G/MT	RFGB-40/MT	RFSAI-62B-SL/MT	RFDEL-71B-SL/MT	RFWD-100/MT	RFMD-200/MT
Number of channels	4	4	-	-	-	-
Power supply	3 V battery CR 2032	2x 3 V batteries CR 2032	230 V AC	230 V AC / 50 Hz	1x 3 VCR2032 battery	2x 1.5 V AA batteries
Design	LOGUS ⁹⁰	glass - sharp	BOX-SL	BOX-SL	IP20	IP20
Colour	in LOGUS ⁹⁰ variations	W - white, B - black	UNI	UNI	UNI	UNI
Dimensions	85 x 85 x 16 mm	94 x 94 x 8 mm	43 x 44 x 22 mm	43 x 44 x 22 mm	25 x 75 x 16 mm	ø 95mm
Protocol	Matter	Matter	Matter	Matter	Matter	Matter
Order code	8954	40B: 8976 40W: 8977	8975	8955	8953	9130



Wireless controller in LOGUS⁹⁰ design. Standard BASE design (white plastic), but can be combined with glass, wood, metal or stone in the frame design.

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

- 6 time functions
- 2x output contacts 8A
- 2 inputs for wired buttons

Universal built-in dimmer is used to regulate light sources. 7 light functions - smooth start or stop with time setting 2 s-30 min.

Window/Door detector is used to detect openings where activation occurs when the magnet and the sensor become separated.

Motion detector for ceiling mounting to detect presence persons moving inside building. Wireless communication to control lighting or security functions. Sensitivity settings and low battery indication.



ACCESSORIES



Service Key



Internal antenna with SMA connector



External antenna with magnetic base



External antenna with magnetic base and IP67 protection



Extension cable

RFAF/USB	AN-I	AN-E	AN-E3	Extension cable
<p>RFAF/USB: 4503</p> <p>The RFAF / USB Service Key (in conjunction with the RF_analyzer) is designed for iNELS RF Control system partners.</p>	<p>AN-I: 6180</p> <p>Polarization: vertical Gain: 2.1 dBi Dimensions: 17 x 44 x 8,5 mm Impedance: 50 Ω Colour: black</p>	<p>AN-E: 209930606056</p> <p>Cable length: 3 m Polarization: vertical Gain: 5 dBi Impedance: 50 Ω Colour: black Dimensions: Ø 30 x 280 mm</p>	<p>AN-E3: 8219</p> <p>Cable length: 3 m Polarization: vertical Gain: 3 dBi Impedance: 50 Ω Colour: black Dimensions: Ø 50 x 88 mm</p>	<p>EC-10: 8191</p> <p>SMA connectors (male/female) Cable length: 10 m Colour: white</p>

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 controller 4-button, 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 - CLASSIC

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



HEATING

WIRELESS HEATING WITH 2 THERMOVALVES

- RF Touch- 2 central unit with a 4" capacitive display
- 2x Wireless ThermoValve to control 2 independent heating circuits

DIMMERS KITS



WIRELESS LIGHT DIMMER - LUXURY

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



2 WIRELESS LIGHT DIMMERS - LUXURY

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



2 WIRELESS LIGHT DIMMERS - CLASSIC

- On-wall button controllers - 4-button, plastic, white
- 2 pcs 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

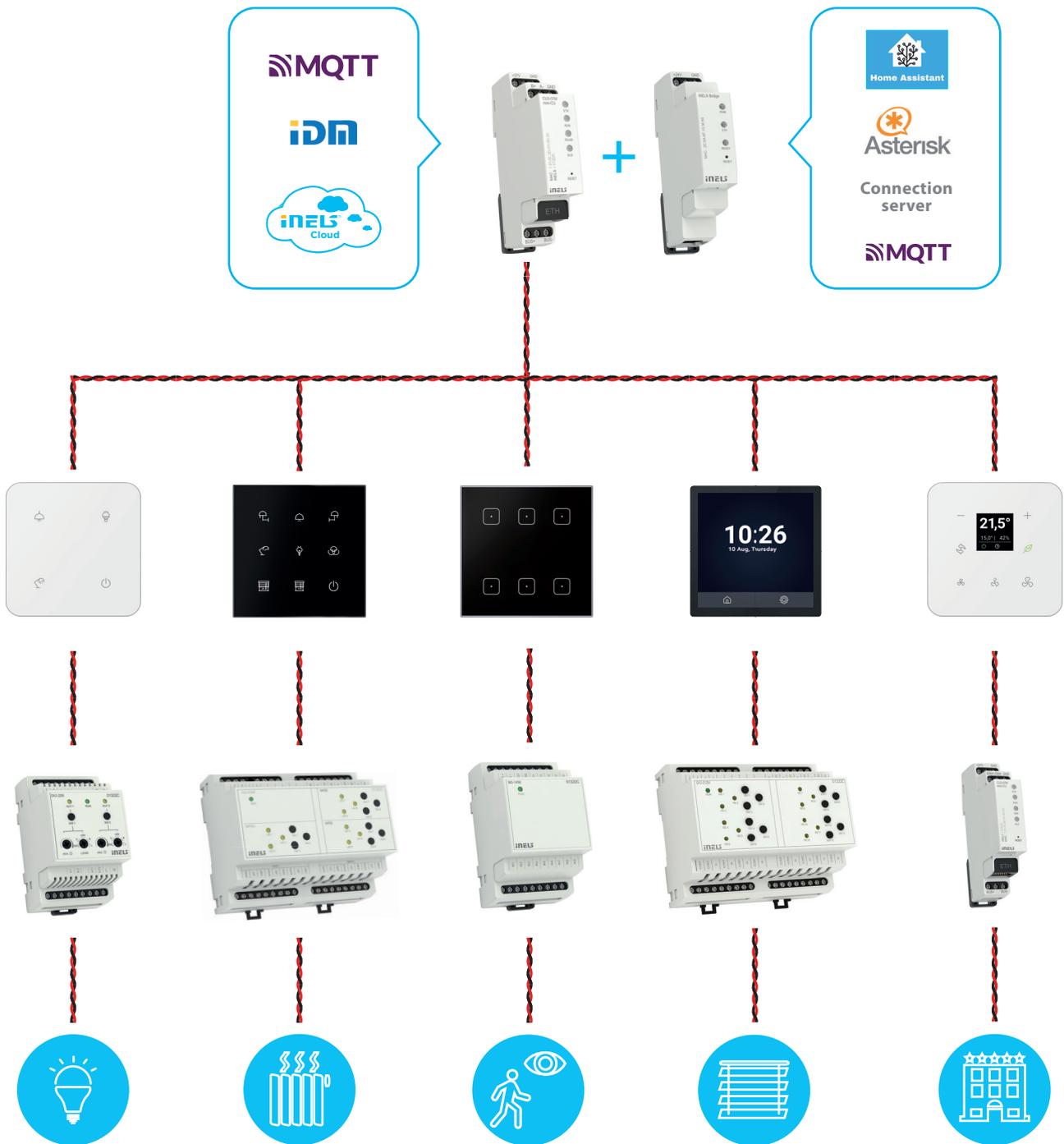


WIRELESS HEATING WITH 2 THERMOVALVES

- Smart RF Gateway - central unit for control system by app
- 2x Wireless ThermoValve to control 2 independent heating circuits



WIRED ELECTRO-INSTALLATIONS iNELS BUS



CENTRAL UNITS



Central unit with 1x BUS



Central unit with 2x BUS



Central unit with 1x BUS, 1x DALI



Central unit with 1x BUS, 1x MODBUS

CU3-07M

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 central software or MQTT 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. Ethernet connector is used for iNELS app or cloud communication or for communication with the superior unit within the iNELS IP topology. The central unit is implemented with MQTT protocol for 3rd party communication.



CU3-08M

Order Code: 9163

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 central software or MQTT 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 iNELS BUS portfolio. Ethernet connector is used for iNELS app or cloud communication or for communication with the superior unit within the iNELS IP topology. The central unit is implemented with MQTT protocol for 3rd party communication.



CU3-09M/DALI

Order Code: 8465

CU3-09M/DALI is a special version of the minimized 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 central software or MQTT as part of a larger project. The system unit is equipped with one BUS, one DALI bus and one RJ45 connector. The DALI system bus allows the control of up to 64 independent DALI ballast addresses for fluorescent, LED and other luminaires. Ethernet connector is used for iNELS app or cloud communication or for communication with the superior unit within the iNELS IP topology. The central unit is implemented with MQTT protocol for 3rd party communication.



CU3-10M

Order Code: 8521

CU3-10M 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 central software or MQTT 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. The CU3-10M system unit is equipped with one Modbus system bus. The Modbus system bus allows control of modbus thermostat and Air condition units (RS-485). Ethernet connector is used for iNELS app or cloud communication or for communication with the superior unit within the iNELS IP topology. The central unit is implemented with MQTT protocol for 3rd party communication.



SYSTEM UNITS



Power supply 30 W with BUS separator



Power supplies for iNELS BUS



BUS separator from power supply



BUS separator from power supply

Technical parameters	PS3-30/iNELS	PSM3-30/iNELS, PSM3-60/iNELS, PSM3-100/iNELS			BPS3-01M	BPS3-02M
Output	27 V / 1A	27 V DC			1x BUS	2x BUS
Supply voltage (frequency)	100-250 V AC (50-60 Hz)	AC 100 - 240 V (50-60 Hz)			BUS 27 V DC	
Rated current	-	30 W	60 W	92 W	8 mA (at 27 V DC)	15 mA (at 27 V DC)
Dimensions	90 x 52 x 65 mm	90 x 35 x 58 mm	90 x 52.5 x 58 mm	90 x 70 x 58 mm	90 x 17.6 x 64 mm	
Order code	8011	8476	8477	8478	3244	3243

Power 30 W, integrated bus separator BPS3-01M.



Used to supply central units and external master within intelligent electroinstallation iNELS. Through BUS separators from the supply voltage BPS3-01M and BPS3-02M, it supplies BUS lines from which iNELS peripheral units are also powered.



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

BPS3-01M: allows you to connect one BUS with max. load 3 A.

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





Ultra slim microwave motion detector - ceiling mount



Ultra slim PIR motion detector - ceiling mount



Light intensity sensor

Technical parameters	MCD3-01	PMS3-01	DLS3-1
iNELS BUS/EBM	BUS	BUS	BUS
DALI/DMX BUS	-	-	yes/no
Supply voltage	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	20 mA (at 27 V DC)	20 mA (at 27 V DC)	12 mA (at 27 V DC)
Housing	ceiling mounting	ceiling mounting	IP65 box
Dimensions	115 x 24 mm	115 x 24 mm	96 x 62 x 34 mm
Order code	9123	9135	5750

The MCD3-01 is a compact microwave wide 360-degree detection angle motion sensor designed for ceiling mounting applications. The sensor is powered by a 27VDC power source and utilizes a 5.8GHz continuous wave radar system, offering precise and reliable motion detection.



The PMS3-01 is a compact PIR motion sensor designed for ceiling or surface mounting applications. The sensor is powered by a 27VDC power source. The motion detector is used to detect movement in the area using the passive infrared scanning spectrum for detection.



DLS3-1 is for sensing the current luminance 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.



CONVERTERS



Analog - digital converter 6 inputs



Digital - analog converter 4 outputs

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.



SWITCHING ACTUATORS



Switching actuator 1-channel Switching actuator 2-channels Switching actuator 4-channels Switching actuator 6-channels Switching actuator 14-channels

Technical parameters	SA3-01B	SA3-02B	SA3-04M	SA3-06M	SA3-014M & SA3-014M/E
Number of contacts	1x NO, 16 A	2x CO, 8 A	4x CO, 16 A	6x CO, 8 A	14x NO, 10 A
Switching current	16 A / AC1	8 A / AC1	16 A / AC1	8 A / AC1	10A/AC1
Switching output	4000 VA	2000 VA	4000 VA / AC1, 384 W/DC	2000 VA / AC1, 192 W/DC	2500 VA/AC, 150 W/DC
Supply voltage (frequency)	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
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)	150 mA (at 27 V DC)
Housing	BOX		3-MODULE		6-MODULE
Dimensions	49 x 49 x 21 mm		90 x 52 x 65 mm		90 x 105 x 65 mm
Order code	3235	3236	3238	3287	9124 8918

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

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

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

14-channel switching actuator for switching appliances, lighting and appliances, 14x switching contact 10A. **SA3-014M:** LED signalling of relay status, manual control. **SA3-014M/E:** Economic model without LED signalling of relay status and manual control.



SWITCHING ACTUATORS

SHUTTER ACTUATORS



Switching actuator, 22 channels

Switching actuator, 22-channels without control and indication components

Shutter actuator, 14 channels

Technical parameters	SA3-022M	EA3-022M	JA3-014M & JA3-014M/E
Number of contacts	20x NO + 1x CO with blocking (for shutters)	20x NO + 1x CO with blocking (for shutters)	14x NO with blocking
Switching current	according to the output (6 A/10 A)	according to the output (6 A/10 A)	4 A/AC15
Switching output	according to the output	according to the output	1000 VA
Supply voltage (frequency)	27 V DC, -20/+10 %	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	100 mA (at 27 V DC)	100 mA (at 27 V DC)	150 mA (at 27 V DC)
Housing	6-MODULE	6-MODULE	6-MODULE
Dimensions	90 x 105 x 65 mm	90 x 105 x 65 mm	49 x 49 x 13 mm
Order code	3526	3523	9125 8949

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 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 designed for controlling rollers, shutters, blinds, awnings, garage door on entrance gates. This unit can control up to 7 motors.

JA3-014M: LED signalling of relay status, manual control.

JA3-014M/E: Economic model without LED signalling of relay status, manual control.





Dimming actuator for RGBW strips



Dimming actuator 2-channels



Dimming actuator 6-channels

Technical parameters	DA3-03M/RGBW	DA3-22M		DA3-66M	
Output	LED strip 12 V, 24 V, 48 V; RGBW LED strip 12 V, 24 V, 48 V	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)	
Input	-	2x wire buttons, 1x temperature		6x wire buttons	
Supply voltage (frequency)	27 V DC, -20/+10 %	230 V AC (50-60 Hz)	120 V AC (60 Hz)	230 V AC (50 Hz)	120 V AC (60 Hz)
Rated current from BUS	5 mA (at 27 V DC)	5 mA (at 27 V DC)		100 mA (at 27 V DC)	
Housing	3-MODULE	3-MODULE		6-MODULE	
Dimensions	90x52x65 mm	90x52x65 mm		90 x 105 x 65 mm	
Order code	8463	3262	3303	8206	7445

The dimmer for LED strips is used for independent control of 12 channels, so it can be connected to, for example: 3 RGBW led strips, 3 RGB led strips + 2 single colour strips, 12 single colour LED strips



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.



INPUT UNITS



Binary input unit 4-channels



Binary input unit 8-channels



Binary input unit 14-channels



Temperature input, 6 inputs



Temperature input 4-channels

Technical parameters	IM3-40B	IM3-80B	IM3-140M	T13-60M	T13-40B
Number of inputs	4x binary	8x binary	14x binary	6x binary	4x temperature
Temperature sensors	1x TC/TZ		-	-	TC, TZ, Ni1000, Pt1000, Pt100
Supply voltage	BUS 27 V DC		BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	20 mA (at 27 V DC)		25 mA (at 27 V DC)	45 mA (at 27 V DC)	20 mA (at 27 V DC)
Housing	BOX		3-MODULE	3-MODULE	BOX
Dimensions	49 x 49 x 13 mm		90 x 52 x 65 mm	90 x 52 x 65 mm	49 x 49 x 13 mm
Order code	3231	3232	3245	3289	3269

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.



Unit T13-60M is designed to connect up to six external temperature sensors. It is used in cases where it is necessary to read the temperature, eg floor/room, indoor/outdoor temperature, process equipment - boiler, solar heating, etc.



Temperature input unit T13-40B is designed for connecting 4x temperature sensors TC, TZ, Ni1000, PT1000 or PT100.



COMBINED UNITS



Room controller with DALI dimmer



Combined actuator 10 inputs, 8 outputs



Fan coil control actuator

Technical parameters	RC3-610M/DALI	IOU3-108M	FA3-612M
Output	8x NO contacts (10 A), 2x analog (0-10 V), 16 DALI address, DIN-4	8x switching, 10 A	4x (0)-10V, 4x switching, 4x SSR
Input	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
Rated current from BUS	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
Dimensions	90 x 105 x 65 mm	90 x 105 x 65 mm	90 x 105 x 65 mm
Order code	8466	8188	3257

The unit is designed to control hotel rooms. 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 includes two analog outputs and a DALI bus for controlling up to 16 DALI ballasts.



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.



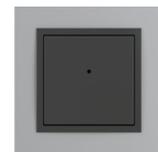
WALL CONTROLLERS



Wall switch button 2 buttons



Wall switch button 4 buttons



Wall card reader 2 buttons

Technical parameters	WSB3-20, WSB3-20H	WSB3-40, WSB3-40H	WMR3-21
Number of buttons	2	4	2
Supply voltage	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)	50 mA (at 27 V DC)
Internal temp. sensor	yes	yes	-
Inputs	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
Dimensions other materials	94 x 94 x 36 mm	94 x 94 x 36 mm	94 x 94 x 36 mm
Order code - electronics*	20: 3234* 20H: 3247*	40: 3233* 40H: 3304*	3275*

* 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 LOGUS³⁰ design.

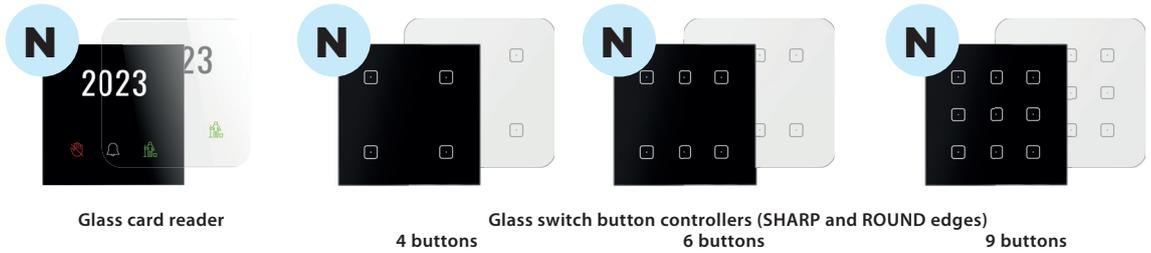


Wall controllers, 4x button, built-in temperature and humidity sensor (version H), 2x LED indication. In LOGUS³⁰ design.



Wall reader with RFID can read chip cards, key fobs and control the entrance. Available in black and white color in Logus³⁰ design.





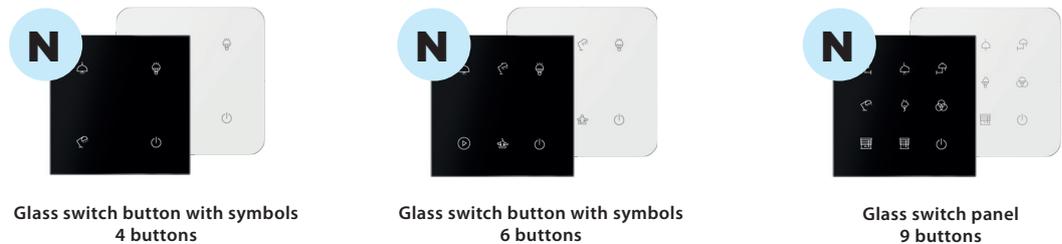
Technical parameters	GCR3-30	GCR3-230	GSB3-40	GSB3-240	GSB3-60	GSB3-260	GSB3-90	GSB3-290
Number of buttons	3		4		6		9	
Supply voltage	BUS 27 V DC							
Rated current from BUS	25-40 mA (at 27 V DC)							
Internal temp. sensor	yes		yes		yes		yes	
Inputs	1x temperature or 1x digital							
Dimensions	94 x 94 x 36 mm	100 x 100 x 8 mm	94 x 94 x 36 mm	100 x 100 x 8 mm	94 x 94 x 36 mm	100 x 100 x 8 mm	94 x 94 x 36 mm	100 x 100 x 8 mm
Order code	GCR3-30B: 9169 GCR3-30W: 9170	GCR3-230B: 9171 GCR3-230W: 9172	GSB3-40B: 8879 GSB3-40W: 8880	GSB3-240B: 8956 GSB3-240W: 8957	GSB3-60B: 8877 GSB3-60W: 8878	GSB3-260B: 8018 GSB3-260W: 8959	GSB3-90B: 8827 GSB3-90W: 8828	GSB3-290B: 8960 GSB3-290W: 8961

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

Glass touch controllers GSB3-40/GSB3-240, GSB3-60/GSB3-260 and GSB3-90/GSB3-290 are part of a comprehensive range of glass iNELS control units with four, six and nine touch buttons whose functions can easily modify by the software. GSB3-40, GSB3-60 and GSB3-90 comes in sharp design whereas GSB3-240, GSB3-260 and GSB3-290 in round design. The glass touch controllers is equipped with an integrated temperature sensor. It is also equipped with analog-to-digital input (AIN/DIN), which can be used to connect potential-free contact or external temperature sensor TC/TZ. Available in elegant black and white versions. The individual capacitive buttons are point-illuminated indicating the status of the controlled output.



GLASS CONTROLLERS WITH SYMBOLS

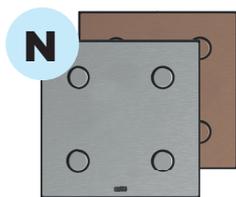


Technical parameters	GSB3-40/S	GSB3-240/S	GSB3-60/S	GSB3-260/S	GSB3-90/S	GSB3-290/S
Number of buttons	4		6		9	
Supply voltage	BUS 27 V DC		BUS 27 V DC		BUS 27 V DC	
Rated current from BUS	27-35 mA (at 27 V DC)		27-35 mA (at 27 V DC)		25-50 mA (at 27 V DC)	
Inputs	1 x external temperature for TC/TZ or 1 x digital input		1 x external temperature for TC/TZ or 1 x digital input		1 x external temperature for TC/TZ or 1 x digital input	
Dimensions	94 x 94 x 36 mm	100 x 100 x 8 mm	94 x 94 x 36 mm	100 x 100 x 8 mm	94 x 94 x 36 mm	100 x 100 x 8 mm
Order code	GSB3-40SB: 8875 GSB3-40SW: 8876 GSB3-40SBP: 8888 GSB3-40SWP: 8889	GSB3-240SB: 8962 GSB3-240SW: 8963 GSB3-240SBP: 8968 GSB3-240SWP: 8969	GSB3-60SB: 8873 GSB3-60SW: 8874 GSB3-60SWP: 8887 GSB3-60SBP: 8886	GSB3-260SB: 8964 GSB3-260SW: 8965 GSB3-260SBP: 8970 GSB3-260SWP: 8971	GSB3-90SB: 8825 GSB3-90SW: 8826 GSB3-90SBP: 8884 GSB3-90SWP: 8885	GSB3-290SB: 8966 GSB3-290SW: 8967 GSB3-290SBP: 8972 GSB3-290SWP: 8973

Glass touch controllers with symbols are part of a comprehensive range of glass iNELS control units with four touch buttons (GSB3-40/S, GSB3-240/S), six touch buttons (GSB3-60/S, GSB3-260/S) and nine (GSB3-90/S, GSB3-290/S) touch buttons whose functions can easily modify by the software. GSB3-40/S, GSB3-60/S and GSB3-90/S comes in sharp design whereas GSB3-240/S, GSB3-260/S and GSB3-290/S in round design. Engraving of symbols on each button are possible upon a request. The glass touch controllers are equipped with an integrated temperature sensor. It is also equipped with analog-to-digital input (AIN/DIN), which can be used to connect potential-free contact or external temperature sensor TC/TZ. Available in elegant black and white versions. In addition to all the features in symbol models, The glass touch controllers are also coming in proximity variant. In the SBP/SWP version, controllers are equipped with a proximity sensor, which can light up the symbols by approaching the unit to approx. 0.25 m.

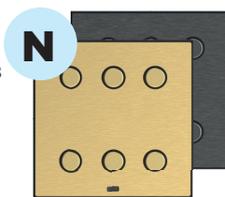


METAL CONTROLLERS



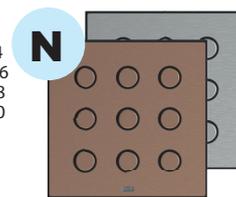
MSB3-40SS: 9136
MSB3-40GG: 9138
MSB3-40CC: 9140
MSB3-40BB: 9142

Metal switch button



MSB3-60SS: 9144
MSB3-60GG: 9146
MSB3-60CC: 9148
MSB3-60BB: 9150

Metal switch button



MSB3-90/SS: 8946
MSB3-90/GG: 8908
MSB3-90/CC: 9131
MSB3-90/BB: 9133

Metal switch button

Technical parameters	MSB3-40	MSB3-60	MSB3-90
Number of buttons	4	6	9
Supply voltage	BUS 27 V DC	BUS 27 V DC	BUS 27 V DC
Rated current from BUS	25-40 mA (at 27 V DC)	25-40 mA (at 27 V DC)	25-40 mA (at 27 V DC)
Internal temp. sensor	yes	yes	yes
Inputs	1x temperature or 1x digital	1x temperature or 1x digital	1x temperature or 1x digital
Dimensions	94 x 94 x 36 mm	94 x 94 x 36 mm	94 x 94 x 36 mm

Metal switch buttons MSB3-40/XX, MSB3-60/XX and MSB3-90/XX are part of a comprehensive range of metal iNELS control units with four, six and nine touch buttons whose functions can easily modify by the software. The metal touch controllers are equipped with an integrated temperature sensor. It is also equipped with analog-to-digital input (AIN/DIN), which can be used to connect potential-free contact or external temperature sensor TC/TZ. Available in in Antique copper, Satin Brass, Brushed silver, and Graphite Black versions. MSB3-XX/BB = Graphite Black plate + Black button, MSB3-XX/GG = Satin Brass plate + Satin Brass button, MSB3-XX/SS = Brushed silver plate + Brushed silver button, MSB3-XX/CC = Antique copper plate + Antique copper button. Based on information from the ambient light intensity sensor it can switch back light of symbols or perform various actions in the iDM3 software.



THERMO-REGULATORS



Glass room thermo-regulator



Glass room thermo-regulator



Glass room thermo-regulator



Digital room thermo-regulator

Technical parameters	GRT3-100		GRT3-70		GRT3-270		IDRT3-1
Number of buttons	7		7		7		2 (for temperature correction)
Supply voltage	BUS 27 V DC		BUS 27 V DC		BUS 27 V DC		BUS 27 V DC
Rated current from BUS	-		85 mA (at 27 V DC)		85 mA (at 27 V DC)		20 mA (at 27 V DC)
Measurement	internal thermometer and humidity sensor, 1x external input for TC/TZ or 1x digital		internal thermometer and humidity sensor, 1x external input for TC/TZ or 1x digital		internal thermometer and humidity sensor, 1x external input for TC/TZ or 1x digital		yes 2x temperature or 2x digital
Dimensions	120 x 80 x 27 mm		94 x 94 x 36 mm		94 x 94 x 41 mm		94 x 94 x 50 mm
Order code	100/B: 9173	100/W: 9174	70/B: 9154	70/W: 9153	270/B: 9156	270/W: 9155	device + cover: IDRT3-1/BR**

The GRT3-100 regulates room temperature and displays both current and desired temperatures. Offers relay output for fan control, heating/cooling. It includes an integrated temperature sensor, 0-10V output, analog/digital input (AIN/DIN), which can be used to connect potential-free contact or external temperature sensor TC/TZ. Option to communicate via modbus protocol. Available in black and white versions.



The Glass Room Thermo-regulator GRT3-70 is designed for apartment and guest room management. It regulates room temperature and displays both current and desired temperatures. The thermo-regulator offers customizable touch buttons for functions like fan control, heating/cooling settings, and more. It includes an integrated temperature sensor and Available in black and white versions.



The Glass Room Thermo-regulator GRT3-270 is designed for apartment and guest room management. It regulates room temperature and displays both current and desired temperatures. The thermo-regulator offers customizable touch buttons for functions like fan control, heating/cooling settings, and more. It includes an integrated temperature sensor and Available in black and white versions.



Control unit for heating/cooling. Temperature correction ± 5 °C or direct input of requested temperature. Built-in temperature sensor. In LO-GUS⁹⁰ design





4" touch control panel



8" touch control panel



10" touch control panel

Technical parameters	EST4	EST8	EST10
Display	IPS 4" 480 x 480 resolution	1280 x 800 resolution	
Supply voltage	24V DC / PoE		24V DC / PoE
Standard interface	(1x) LAN RJ45 10/100Mbps interface, (1x) Add-On (optional interface) Port (1x) Digital Out (open collector 5V 100mA), (1x) Digital In	2x Add-On Ports (Optional Interface Ports), 5x Digital In 2x Digital Out (Dry Contact 5A / 250V AC max), 1x Uni-port	
Optional interface	iNELS BUS, KNX Twisted Pair (A-KNX), Bticino (SCS) Twisted Pair (A-SCS), RS485 (EIA-485) (RS4), DALI 2 (A-DLI), Galvanic isolated RS485 Modbus (A-GMD), VRF mainline communication (A-VRM -or- A-VRR), BLE Bluetooth 5.0 (BCU-S24-BLT -or- BCU-POE-BLT), Zigbee 3.0 (BCU-S24-ZGB -or- BCU-POE-ZGB)	iNELS BUS, KNX Twisted Pair (A-KNX), Bticino (SCS) Twisted Pair (A-SCS), RS485 (EIA-485) (RS4), DALI 2 (A-DLI), Galvanic isolated RS485 Modbus (A-GMD), VRF mainline communication (A-VRM -or- A-VRR), BLE Bluetooth 5.0 (BCU-S24-BLT -or- BCU-POE-BLT), Zigbee 3.0 (BCU-S24-ZGB -or- BCU-POE-ZGB)	
Dimensions	92 x 92 x 29 mm	243 x 149 x 42 mm	307 x 194.6 x 39.5 mm
Order code	9964	-	-

The EST4 unit is a powerful hardware, user-friendly 4" IPS display, and support for various interfaces and sensors. It offers reliable performance in different operating environments. Key features include a high-quality display, Linux 3.4 OS, ARM A7 Single-Core processor, integrated sensors, LAN connectivity, optional interfaces, and flexible power options. Configuration and programming of iNELS units via Sky platform



The EST8/10 unit is a high-quality capacitive display, run on Android 4.2.2 OS with ARM A7 Dual-Core processor. These units offer intercom capabilities, built-in web servers, and connectivity options like Ethernet with PoE support. They also provide various optional interfaces such as RS485, Modbus, VRF, BLE Bluetooth 5.0, and Zigbee 3.0, and can be powered by 24VDC or POE IEEE 802.3at. Configuration and programming of iNELS units via Sky platform.



INTEGRATION



Third-party integration gateway



Third-party integration server

iNELS Bridge

Order code: 8509

- iNELS Bridge works as a gateway for connecting third party devices and integrating them into the iNELS environment.
- It is a one module hardware contain powerful linux based computer.
- The unit comes with an option of pre-installed Connection server, Home assistant with iNELS driver MQTT server and Asterisk.
- The server uses the open Home Assistant platform, which contains more than 1000 existing integrations.
- The connection server is providing a communication environment between iNELS BUS System with the third-party devices, for which their protocols are also translated and submitted.
- iNELS Bridge is equipped ethernet port for fast and easy communication.
- The configuration is happening on its own web interface, where the default IP address is not fixed. (The IP address is assigned from the DHCP server and it's needed to be known when we're connected to the network).



Connection Server II.

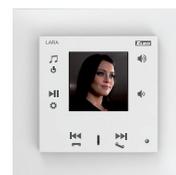
Order code: 8508

- The connection server is providing a communication between iNELS BUS System with the third party devices, smartphone or tablet.
- The iHC/iNELS 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 other data.
- Connection server uses the RockPi hardware and the apps requires a license which is paired with the MAC address of the device.
- The configuration is happening on its own web interface, where the default IP address is not fixed. (The IP address is assigned from the DHCP server and it's needed to be known when we're connected to the network).





Music and internet radio player



Music and internet radio player with intercom and videophone features

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

Order code: LARA-R

- Music and internet radio player - all in the dimension of a switch and a luxurious LOGUS⁹⁰ design.
- LARA Radio - when connected to the Internet, it can play streaming radio stations and you can store up to 40 of them. But you can also select from thousands of radio stations from across the globe, which provide data for correct connection.
- LARA Radio can play content from an external music source, which can be a smart phone or e.g. an MP3 player. These devices are connected to a 3.5mm stereo jack audio input, located underneath the front panel.
- LARA Radio can also play audio files from central data storage.

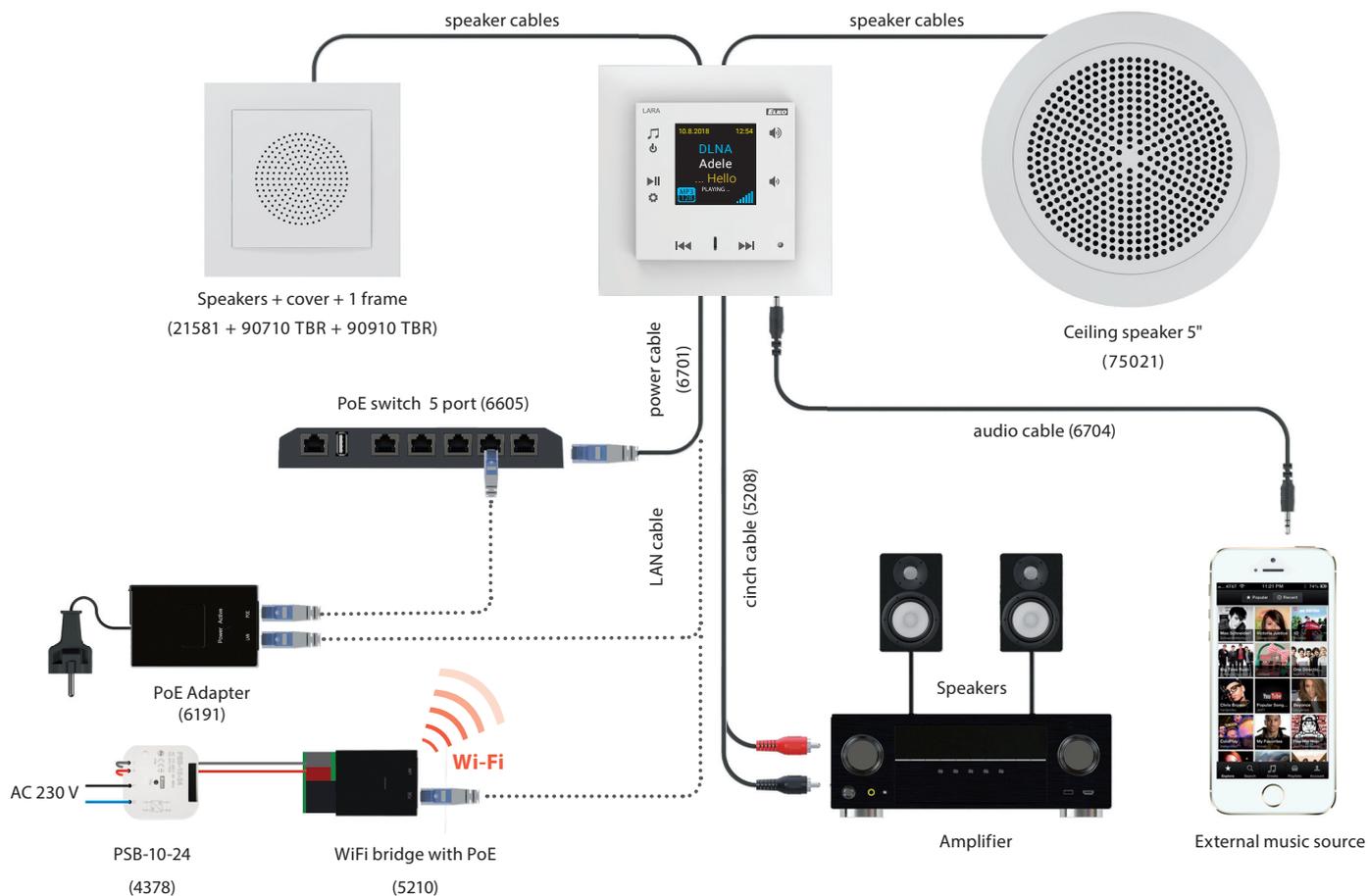


Order code: LARA-IC

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



Wiring example



iNELS APP

The application allows easy control of connected devices through wireless and wired gateways, such as socket switching, dimming lights, controlling blinds or garage doors, managing heating circuits, and compatible air conditioning. It also displays available values, such as temperature, status of motion detectors, windows, doors, or flood detectors, as well as the current status of all controlled devices.

Newly, the application can be installed on tablets, where all control options are fully preserved, just like in the standard application. The user-friendly Dashboard on the tablet enables users to view frequently used devices, previews of connected cameras, and created scenes. Users can quickly and easily control multiple devices at once with a single click. Furthermore, it is now possible to integrate SIP-enabled Intercoms, allowing call notifications and door unlocking from anywhere in the world. Another new feature includes receiving notifications related to units connected to the account. With the new iNELS mobile application, we are opening a completely new stage, expanding the functions and integration possibilities of the iNELS system.

In addition to the iNELS mobile application, there is also the inels.cloud platform available. This website allows users to control devices connected to inels BUS and RF gateways through the cloud. The platform offers advanced features, including the ability to configure custom Dashboards, view historical device data, and conditionally interconnect RF and BUS units. This feature allows users to set conditions to respond to specific events or interconnect devices with each other. Another useful function is push notifications, which inform users about important events or device statuses. With the inels.cloud platform, user management is also possible, enabling account owners to add additional users and restrict their rights to control specific devices.

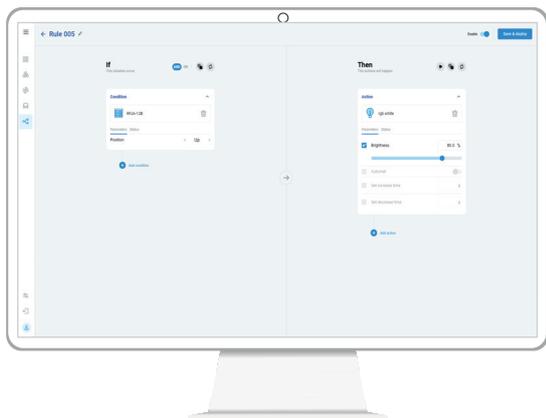
Thanks to these new updates and features, the iNELS mobile application and inels.cloud platform expand the possibilities and integration options of the iNELS system, providing users with an enhanced and seamless smart home experience.

Electroinstallation			
Wireless	BUS		
			Lighting control •
			Garage doors and gates •
			Switching appliances •
			RGB bulbs and LED strips •
			Scenes •
			Detectors/sensors •
		HVAC	Heating •
			Air conditioning •
			Recuperation •
		3rd party	Cameras •
			Weather station •
			Intercoms •
			Home appliances •
		Voice assistants	Google Home •
			Amazon Alexa •
		Others	Automation •
			Notification •
			Favourites/overview •
			Log history •
			Weather data •
			Users management •



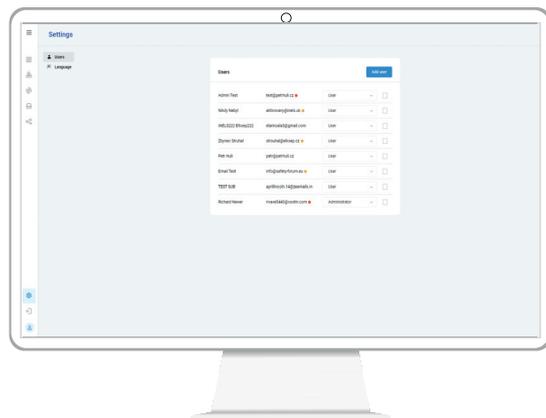
Conditions

Unlimited automation options.



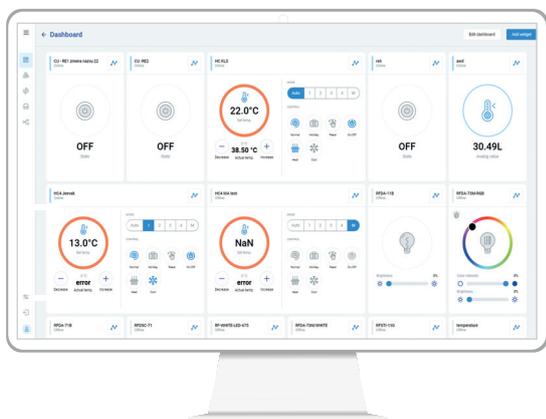
User management

Control of user accounts.



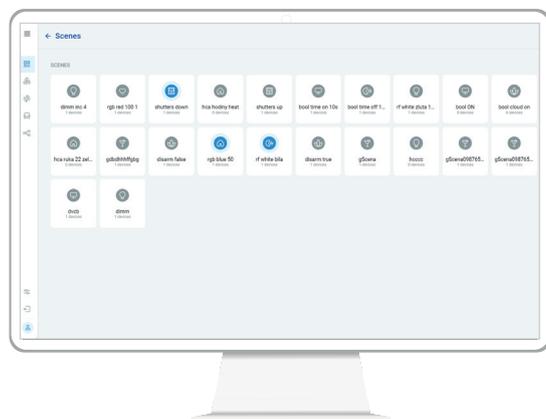
Dashboard

Device overview with the option to view event history.



Scenes

Group device control.



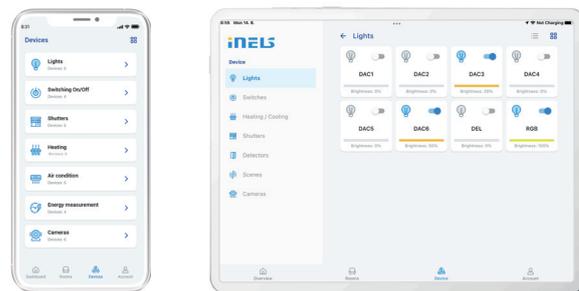
Dashboard

Absolute control over the state of all technologies.



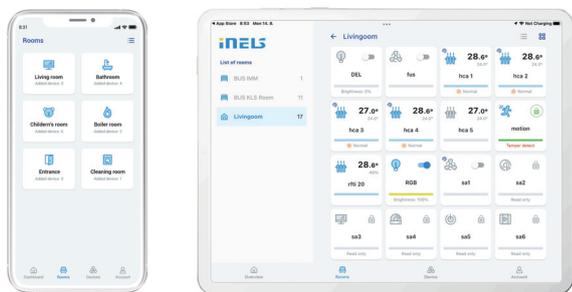
Device list

Control the device from anywhere.



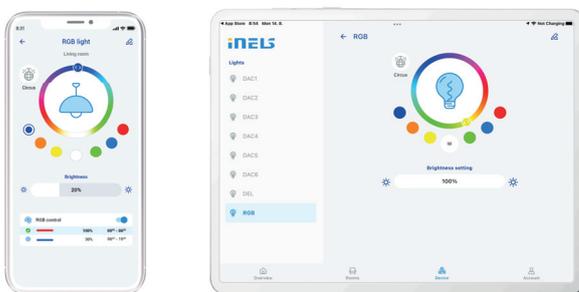
Rooms management

Settings according to individual rooms.



Colour setting

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



LOGUS⁹⁰

Luxurious design for any interior

Lo

gus

90

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.

BASE

Smart finish. Discrete shape of function.



AQUARELLA

Distinct colors. Shades that characterize the space.



ANIMATO

Large selection of colors, modern design and pleasant price.



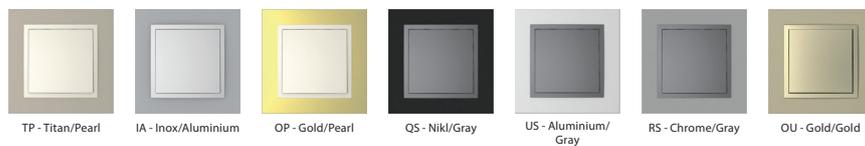
CRYSTAL

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



METALLO

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



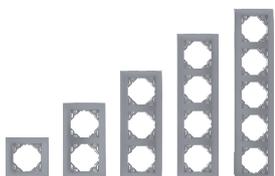
ARBORE

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



PETRA

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



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

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

DEVICES OVERVIEW

Switch
one-pinSwitch
two-pinSwitch
three-pinRotary
dimmerMovement
detector

Card switch

Button with LED
lamp symbol KEY

Blinds



Switch

UNITS OF THE iNELS SYSTEM IN LOGUS⁹⁰ DESIGNWall-mounted
controllerMultifunction
unitDigital room
temperature
controller

DEVICES OVERVIEW

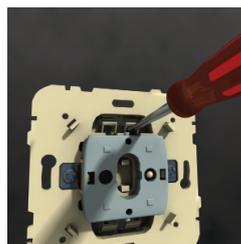
- switches
- switches with lock
- time switches
- over-switches
- rotary switches
- dimming switches
- two-pole switch
- pushbuttons
- switch, pulling switch
- orientation lighting
- shutters controllers
- shutters controllers with IR sensor
- digital time switch motion detectors
- card switch
- standard 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

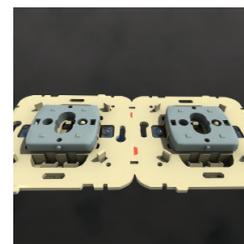
Mechanism are made of special alloy of non-flammable plastics that prevent in destruction or damage of device body thanks to their strenght and elasticity. The plastic design of the mechanism simultaneously ensures safe insulation from conductive parts of installation. The mounting frame is an integral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



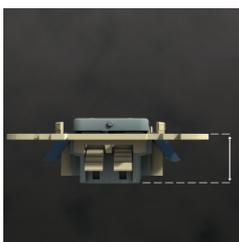
Quick Clips allow installation to adjust the frame on an uneven wall (two positions for the "snap" frame). Inequality walls will allow the deal and floating fingerboard.



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 allows mounting to instrumentation device / box.

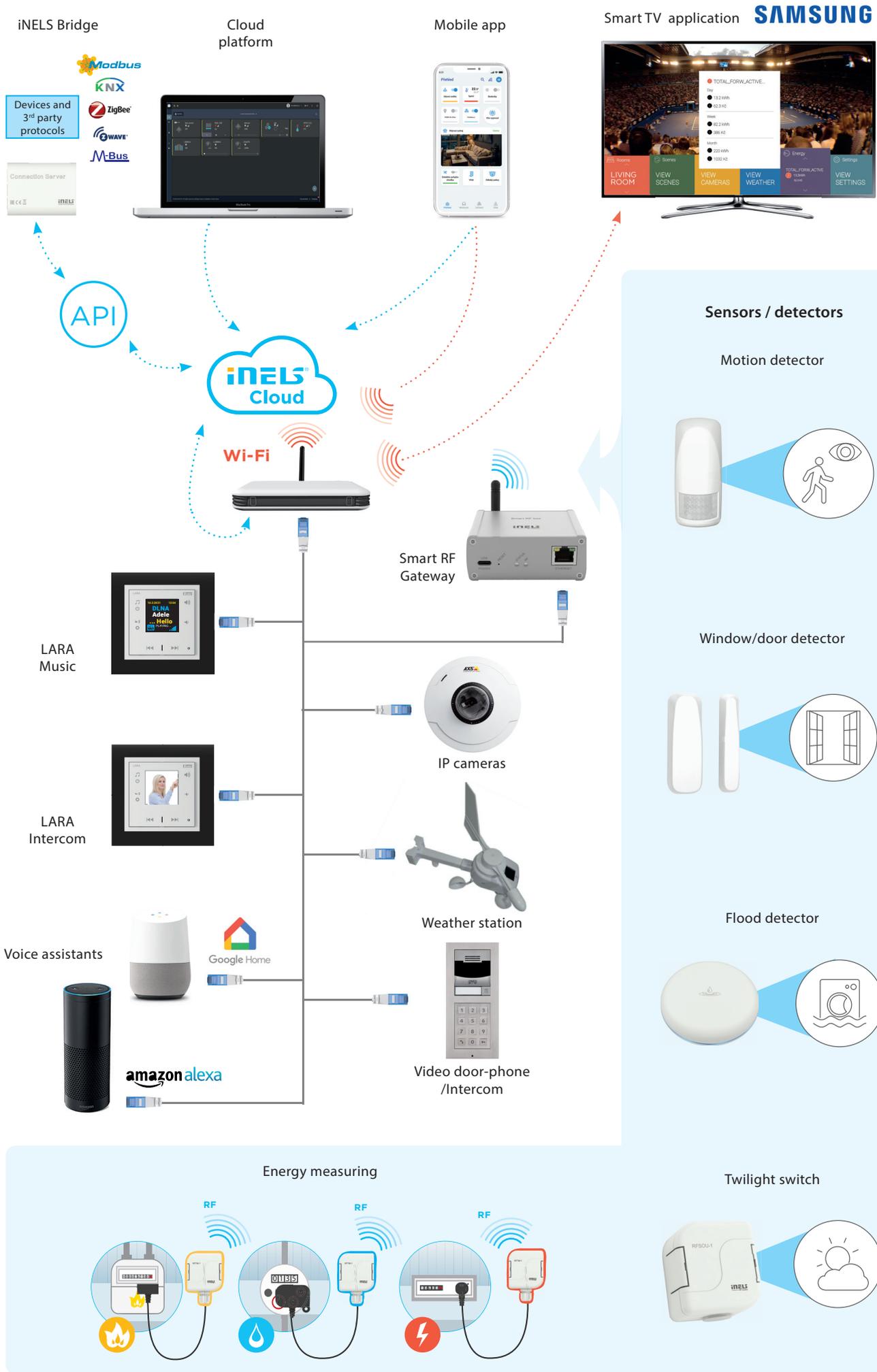


Screwless terminals provide fast and quality connection without need of instrument usage. Double terminals on every pole provide multiple connection without need of extra terminals usage.



Ability to test electrical functionality of your device without disassembly.

		Order code	Box (Un)			Order code	Colour	Box (Un)
	Card-System Timer Switch 16 A - 100-240 V~	21033	1		Cover Plate for Card-System Timer Switch	90733 T	BR MF GE PE AL IS PM DU	1
	Timer Switch 16 A - 100-240 V~	21040	1		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 Detector - Wall Installation	90403 T	BR MF GE PE AL IS PM DU	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					
	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
	RLC Dimmer Press Switch 100-240 V~	21218	1		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 PM DU	20 2
	White Orientation Light with battery - Two operating functions - 230 V ~ - 50-60 Hz	21389	10					
	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		Cover Plate for Double USB Charger Type A with outlets at 20°	90673 T	BR MF GE PE AL IS DU PM	1



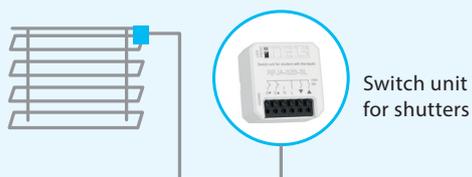
Actuators



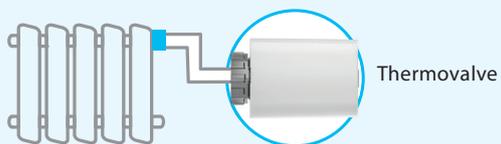
Switching socket



Universal dimmer R-L-C-LED-ESL



Switch unit for shutters



Thermovalve



Switch unit 6-channels



Analog controller 0(1)-10 V



Switch unit for outdoor use

Controllers



On wall button controller



Glass touch controller



Glass touch with dimmer



Key fob



Input contacts converter



Outdoor controller



Control unit



Temperature controller



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ELKO EP, s.r.o. | Palackeho 493 | 769 01 Holesov, Vsetuly | Czech Republic
phone: +420 573 514 221 | fax: +420 573 514 227 | elko@elkoep.com | www.elkoep.com

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