## FIIS

RELAYS
iNELS RF Control iNELS BUS System

LOGUS ${ }^{90}$
Lighting

## PRODUCT OVERVIEW



## Presentation of ELKO EP Company

The company ELKO EP is enjoying its twenty-third year on the tough and rapidly accelerating electronics market. It maintains its position thanks to its own development, precise production and distribution of devices, which make your day easier at home, and in industry, they reliably provide for a fluid process of automation technology.
A dynamic time requires fast-developing solutions. We can fortunately say that our work begins with our in-house development of such devices that you - our customers - are now demanding. We do not hesitate and we react flexibly. We are modernizing the production environment, last year automated production expanded to include the (faster, latest) SMD technology, which can handle producing up to 1,000,000 products per month. Our internal testing laboratory and a two-phase final inspection ensure oversight of quality of our manufactured products.


For several years now, we have been working intensively on developing intelligent electrical installations - in both bus and wireless design. The intelligent electrical installation (iNELS), by the way we designed it, does not just mean control of ordinary electrical elements such as light bulbs or sockets, but includes control of all technologies in the home including multimedia. And that ranks iNELS amongst the top in its field thanks to the complex concept and control of applications.
Our mission is to bring customers modern wiring solutions that make everyday life easier, facilitate work and save money.
While others merely sell, we develop and produce. ELKO EP, always something more.

## ELKO EP in numbers

Headquarters - production farility: Holešov, Czech Republic Year founded: 1993
Number of employees: 194 in Holešov, 254 in ELKO Holding Branches: Slovakia, Poland, Hungary, the Ukraine, Russia, Germany, Spain, Austria, Dubai

Consolidated revenue: > 20 mil. EUR
Export countries: > 66
Important OEM customers: Schneider Electric, Eaton, Siemens, ETI, TYCO, GE Certification of processes: ISO 9001, ISO14001
Certification of products: CE (EU), UL (USA), GOST (RU), Ukrstandart (UA) a.j.

## Attained awards



AWARDS GOLDEN PRODUCT FOR THE SMR-T

Super-multifunction relay SMR-T won the GOLDEN PRODUCT Award at the electrical fair in Ostrava.

$\vdots$
AWARDS JIŘí KONEČNÝ ENTREPRENEUR OF THE YEAR 2004
In 2004 jǐíi Konečný won the Entrepreneur of the year award.


COMPANY OF THE YEAR 2012 VODAFONE
In 2012, ELKO EP became Vodafone Company of the Year of the Zlín Region and placed second nationwide.

the honorable MENTION "VISIONARIES" FOR "WIRELESS SYSTEM"

In 2013 ELKO EP Ltd.
company received the honorary mention of the jury Chechlnfo.


AWARDS RF TOUCH BOHEMIAN-MORAVIAN ASSOCIATIONS
The company ELKO EP s.r.o. won the prestigious GOLDEN AMPERE Award for the product RF Touch.

## Product Lines ELKO EP



## RELAYS - Modular electronic devices

www.elkoep.com
A wide range of electronic modular devices, which bring new possibilities to home and office control, monitoring and security, as well as to industrial process control: time relays, installation contactors, staircase automatic switches, time switches clocks, dimmers, thermostats, power supplies units, control and signalling devices, GSM gates, etc.

## iNELS RF Control - Wireless control

www.inels.com
A unique wireless control system providing you perfect control over your home! The RF Control system enables you to control functions such as heating, lighting, electrical appliances and window shutters, all with a single touch. No wall cutting, fast and easy installation, exclusive design of wireless wall switch buttons and other components.


Smart home kits
www.inels.com/kits
Smart kit is a starter kit for Smart Home or House with intelligent electro-installation. After Smartphones and Smart TV, Smart house is the next step in the development of modern technology and housing.

iNELS BUS SYSTEM - Intelligent electro-installation system
www.inels.com
iNELS will transform your house into a timeless intelligent household. It will take charge of heating and air-conditioning, regulation, lighting control and home appliance switching, while also providing perfect security for your home. Enjoy controlling your entire house via a TV screen thanks to iNELS Multimedia (iMM) or use the App for your smartphone or tablet.

In this group you can find products, which brings you a new dimension of controlling music, video and home appliances. These are not just ordinary controllers but products which can be a pefrect part of your electro-installation.


LOGUS ${ }^{90}$ - Home switches and sockets
www.elkoep.com
We offer you exclusive switches, sockets and accessories in a standard plastic or metallic design. However, there are also charming luxury frames from purely natural materials such as genuine wood, metal, granite or hardened glass. Be especial!


ELKO Lighting s.r.o.
www.elkoep.com
We don't only supply LED light sources to the market, but also we bring a complex lighting solution. Our goal is to supply quality and affordable LED light sources and provide a high-level of service - always to satisfy our customers!

## Attained awards



GOLDEN AMPER AWARDS FOR ,,RF Touch"

RF Touch - wireless touch control unit won the GOLDEN AMPER.
 AWARD OF CZECH AND
MORAVIAN ELECTRICAL AND
ELECTRONIC ASSOCIATION

The ELKO EP product "LARA" has gained the award - Innovative Product of the Year 2014.


AWARD FOR THE
SMART RF BOX
„eLAN-RF-003"
In the competition Top Energie 2014, the product
,,Smart RF box eLAN-
RF-003" won third place.


CZECH TOP 100 AWARD

ELKO EP ranked among the best 100 Czech companies.


FINALIST OF THE COMPETITION "MANAGER OF THE YEAR 2014"

Mr. Jiři Konečný was granted the title "Manager of the year 2014" by the National Commission.

## Choose the right one!

## CLASSIC ELECTRO-INSTALLATION



## WIRELESS ELECTRICAL INSTALLATIONS



## BUS ELECTRICAL INSTALLATIONS



Wireless kits to control your household

## THE GAME OF LIGHTS

Kit to control lights via smartphone.

heating With savings
Kit to control heating via wireless RF Touch unit.


REMOTE HEATING
Kit to control heating via smartphone.


## EASY HEAT REGULATION

Kit for wireless temperature regulation in the home.


## RADIO \& MUSIC IN THE SWITCH

Kit for controlling music, which perfectly fits in your home's interior.


## YOUR HOUSE UNDER THE THUMB

Control your house via a smartphone.


## ONE CONTROLLER FOR ALL

Kit for controlling IR devices via a smartphone.
 AND QUICKLY EXTENDED For more information, see our webpage: www.inelskits.com

## Catalogue content

MODULAR ELECTRONIC DEVICES 7
time relays, multifunction time relays
digital time relays, plug-in relay, super multifunction relay, staircase switches
power relays, dimmers
stabilized power supplies, power supplies
bell transformers, USS modules, twilight switches, memory relays
monitoring relays - 1 phase, 3 phases
monitoring current relays - 1 phases, 3 phases, accessories
monitoring - voltage, $-\cos \varphi$, - frequency, electricity meters
modular thermostats, room and out side thermostats, hygrostats,
level switches, level sets, thermo-valve, accessories
installation contactors

WIRELESS CONTROL

function / RF actuators

controllers, system units

switches, lighting

dimmers, temperature control

monitoring units, accessories, RF sets

sets, virtual kits

INTELIGENT ELECTRO-INSTALLATION SYSTEM

central unit, system units

switching actuators, dimming actuators, convertors

shutter actuator, input units, wall units and controllers

application

AUDIO/NIDEO
application Smart TV, smart box IR
control Audio / Video
Lara Radio, Lara Intercom
Connection Server, iMM Audio Zone-R, iMM Client / iMM Server
Lara accessories

LOGUS ${ }^{90}$
design series, type of devices, control devices, example of order advantages of devices, new, WATERPROOF 48 SERIE

LED LIGHT SOURCES
LED bulbs in classic shape, LED bulbs - special designs
LED spotlights, LED tubes
LED downlight, LED panels, LED and RGB strips, aluminum profiles
We can dim everything!
Price offer configurator, Functional DEMO cases

Printed materials

# MODULAR ELETRONIC DEVICES 



## DIGITAL ENERGY METERS

TO MEASURE ACTIVE ENERGY WITH DIRECT CONNECTION


SINGLE-PHASE
ENERGY METER
PM -1


THREE-PHASE ENERGY METER
PM-3


LT L2 LB

## 3 LED INDICATORS

Green - Load less than 4 W / Red - Energy consumption more than 4 W / Orange - Overload

- Sealable cover
- Energy consumption is displayed on 7-segment numeric LCD display.
- The measurement of instantaneous power consumption.
- Accuracy Class - 1, no calibration.
- Pulse output ,,SO" for visualization of consumption in the iNELS system.


## PM-1

Rated voltage 230V AC.
Rated current up to 50 A .

## PM-3

Rated voltage 220 / 380V AC. Rated current up to 100 A.


|  | TIME RELAYS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | SINGLE-FUNCTION TIME RELAY | DELAY OFF WITHOUT SUPPLY VOLTAGE | DOUBLESTAGE DELAY UNIT | $\begin{aligned} & \text { DELAY ON } \\ & \text { STAR/DELTA } \end{aligned}$ | ASYMMETRIC CYCLER |
|  |  |  |  |  |  |
| Technical parameters | CRM-81] CRM-83J | CRM-82TO | SJR-2 | CRM-2T | CRM-2H |
| Number of functions | 3 | 2 | 1 | 1 | 2 |
| Time range | 0.1 s - 10 h (6 ranges) | 0.1 s - 10 min . (4 ranges) | 0.15 - 10 days (8 ranges) | 0.1 s - 100 days (10 ranges) | 0.1 s - 100 days (10 ranges) |
| Number of contacts | 1x chang. (AgNi) 3x chang. (AgNi) | 2 x changeover (AgNi) | 2 x changeover (AgNi) | 2 x changeover (AgNi) | 1x changeover (AgNi) |
| Rated current | $16 \mathrm{~A} / \mathrm{AC1}$ 8A/AC1 | $8 \mathrm{~A} / \mathrm{AC1}$ | 16A / AC1 | 16A/AC1 | 16A/AC1 |
| Power supply | AC 230V, AC/DC 12-240V (AC50-60Hz) | AC/DC 12-240V (AC50-60Hz) | AC $230 \mathrm{~V}, \mathrm{AC/DC}$ 12-240V (AC50-60Hz) | AC 230V, AC/DC 12-240V (AC50-60Hz) | AC $230 \mathrm{~V}, \mathrm{AC/DC} 12-240 \mathrm{~V}$ ( (AC50-60Hz) |
|  | Single-function and single--time relay. Suitable for applications with beforehand known requirements for function and time. <br> ZR - delayed start <br> ZN - delayed return <br> BL - cycler 1:1. | Relay is timing without power supply voltage and is switched off after set period. Two time functions selectable by using a rotary switch: a-delayed return after power supply is switched off e - delayed start. | Serves for sequent switching of high power (for example electrical heating). <br> 2 time functions: <br> $2 x$ delayed start. Adjustable time from 0.1 s to 10 days. | Designated for delayed star/ delta motor start. Time t1 1 . (star) - adjustable time from 0.1 s to 100 days. Time t2 (delay) between $\boldsymbol{N} / \boldsymbol{\Delta}$ - time range from 0.1 s to 1 s . | Asymmetric cycler with independently adjustable output closing and opening time. 2 time functions: <br> 1) cycler starting with impulse. <br> 2) cycler starting with gap. |


|  | MULTIFUNCTION TIME RELAYS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | MULTIFUNCTION TIME RELAY | MULTIFUNCTION TIME RELAY | MULTIFUNCT. TIME RELAY WITH CONTACTLESS OUTPUT | TIME RELAY WITH EXTERNAL POTENTIOMETER | ASYMMETRIC CYCLER WITH EXTERNAL POTENT. |
|  |  |  |  |  |  |
| Technical parameters | CRM-61 | CRM-91H CRM-93H | CRM-9S | CRM-91HE | CRM-2HE |
| Number of functions | 6 | 10 | 10 | 10 | 2 |
| Time range | 0.1s-10 h | 0.1 s - 10 days | 0.1 s - 10 days | 0.1 s - 10 days | 0.15 - 100 days |
| Number of contacts | 1x changeover (AgNi) | 1x chang.(AgNi) 3x chang.(AgNi) | 1x triak | 1 x changeover (AgNi) | 1 x changeover (AgNi) |
| Rated current | 8A/AC1 | 16A/AC1 8A/AC1 | 0.7 A | 16A/AC1 | 16A/AC1 |
| Power supply | AC $24-240 \mathrm{~V}(50-60 \mathrm{~Hz})$, DC 24 V | AC230V, AC/DC 12-240V (AC50-60Hz) | AC 12-240V ( $50-60 \mathrm{~Hz}$ ) | AC/DC 12-240V (AC 50-60Hz) | AC/DC 12-240V (AC 50-60Hz) |
|  | Use for electric appliances, control of lighting, heating, motors, pumps etc... 6 functions. Comfort and transparent setting of functions and time ranges is carried out with function rotary switches. | Multifunctional time relay for u management and control or in h abundant equipment ( 10 functio power supply, 16A or 3x8A cont Comfort and transparent setting is carried out with function rotar CRM-9S: absolutely noiseless sw | niversal use in automation, house installations. Thanks to its ons, 10 time ranges, universal act), it covers all requirements. of functions and time ranges y switches. witching. | Time relay with possibility of tim control component - potention CRM-91HE: multifunction tim sto 10 days. CRM-2HE: asymmetric cycler. | e control with external ter. <br> elay. Time adjustable from 0.1 |


|  | DIGITAL TIME RELAYS |  |  |  | PLUG-IN RELAY |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | TIME SWITCH WITH WEEKLY PROGRAM | ASTRONOMICAL TIME SWITCH | TIME SWITCH WITH DCF CONTROL | PROGRAMMABLE DIGITAL RELAY | TIMERELAY ASYMMETRIC INTO SOCKET CYCLERINTO SOCKET |
|  |  |  |  |  |  |
| Technical parameters | SHT-1 SHT-3 SHT-1/2 SHT-3/2 | SHT-4 | SHT-6 | PDR-2A PDR-2B | PRM-91H PRM-92H PRM-2H |
| Number of functions | 1-channel 2-channel | 2-channel | 1-channel with external DCF receiver | 16 10 | $10 \quad 10$ |
| Time range | min. step 1s | min. step 1s | min. step 1s | $0.01 \mathrm{~s}-100 \mathrm{~h}$ | $0.1 \mathrm{~s}-10$ days $\quad 0.1 \mathrm{~s}-100$ days |
| Number of contacts | 1x chang. ( $\mathrm{AgSnO}_{2}$ ) 2 xchang. $\left(\mathrm{AgSnO}_{2}\right)$ | 2 x chang. ( $\mathrm{AgSnO}_{2}$ ) | 1x changeover $\left(\mathrm{AgSnO}_{2}\right)$ | 2 x changeover (AgNi) | 1x chang.(AgNi) 2xchang.(AgNi) |
| Rated current | 16A/AC1 | 16A/AC1 | 16A/AC1 | 16A/AC1 | 16A/AC1 8A/AC1 |
| Power supply | AC $230 \mathrm{~V}, \mathrm{AC/DC}$ 12-240V (AC $50-60 \mathrm{~Hz}$ ) | AC $230 \mathrm{~V} / 50-60 \mathrm{~Hz}$ | AC $230 \mathrm{~V} / 50-60 \mathrm{~Hz}$ | AC 230V, AC/DC 12-240V(AC50-60Hz) | AC/DC 12-240V (AC50-60Hz) |
|  | SHT-1, SHT-1/2: Time switch clock with SHT-3, SHT-3/2: Time switch clock with SHT-4: Digital time switch with an astro Serves for control of various appliances real time, in daily, weekly and annual mo Automatic transfer between summer an Sealable transparent front panel cover. 1 places, back-lighted LCD display. Reserve real time backup - up to 3 years. | weekly program annual program nomical program in dependence on de. <br> d winter time. 00 memory | Used for controlling appliances depending on real time, that is synchronized by a DCF 77 signal, thanks to the automatic time settings (with DCF 77 signal) it eliminates inaccuracies and errors by time running. | PDR-2A: 30 memory places for most frequently used times. PDR-2B: 2 time relays in one device. <br> Used for installations where it is necessary to set the exact time (a visual inspection). | Equivalents of modular types of relays, constructed for standardized round 11-pin or 8 -pin sockets. Socket design allows easy replacement, substitution of older types of relays (pin compatible) or simple replacement of auxiliary relay by timer. PLUG-IN version, installation into socket. |

## SUPER MULTIFUNCTION RELAY

STAIRCASE AUTOMAT WITH DIMMING


|  | POWER RELAYS |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | POWER RELAY | POWER RELAY |  | POWER RELAY |  | POWER RELAY <br> INTO SOCKET |  | POWER RELAY <br> INTO SOCKET |  |
|  |  |  |  |  |  |  |  |  |  |
| Technical parameters | VS116B/230 | VS116K | VS116U | VS308K | VS308U | VS316/24 | VS316/230 | 750L | 782L |
| Power terminals | L-N | A1-A2 | A1-A2 | A1-A2 | A1-A2 | A1-A2 | A1-A2 |  |  |
| Power supply | AC $230 \mathrm{~V} / 50-60 \mathrm{~Hz}$ | AC 230 V | AC/DC 12-240 V | AC 230 V | AC/DC 12-240 V | AC/DC 24 V | AC 230 V | AC (6,12,24,48,60, | 20,220,230,240) |
| Power terminals | - | A1-A3 | - | A1-A3 | - | - | - |  |  |
| Power supply | - | AC/DC 24 V | - | AC/DC 24 V | - | - | - | DC (6, 48, 60, 1 | 20, 12, 24, 220) |
| Number of contacts | 1x changeover $\left(\mathrm{AgSnO}_{2}\right)$ | 1x changeo | er $\left(\mathrm{AgSnO}_{2}\right)$ | $3 x$ chan | ver (AgNi) | 3 x changeov | ver ( $\mathrm{AgSnO}_{2}$ ) | $3 x$ chang. (AgNi) | 4x chang. (AgNi) |
| Rated current | $16 \mathrm{~A} / \mathrm{AC1}$ |  |  |  | AC1 | 16A/ | AC1 | 10 A | 6 A |
|  | They are used as enhancement or extension for existing device contact numbers. Possibility of LED color selection for output status indication: red, green, yellow, blue or white LED. <br> VS116B/230: MINI, mounting into an installation box. |  |  |  |  | VS316/24 or VS316/230 allows switching of different phases or 3-phase voltage. |  | It is used to switch a higher output (load) than the capacity of switching element = amplifier. Auxiliary control of lighting, signaling, relay interlocks, boilers, HDO, direct heaters,mechanical indication incorporated in standard, LED indication, cadmium-free gold-plated contact, locking lever. |  |


|  | DIMMERS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CONTROLLED DIMMER | CONTROLLED DIMMER | CONTROLLED DIMMER | CONTROLLED DIMMER | LIGHTING INTENSITY CONTROLLER |
|  |  |  |  |  |  |
| Technical parameters | DIM-5 DIM-14 | SMR-M DIM-15 | DIM-6 DIM6-3M-P | SMR-S SMR-U | LIC-1 |
| Number of contacts | $1 \times$ triak $2 \times \mathrm{MOSFET}$ | $2 \times$ MOSFET | $4 \times$ MOSFET $2 \times$ MOSFET | 1xtriak $2 \times$ MOSFET | $2 \times \mathrm{MOSFET}$ |
| Rated current: | 2 A | 2 A | 10 A 5 A | - | - |
| Power supply | AC $230 \mathrm{~V} / 50 \mathrm{~Hz}$ | AC $230 \mathrm{~V} / 50 \mathrm{~Hz}$ | AC $230 \mathrm{~V} / 50 \mathrm{~Hz}$ AC $230 \mathrm{~V} / 50 \mathrm{~Hz}$ | $230 \mathrm{VAC} / 50 \mathrm{~Hz}$ | AC $230 \mathrm{~V} / 50-60 \mathrm{~Hz}$ |
| Load | $\begin{array}{cc} \text { R-10-500VA } & \text { R- } 500 \mathrm{VA} \\ \text { L-10-250VA } & \text { L-500VA } \\ - & C-500 \mathrm{VA} \end{array}$ | ESL <br> LED | $\begin{array}{ll} \text { R-2000VA } & \text { R-1000VA } \\ \text { L-2000VA } & \text { L-1000VA } \\ \text { C-2000VA } & \text { C-1000VA } \end{array}$ | $\begin{array}{cc} R-10-300 \mathrm{VA} & R-500 \mathrm{VA} \\ L-10-150 \mathrm{VA} & \mathrm{~L}-500 \mathrm{VA} \\ - & C-500 \mathrm{VA} \end{array}$ | $\begin{gathered} \text { R- } 300 \text { VA; } \\ \text { L- } 300 \text { VA; C- } 300 \mathrm{VA} ; \\ \text { ESL; LED } \end{gathered}$ |
|  | DIM-5: button control (connected in parallel), short presses ON/OFF, a long press regulates brightness, storing in the memory. DIM-14 as DIM-5, built-in protection against temperature and current overload, electronic fuse. | SMR-M: for mounting under the button into an installation box KU-68 (or similarly). ESL dimmable energy-saving lamps. LED lamps. DIM-15: ESL dimmable ener-gy-saving lamps. LED lamps. | DIM-6: Dimmer can be controlled by several methods: pushbutton, external potentiometer, analog signal 0-10V, INELS bus system. Possibility of modular extension up to 10 OOO VA. DIM6-3M-P: Expandable power module for DIM-6 cannot be operated separately. | SMR-S: Button-controlled dimmers designated for flush mounting into an installation box. Used to control lamp brightness, dimming, possible to control from more places. SMR-U:as DIM-14, but for mounting under the button into an installation box KU-68. | Intensity controller for maintaining the lighting level. ESL dimmable energy-saving lamps, LED lamps, R,L,C, - resistive, inductive and capacitive load. |


|  | DIMMERS |  | STABILIZED POWER SUPPLIES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | LIGHTING INTENSITY CONTROLLER | LED DIMMER DALI/DMX | POWER SUPPLIES OF PSB SERIES (10 W) | POWER SUPPLIES OF PS SERIES (10 W) | POWER SUPPLIES OF PS SERIES (30 W) |
|  |  |  |  |  |  |
| Technical parameters | LIC-2 | DCDA-33M/RGB | PSB-10-12 PSB-10-24 | PS-10-12 PS-10-24 | PS-30-12 PS-30-24 |
| Output voltage | 0/1-10V | $6-55 \mathrm{~V}$ | 12VDC 24VDC | 12VDC 24 VDC | 12VDC 24 VDC |
| Max. load | 50 mA | $3 \times 50 \mathrm{~W}$ | 0.84 A/10W 0.42 A/10W | 0.84 A/10W 0.42 A/10W | 2.5A/30W $\quad 1.25 \mathrm{~A} / 30 \mathrm{~W}$ |
| Number of modules | 1 | 3 | box | 1 | 3 |
| Output voltage tolerances | - | - | $\pm 2 \%$ | $\pm 2 \%$ | $\pm 2 \%$ |
| Power supply | AC 100-240V | 12-60V DC | AC 110-250V/50-60 Hz | AC 184-253V/50-60 Hz | AC 100-250V/50-60 Hz |
|  | Serves as control unit for dimmers or electronic ballasts with analog control $0-10 \mathrm{~V} / 1-10 \mathrm{~V}$. | Serves to dim monochrome LED and RGB LED light sources with power supply $12-24 \mathrm{~V}$ DC which are current-controlled. | PSB-10: switched stabilizzd power supplies with fixed output voltage, for mounting into an installation box. | PS-10: switched stabilized power supplies with fixed output voltage, 1-module configuration. | PS-30: switched stabilized power supplies, 3-module configuration. |


|  | POWER SUPPLIES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | POWER SUPPLIES PS SERIES (100 W) | REGULATED POWER SUPPLY (30 W) | POWER SUPPLIES OF DR SERIES ( 60 W ) | NON-STABILIZED POWER SUPPLY OF ZNP SERIES | REGULATED POWER SUPPLY (10 VA) |
|  |  | คпини! |  |  |  |
| Technical parameters | PS-100-12 PS-100-24 | PS-30-R | DR-60-12 DR-60-24 | ZNP-10-12V ZNP-10-24V | ZSR-30 |
| Output voltage | 12VDC 24VDC | $12-24 \mathrm{VDC}$ | 12VDC 24VDC | 12VAC/DC 24VAC/DC | DC5-24V stab./DC24V nonstab/AC24V |
| Max. load | 8.4A/100W 4.2 A/100W | 2.5-1.2A /30W | $4.5 \mathrm{~A} / 54 \mathrm{~W} \quad 2.5 \mathrm{~A} / 60 \mathrm{~W}$ | 8W | 8 W |
| Number of modules | 6 | 3 | 4.5 | 3 | 3 |
| Output voltage tolerances | $\pm 2 \%$ | $\pm 3 \%$ | $\pm 1 \%$ | - | $\pm 5 \%$ |
| Power supply | AC 100-253V/50-60 Hz | AC 100-250V/ $50-60 \mathrm{~Hz}$ | 88-264V AC/47-63 Hz/124-370VDC | AC $230 \mathrm{~V} / 50-60 \mathrm{~Hz}$ | AC $230 \mathrm{~V} / 50-60 \mathrm{~Hz}$ |
|  | PS-100: switched stabilized pow voltage, 6-module configuration Output current is limited with an switches off in case of exceedin switches on again after a short - power supply switches off at th switches on again after cooling PS-30-R: switched stabilized po configuration. | supplies with fixed output <br> ectronic fuse; power supply naximum current and e delay. Thermal protection mal overloading and it wn. <br> r supplies, 3-module | Switched stabilized power supply. Input voltage (Uprim) in wide range $100-240 \mathrm{~V}$ AC. Electronic protection against short circuit, overloading and overvoltage. | Power supply with fixed output voltage. Protection against short circuit and overloading with a melting fuse. Both AC and DC output voltage: 12 V or $24 \mathrm{~V} / 8 \mathrm{~W}$. non-stabilized. | Controllable power supply. Supplying of various devices and appliances with safe voltage and full galvanic separation from the mains. |


|  | BELLTRANSFORMERS |  | USS MODULES |
| :---: | :---: | :---: | :---: |
|  | BELL TRANSFORMERS OF ZTR SERIES (8 VA) | BELL TRANSFORMERS OF ZTR SERIES (15 VA) | CONTROLLING AND SIGNALING MODULES USS-ZM, USS-00 .. USS-15 |
|  |  |  |  |
| Technical parameters | ZTR-8-8 ZTR-8-12 | ZTR-15-12 | USS-ZM - BASIC MODULE |
| Output voltage | AC8V AC 12 V | AC $4 \mathrm{~V}, 8 \mathrm{~V}, 12 \mathrm{~V}$ | USS-00 - Blind flange <br> USS-01 - Switch |
| Max. load | 8 VA | $4 \mathrm{~V} 5 \mathrm{VA}-8 \mathrm{~V} 10 \mathrm{VA}-12 \mathrm{~V} 15 \mathrm{VA}$ | USS-02 - Switch over USS-03 - Switch with intermediate position |
| Number of modules | 2 | 3 | USS-04 - Switch + pushbutton with intermediate position |
| Power supply | AC $230 \mathrm{~V} / 50 \mathrm{~Hz}$ | AC $230 \mathrm{~V} / 50 \mathrm{~Hz}$ | USS-06 S/R - Pushbutton closing/opening |
|  | Designated for general use - e. supplying. <br> Universal power supply with a | for door bell, door lock <br> rnating output voltage. | USS-07-09 - Switch with glow lamp (red, green, blue...) <br> USS-10-15 - Signalling LED (red, green, blue...) <br> Designated for switching, control and signaling of auxiliary and power circuits. <br> USS- "Do-it-yourself" = various types of switching and signaling units can be "snapped" in the basic module. <br> Units are supplied separately, individual configurations are assembled by the user. It is possible to place up to two units into one MODULE (for example $2 x$ switch, $2 \times$ signalling lights or combinations) $=$ when compared with competitors it is saving place in a switch board. <br> 1-MODULE, DIN rail mounting. Operating temperature $-20 . .+55^{\circ} \mathrm{C}$. |




MONITORING RELAYS - 1 phase

|  | MONITORING VOLTAGE RELAY, 1 PHASE, AC | MONITORING VOLTAGE RELAY, 1 PHASE, AC | MONITORING VOLTAGE RELAY, 1 PHASE, AC | MONITORING VOLTAGE RELAY, 1 PHASE, DC | MONITORING VOLTAGE RELAY, 1 PHASE, AC/DC |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Technical parameters | HRN-33 HRN-63 | HRN-35 | HRN-37 HRN-67 | HRN-34 HRN-64 | HRN-41 HRN-42 |
| Number of contacts | 1x chang./SPDT (AgNi/Silver Alloy) | 1x changeover for each level of voltage (AgNi) | 1x chang./SPDT (AgNi/Silver Alloy) | 1x chang./SPDT (AgNi/Silver Alloy) | 2x chang./SPDT (AgNi/Silver Alloy) |
| Rated current | $16 \mathrm{~A} / \mathrm{AC} 1$ | $16 \mathrm{~A} / \mathrm{AC} 1$ | $16 \mathrm{~A} / \mathrm{AC} 1$ | $16 \mathrm{~A} / \mathrm{AC1}$ | $16 \mathrm{~A} / \mathrm{AC1}$ |
| Circuits secure | 1 phase | 1 phase | 1 phase | DC | 1 phase AC/ DC |
| Monitored ranges | AC 48-276V/50 Hz | AC 48-276V/50 Hz | AC $24-150 \mathrm{~V} / 50 \mathrm{~Hz}$ | DC6-30V | 10-50V; 32-160V; 100-500 V |
| Umin/max | AC 48-276V/50 Hz | AC $48-276 \mathrm{~V} / 50 \mathrm{~Hz}$ | AC $24-150 \mathrm{~V} / 50 \mathrm{~Hz}$ | DC6-30V | AC $110 \mathrm{~V} ; \mathrm{AC} 230 \mathrm{~V} ; \mathrm{AC} 400 \mathrm{~V} ;$ AC/DC 24 V (AC 50-60Hz) |
|  | Serves for monitoring of power supply voltage for appliance sensitive with respect to power supply tolerances, device protection against undervoltage / overvoltage. It monitors undervoltage and overvoltage level separately. Adjustable delay 0-10 s. | Serves for monitoring of power supply voltage for appliance sensitive with respect to power supply tolerances, device protection against undervoltage / overvoltage. <br> It has independent output relay for each voltage level. | Serves for monitoring of power supply voltage for appliance sensitive with respect to power supply tolerances, device protection against undervoltage / overvoltage. It monitors undervoltage and overvoltage level separately. Adjustable delay 0-10 s. | Serves for monitoring of power supply voltage for appliance sensitive with respect to power supply tolerances, device protection against undervoltage / overvoltage. With its range, it is predestined for monitoring of battery circuits. | Functions: <br> HRN-41: "HYSTERESIS". <br> HRN-42: "WINDOW". <br> "MEMORY" function- for return from error into normal status, it is necessary to press RESET pushbutton. Galvanically separated power supply. |


|  | MONITORING RELAYS - 3 phases |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | RELAY FOR SEQUENCE AND PHASE OUTAGE MONITORING | VOLTAGE RELAY FOR OVERVOLTAGE / UNDERVOLTAGE MONITORING | VOLTAGE RELAY FOR OVERVOLTAGE / UNDERVOLTAGE MONITORING | RELAY FOR SEQUENCE AND PHASE OUTAGE MONITORING | RELAY FOR COMPLETE MONITORING OF 3-PHASE NETWORKS |
|  |  |  |  |  |  |
| Technical parameters | HRN-55 HRN-55N | HRN-57 HRN-57N | HRN-54 HRN-54N | HRN-56, 1M HRN-56, 3M | HRN-43 HRN-43N |
| Number of contacts | 1x chang./SPDT (AgNi/Silver Alloy) | 1x chang./SPDT(AgNi/Silver Alloy) | 1x chang./SPDT (AgNi/Silver Alloy) | 1x chang./SPDT (AgNi/Silver Alloy) | $2 x$ chang./SPDT(AgNi/Silver Alloy) |
| Rated current | $8 \mathrm{~A} / \mathrm{AC1}$ | 8 A/AC1 | 8 / / AC1 | 8 A / AC1 | $16 \mathrm{~A} / \mathrm{AC1}$ |
| Circuits secure | 3 phases | 3 phases | 3 phases | 3 phases | 3 phases |
| Monitored ranges Umin/max | 125\% Un / 75\% Un | 105-125 \% Un / 75-95\% Un | 105-125\% Un / 75-95\% Un | $70-95 \%$ Un / 60\% Un | 35-99\% Umax |
| Power supply | from monitored voltage | from monitored voltage | from monitored voltage | from monitored voltage | AC $230 \mathrm{~V} ; \mathrm{AC} 400 \mathrm{~V}$; AC/DC 24 V (AC 50-60Hz) |
|  | HRN-55: Supplied from all phases, i.e. relay function is retained even one phase outage. <br> HRN-55N: L1-N supplying, i.e. the relay monitors also neutral wire breaking. | Serves for monitoring of voltage in switchboard, protection of devices and equipment. Possibility of setting of top and bottom voltage limits at which the output relay contact opens. Umax 105-125\% Un. Umin 75-95\% Un. | Serves for monitoring of voltage, sequence and phase outage in switchboard, protection of devices and equipment. It is possible to set the top and bottom voltage limits at which the output relay contact opens. Delay of 0.1-10 s. | Relay monitors sequence and outage of phases in circuits: $\begin{aligned} & 3 \times 120 \mathrm{~V}-1 \mathrm{M} \\ & 3 \times 208 \mathrm{~V}-1 \mathrm{M} \\ & 3 \times 240 \mathrm{~V}-1 \mathrm{M} \\ & 3 \times 400 \mathrm{~V}-1 \mathrm{M} \\ & 3 \times 480 \mathrm{~V}-3 \mathrm{M} \\ & 3 \times 575 \mathrm{~V}-3 \mathrm{M} \end{aligned}$ | Relay monitors and controls in 3-phase networks: - voltage in two levels (overvoltage and under voltage) <br> - phase asymmetry <br> - phase sequence <br> - phase outage |


|  | MONITORING CURRENT RELAYS - 1 phases |  |  | - 3 phases | ACCESSORIES |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | MONITORING CURRENT RELAY, (1-20 A) | MONITORING CURRENT RELAY | MONITORING CURRENT RELAY AC/DC | MONITORING CURRENT RELAY | CURRENT TRANSFORMERS |
|  |  |  |  |  |  |
| Technical parameters | PRI-32 | PRI-51 PRI-52 | PRI-41 PRI-42 | PRI-53/1 PRI-53/5 | SR |
| Number of contacts | 1x chang./SPDT (AgNi/Silver Alloy) | 1x chang./SPDT (AgNi/Silver Alloy) | 1x chang./SPDT (AgNi/Silver Alloy) | $2 x$ chang. / DPDT (AgNi) gilded | - |
| Rated current | 8 A/ AC1 | 8 / / AC1 | 16 A / AC1 | 0-5A | 0-5A |
| Circuit monitoring | 1 phases | 1 phases | 1 phases | 3 phases | 1 phases |
| Monitored ranges | 1-20 A (AC 50Hz) | 0.05-16A 0.5-25A | 4-16 A; 1.25-5A; 0.4-1.6 A | adjustable 40-120\% In | 50-600 A |
| Power supply | AC 24-240V, DC 24 V (AC 50-60Hz) | $\begin{gathered} \mathrm{AC} 24-240 \mathrm{~V}, \mathrm{DC} 24 \mathrm{~V} \\ (\mathrm{AC} 50-60 \mathrm{~Hz}) \end{gathered} \quad \mathrm{AC} 230 \mathrm{~V}$ | AC 230V, AC/DC 24 V (AC 50-60Hz) | $24-240 \mathrm{~V}$ AC/DC | - |
|  | PRI-32: monitoring relay is used to monitor current level in single-phase AC circuits. The product includes also current transformer; if a conductor is put in it, the transformer detects the size of passing current. | PRI-51: monitoring relay is used to monitor current level in single-phase AC circuits. PRI-52: used to indicate the current flow, e.g. to monitor wire heating cables, rod heating elements, to monitor the consumption of engines... | Functions: <br> PRI-41: "HYSTERESIS". <br> PRI-42: "WINDOW ". <br> The relay is designated for monitoring of DC and $A C$ single-phase currents in 3 ranges. | 24-240 V AC/DC power supply galvanically separated from the circuit of the monitored current. Adjustable function: UNDER, OVER. 2 types according to the rated current $\ln (1 A, 5 A)$. | Designated as a complement to monitoring current relays of PRI line, i.e. in order to increase max. monitored current. <br> Primary current: 50, 100, 150, $200,250,300,400,600 \mathrm{~A}$. |


| MONITORING | - voltage | $-\operatorname{COS} \varphi$ | - frequency | ELECTRICITY METER |
| :---: | :---: | :---: | :---: | :---: |
|  | OPTICAL SIGNALIZATION FOR 3-PHASE NETWORK | RELAYS FOR MONITORING OF COS POWER FACTOR | FREQUENCY MONITORING RELAY | ELECTRIIITY METER |
|  |  |  |  |  |
|  |  |  |  | (1) new |
| Technical parameters | MPS-1 | COS-1 | HRF-10 | PM-1 PM-3 |
| Number of contacts | - | 2x chang./DPDT (AgNi/Silver Alloy) | 1x changeover/ /SPDT (AgNi) gilded | Simple direct measurement of power in single-phase circuits <br> Display the total energy consumption through 5-digit + 2 decimal places LCD. <br> LED indicator displays the status of the power supply and the power pulse signal. <br> PM-1: Overloading - orange LED. 1-module design to DIN rail, sealable cover. <br> PM-3: LED indicator displays the status (no load, normal, and overload). 7-module design to DIN rail, sealable cover. |
| Rated current (supply) | - | $16 \mathrm{~A} / \mathrm{AC1}$ | 16A |  |
| Circuit monitoring | fused for optical signaling of the voltage | 1 phases, 3 phases | - |  |
| Monitored ranges | 50-276 V | cos- 0.1 - 0.99 | adjustable $80-120 \%$ Fn |  |
| Power supply | AC $3 \times 400 / 230 \mathrm{~V}, 50 / 60 \mathrm{~Hz}$ | AC $230 \mathrm{~V} ; \mathrm{AC} 400 \mathrm{~V}$; AC/DC 24V (AC 50-60Hz) | 161-346V |  |
|  | Used for optical signaling of the voltage level in three phases. Four-wire connection - L1, L2, L3, N. <br> Monitors phase voltages against neutral wire. LED indicator - for every phase 1 LED. | Relay monitors phase off -set between current and voltage in 3 -phase or also 1 -phase networks - it evaluates $\cos -$ - . The relay is predestined for motor overloading/relief monitoring. | The relay is designed for monitoring frequency of AC voltage, e.g. in photovoltaic power stations, generators. Two adjustable levels of frequency (Fmin, Fmax) in the range of $80-120 \%$ Fn |  |

## MODULAR THERMOSTATS



## LEVEL SWITCHES

|  | LEVEL SWITCHES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | DOUBLE LEVEL SWITCH | LEVEL SWITCH | LEVEL SWITCH | MULTI-GRADE LEVEL SWITCH | LEVEL SET |
|  |  | new |  |  |  |
| Technical parameters | HRH-1 | HRH-7 | HRH-5 | HRH-6/DC HRH-6/AC | HRH-4 |
| Function | 3 | 2 | 2 | 2 | 2 |
| Number of contacts | $2 x$ chang./DPDT (AgNi/Silver Alloy) | 1x chang.(AgSnO2) | 1x chang.(AgNi) | 1x NO-SPST (AgNi/Silver Alloy) | 4x N0 |
| Current rating | 16A / AC1 | 15-18: 16 A / AC3; 15-16:3A / AC3 | 8A/ AC1 | 10A / AC1 | 25 A |
| Sensitivity | 5-100 k | 5-100 k | 5-100 k | 10-150 kS | 5-100 k |
| Power supply | AC 110V; AC $230 \mathrm{~V} ; \mathrm{AC} 400 \mathrm{~V}$; AC/DC 24 V (AC 50-60Hz) | 24-240V AC/ DC (AC 50-60Hz) | 24-240V AC/ DC (AC 50-60Hz) | DC 12-24V or AC 230 V | AC/DC 230V, AC/DC 24V (AC50-60 Hz) |
|  | Level switch with single-status, two-status monitoring. 2 independent level switches with single-status monitoring. It is possible to select the following functions with DIP switch: replenishing, pumping out, tank level monitoring. | Suitable to operate/work in harsh conditions due to the high degree of protection IP65. The same functions as for HRH-5. | The relay is designed for monitoring the level of conductive fluids with the option of selecting functions: pumping in and pumping out. Optionally set configurations: single-level or double-level switch. | 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. <br> HRH-6/S: additional signaling to HRH-6 with 6 indicators on the front panel. | It is a complete unit consisting of HRH-5 level relay and VS425 contactor. Set has IP55 protection. The set is designed to switch 3-phase pumps. |


| LEVEL SETS | ACCESSORIES |  |  | HERMO-VALVE |
| :---: | :---: | :---: | :---: | :---: |
| LEVEL SETS | THERMO SENSORS FOR THERMOSTATS | LEVEL SENSORS | THERMO-VALVE | ENERGY-SAVING DIGITAL RADIATOR THERMO-VALVE |
|  |  |  |  |  |
| LEVEL SWITCH SETS FOR LEVEL MONITORING | TC, TZ, Pt | SHR-x CABLE | TELVA 230V, TELVA 24V | ATV-1 |
| There are Level sets placed in switchboard with IP65 protection (protected against dust and against water jets). <br> HRH-VS: level switch HRH-5 with installation contactor VS42540 (25A contact). <br> HRH-MS-1A: level switch HRH-5 with motor starter MS18 0,63-1A. HRH-MS-1.6A: level switch HRH-5 with motor starter MS18 1-1.6A. <br> HRH-MS-VS-2.5A: level switch HRH-5 with installation contactor VS425-40 (25A contact) and with motor starter MS18 1.6-2.5 A. HRH-MS-VS-4A: level switch HRH-5 with installation contactor VS425-40 (25A contact) and with motor starter MS182.5-4 A. HRH-MS-VS-6.3A: level switch HRH-5 with installation contactor VS425-40 (25A contact) and with motor starter MS18 4-6.3 A. | TC: Types of thermo sensors for range $0 . .+70^{\circ} \mathrm{C}$. <br> IZ: Types of thermo sensors for range $-40 . .+125^{\circ} \mathrm{C}$. <br> Pt100: Types of thermo sensors for range $-30 .+200^{\circ} \mathrm{C}$. <br> Temperature sensors are produced from thermistor NTC. TC - cable CYSY is used, 2Dx0.5mm, PVC insulation IZ - cable with silicone insulation. <br> Pt100 - shielded cable with silicon insulation $2 \times 0.22 \mathrm{~mm}^{2}$. TC, TZ, Pt - offered length is $10 \mathrm{~cm}, 3,6$ or 12 m . | SHR-1: for guarding flooding. SHR-1-M brass sensor. SHR--1-N stainless steel sensor. SHR-2: is used to detect levels as in wells, boreholes, tanks. Stainless steel sensor in PVC housing. <br> SHR-3: for use in harsh and industrial environments. Stainless steel sensor. <br> Accessories for level switches: D03VV-F 3x0.75/3.2: cable to probes SHR-1 and SHR-2, 3x $0.75 \mathrm{~mm}^{2}$ with a certifi cation for drinking water, 1 m . D05V-K 0.75/3.2: cable to probes SHR-1 and SHR-2, 3x $0.75 \mathrm{~mm}^{2}$ with a certification for drinking water, 1 m . | Thermodriver Telva is a suitable control unit for a wide range of thermostatic valves. Visual indicator of valve position. <br> Design: <br> NO - without voltage open NC - without voltage closed Types of thermo actuators: <br> - TELVA 230V, NO <br> - TELVA 230V, NC <br> - TELVA 24V, NO <br> - TELVA 24V, NC. | This energy-saving digital radiator thermo-valve is a programmable regulation device for various heaters, but mainly radiators. Intervals of heating and ener-gy-saving operation can be set using a freely adjustable time program. <br> 8 individually programmable switching times per day: -4 heating intervals - 4 energy-saving intervals. The device features very quiet operation and long battery life (up 5 years). Quick and easy installation. |



## INSTALLATION CONTACTORS

|  | INSTALLATION CONTACTORS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | INSTALLATION CONTACTORS <br> 1-MODUL | INSTALLATION CONTACTORS 1-MODUL | INSTALLATION CONTACTORS <br> 3-MODUL | $\begin{aligned} & \text { INSTALLATION CONTACTORS } \\ & 4.5-M O D U L \end{aligned}$ | MINIATURE INSTALLATION CONTACTOR |
|  |  |  |  |  |  |
| Technical parameters | VS120 | VS220 | VS425 | VS440 VS463 | VS420 |
| Number of poles | 1 | 2 | 4 | 4 | 4 |
| Load | 20 A | 20 A | 25 A | $40 \mathrm{~A} \quad 63 \mathrm{~A}$ | 20 A |
| Configuration of contacts NO/NC | 10,01 | 20,11,02 | 40,31, 22, 04 | $40,31,22,04 \quad 40,31,22$ | 40,31 |
| Coil power supply | AC/DC $24 \mathrm{~V}, 48 \mathrm{~V}, 110 \mathrm{~V}, 230 \mathrm{~V}$ | AC/DC $24 \mathrm{~V}, 48 \mathrm{~V}, 110 \mathrm{~V}, 230 \mathrm{~V}$ | AC/DC $24 \mathrm{~V}, 48 \mathrm{~V}, 110 \mathrm{~V}, 230 \mathrm{~V}$ | AC/DC $24 \mathrm{~V}, 48 \mathrm{~V}, 110 \mathrm{~V}, 230 \mathrm{~V}$ | AC $24 \mathrm{~V}, 48 \mathrm{~V}, 110 \mathrm{~V}, 230 \mathrm{~V}$ |
|  | 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. <br> IP 20 protection - guards providing IP 40 protection of all contactor 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. |  |  |  |  |


|  | INSTALLATION CONTACTORS |
| :--- | :--- | :--- | :--- | :--- | :--- |
| INSTALLATION CONTACTOR |  |
| WITH MANULL CONTROL |  |

## INSTALLATION CONTACTORS

## -



1: by sliding the switch from AUTO to position 1 , the switching contacts are closed and the NC contacts are open. This lasts until the following impulse to the contactor coil.

AUTO: normal function of the contactor as an installation contactor without manual control

O: contacts are constantly disconnected (switching contact) or are constantly switched on (NC contact) regardless of voltage. Optical status indicator switched on/off.

## WIRELESS INTELLIGENT

 ELECTRO-INSTALLATIONELETRO-INSTALLATION

## Wireless electro-installation

## What are the benefi ts of using wireless control?

- Remotely switching of home appliances or electrical devices
- Light dimming, light scenes
- Controlling shutters, blinds and internal window blinds
- Controlling the entrance gate and garage door
- Manual or automatic control - according to a pre-set program
- Switching on/off home appliances depending on the response of sensors
- Response to (undesired) opening a window or a door
- Response to the movement of people (authorized and unauthorized)
- Saving energy thanks to lighting and heating regulation


RF Control - Wireless RF system is a unique solution of intelligent electrical installation especially for reconstructions of houses, apartments or wiring extensions. Installation can be performed easily without breaking or cutting into the walls. Units (actuators) can be installed directly into suitable wall boxes, lighting covers, switchboards and wherever installation allows you to do so.

Flexible location: ideal for installing in existing buildings, as well as for refurbished and new buildings: thanks to RF Control, you are not limited by the location of a switch, for instance when moving furniture. The wireless wall switch button may be glued to glass, mounted on a beam or just placed on a night table and easily moved elsewhere at anytime.
Controlling lights from your terrace or opening your garage?
You will have the keychain - your portable controller - always ready!
The universal transmitter module converts up to 4 potential-free external inputs (buttons) to RF signal, facilitating the connection of the following devices to the system: door switches or buttons, electronic alarm sensors (fire, smoke, door detector...), bells, etc. Property protection and safety. A flood, temperature, fire or gas leakage sensor sends a signal to the actuator, which closes the water or gas supply, switches on ventilation, etc.
Receivers (actuators) may be mounted in an installation box, under the existing switch, light covers or ceiling, or on a DIN rail inside the switchboard.
A smart design of wireless wall switch buttons with plastic, glass, wood, metal or granite finish.


## Switching

el. appliances

Light
dimming

Heating
regulation

Air conditioning control

Roller blind control

Detector
control

SMART BOX FOR CONTROLLING YOUR ELECTRICAL INSTALLATION WITH YOUR SMART PHONE
It's used for controlling the electro-installation with your smart phone or tablet. Control options are through the Web browser or iHC application (Android).

## THE TOUCHING CONTROL UNIT „RF TOUCH"

RF Touch offers you complete control over the electro-installation. All these with the possibility of setting a weekly program, all automatically and wirelessly.

## REMOTE CONTROL „RF PILOT" WITH OLED DISPLAY

With an excellent complement to the RF Control system, the remote control comes with an elegant design and an OLED display. Thanks to RF Pilot you have a comfortable control over the home devices and appliances.

## Functions

## RF actuators

| $\frac{\lambda}{\stackrel{\lambda}{\omega}}$ |  | $\begin{aligned} & \text { 들 } \\ & \text { "た } \\ & \text { 을 } \end{aligned}$ |  |  |  | $\begin{aligned} & \stackrel{\sim}{む} \\ & \stackrel{4}{7} \\ & \stackrel{N}{\omega} \end{aligned}$ |  | $\begin{aligned} & \text { ㅇ } \\ & \text { ㄷ } \\ & \text { 윽 } \end{aligned}$ | $\begin{aligned} & \text { 을 } \\ & \text { O} \\ & \frac{1}{工} \\ & 0 \\ & 0 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ！ | （0） |  | $\square$ |  | III＇ |  | \य3？ | \％ | 4 |


| RFWB－20／G <br> RFWB－40／G | Wireless switch，which can be located anywhere． |  | $\bullet$ |  | － | － | － | － |  | － |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RF Key | A handy little helper in your pocket． |  | － |  | － | $\bullet$ | － | － |  | － |  |
| RFIM－20B RFIM－40B | The transmitter which can change your switch to wireless． |  | $\bullet$ |  |  |  | － |  |  | － |  |
| RFSG－1M | Save money by switching cheap／expensive current． |  |  |  | － |  | － |  | － |  |  |
| RF Touch／W RF Touch／B | Everything is under control with the touch control unit． | $\bullet$ | $\bullet$ | $\bullet$ | － | － | $\bullet$ | － | $\bullet$ | － |  |
| eLAN－RF－003 | Controlling using our smart application or web interface for your smart phone，tablet or TV． |  | $\bullet$ | － | － | － | － | － | － | － |  |
| eLAN－RF－Wi－003 | Controlling using our smart application or web interface for your smart phone，tablet or TV． |  | － | － | － | － | － | － |  | － |  |
| RF Pilot | An inspiring design control． |  | $\bullet$ | $\bullet$ | － | － | － |  | － | $\bullet$ |  |
| RFGSM－220M | Controlling and information are in your mobile phone． | $\bullet$ | － | － | － | － | － | － | － | － |  |
| RFRP－20 | Repeater for radio signal prolongation． |  | － | － | － |  | － |  | － | － |  |
| RFSA－11B RFSA－61B | Switching appliances and lights with time functions． |  | $\bullet$ | $\bullet$ | $\bullet$ |  | $\bullet$ |  | － | － |  |
| RFSA－62B | One actuator controls the two lighting circuits． |  | $\bullet$ | － | － |  | － |  | － | － |  |
| RFSA－61M | Switching actuators for solutions to the switchboad，switching the socket circuits． |  | $\bullet$ | － | － |  | － |  | － | － |  |
| RFSA－66M | Switching actuators for solutions to the switchboad，switching the socket circuits． |  | $\bullet$ | － | － |  | － |  |  | $\bullet$ |  |
| RFSAI－61B | Features an external terminal to connect a wire button（a combination of wired and wireless electrical installation）． |  |  | $\bullet$ |  |  | $\bullet$ |  | $\bullet$ | $\bullet$ |  |
| RFSC－11 RFSC－6 | Socket implementation－simple solution for switching the fan and other appliances． |  |  | $\bullet$ | $\bullet$ |  | － |  | － | $\bullet$ |  |
| RFUS－11 RFUS－61 | Switching in demanding environments（cellars，greenhouses，bathrooms ．．．）． |  | － | － | $\bullet$ | $\bullet$ | $\bullet$ | － | － | $\bullet$ |  |
| RFJA－12B | Controlling blinds，garage doors，shutters and awnings． |  |  |  |  | － |  | － |  |  |  |
| RF－RGB－LED－550 | Embedded RF module． |  |  |  |  |  |  |  |  | － |  |
| RF－White－LED－675 | Solutions for dimming LED strips． |  |  |  |  |  |  |  |  | $\bullet$ |  |
| RFDA－73M／RGB | Dimmer for placing in the ceiling or in an installation box． |  |  |  |  |  |  |  |  | － |  |
| RFDA－11B RFDA－71B | Dimmer intended to be mounted in the ceiling or into the installation box． |  |  |  |  |  |  |  |  | － |  |
| RFDEL－71B RFDEL－71M | Universal dimmer for all types of loads． |  |  |  |  |  |  |  |  | $\bullet$ |  |
| RFDSC－11 RFDSC－71 | Simple solution for dimming your lamps． |  |  |  |  |  |  |  |  | － |  |
| RFSOU－1 | Automatically controls the brightness in the room． |  |  |  |  |  |  | － |  | － |  |
| EMDC－64M | Control unit for DALI and DMX． |  |  |  |  |  |  |  |  | $\bullet$ |  |
| RFATV－1 | Wireless thermo－valve powered by batteries，it is ideal solution for radiators． |  |  |  |  |  |  |  | － |  |  |
| RFSTI－11／G | It measures the temperature and at the same time monitors the critical floor value． |  |  |  |  |  |  |  | $\bullet$ |  |  |
| RFSTI－11B | It measures the temperature and at the same time monitors the critical floor value． |  |  |  |  |  |  |  | $\bullet$ |  |  |
| RFTI－10B | For sending information about the temperature．Placed any where thanks to battery power． |  |  |  | － |  |  |  | － |  |  |
| RFTC－10／G RFTC－50／G RGTC－100／G | Digital controllers．The quick solution for heating control． |  |  |  |  |  |  |  | － |  |  |
| RFDAC－71B | It controls thermodrives and serves for dimming fluorescent tubes． |  |  |  |  |  |  |  | － | $\bullet$ |  |
| RFSF－1B | Protection against flooding． | $\bullet$ |  |  |  |  |  |  |  |  |  |
| RFPM－2 | Energy consumption indicator． |  |  |  |  |  |  |  |  |  | $\bullet$ |

CONTROLLERS

|  | CONTROLLERS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | WIRELESS WALL CONTROLLER | 4 BUTTON CONTROLLER <br> - KEYCHAIN | WIRELESS CONTACT CONVERTER | WIRELESS CONTACT CONVERTER | WIRELESS REMOTE CONTROLLER WITH DISPLAY |
|  |  |  |  |  | $\mathrm{St}_{0}$ |
| Technical parameters | RFWB-20/G RFWB-40/G | RF-KEY/B RF-KEY/W | RFIM-20B RFIM-40B | RFSG -1M | RF PILOT |
| Number of channels* | 24 | 4 | 24 | 1 | 40 |
| Power supply | 3 V battery CR 2032 | 3 V battery CR 2032 | 1x3Vbat.CR2477 $2 \times 3$ bat.CR2032 | $110-230 \mathrm{~V} \mathrm{AC} / 50-60 \mathrm{~Hz}$ $12-24 \mathrm{~V}$ AC/DC / $50-60 \mathrm{~Hz}$ | $2 \times$ battery 1.5V AAA / R03 |
| Mounting | on surfaces | any | in an installation box | for independently mounting | any |
| Design | LOGUS ${ }^{50}$ | keychain | MINI | 1-MODUL | remote control |
| * Enable to control units independently of each other | The wireless controller is used to control switches and dimmers (lights, gate, garage door, blinds, etc.). The flat design with level base makes it ideal for fast installation on any surface (fi xation with adhesive or screws in the installation box). | The key alarm is used to control switches and dimmers (lights, gate, garage door, blinds, etc.). Designed in black and white with laser printing. | RFIM-20B: the wireless contact converter changes your existing button / switch to a wireless one. Two inputs enable control of two units independent. RFIM-40B: the wireless contact converter changes your existing button to a wireless one. Four inputs enable control of four units independently. | 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. | The RF Pilot remote control is a central controller for switching electrical appliances and equipment, dimming lights, controlling blinds, etc. Display of room temperature, battery status, date and time directly on display. Bidirectional communication, transmits and receives commands and displays the status of units. |

## SYSTEM UNITS

WIRELESS TOUCH UNIT

CONTROL APPS FOR
SMARTPHONES SMARTPHONES

MULTIFUNCTIONAL GSM
COMMUNICATOR COMMUNICATOR

REPEATER TO EXTEND THE RANGE


| RF TOUCH-W |  |
| :---: | :---: |
| RF TOUCH-B |  |
| 40 |  |
| $110-230 \mathrm{VAC}$, | $100-230 \mathrm{VAC}$ |
| from the side 12VDC | in box |
| on surfaces |  |

LOGUS90
The wireless touch unit RF Touch is a central controller for heating, switching electrical appliances and equipment, dimming lights, controlling blinds, etc. It transmits and receives commands from units and processes set programs for automatic control. Thanks to bi-directional communication, it visualizes the current status of individual units.


design box
eLAN-RF-003: is connected by network cable LAN to the home network (router) and communicates with your smart phone. eLAN-RF--Wi-003: is connected to the home network (router) via the Wi-Fi network and communicates with your smart phone. Connection to the home network is also possible via network LAN cable.

## SWITCHES

WIRELESS SWITCH UNIT
WIRELESS SWITCH UNIT
WIRELESS SWITCH UNIT
WITH THE INPUT -


WIRELESS SWITCH UNIT
WIRELESS SWITCH UNIT

| Technical parameters | RFSA-11B RFSA-61B | RFSA-62B |
| :---: | :---: | :---: |
| Number of contacts | 1x NO ( $\mathrm{AgSnO}_{2}$ ) | $2 \mathrm{NNO}\left(\mathrm{AgSnO}_{2}\right)$ |
| Rated current | $16 \mathrm{~A} / \mathrm{AC1}$ | 8 / / AC1 |
| Load | $4000 \mathrm{VA} / \mathrm{AC1}, 384 \mathrm{~W} / \mathrm{DC}$ | 2000 VA / AC1 |
| Power supply | $\begin{gathered} 230 \mathrm{VAC} / 50-60 \mathrm{~Hz}\|120 \mathrm{~V} \mathrm{AC/60Hz}\| \\ 12-24 \mathrm{~V} \mathrm{AC} / D C / 50-60 \mathrm{~Hz} \end{gathered}$ | $230 \mathrm{~V} \mathrm{AC} / 50-60 \mathrm{~Hz}\|120 \mathrm{~V} \mathrm{AC} / 60 \mathrm{~Hz}\|$ $12-24 \mathrm{~V}$ AC/DC/50-60Hz |

The switching unit with 1 output channel is used to control appliances, lights (easy to integrate it to control garage doors or gates). The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.

| Switching <br> actuators | Output |  | Rated current |  |  | Number of functions |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 channel 2 2 channel | 16A | 8 A | 1 | 6 |  |  |  |
|  | $\bullet$ |  | $\bullet$ |  | $\bullet$ |  |  |  |
| RFSA-61B | $\bullet$ |  | $\bullet$ |  |  | $\bullet$ |  |  |
| RFSA-62B |  | $\bullet$ |  | $\bullet$ |  | $\bullet$ |  |  |


| RFSAI-61B |
| :---: |
| $1 \times \mathrm{NO}\left(\mathrm{AgSnO}_{2}\right)$ |
| $16 \mathrm{~A} / \mathrm{AC1}^{2}$ |
| $4000 \mathrm{VA} / \mathrm{AC} 1,384 \mathrm{~W} / \mathrm{DC}$ |
| $230 \mathrm{VAC/50-60Hz}$ <br> $12-24 \mathrm{~V} \mathrm{AC/DC} / 50-60 \mathrm{~Hz}$ |

The switching unit with 1 output channel is used for controlling appliances and lights. It is possible to connect the existing button to the internal terminal in the wiring. The BOX design lets you mount it right in an installation box, a ceiling or controlled appliance cover.


| RFSA-61M |
| :---: |
| 1x changeover $\left(\mathrm{AgSnO}_{2}\right)$ |

RFSA-66M $3 x$ chang. $\left(\mathrm{AgSnO}_{2}\right), 3 \times \mathrm{NO}\left(\mathrm{AgSnO}_{2}\right)$
16 A/ AC1
4000 VA / AC1, 384 W / DC
$110-230 \mathrm{~V}$ AC/50-60Hz
12-24V AC/DC SELV
RFSA -61 M : the switching unit with 1 output channel is used for controlling appliances, sockets or lights. 1-MODUL RFSA - 66M : the switching unit with 6 output channels is used for independent control of up to 6 appliances, sockets or lights. 3-MODUL.
The package includes an internal antenna AN-1, in case of locating the element in a metal switchboard, you can use the external antenna AN-E for better signal reception.

SWITCHES


| Technical parameters | $\begin{aligned} & \text { RFSC-11 } \\ & \text { RFSC-61 } \end{aligned}$ |
| :---: | :---: |
| Number of contacts | 1xNO ( $\mathrm{AgSnO}_{2}$ ) |
| Rated current | $16 \mathrm{~A} / \mathrm{AC1}$ |
| Load | $4000 \mathrm{VA} / \mathrm{AC1}, 384 \mathrm{~W} / \mathrm{DC}$ |
| Power supply | $\begin{gathered} 230-250 \mathrm{~V} \mathrm{AC} / 50-60 \mathrm{~Hz} \\ 120 \mathrm{~V} \mathrm{AC} / 60 \mathrm{~Hz} \end{gathered}$ |
|  | The switched socket with 1 output channel is used to control fans, lamps, heaters and appliances, which are connected by a power cord. Thanks to the socket design, installation is simple by direct insertion into the existing socket. Produced in 5 designs of sockets and plugs. |


| $\begin{array}{c}\text { RFUS-11 } \\ \text { RFUS-61 }\end{array}$ |
| :---: |
| $1 \times$ xhangeover $\left(\mathrm{AgSnO}_{2}\right)$ |
| $12 \mathrm{~A} / \mathrm{AC1}$ |
| $3000 \mathrm{VA} / \mathrm{AC} 1,384 \mathrm{~W} / \mathrm{DC}$ |
| $230 \mathrm{~V} \mathrm{AC} / 50-60 \mathrm{~Hz} / 120 \mathrm{~V} \mathrm{AC} / 60 \mathrm{~Hz} \mid$ | $12-24 \mathrm{~V}$ AC/DC/50-60Hz

The switching unit with 1 output channel is used for controlling appliances, sockets or lights. The increased IP 65 protection is suited to mounting on the wall or in harsh environments such as the cellar, garage or bathrooms.

| RFJA-12B | $\begin{aligned} & \text { RF-RGB-LED-550 } \\ & \text { RF-WHITE-LED-675 } \end{aligned}$ |
| :---: | :---: |
| $2 \times \mathrm{NO}\left(\mathrm{AgSnO}_{2}\right)$ or contactless switch. | - |
| 8A / AC1 (not available 12-24VDC) | - |
| $2000 \mathrm{VA} / \mathrm{AC} 1$ (not available 12-24VDC) | - |
| $\begin{gathered} 230 \mathrm{~V} \mathrm{AC/50-60Hz}\|120 \mathrm{~V} \mathrm{AC} / 60 \mathrm{~Hz}\| \\ 12-24 \mathrm{~V} D \mathrm{DC} \end{gathered}$ | $100-240 \mathrm{~V} \mathrm{AC/} 50-60 \mathrm{~Hz}$ |
| The switching unit for blinds has 2 output channels used to control garage doors, gates, blinds, awnings, etc. RFJA-12B/230V(120V): connection of switched load $2 \times 8 \mathrm{~A}$ ( $2 \times 2.000 \mathrm{~W}$ ). <br> RFJA-12B/24VDC: contactless quiet switching. | The lamp has an implemented wireless unit, which receives commands from system units of iNELS RF Control (link) and sends a signal for visualization of the current status ON/OFF, brightness. RF-RCB-LED-550: colored lamp. Luminous fl ux up to 550Lm, with power 9W. RF-White-LED-675: white wireless lamp. Luminous flux up to 675 Lm , with power 10 W . |


$2 \times 1.5$ battery AAA
The wireless twilight dimmer measures the light intensity and based on a set value, it sends the command to switch on the lights or pull the blinds up or down.The increased IP 65 protection is suited to mounting on the wall or in harsh environments.

|  | DIMMERS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | R-L-C DIMMER | UNIVERSAL DIMMER (FLUSH MOUNTED) | UNIVERSAL DIMMER (DIN RAIL MOUNTED) | DIMMING SOCKET | DIMMER FOR COLOURED (RGB) LED STRIPS |
|  |  |  |  |  |  |
| Technical parameters | RFDA-11B RFDA-71B | RFDEL-71B | RFDEL-71M | RFDSC-11 <br> RFDSC-71 | RFDA-73M/RGB |
| Power output | $2 \times \mathrm{MOSFET}$ | $2 \times$ MOSFET | $2 \times \mathrm{MOSFET}$ | $2 \times \mathrm{MOSFET}$ | $3 \times$ MOSFET |
| Power supply | 230 V AC / 50 Hz \| 120 V AC / 60 Hz | $230 \mathrm{~V} \mathrm{AC} / 50 \mathrm{~Hz}$ \| 120 V AC / 60 Hz | $230 \mathrm{~V} \mathrm{AC} / 50 \mathrm{~Hz} \mid 120 \mathrm{VAC} / 60 \mathrm{~Hz}$ | $230-250 \mathrm{~V} / 50-60 \mathrm{~Hz} \mid 120 \mathrm{VAC} / 60 \mathrm{~Hz}$ | $12-24 \mathrm{~V}$ DC stabilized |
| Rated current | - | - | - | - | $3 \times 5 \mathrm{~A}$ |
| Load | R; L; C max. $250 \mathrm{~W} / 150 \mathrm{~W}$ | R;L; C; LED; ESL max. 160W\|80W* | R; L; C; LED; ESL max. $600 \mathrm{~W} \mid 300 W^{*}$ | R; L; C; LED; ESL 300W \| 150W* | LED, RGB LED |
| * capacity for power factor $\cos \varphi=1$. <br> The power factor of dimmable LEDs and ESL bulbs ranges from $\cos \varphi=0.95$ up to 0.4. An approximate value of maximum load may be obtained by multiplying the load capacity of the dimmer by the power factor of the connected light source. | The halogen dimmer is used to regulate light sources: <br> R - classic lamps, L - halogen lamps with wound transformer, C - halogen lamps with electronic transformer. RFDA-11B: single-function dimming, ON/OFF. RFDA-71B: multi-function 6 light functions. | The universal built-in dimmer is used to regulate light sources: R, L, C, ESL, LED. Thanks to setting the min. brightness by potentiometer, you will eliminate flashing of the LED and ESL light sources. Connection of the existing button on the control input ., S" enables combination of wireless control with classic (wired) control. | The universal modular dimmer is used to regulate light sources: R, L, C, ESL, LED. Control can be performed by: <br> a) Controllers and System units iNELS RF Control <br> b) by control signal $O(1)-10 \mathrm{~V}$ <br> c) potentiometer <br> d) existing button in the installation. | The dimmed socket is used to control light sources that are connected by power cord - especially lamps: R, L, C, ESL, LED. Thanks to the socket design, installation is simple by direct insertion into the existing socket. Produced in 5 designs of sockets and plugs. | The dimmer for LED strips is used for independent control of 3 single-color LED strips or one RGB LED strip. The expanded selection of control modes enables it to be combined with: <br> a) Controllers and System units iNELS RF Control, b) by control signal O(1)-10V, c) by connecting to iNELS BUS using a DAC ballast. |


|  | DIMMERS |  | TEMPERATURE CONTROL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CONVERTER INELS -DALI/DMX | ANALOG CONTROLLER | SWITCH UNIT WITH A TEMPERATURE SENSOR | SWITCH UNIT WITH A TEMPERATURE SENSOR | WIRELESS TEMPERATURE SENSOR |
|  | (!) <br> new |  |  |  |  |
| Technical parameters | EMDC-64M | RFDAC-71B | RFSTI-11B | RFSTI-11/G | RFTI-10B |
| Output | DALI, DMX | 0 (1)-10V; 1x AgSnO ${ }_{2}$ switches the phase conductor | 1x NO ( $\mathrm{AgSnO}_{2}$ ) | 1x NO ( $\mathrm{AgSnO}_{2}$ ) | - |
| Power supply | AC $100-250 \mathrm{~V} / 50 \mathrm{~Hz}$ | $110-230 \mathrm{~V}$ AC / $50-60 \mathrm{~Hz}$ | $\begin{gathered} 230 \mathrm{~V} \mathrm{AC/50-60Hz}\|120 \mathrm{~V} \mathrm{AC/60Hz}\| \\ 12-24 \mathrm{~V} \mathrm{AC/DC/} / 50-60 \mathrm{~Hz} \end{gathered}$ | 110-230V AC/50-60 Hz | $1 \times 3 \mathrm{~V}$ battery CR 2477 |
| Range in open space | up to 100 m | up to 200 m | up to 160 m | up to 160 m | up to 160 m |
| Design | 3-MODUL | MINI, in an installation box | MINI, in an installation box | LOGUS ${ }^{90}$ | MINI, in an installation box |
|  | The unit EMDC-64M is designed to control DALI electronic ballasts and DMX receivers from the iNELS system. Selection of control (RF/EBM) and the controlled (DALI/DMX) interface is performed using DIP switches on the front panel of the unit. | The analog controller with output $0(1)-10 \mathrm{~V}$ is used for: <br> a) dimming fl uorescent lamps (using a dimmable ballast), b) dimming LED panels (when using a suitable dimmed source up to 50 units LP-60603K/6K), c) Control of thermal actuators, d) control of other controllers | The temperature unit measures the temperature by external sensor, and controls the heating circuit (electric underfl oor heating, air conditioning, boiler, etc.). These can be combined with system units: smart RF box eLAN-RF, wireless controller RFTC-50/G or touch unit RF Touch. | The thermo-regulation drive measures the (internal/ external) temperature by external sensor, and controls the heating circuit (electric underfl oor heating, air conditioning, boiler, etc.). Manual control of temperature directly using buttons on the unit. Switch design (design LOGUS90) off ers mounting in an installation box. | The temperature sensor measures the temperature by internal sensor, which it sends in regular intervals to the system unit. Option of connecting an external sensor to the terminals THERM. The temperature sensor can be placed anywhere thanks to battery power. |

TEMPERATURE CONTROL
 the room temperature by internal sensor, and based on the set temperature, it sends a command to control heating. The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, etc.
RFTC-50/G, RFTC-100/G: The wireless controller in design LOCUS ${ }^{90}$ measures the room temperature by internal sensor, and based on the set temperature, it sends a command for heating / cooling. The backlit LCD display displays the current and set temperature, status (ON/OFF), battery status, day of the week, current time, etc.
Manual control by buttons on the unit.

## MONITORING UNITS

| WIRELESS FLOOD | ENERGY METER |
| :---: | :---: |
| DETECTOR |  |

## WIRELESS <br> THERMOVALVE



| $2 \times 1.5 \mathrm{~V}$ battery AA |
| :---: |
| up to 100 m |
| design box |

The wireless thermostat measures room temperature by internal sensor; based on a set program in the system unit, it opens / closes the radiator valve.
It can be combined with one of three system units: smart RF box eLAN-RF, wireless controller RFTC-100/G or touch unit RF Touch.

## ACCESSORIES



## RF SETS

TRANSMITTER AND RECEIVER COMBINATIONS


French Schuko British

| $\begin{aligned} & \mathrm{CZ}, \\ & \mathrm{SK}, \\ & \mathrm{PL}, \\ & \text { FR } \end{aligned}$ | CB |
| :---: | :---: |
| Australian | US |
| AUS | USA |

RF SETS are a combination of elements - transmitters and receivers.
RF SETS are separated into basic and multifunctional. They are supplied as a combination of the selected transmitter and receiver or as a complete set of a switching dimming actuator and transmitters (keychan, wireless switch).

Basic sets, indicated as RFSET-xxxx-Z1, are designed to satisfy the most common user requirements. Receivers are equipped with the most used user function.
Basic RF sets are combined with receivers: RFSC-11, RFSA-11B, RFJA-12B/230V, RFDSC-11, RFDA-11B.

Multifunction sets, under the designation RFSET-xxxx-F1, provide the user with comfort in the form of rich options in functions and selection of from up to seven preset programs of actuators. Multifunctional sets are combined with the receivers: RFSC-61, RFSA-61B, RFSA-62B, RFSA- 61M, RFDSC-71, RFDA-71B.



## KIT TO CONTROL LIGHTS VIA SMARTPHONE

It's never been easier to set the appropriate ambience for reading a book or, watching a movie or a party with friends. All you need is wireless bulbs and a smart box, then you can control every device from the comfort of your smartphone, tablet or smart TV. You can't just control colored or white light bulbs, but also other appliances too.


## KIT FOR CONTROLLING IR DEVICES VIA A SMARTPHONE

Thanks to the Smart IR box, you can control the home appliances via a Smartphone. Thus you no longer need a bunch of controllers, you do not have to look for them, and you do not need to replace the battery. You always stick your phone in your pocket, always at hand. Moreover, you can control other devices which are placed in another room (e.g. you can turn off the TV in the children room).

RADIO \& MUSIC IN THE SWITCH


LARA
$1 \times \quad$ RADIO2× speakers


## KIT FOR CONROLLING MUSIC, WHICH PERFECTLY FITS IN YOUR HOME'S INTERIOR

LARA is a music and internet radio player. We have registered 40 favorite Czech radios stations as presets stations, however you can easily change it using the configurator. LARA plays the music, which is stored in the NASA storage or in the external source (phone, MP3 player) that is connected through a cable on the front panel of the device. Built-in amplifier that allows direct connection of speakers (in the same LOGUS ${ }^{90}$ design) or allows connection of external in-wall or ceiling speakers.


## CONTROL YOUR HOUSE VIA A SMARTPHONE

The kit "House under the thumb" which you're holding in your hands is the basic starter kit for you, which would like to make your home more comfortable. The starter kit consists of 2 colored wireless bulbs, $1 \times$ switching socket and $1 \times$ camera, which allows you to try the basic units of iNELS RF Control - wireless solution. Everything is preset to ensure fast and easy control.

## VIRTUAL KITS

The virtual kit is a set of wireless units that are packed individually (as an individual product), but on the other hand, they are preset together (they are meant to work together) to ensure a simple installation. They are offered at a discounted price and it is not possible to separate any unit from this price.

## UNDERFLOOR HEATING - BY WATER

Any wireless temperature regulator measures the room temperature, it compares with set temperature and time program, then sends a command to switch on the units. Based on the command from the temperature regulator, 6-channels switching unit is able to control up to 6 thermo-valves corresponding to heating circuits.

## KIT CONSISTS OF:

Wireless temperature controller RFTC-50/G, wireless switch unit (6 outputs) RFSA-66M, thermodriver TELVA/230V.

## UNDERFLOOR HEATING - BY ELECTRICITY

Temperature and switching unit (two in one) measures the floor temperature via external sensor (built-in). Then it sends data to wireless touch unit RF Touch, which compares it with the temperature set along with the time schedule and then sends a command back to switch on/ switch off the heating circuits. It is possible to connect up to 4 temperature/switching units.

Advice 1) If just one reference temperature is enough for you, so then it can be measured by temperature sensor RFTI-10B and to switch up to 6 independent heating circuits you can use 6-channels switching actuator RFSA-66M.
Advice 2) The wireless unit RF Touch can be replaced by Smart RF box and all can be controlled via your smartphone. Both solution can be used together.

## KIT CONSISTS OF:

Switching actuator with thermosensor RFSTI-11/G, Wireless touch unit RF Touch.


## KIT TO CONTROL HEATING VIA WIRELESS RF TOUCH UNIT

Includes 3 wireless thermovalves that are installed instead the standard radiator valves. It measures the room temperature and sends it to the RF Touch control unit. RF Touch compares it with the temperature set along with time schedule and sends a command to open or close the valve. You can set heating programs in the weekly schedule, separately for each circuit (room).

## REMOTE HEATING



## KIT TO CONTROL HEATING VIA SMARTPHONE

It includes 3 wireless thermovalves that are installed instead the standard radiator valves. They measures the room temperature and send it to the Smart RF box. The Smart RF box compares it with the temperature set along with the time schedule in the application of your phone and sends a command to open or close the valve. You can always turn on the heating circuit via an app, whether you're at home, or just going to visit your cottage and do not want to come to unheated place.


## KIT FOR WIRELESS TEMPERATURE REGULATION IN THE HOME

This kit enables convenient and quick control of heater, oil heater, panel heater or portable air conditioner. Just plug the device into controlled switching sockets and appropriately place your controller RFTC-50/G The desired temperature is set on the controller, that compares it with the current record and it sends a command to turn the device ON.

## VIRTUAL KITS

## AGAINST THE FLOOD

A wireless sensor monitors the water leaks or flooding in the critical places (basement, pits, shafts, bathroom, laundry room,...) and sends immediately a command to the switching unit to close the solenoid valve of the main water supply. You can be also informed of that accident through a GSM gateway by sending SMS text messages.

## The KIT CONSISTS OF:

Switch unit RFUS-61, wireless flood detector RFSF-1B,flood probe FP-1.
We recommend: solenoid valve: MPW SS 304-1/2 (3/4) 230V AC

## COLORED RGB LED STRIP

The app in your smartphone can send (through RF smart box) the commands to the dimming unit to which the RGB strip is connected. From your app it is possible to switch ON/OFF, to set the color or to run the scene of automatic color blending.

Advice 1) The colored RGB strip can be controlled through RF Pilot, by controllers RFWB-20/40, RF Key,...
Advice 2) If you do not want the colored RGB strip, we can replace it by monochromatic (warm white, cool white, red, ...). Then you can connect 8 m of monochromatic strip (power $7.2 \mathrm{~W} / \mathrm{m}$ ) to RFDA-73M/RGB to each output.

## KIT CONSISTS OF:

Smart RF box, dimmer RFDA-73M/RGB, $2 \times 5 \mathrm{~m}$ coloured RGB strip 7.2W/m, power supply $230 \mathrm{~V} / 12 \mathrm{~V} / 100 \mathrm{~W}$.

# INTELLIGENT ELECTRO-INSTALLATION 





## What are the benefits of bus controlling?

- Save energy by regulating lighting and heating properly
- Control of blinds, awnings, exterior or internal window shutters
- Dimming lights, lighting scenes
- Control of appliances or electrical devices
- Control access gates, garage doors
- Logical and central functions (exit button, ...)
- Manual and automatic control mode
- Preventing undesirable opening of a window or a door
- Responding to the movement of people (authorized and unauthorized)
- Remote monitoring via smartphone, tablet or laptop
- Possibility to control via the TV screen
- Integration of third-party devices (cameras, air conditioning, ...)


When you build a new house or decide on a complex reconstruction, the bus solutions of iNELS BUS system represents a unique solution of electro-installation. The system offers wide range of functions which bring a pleasant comfort to the users. It also allows to integrate each technology in the house and brings savings. The way of controlling can be changed according to user requirements, the electro-installation can also be extended.
Using of applications to smartphones or tablets is very popular. They provide efficient and easy way to control your home during your absence.
iNELS BUS System allows you to integrate and control most of technologies used in your house. It saves your money spent on energy. You don't need to wonder whether it is summer or winter. Simply set the desired the temperature in the room and your house will automatically know what to do.
The main idea of intelligent living is saving. The house is able to switch off the lighting and heating in the room at the time of your absence. In winter it pulls up the blinds, what allows the house warming by sun rays. Vice versa in the summer the blinds are pullled down earlier what reduce the switching frequence of energy-intensive air conditioning.
Flood, temperature, fire or gas leak detector sends command to close the water supply, gas, ventilation, etc.
The really useful features is also a simulation of presence when you are on vacation.
To control the electro-installation you can use wall-switches, glass touch switches, touch display, smartphone, tablet or TV screen. So you can easily control whole house from one place. Do you like to listen music, to watch movies or to view pictures? All these data can be available from anywhere in your house thanks to iNELS Multimedia. In addition you can easily turn off the children's television in other room. Whole house can be controlled via TV screen.

Switching el. appliances

Light
dimming

Heating regulation

Air conditioning control

## CONTROL YOUR ELECTRO-INSTALLATION VIA SMARTPHONE

Get your house under control thanks the Apps in your smartphone or tablet. The Apps have been developed for these operating systems Android and iOS (iPhone, iPad).

## CONTROL TOUCH UNIT EST

The EST unit with colour touch screen allows you to control heating, adjust the colour of LED strips and control lighting, shutters, other appliances or scenes. This unit is especially suitable for areas/rooms where would otherwise be necessary to use a bunch of controllers.


Roller blind
control
Detector
control

Multimedia

## CONTROL THROUGH A TV

From the comfort of your couch you can easily control the whole house, you can adjust the temperature in the given room or turn the lights OFF in your garage. The multimedia extension allows you to view pictures from your holiday, play the movie in the other room or listen the radio or music. All your pictures, movies and music will be stored in just one place, but available from any room in the house.


## Central unit CU3-01M and CU3-02M



Central units CU3-01M and CU3-02M are the brain of the iNELS system, a "mediator" between user's programming environment and controllers, units and actuators connected to the bus.

- It's possible to directly connect up to 2 lines of CIB buses in to CU3-01M and CU3-02M, and on each bus we can connect up to 32 iNELS3 units.
- The main difference between CU3-02M and CU3-01M is that CU3-02M is moreover equipped by RF module which enables communication with selected units from iNELS RF Control system.
- Central units CU-01M(O2M) support also peripheral units from iNELS2 thanks to external master MI3-02M/iNELS2.
- User's project and retentive data are stored in a non-volatile internal memory hereby data are backed up without the supply voltage. Real time clock (RTC) backup for 10 days.
- Power supply controlling system - network voltage and the status of the backup battery.
- Possibility of setting time synchronization via NTP server.
- The RJ45 Ethernet port's connector is located on the front panel of the unit, the transmission speed is 100 Mbps .
- For CU3-01M (02M) it is possible to use 4 potential-free inputs for connecting external controllers (buttons, switches, sensors, detectors, etc.) and 2 analog inputs 0-30V.
- CU3-01M (02M) comes with OLED display that shows the current status and configuration of CU3-01M (O2M) central unit.
- CU3-01M (02M) can be controlled using the directional buttons on the front panel.
- The central unit CU3-01M (02M) can be fitted with various sub-modules, which can be used for communication, e.g. RS232, RS485, etc. or can contain various combinations of inputs/outputs.
- On the front panel, the central unit is fitted with an OLED display with $128 \times 128$ resolution and direction buttons designed for navigating within the menu shown on the display.
- The OLED display displays the current status of the central unit (RUN, HALT, ERROR), date and time. Within the menu display, you can set the IP address of the central unit, date or time.
- Configuration of the unit and thereby the entire system is performed via an Ethernet interface, by means of configuration software iNELS Designer Et Manager, designed for Windows XP and higher.
- You can configure the central unit remotely via the Internet (if the unit is connected to the Internet via a LAN network).
- Using the built-in webserver, remote control is possible of user functions via an Internet browser (PC, smartphone, tablet).
- By means of CU3-01M(O2M) and parameterizing software IDM, it is possible remotely to upgrade firmware on a bus of connected units and of the central unit itself.

|  | SYSTEM UNITS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | POWER SUPPLY | EXTERNAL MASTER BUS CIB | BUS SEPARATOR FOR SEPARATION FROM POWER SUPPLY | CONVERTER INELS <br> - DALI/DMX | GSM COMMUNICATOR |
|  |  |  |  |  |  |
| Technical parameters | PS3-100/INELS | MI3-02M, M13-02M/INELS2 | BPS3-01M, BPS3-02M | EMDC-64M | GSM3-01M |
| Output | 27.6V/3.6A, 12.2V/0.35A | $2 \times$ CIB iNELS3 $2 \times$ CIB iNELS2 | $1 \times \mathrm{CIB} \quad 2 \times \mathrm{CIB}$ | DALI/DMX | - |
| Power supply | 100-250V AC | CIB 27V DC | CIB 27V DC | 100-250V AC ( 100 mA ) | CIB 27V DC |
| Rated current from CIB BUS | - | 25 mA (at 27V DC) | 8 mA (at 27V DC) 15 mA (at 27V DC) | - | 250 mA (at 27V DC) |
|  | Is a stabilized switching power supply, with the total power of 100 W . <br> Power supply: <br> AC 100-250 V AC. <br> Output voltage: DC/max. Load: $27.6 \mathrm{~V} / 3.6 \mathrm{~A}$ and $12.2 \mathrm{~V} / 0.35 \mathrm{~A}$, 6-MODULE. | External master M13-02M provides expansion of the amount of units iNELS3 connected to the central unit CU3-01M or CU3-02M for 2 times 32 units. 1-MODULE. | Units serve for impedance separation of CIB from supply voltage power. <br> BPS3-01M allows you to connect one bus CIB. BPS3-02M allows you to connect two separate CIB1 and CIB2. <br> 1-MODULE. | Converter iNELS-DALI/DMX for control of electronic ballasts DALI and receivers DMX, up to 64 independent electronic ballasts DALI, up to 32 receivers DMX (with repeater up to 64). 3-MODULE. | It serves for communication with the iNELS system via commands sent in short SMS messages from mobile phone GSM. Communication interface: system bus EBM. 3-MODULE. |


|  | SWITCHING ACTUATORS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | SWITCHING ACTUATOR (2-CHANNEL) | SWITCHING ACTUATOR (4-CHANNEL) | SWITCHING ACTUATOR (6-CHANNEL) | SWITCHING ACTUATOR (12-CHANNEL) | SWITCHING ACTUATORS (1-CHANNEL / 2-CHANNEL) |
|  |  |  |  |  |  |
| Technical parameters | SA3-02M | SA3-04M | SA3-06M | SA3-012M | SA3-01B SA3-02B |
| Number of contacts | 2 xchangeover | $4 \times$ changeover | $6 \times$ changeover | $12 \times \mathrm{NO}$ | 1xNO 2xNC |
| Switching current | 16A/ AC1 | 16A/AC1 | 8A/AC1 | 8 A/AC1 | 16A 8A |
| Switching output | $4000 \mathrm{VA} / \mathrm{AC1}, 384 \mathrm{~W} / \mathrm{DC}$ | $4000 \mathrm{VA} / \mathrm{AC1} 1,384 \mathrm{~W} / \mathrm{DC}$ | 2000VA/AC1, $192 \mathrm{~W} / \mathrm{DC}$ | $2000 \mathrm{VA} / \mathrm{AC1}, 192 \mathrm{~W} / \mathrm{DC}$ | 4000 VA 2000VA |
| Power supply | CIB 27V DC | CIB 27V DC | CIB 27V DC | CIB 27V DC +230 V AC (120V AC) | CIB 27V DC |
| Rated current from CIBBUS | 50 mA (at 27V DC) | 70 mA (at 27V DC) | 60 mA (at 27V DC) | 5 mA (at 27V DC) | 30 mA (at 27V dc) 50 mA (at 27 V DC) |
|  | Two-channel switching actuator for switching appliances and controlling roll shutters/blinds, 2x switching contact 16 A, LED relay status indicator, manual control 1-MODULE. | Four -channel switching actuator for switching appliances and control roll shutters/blinds, 4x switching contact 16 A, LED relay status indicator, manual control. 3-MODULE. | Six-channel switching actuator for switching appliances, e.g. lighting and thermal actuators, 6x switching contact 8 A, LED relay status indicator, manual control. 3-MODULE. | Twelve-channel switching actuator for switching appliances, e.g. lighting and thermal actuators, $12 \times$ switching contact 8 A. LED relay status indicator, manual control. The actuator is powered via ClB bus and simultaneously by an AC voltage SA3-012M-230V AC SA3-012M/120V-120V AC. 6-MODULE. | SA3-01B: Single-channel switching actuator for switching appliances, e.g.g lighting, thermal actuators and sockets, $1 \times$ switching contact 16 A . SA3-01B: Two-channel switching actuator for switching appliances and controlling roll shutters/ blinds, $2 \times$ switching contact 8 A . $1 \times$ temperature input TC/TZ. mounting into an installation box. |


|  | DIMMING ACTUATORS |  |  | CONVERTERS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DIMMING ACTUATOR (2-CHANNEL) | DIMMING ACTUATOR (2-CHANNEL) | DIMMING ACTUATOR (2-CHANNEL) | ANALOG-DIGITAL CONVERTER | DIGITAL-ANALOG CONVERTER | DIGITAL-ANALOG CONVERTER |
|  |  |  |  |  |  |  |
| Technical parameters | DA3-22M | LBC3-02M | DCDA-33M/RGB | ADC3-60M | DAC3-04B | DAC3-04M |
| Output | $2 \times \mathrm{MOSFET}$ | $\begin{aligned} & 2 \times 0(1)-10 \mathrm{~V} / 10 \mathrm{~mA} \\ & 2 \times \text { changeover } 16 \mathrm{~A} / \mathrm{AC1} \end{aligned}$ | $3 \times$ MOSFET | - | $4 \times 0$ (1) - $10 \mathrm{~V} / 10 \mathrm{~mA}$ | $4 \times 0$ (1) - $10 \mathrm{~V} / 10 \mathrm{~mA}$ |
| Input | $2 \times$ buttons, $1 \times$ temperature | - | - | 6xanalog.; $0-10 \mathrm{~V} ; 0-20 \mathrm{~mA}$ | 1 x temperature | 1 x temperature |
| Output capacity | (230V) 400VA*, (120V) 200 VA* | relay: $4000 \mathrm{VA} /$ AC1, 384W/DC | $3 \times 50 \mathrm{~W}$ | - | - | - |
| Power supply | CIB 27VDC+230VAC(120VAC) | CIB 27V DC | CIB 27VDC $+12-60 \mathrm{~V}$ | CIB 27V DC | CIB 27V DC | CIB 27V DC |
| Rated current from CIB BUS | 5 mA (at 27V DC) | 60 mA (at 27V DC) | 40 mA (at 27V DC) | 50 mA (at 27V DC) | 50 mA (at 27V DC) | 50 mA (at 27V DC) |
| * for each channel | Universal dimming two-channel actuator for dimming ESL, LED and RLC loads, $2 x$ $400 \mathrm{VA}, 2 x$ controlling input, 1x temperature input TC/TZ. The actuator is powered via CIB bus and simultaneously by an AC voltage DA3-22M 230V AC. DAЗ-22M/120V 120VAC. 3-MODULE. | Analog two-channel actuator for controlling dimmable electronic ballasts, $2 \times$ analog signal $1-10 \mathrm{~V}, 2 \mathrm{x}$ switching contact 16 A, LED indicator of relay status, 3-MODULE. | Dimming actuator is designed for dimming RGB and LED light sources with power supply 12-24V DC, which are controlled by variable current. Controlling interface DMX, DALI and CIB. 3 channels, max. 2A on one channel, 3-MODULE. | Converter of analog signals on bus (e.g. for connecting a weather station), 4 x analog input, $2 x$ temperature input TC, TZ, Ni1000, Pt1000 or Pt100. <br> 3-MODULE. | Is a converter of a digital signal to an analog voltage signal. O(1)-10 V. for control of electronic ballasts, thermal actuators, etc., 4 channels, 1 x temperature input TC/ TZ. For mounting into an. | Is a converter of a digital signal to an analog voltage signal. O(1)-10 V. for control of electronic ballasts, thermal actuators, etc., 4 channels, 1 x temperature input TC/TZ. 3-MODULE |

## fnels

|  | SHUTTER | THERMO INPUT |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SHUTTER ACTUATOR ( 2-CHANNEL) | BINARY INPUT UNIT | BINARY INPUT UNITS | BINARY INPUT UNIT | TEMPERATURE INPUTS | THERMO INPUT (6-CHANNEL) |
|  |  |  |  |  |  |  |
| Technical parameters | JA3-02B/DC | IM3-140M | ІМЗ-20В ІМЗ-40В | ІМЗ-80в | TI3-10B TI3-40B | TI3-60M |
| Output MOSFET | 12-24V DC (0.85 A) | - | - | - | - |  |
| Number of inputs | $2 \times \mathrm{AIN} / \mathrm{DIN}$ | $14 \times$ binary | $2 \times$ binary $4 \times$ binary | 8x binary | 1xtemper. $4 \times$ temper. | 6 xtemperature |
| Temperature sensors | 1xTC/TZ | - | 1xTC/TZ | 1xTC/TZ | TC, TZ, Ni1000, Pt1000, PPt100 | TC,TZ, Ni100, Pt+1000, Pt100 |
| Power supply | CIB 27V DC | CIB 27V DC | CIB 27V DC | CIB 27V DC | CIB 27V DC | CIB 27V DC |
| Rated current from CIB BUS | 60 mA (at 27V DC) | 25 mA (at 27V DC) | 20 mA (at 27V DC) | 20 mA (at 27V DC) | 20 mA (at 27V DC) | 45 mA (at 27V DC) |
|  | Actuator for control of drives of blinds, roll shutters, awning with power supply 24 V DC, 1x temperature input TC/TZ. Mounting into an installation box. | The binary input unit is designed to connect up to 14 devices with potential free contact (PIR, button, etc.), 14x binary input, output for power supply detectors $12 \mathrm{VDC} / 150 \mathrm{~mA}$. 3-MODULE | Binary input units are used for connection of 2 or 4 devices with potential-less contacts (PIR, button, etc.), 1x temperature input TC/TZ. output for power supply detectors 12 V DC/75 mA, mounting into an installation box. | Binary input units are used for connection of 8 devices with potential-less contacts (PIR, button, etc.). 1x temperature input TC/ TZ, output for power supply detectors 12 V DC/75 mA, mounting into an installation box. | For connecting $1 \mathrm{x} / 4 \mathrm{x}$ temperature sensor TC TZ, Ni1000, Pt1000 or Pt100. <br> Mounting into an installation box. | For connecting $6 x$ temperature sensor TC, TZ, Ni1000, Pt1000 or Pt100. 3-MODULE. |


|  | WALL UNITS AND CONTROLLERS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CONTROL UNIT | WALL GLASS TOUCH CONTROLLER | TWO-BUTTON CONTROLLER | FOUR-BUTTON CONTROLLER | WALL CARD READER | DIIITAL THERMO-REGULATOR |
|  |  | $\bigcirc \bigcirc$ <br> $\bigcirc \bigcirc \bigcirc$ |  |  |  |  |
| Technical parameters | EST3 | $\begin{aligned} & \text { CSB3-40.CSB3-60, } \\ & \text { CSB3 } 3 \text {-80 } \end{aligned}$ | WSB3-20 | WSB3-40 | WMR3-11 | IDRT3-1 |
| Number buttons | max. 12 | 4/6/8 | 2 | 4 | 2 | 2 (for correction temper.) |
| Power supply | CIB 27V DC | CIB 27 V DC | CIB 27V DC | CIB 27V DC | CIB 27V DC | CIB 27V DC |
| Rated current from CIBBUS | 150 mA (at 27V DC) | 25-40 mA (at 27V DC) | 25 mA (at 27V DC) | 25 mA (at 27V DC) | 50 mA (at 27V DC) | 20 mA (at 27V DC) |
| Internal temp. sensor | - | YES | YES | YES | - | YES |
| External temp. sensor | - | YES | YES | YES | - | YES |
|  | The control unit with touch screen, <br> - buttons screen <br> - temperature control screen <br> - control RCB light <br> sources screen <br> - security keyboard screen. | Wall-mounted glass controllers with touch control are a design element in the system iNELS, built-in temperature sensor, $2 x$ AIN/ DIN for 2 potential free contacts or one temperature sensor TC/TZ. | Two-button controller, built-in temperature sensor, 2x AIN/DIN for 2 potential free contacts or one temperature sensor TC/TZ, $1 \times$ LED indicator (red/green). LOCUS ${ }^{90}$ design. | Four-button controller, built-in temperature sensor, $2 \times$ AIN/DIN for 2 potential free contacts or one temperature sensor TC/TZ, $1 \times$ LED indicator (red/green). LOCUS ${ }^{90}$ design. | Wall reader of contactless media, $1 \times$ switching contact 8 A, two-button controller. LOGUS ${ }^{90}$ design. | Control unit for correction of circuit of heating/ cooling $\pm 5^{\circ} \mathrm{C}$ or for direct entering of the required temperature in ${ }^{\circ} \mathrm{C}$, built-in temperature sensor. |



## (2) iNELS BUS System

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Android |  | iOS |  | Linux |
| $\square$ | 圈 | $\square$ | 苗 | $\square$ |
| Tablet | Telefon | iPad | iPhone | TV |
| iHC-TA | iHC-MA | iHC-TI | iHC-MI | imm |


iNELS RF Control -
Android iOS

| $\checkmark$ | $\checkmark$ | $\checkmark$ |
| :--- | :--- | :--- |
| $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\checkmark$ | $\checkmark$ | $\checkmark$ |
| $\checkmark$ | $\checkmark$ | $\checkmark$ |


| $\checkmark$ | $\checkmark$ | $\checkmark$ |
| :---: | :---: | :---: |
| $\checkmark$ | $\checkmark$ | 0 |
| $\times$ | $\times$ | $\times$ |
| $\checkmark$ | $\checkmark$ | $\checkmark$ |

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x

The list of supported third-party systems is available on our web page wwwinels.com
$\checkmark$ Supported
o Coming soon
x Not supported

iHC - MI iHC-MARF

iHC - MIRF and are supported by Android OS 2.3 or later and iOS

# A/V DISTRIBUTION \& MULTIMEDIA 

## AUDIO VIDEO


$=$



## Audio / Video

a new dimension for $A / V$ distribution and control

The group - Audio/Video includes products which bring completely new possibilities to control music, video and home appliances.

They are not just regular controllers, but products which can fit perfectly into your electro-installation.

LARA - Internet radio with clear sounds, which can be also used like a component of home video intercom. Let LARA control your music at your entire home, control your house using just one system - use just one controller to get your house under control.

Are you watching at your table in living room and you can just see bunch of controllers? We have solution for you - smart box eLAN-IR.

Our goal is to make you happy and satisfied and feel really comfortable controlling your house.


## iHC-TVC

- iNELS Home Control application enables you to control your lighting, home appliances and garage door through smart TV SAMSUNG.

Steps to easy installation:

- select actuators from iNELS RF Control (if you don't have them yet) to control home appliances, lighting, blinds...
get one of the smart boxes eLAN-RF and connect it to the router
- install an application to Samsung SMART TV - iNELS Home Control
- create lighting scenes and all can be controlled using your SAMSUNG TV remote controller of TV Samsung. Intended only for Samsung SMART TV.
- The smart box can be nicely used in two diff erent basic ways, such as:


## eLAN-IR-003



- A part of the iNELS intelligent electrical installation system withing the range of playing multimedia from the iHC app or when an iMM shows an IR signal, it can control the TV, an amplifi er and smart phone (or a tablet and gyroscopic mouse) and it serves as the sole driver of the entire system.
- An independent facility or (an IR terror drivers ), which unites all drivers under one and replacing it with a smart phone "without having to use iNELS complex system".
- eLAN-IR-003 converter Ethernet commands from the infrared (IR) code.
- The Smart box can control the devices, which are controlled by the IR controller, for example: TV, VCR, satellite receiver, DVD player, amplifi er, hi-fi , air conditioning, fans and others.
- In case of integrating a smart box to the iNELS system for controlling, we shoud use:
- The complex iHC application for intended iNELS system and its iMM mulimedia superstructure. The application is available for smart phones and tablets with an Android OS and also for an iPhone and an IPAD.
- The iMM application for TV screening "Video zone".
- In case of the usage as an independent device, we can use iHC-MAIR app (for Android smart phones) and iHC-MIIR (for an iPhone), also the app allows us to control more smart boxes (for example one in every place).
- We can control the device remotely, for example you can switch you AC on from work, without even seeing it.
- There is a possibility to control up to 100 IR codes.
- It supports IR codes with the frequency between $20-455 \mathrm{KHz}$.


## Audio/Video Control




## LARA Radio



- A music and Internet radio player - all in the dimension of a switch and a luxurious LOGUS ${ }^{90}$ design.
- In the range of WiFi connection, LARA can play music and stream the radio, which can be saved up to 40 channels. You can pick any radio station from all over the world which is providing the data for a proper connection
. LARA Radio can play the contents of external music source, which may be an iPhone, smart phone
- or eg. MP3 player. These devices are connected to the audio input 3.5 mm stereo jack, which is located below the front panel
- LARA Radio also plays audio files from a central data repository, where Logitech Media Server is installed. You can also use LARA function can LARY within the complex iNELS iNELS or as a fully independent home automation device. When it's used within iNELS systém, then its being controlled by iHC applications, however, when you're using it as NAS, then LARA NAS App is available.
- Controlling is being done by touching the front panel (where six capacitive buttons are available) or an infrared remote control that is included with the product.
The basic device settings, such as (the network connection, language or an audio output) is done
- using the display and a simple controlling menu from capacitive buttons on the front cover. Meanwhile other settings such as: (the station selection, the connection to the server, firmware updates, etc.) Is configured using a computer and software LARA Configurator.
- LARA Radio has an integrated amplifier with an output of $2 \times 10 \mathrm{~W}$, which greatly simplifies the installation in areas where that power is sufficient. LARA can be used for example in the kitchen sound system, bathrooms, waiting rooms, offices, reception areas, lobbies, operating rooms and wellness areas.
- LARA Radio is powered through the PoE with a maximum voltage of 27 V DC / 1000 mA , where the advantage in this case is that only one (UTP) cable is used for power supply and communication.


## LARA Intercom



- 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 LOGUS ${ }^{90}$ 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 the sound of the door (IP Intercom), so with someone visiting and standing in front of the house, we can see that on LARA display as part of this function which increases the security feeling and safety besides of course, the comfort for the user.
- LARA Intercom is equipped with an OLED colored display with the size of $1.5^{\prime \prime}$, which is used to transfer images and sounds from the door camera properly. The display also shows basic information about playing music, which also serves the orientation in the menu settings, etc.
- The intercom function can also be used for communications between all the family members throughout the whole house, thanks to two way voice communications possibilities between differnt Lara units.
- LARA intercom can also play music and stream the radio, which can be saved up to 40 channels. You can pick any radio station from all over the world which is providing the data for a proper connection
- LARA intercom can also play the contents of external music source, which may be an iPhone, smart phone or eg. MP3 player. These devices are connected to the audio input 3.5 mm stereo jack, which is located below the front panel
- LARA intercom can also play audio files from a central data repository, where Logitech Media Server is installed. You can also use LARA function can LARY within the complex iNELS iNELS or as a fully independent home automation device. When it's used within iNELS systém, then its being controlled by iHC applications, however, when you're using it as NAS, then LARA NAS App is available.
- Controlling is being done by touching the front panel ( where six capacitive buttons are available) or an infrared remote control that is included with the product.
- The basic device settings, such as (the network connection, language or an audio output) is done using the display and a simple controlling menu from capacitive buttons on the front cover. Meanwhile other settings such as: (the station selection, the connection to the server, firmware updates, etc.) Is configured using a computer and software LARA Configurator.
- LARA Radio has an integrated amplifier with an output of $2 \times 10 \mathrm{~W}$, which greatly simplifies the installation in areas where that power is sufficient. LARA can be used for example in the kitchen sound system, bathrooms, waiting rooms, offices, reception areas, lobbies, operating rooms and wellness areas.
- LARA Radio is powered through the PoE with a maximum voltage of 27 V DC / 1000 mA , where the advantage in this case is that only one (UTP) cable is used for power supply and communication.


## Connection server iMM Audio Zone-R



Connection Server

- 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.
- The iHC appliction's environment enables us to control all these technologies from just one app.
- The inclusion Connection Server to the system can be controlled from the application iHC except bus units (lighting, blinds, heating, etc.) also IP cameras, air conditioning, recuperation or domestic appliances Miele.
- It also allows the communication with the domestic voice intercom 2 N . It can also arrange the information from the weather station Giom or data from energy meters (electricity, water, gas), which is visualized in clear graphs.
- The device connection server uses the Raspberry Pi hardware and the apps requires a license relative to the MAC address of the device.
- While connecting with the devices connection server, it's recommended to use an uninterruptible power supply (UPS), which ensures that, there will be no power outage.
- As a part of the package, we also included an SD card where we previously installed Linux OS on it and its needed software equipment.
- The configuratution is happening on its own web interface, where the default IP address is not fixed. (The IP address is assigned from the DHCP server and it's needed to be known when we're connected to the network )
iMM Audio Zone-R
- The iMM Audio zone-R serves as a player for the other Audio zones where we also can integrate the iMM server to the iNELS system.
- The iMM Audio zone-R allows us to play music which is stored on the network storge, which by itself could be an iMM server or NAS ( Network Attached Storage ), for example: Synology.
- The music is being played through the Logitech Media Server.
- We can control every iMM Audio zone-R in the system using the iHC application in any smart phone or a tablet, possibly from the iMM application TV picture, 'Video zone,'
- The Audio zone is equipped with a stereo jack of 3.5 mm output for supplying to the amplifier or active speakers.
- The Audio zone can be connected via an HDMI to a TV or a monitor with speakers and play music within these devices.
- An HDMI output for the connection of the monitor to determine the IP address service (see the instructions).
- $2 \times$ USB ports, for example for connecting a keyboard during the IP address determination process.
- 1xRJ45 for the connection to the computer or to an Ethernet Network.
- The configuration is done on their own web interface with the default IP address 192.168.1.220 (see separate manual, which is available on the product packaging and www.elkoep.cz and www.inels.cz).
- The actual configuration of the iNELS system takes place on the web interface of the iMM server (iMM Control Center), more info on the iMM construction.
- As a part of the package, we also included an SD card where we previously installed Linux OS on it and its needed software equipment.


## iMM Client / iMM Server



- The iMM device can operate in three diffent modes (the choice depends only on the SW configuration, HW is identical) and it can be used as part of a complex system of intelligent electrical installations iNELS or as an independent device for managing the multimedia in the house such as audio, video, photo, TV.
- In the iMM server mode, the iMM can be used to link almost all the different technologies in the house together and it enables us to control them all from one application which is called iNELS Home Control „iHC" which can be installed in any smart phone or tablet.
- The iMM server for the „iHC" application provides communication with the iNELS bus system, for example light control, heating, security, screening techniques and so on, even air conditionting; for example: an LG unit or a Coolmaster unit control, Daikin, Sanyo, Toshiba, Mitsubishi, Fujitsu and Hitachi. Recovery as well, such as Atrea or AirPohoda, webcameras ( thanks to the ONVIF protocol, which is supported by nearly 300 brands), house hold appliances such as Miele,the entrance syllables (SIP protocol support), multimedia (audio, video, TV, photo), a weather station or the measurement of energy consumption (electricity, water, gas).
- In the iMM mode the client severs as any device such as Video zone player.
- Video zones means television, from which you can watch TV programs, view photos, play music or movies from a central data repository. To control all TVs and also amplifiers at home you only need one controller, a smart phone or tablet with the „iHC" application, possibly also a gyroscopic controller.
- Not only all the multimedia content is stored in once place, but it's also available within the whole house without having to transfer the multimedia files on CDs for example. With this central data repository the data can be played or displayed directly to any iMM server or also any NAS „Network Attached Storage" for example. Synology.
- Additionally, we can control the whole electrical installations system iNELS from the TV screen, this also serves the other icons which are arranged on the image that contains the floor plan for example. that is a copy of the ground plan of the house.
- The third mode is iMM Client / Server, which is mainly used in installations with one Video zone, where devices also simultaneously fuilfill the server function.
- By connecting and combining all these technologies, we can create different scenes, for instanse; when the fim starts playing by switching the projector the elevator starts moving, also when we expand the the screen projection we turn the lamps on, pull up the shutters and adjust the lighting scene. That can all be one with one touch.
- The video and audio transmission to your TV is running through the HDMI cable. Controlling the TV is then being done via the IP address, RS232 or an IR, which can be used with the eLAN-IR.
- The Audio 3.5 mm input can be used as a stereo jack for analog signal or an optical jack for digital output of the optical cable.


| Power sets |
| :--- |
| POWER SUPPLY PoE + WiFi INTO OR THE BOX <br> Wifi bridge with PoE and power supply into an installation box. <br> Power supply 230V. |


| Code | Name | EAN |
| :--- | :--- | :--- |
| LARA-R/BR | LARA Radio_white | 8595188148719 |
| LARA-R/AL | LARA Radio_aluminium | 8595188149211 |
| LARA-R/GE | LARA Radio_ice | 8595188149228 |
| LARA-R/PE | LARA Radio_pearl | 8595188149259 |
| LARA-R/MF | LARA Radio_ivory | 8595188149242 |
| LARA-R/IS | LARA Radio_grey | 8595188149235 |
| LARA-IC/BR | LARA Intercom_white | 8595188149389 |
| LARA-IC/AL | LARA Intercom_aluminium | 8595188149372 |
| LARA-IC/GE | LARA Intercom_ice | 8595188149396 |
| LARA-IC/PE | LARA Intercom_pearl | 8595188149426 |
| LARA-IC/MF | LARA Intercom_ivory | 8595188149419 |
| LARA-IC/IS | LARA Intercom_grey | 8595188149402 |

## SWITCHES

 AND SOCKETS
## 




## DESIGN LINES

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

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.


## DEVICES OVERVIEW



## DEVICES OVERVIEW

- switches
- switches with lock
- over-switches
- rotary switches
- dimming switches - pushbuttons
- switch, pulling switch
- shutters controllers
- shutters controllers with IR sensor - digital time switch motion detectors - card switch
- Jazz Light Sound system - audio system units - standard
- Schuko, EURO-USA
- ceramic
- data sockets Cat 5, Cat 6
- radio, TV, satellite, data
- telephone sockets
- double button ( $2 \mathrm{NO}+2 \mathrm{NC}$ )
- programmable thermostat (space/floor)
- simple thermostat (space/ floor) with infrared control automatic relay for controlling blinds
- multimedia sockets
- IP 44 socket cover with frame
- IP 44 safety socket cover for
types French, Schuko
- IP 44 simple cover
- IP 44 double cover
- complete screwless socket
(Schuko) with plates
- complete British standard socket
- LED lamp for backlighting
mechanisms MEC 21 / 48
Series-12V(250V)

EXAMPLE OR ORDER


## 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.


## NEWS!



21210
Dimmer for fluorescent lamps with electronic ballast EVG

1-10V
IMax-40mA
Silent.


21215
Electronic dimmer/two-way switch for low power lamps - 150W R,C

15-150W/NA.
Dimming LED.
Silent.


21211
Ferromagnetic dimmer/2-way switch 500 VA R, L 20-500WNA.


21219
Speed controller for induction motors - 600VA 60-600VA.


21213
Electronic dimmer/two-way switch 550W R, C
20-550W/VA
Silent.


21470
Double Earth Socket
(French Type),


21214
Dimmer/two-way switch for energy saving lamps - 110VA
$R, L$
7-110WNA.
Dimming LED.


90656
Safety cover plate for double Earth socket.

A complete overview of designs, order numbers and technical information are all found in the "LOGUS90 Technical Catalog":

## WATERPROOF 48 series

EFAPEL with the series Waterproof 48 is the right choice for "any terrain" when performing an electrical installation in a moist or dusty environment.

Thanks to IP65 protection and use of thermoplastic with high resistance to weather conditions, the Waterproof 48 series represents the best solution for installations in industrial areas, garages and gardens.
It is produced in the traditional color gray - RAL 7035 - and in white - RAL 9003, which are colors used in EFAPEL technical cable trunkings.

The series Waterproof 48 has 34 functions; these can be mounted in simple or double bases and in vertical or horizontal positions.


## LIGHTING




|  | LED BULBS- SPECIAL DESIGN |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LED CANDLE / BALL | LED WIDE PROFI | LED Globus | LED MINI (G9) |
|  |  |  |  |  |
| Technical parameters | LC-E14-350-2K7 / LMB-E14-250-3K | LBWB-E27-530-2K7 | LBG-E27-806-2K7 | LL-G9-100-4K |
| Power [W] | $5 / 4$ | 7 | 11 | 1.5 |
| Base | E14 | E27 | E27 | G9 |
| Luminous flux[lm] | $350 / 250$ | 530 | 806 | 100/180 |
| Color temperature [K] | $27000 / 3000$ | 2700 | 2700 | $4000 / 2700$ |
| Dimmable | - | - | - | - |
|  | - Candle shape /Ball shape <br> - Replacement for 25W light bulb <br> - Warm white | - Wide angle of the shine ( $265^{\circ}$ ) <br> - Replacement for 40W light bulb <br> - Warm white | - Diameter 95mm <br> - Replacement for 60W light bulb <br> - Warm white | - Base G9 <br> - Replacement for 7W light bulb <br> - Neutral white/ Warm white |


|  | LED SPOTLIGHT |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LED SPOT DIMM | LED SPOT MAX | LED SPOT WIDE | LED SPOT |
|  |  |  |  |  |
| Technical parameters | DLSL-GU10-350-3K | LSL-GU10-350-3K / 5K | LSWL-GU10-200-3K | LSL-GU10-280-3K |
| Power [W] | 5 | 6 | 3.5 | 5 |
| Base | GU10 | GU10 | GU10 | GU10 |
| Luminous flux[lm] | 350 | 350 | 200 | 280 |
| Color temperature [K] | 3000 | $3000 / 5000$ | 3000 | 3000 |
| Dimmable | YES | - | - | - |
|  | - Dimmable <br> - It replaces traditional 30W halogen lamp <br> - Warm white / Cold white | - Highly luminous, voltage 230V <br> - It replaces the classic 35W halogen lamp <br> - Warm white / Cold white | - Wide angle of shine $\left(110^{\circ}\right)$ <br> - It replaces the classic 25 W halogen lamp <br> - Warm white | - Voltage 230V <br> - It replaces the classic 30 W halogen lamp <br> - Warm white |


|  | LED SPOTLIGHTS |  | LED TUBE |  |
| :---: | :---: | :---: | :---: | :---: |
|  | LED SPOT 12 V | LED TUBE | LED TUBE | LED TUBE |
|  |  |  |  |  |
| Technical parameters | LSL-GU5.3-280-3K | LT-G13-60-3K / 4K / 6K | LT-G13-120-3K / 4K / 6K | LT-G13-150-3K / 4K / 6K |
| Power [W] | 5 | 10 | 20 | 30 |
| Base | GU5.3 | G13 | G13 | G13 |
| Luminous flux [lm] | 280 | 1000 / 1050 | $1800 / 2000 / 2100$ | $2700 / 3000 / 3150$ |
| Color temperature [K] | 3000 | $3000 / 4000 / 6000$ | $3000 / 4000 / 6000$ | $3000 / 4000 / 6000$ |
| Dimmable | - | - | - | - |
|  | - Voltage 12V <br> - It replaces traditional 30W halogen lamp - Warm white | Today we have more choices than just classic light bulb innovation. Now we can have LED tubes as well. So nothing stands in the way of practical and elegant illumination. <br> When installing tubes, it is necessary to completely remove the choke coil and starter from the classic connection to further reduce power consumption. |  |  |

## LED DOWNLIGHT




## WE CAN DIM ANYTHING！

|  | PRODUCT |  |  |  | R 蘭为気 | L FF－1IIL | C－ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 10 0 8 2 4 |  |  |  |
|  |  | DIM－2－Staircase switch with dimming， gradual brightness increase／decrease， 500 VA． |  | X | 8595188112475 | $\checkmark$ | $\checkmark$ | X |
|  |  | DIM－5－Dimmer－short press ONOFF， pressing and holding dims， 500 VA ． | $x$ | 8595188115612 | $\checkmark$ | $\checkmark$ | $x$ |
|  | $3$ | DIM－14－Like DIM－5，also sutable for loads L． Dims loads R，L，C）． | $\checkmark$ | 8595188135955 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  |  | DIM－15－Dimmer for LED lamps and dimmable efficient fluorescent lamps，brightness adjustment by potentiometer | $x$ | 8595188140690 | $x$ | $x$ | $x$ |
|  | $1:-$ | DIM－6－Dimmer can be controlled by severa methods：pushbutton，extemal potentiometer， analog signal 0－10V，iNELS bus system． | X | 8595188136914 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | iil | SMR－S－Like DIM－5，pushbutton control，for mounting into KU68，dims by pressing and holding button，300W | X | 8595188123518 | $\checkmark$ | $\checkmark$ | X |
|  | init | SMR－U－Like DIM－14，pushbutton control，for mounting into KU68，dims by pressing and holding button，500W | $\checkmark$ | 8595188130738 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | $\cdots$ | SMR－M－Like DIM－15，pushbutton control． for mounting into KU68，LED dimming and dimmable efficient fluorescent lamps． | X | 8595188143776 | $x$ | X | $x$ |
|  | $3$ | LIC－1－Dimmer maintaining set light intensity in $L \mathrm{Lx}$ ，including SKS photo－sensor． | $x$ | 8595188144933 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | \% | LIC－2－Lighting intensity controller for dimmers or electronic ballasts． | $x$ | 8595188145312 |  | Output 0／1－10 |  |
|  | $\because$ | DCDA－33M／RGB－Designed for dimming single－color LED and RGB LED light sources． | $x$ | 8595188148807 | Contro | I with DAL／DM | V／CIB |
|  | $4$ | RFDA－11B－Dimming actuator basic program light scene，OFF function． | $\checkmark$ | 8595188136846 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | $4$ | RFDA－71B－Dimming actuator－ 7 programs， 4 lighting scenes，sunset and sunise simulation， ONOFF function． | $\checkmark$ | 8595188136273 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | $\begin{gathered} \because \\ i 11 \end{gathered}$ | RFDEL－ $71 \mathrm{~B} / \mathrm{M}-$ Dimming actuator $-7 /$ programmable functions（6 light functions，ON／OFF function）． | $x$ | 8595188145121 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | $\begin{aligned} & =1 \\ & \text { IIII } \end{aligned}$ | RFDAC－71B－Analog actuator－ 7 programs （6 light functions，ON／OFF function） | $x$ | 8595188142809 | $1 \times$ Output 0／1－10 V |  |  |
|  | $x \because$ | RFDA－73M／RGB－Dimmer for coloured （RGB）LED strips． | $x$ | 8595188148814 | X |  |  |
|  | $x$ | EMDC－64M－Converter INELS－DALIDMX． | X | 8595188150309 | Control of receivers DAL／DMX |  |  |
|  | $\because$ | DA3－22M＿ $\mathrm{V}_{2}$－ 2 －channel dimming actua tor is used to control the brightness intensity o light sources ESL，LED and RLC． | $\checkmark$ | 8595188132626 | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  | $\therefore$ | LBC3－02M－Dimming double－channel actuator， $2 \times$ relays， $2 \times 1-10 \mathrm{~V}$ ． | $x$ | 8595188132688 | $2 \times$ Output $1-10 \mathrm{~V}$ |  |  |


| ESL ¢ 『ア | LED |  |  |
| :---: | :---: | :---: | :---: |
|  |  | CATEGORY 2 |  |
| $x$ | * | * | * |
| * | * | * | * |
| * | * | * | $x$ |
| $\checkmark$ | $\checkmark$ | $\checkmark$ | $x$ |
| $x$ | $x$ | $\checkmark$ | $x$ |
| $x$ | $x$ | $x$ | * |
| * | * | $x$ | * |
| $\checkmark$ | $\checkmark$ | $\checkmark$ | $x$ |
| $\checkmark$ | $\checkmark$ | $\checkmark$ | * |
| $x$ | $x$ | $x$ | $x$ |
| * | $x$ | * | * |
| * | $x$ | $\checkmark$ | * |
| $x$ | $x$ | $\checkmark$ | $x$ |
| $\checkmark$ | $\checkmark$ | $\checkmark$ | $x$ |
| $x$ | $x$ | $x$ | $x$ |
| $x$ | $x$ | * | $\checkmark$ |
| $x$ | $x$ | $x$ | $x$ |
| $\checkmark$ | $\checkmark$ | $\checkmark$ | $x$ |
| $x$ | $x$ | $x$ | $x$ |

## Functional DEMO cases

## http://www.eshop.elkoep.com

At our stands, we can demonstrate to interested guests using our demonstration case the wireless control of RF Control, new designs of switches of LOGUS ${ }^{90}$ sockets and on panels installation devices for the electronic technologies and new products from the series of modular electronic devices.


4 RELAY
The demo case can realistically simulate the functions of the multifunction time relay, digital time switch clock, twilight switches, dimmers, contactors and auxiliary relays.

It is the ideal training tool, but is also appropriate for self-teaching of functions of the products from the group RELAY.


4 LARA
This demo case is intended for the presentation and demonstration of LARA functionality - LARA as an internet radio, LARA as a music player, LARA as a home intercom, LARA as a home videophone (with IP door phone 2 N ) and LARA as an iNELS audio zone.

Thanks to the speakers designed for installation in ceilings or into switches you can enjoy the ultimate music experience.


4iNELS RF Control
Demonstration of the wireless system - switching, dimming, heating + detectors.

The demo case makes a fantastic training tool, but also acts as a demonstration of functionality for the customer and the design of individual products.
 3rd PARTY
SYSTEMS
This demo case is intended to demonstrate the integration of our iNELS BUS system with the KNX standard and systems Creston, Control4.

With wireless systems Zwave and ZigBee

« iNELS Bus ।
This is the ideal starter for becoming familiar with the intelligent solution of electrical installation (socalled BUS).

Here you can try adding parameters in the configuration program IDM, and it also makes for a fine tool for presentations to customers.


There is nothing better than seeing the switch in person, to touch it... We therefore recommend this case to every company dealing in the sale of switches.

You can look forward to refined metal, glass, wooden or even stone frames,
There are also the plastic variations BASE and AQUARELLA.

## Printed materials

available on: http://www.elkoep.com/download/promotional-materials/


OTHERS:

iNELS Presentation possibilities



