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ABOUT THE COMPANY

Gone are the days when everyone lit their way with their own torch. Romantic gas lamps that were manually lit at dusk are also the past. Today, the city light up every evening with a huge number of lamps increased holiday periods by light decoration and illumination of monuments. And it’s not for free!

In contrast to the traffic lights, street lamps are not an absolute necessity - but their absence would lead to strong protests by residents. A much better solution for economical community is rational organization of lighting and proper control over it. Appropriate, i.e. responding to the needs of users while minimizing the costs.

Creating a good solution for a particular customer requires both substantial technical knowledge, knowledge of market trends and practical experience. This is what makes RABBIT, which exists since 1989, stand out. It deals with the control, management and monitoring of external lighting. Comprehensively solves problems concerning lighting. Adjusts projects to individual needs. Offers professional guidance and execution of installation works, service, maintenance lighting and training. 26-year experience collected by the company is supported by numerous realizations. Its devices control external lighting not only in Poland (e.g. comprehensive solutions for Warsaw and Krakow), but also in Estonia, Romania, Lithuania and Latvia. Significant savings arising from modernization of lighting are usually achieved by optimizing the moment of switching the street lighting on and off. In the simplest case, this is correlated with the time of sunrise and sunset. For a big city small shifts of that moment can mean the difference in cost expressed in thousands of PLN. Therefore, digital astronomical CPA programmers, which precisely define the right moment to switch, enjoy great interest of our customers. Municipalities appreciate the savings obtained after installation of the programmer in the lighting system and therefore fast return on investment, while energy companies emphasize their functionality and minimal risk of failure.

For more than a quarter of a century, we focus on modern technology, reliability and long life. We invite you to familiarize yourself with our offer and cooperation, which will soon bring tangible results.

PRIZES AND AWARDS

- 1st Prize Best Product LIGHT 2015 Fair - for SkyLight lighting management system in industrial facilities
- 1st Prize of the Polish chamber of Civil Engineers 2015 - for SkyLight lighting management system in industrial facilities
- Grand Prize 11th International Fair of Electrical Equipment and Security Systems - ELECTRICITY 2013 Award of the President of the Republic of Poland LECH WAŁĘSA - for power reducer microBOX
- 1st Prize for the Best Product of 2012 LIGHT Fair - Digital Astronomical Programmer CPA 6.0
- 1st Prize of the Polish chamber of Civil Engineers 2012 - in the scope of for lighting CPA 6.0
- 1st Prize of 8th International Fair of Electric Fittings and Security Systems - ELECTRICITY 2010 - for intelligent monitoring and control system CPAnet
- ELEKTROSYSTEMY magazine award - Elektroproduct 2008 in the category "Lighting technology" for CPA SRC astronomical programmer
- Grand Prize of 4th International Fair of Electric Fittings and Security Systems - ELECTRICITY 2006 Award of the President of the Republic of Poland LECH WAŁĘSA - for SAL SOLARIS lighting system
- Award of 5th International Fair ELEKTROEXPO 1998 GOLDEN SPARK - for street lighting control system CPA 2000
CPAnet

CONTROL AND MONITORING SYSTEM

CPAnet is a modern system that is used for remote monitoring and management of street lighting through the website.

We refer to this system as intelligent as it is able to select the most appropriate moment and time to switch on/off the lights and adjust the light intensity. This considerably reduces power consumption. The system consists of controllers and software. System controllers switch on the lighting system by contactors also allowing control of power reducers operation. Built-in GPS receiver allows to pinpoint the geographical location of the lighting system, therefore to precisely specify the moment of sunrise and sunset. Time downloaded from the GPS frees the user from having to correct the clock in the driver. The device is mounted in the lighting cabinet. Along with the connected lighting circuits it creates a system that can be remotely monitored by the user. CPAnet is user-friendly - the controller mounted in the lighting cabinet is automatically localized in the system. Each user after logging in to its account www.cpanet.pl has access to its subordinate structure of lighting (town, municipality). In addition, the user can secure access to the system with SMS password - as in banking systems.

WIRING DIAGRAM

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TECHNICAL SPECIFICATIONS

- supply voltage: 85-264 VAC, 47-440 Hz
- driver size (width / height / depth): 150 x 85 x 110 mm
- width of the device: 9 modules
- number of outputs: 8 (4 circuit, 4 switch)
- outputs current capacity: 6 A/230 V
- number of inputs: 8
- operating temperature: from -30°C to +85°C
- protection degree: IP20
- DIN rail mounting
- cooperation with a network analyzer/meter
SYSTEM FEATURES

- Full control and management through a website
- GPS time synchronization (time and geographical location downloaded from the GPS enable accurate calculation of sunrise and sunset on a given day and location)
- Communication: GPRS, SMS
- Automatic location of the controllers on the website map
- Easy creation and management of groups of drivers
- Possibility to emergency switch the lighting on/off via SMS (mobile phone or web pages)
- Real-time monitoring and analysis of network parameters: current, voltage, power consumption, active power, reactive power
- Archiving and visualization of measurement and alarm data
- Reporting system
- User authentication (login, password) and giving them different powers
- Remote software updates and settings on GPRS
- Free SIM card for 24 months
- Access to free software on the website
- Application for mobile devices
- Emergency power supply from a built-in battery
- LEDs on the front panel, indicating the status of inputs and outputs, GSM signal, GPRS, GPS, network coverage, battery charging status
- 6 output modes: astronomical, daily, cascade, service, reduction, weather
- Possibility of introducing 10 exceptions to the illumination work schedule (e.g. public holidays, local holidays, etc.)
- Ability to set separate patches for summer and winter
- Immediate information on the occurrence of alarm situations, i.e. power failure, failure of individual phases, power excess/reduction, cabinet openings
- Remote lightning power switch on/off during maintenance
- Possibility to remotely program lighting with APC-2 and APC-LED systems
- Possibility to turn on/off lighting via SMS (e.g. sports fields)
- Possibility to customize road lighting to the current volume of traffic (based on data from an external traffic control system)
- System designed for use both in new and existing lighting systems
- Temporary lack of access to the Internet does not interfere with operation of the controller
- Virtual photocells can be connected, allowing an immediate response to severe weather changes. Its proper use allows achieving substantial savings.
The CPA 5RC programmer is a modern street lighting controller, which is used to turn on and off and monitor the work of lighting. It contains a precision quartz clock (possible deviation of indications: +/- 5 seconds per month), which also automatically adjust for daylight savings (summer/winter). Communication with the controller mounted in the lighting cabinet can be done remotely - using a wireless remote control, therefore opening the cabinet is not required. This allows for easier and faster change of operating parameters (settings) of the controller. The event recorder built in the controller provides basic information about the work of the lighting network. All power failures are recorded. The wireless remote allows you to download data from the controller and transfer them to your computer. The supplied software makes it easier to analyze the data collected.

FEATUERS OF THE DEVICE

- cooperation with PSSRC radio remote control
- event recorder
- automatic change of summer/winter time
- six stored astronomical arrays
- programmable night interruption
- cooperation with twilight switch
- easy to read LED display and ergonomic keyboard facilitate making settings
- LEDs on the front panel indicate the status of inputs and outputs
- ability to lock the keyboard and controller settings, using the PSSRC remote control
- possibility to block the driver with PIN

TECHNICAL SPECIFICATIONS

- supply voltage: 230 V +10/-20%, 50 Hz
- driver size (width / height / depth): 105 x 90 x 60 mm
- width of the device: 6 modules
- number of outputs: 3 (two independent programmable outputs in astronomical mode and one universal)
- outputs current capacity: 8 A / 230 V
- number of inputs: 2 (twilight switch, event recorder)
- operating temperature: from –30°C to +70°C
- protection degree: IP20
- DIN rail mounting
The CPA 5RC with GPS is an intelligent street lighting controller with built-in GPS module.

The CPA 5RC with GPS programmer is a device designed to manage the street lighting system. It features a built-in receiver for GPS satellite location system, enabling accurate determination of the time of day and date. This eliminates the need for manual clock adjustments.

The controller can be programmed remotely, allowing for easy configuration without the need to access the cabinet. With its built-in event recorder, users can monitor network changes and outages.

The CPA 5RC with GPS is equipped with a variety of features including:
- GPS time synchronisation
- Cooperation with PS5RC radio remote control
- Event recorder
- Automatic change of summer/winter time
- Six stored astronomical arrays
- Programmable night interruption
- Cooperation with twilight switch
- Easy-to-read LED display and ergonomic keyboard
- Ability to lock the keyboard and controller settings
- Possibility to block the driver with PIN

### Technical Specifications
- Supply voltage: 230 V ±10% / –20%, 50 Hz
- Driver size (width / height / depth): 105 x 90 x 60 mm
- Width of the device: 6 modules
- Number of outputs: 3 (two independent programmable outputs in astronomical mode and one universal)
- Outputs current capacity: 8 A / 230 V
- Number of inputs: 2 (twilight switch, event recorder)
- Operating temperature: from –30°C to +70°C
- Protection degree: IP20
- DIN rail mounting
The device calculates the hours of sunrise and sunset based on user input geographical coordinates and the date. After installing the driver in a lighting cabinet it is sufficient to validate the date and time, and enter the geographical coordinates and possible amendments. This can be done using backlit buttons found on the front panel, but you can also use the PSSRC wireless remote control. You can enable the device in the CPA 4.0 controller mode, than the device uses the same table of sunrises and sunsets. The device can operate with GSM modem, the connection of which to the controller allows to manage lighting through the website. The user can remotely manage the controller or group of controllers, has an image (visualization) of operating states on a map and information on alarms in real time. Thanks to the external modem, the user does not have to make adjust the clock in the controller, as the synchronization of time and date takes place automatically.

CPA 6.0 is a controller designed for switching on and off the street lighting, based on geographical coordinates.

**FEATURES OF THE DEVICE**

- automatic change of summer/winter time
- switches the lighting on and off based on geographical coordinates
- there is a possibility of including a table of sunrises and sunsets identical to the one in CPA 4.0
- programmable night interruption
- ability to block night break e.g. on weekends, on holidays
- easy to read LCD display (two lines of eight characters) and ergonomic, backlit keyboard make it easy to introduce settings
- cooperation with twilight switch
- cooperation with PSSRC remote control
- ability to lock the keyboard and controller settings, using the remote control
- lighting operation time meter (separate for each of the control outputs)
- possibility to cooperate with GSM modem

**TECHNICAL SPECIFICATIONS**

- supply voltage: 230 V +10/−20%, 50 Hz
- driver size (width / height / depth): 105 x 90 x 60 mm
- width of the device: 6 modules
- number of outputs: 3 (two independent programmable outputs in astronomical mode and one universal)
- outputs current capacity: 8A/230 V
- number of inputs: 1 (twilight switch or event recorder)
- operating temperature: from −30°C to +70°C
- protection degree: IP20
- DIN rail mounting
CPA 4.0

ASTRONOMICAL DIGITAL PROGRAMMER

CPA 4.0 is a controller designed for switching on and off the street lighting.

Hours of switching on and off are determined on the basis of data from an array of sunrises and sunsets, and amendments made by the user. This almost maintenance-free device successfully replaces the previously used twilight switches and allows you to optimize lighting expenditure to a level equivalent to user expectations.

Installed in lighting cabinet and properly programmed CPA4.0 controller does not require further intervention of the user. It controls lighting in annual cycle, without the need for periodic adjustment. Device programming is performed using controller buttons or wireless remote controller PSSRC operating in the infrared.

Using the PSSRC remote control one can temporarily change settings of CPA4.0, and even implement a previously prepared complete program by pressing a single button.

FEATURES OF THE DEVICE

- automatic change of summer/winter time
- programmable night interruption
- ability to block night break e.g. on weekends, on holidays
- cooperation with twilight switch
- cooperation with PSSRC remote control
- easy to read LED display and ergonomic keyboard facilitate making settings
- LEDs on the front panel indicate the status of inputs and outputs
- ability to lock the keyboard and controller settings, using the remote control
- lighting operation time meter (separate for each of the control outputs)

TECHNICAL SPECIFICATIONS

- supply voltage: 230 V +5/-10%, 50 Hz
- driver size (width / height / depth): 105 x 90 x 60 mm
- width of the device: 6 modules
- number of outputs: 3 (two independent programmable outputs in astronomical mode and one universal)
- outputs current capacity: 8 A/230 V
- number of inputs: 1 (twilight switch)
- operating temperature: from −30°C to +50°C
- protection degree: IP20
- DIN rail mounting
PS5RC

WIRELESS CONTROLLER

PS5rc remote controller is used for wireless control of the CPA watches family.

It communicates remotely with the CPA 5RC controller by radio link, so without the need to open the cabinet. Communication with the controllers of CPA 4.0 and CPA 6.0 type takes place in the infrared. The range radio link in an open space is tens of meters. It depends on external conditions, but in practice it does not fall under several meters. Infrared connection range is a few meters.

Using the remote control, the user can easily enter or change any necessary settings for the controller. Remote control software allows for quick - one button - implementation of the previously prepared complete program settings. The user can also send control command or remotely lock the keyboard and controller settings. This prevents making changes to the driver settings by unauthorized persons. Furthermore wireless remote CPA 5RC allows to remotely lock, using PIN code. Remote control software allows downloading the data from the CPA 5RC driver built-in event recorder and transferring them to computer memory. The device is lightweight and ergonomic. The remote control is equipped with an RS232 interface for connection to a PC. The software delivered together with the remote control allows for the exchange and processing of data.

FEATURES OF THE DEVICE

- wireless control
- easy to read LCD display and membrane keypad
- ease and the speed of introducing operating parameters (settings) of the driver
- possibility to support multiple types of drivers

TECHNICAL SPECIFICATIONS

- supply voltage: 2 bateries R6 (AA)
- dimensions (length x width x height) 200 x 95 x 40 mm
- weight 260 g
- connection RS 232
- operating temperature: from -40 to +85°C
- protection degree: IP20
ILUMIN

AUTONOMOUS RELAY FOR CONTROLLING ILLUMINATION

Autonomous ILUMIN time relay is used to turn on and off illumination, which is powered from street lighting circuit.

The use of the device allows for late night switching off the illumination powered from road lighting network. Duration of the night exclusion can be easily set by the user. Such solution allows to deactivate illumination in the middle of the night.

ILUMIN can also be used in a situation where the main lighting circuit powers the auxiliary circuit e.g. park, playground, etc.

The relay is a maintenance-free device which does not require adjustment and does not contain a clock, which must be adjusted, or additional power supply.

FEATURES OF THE DEVICE

- independent control over illumination circuit or another circuit powered from the street lighting circuit
- does not require an external control
- the product does not contain a clock or its own power supply
- possibility of simple reprogramming of the factory settings

TECHNICAL SPECIFICATIONS

- supply voltage: 230 V +5/-15%, 50 Hz
- device size (width / height / depth): 175 x 150 x 100 mm
- outputs current capacity: 16 A/230 V (we also offer models for other current capacities (one and three-phase))
- operating temperature: from -20 to +85 °C
- protection degree: IP65

WIRING DIAGRAM
digiLUX

DIGITAL TWILIGHT SWITCH

digiLUX digital twilight switch is designed to control lighting: street, manufacturing facilities and industrial halls.

It is an autonomous device or operating as supplementation of digital astronomical CPA programmers. digiLUX measures the intensity of light with an accuracy of one lux in wide range and displays the measured value on the LED display. The device consists of measuring part and a sensor made based on light-to-frequency converter. Buttons placed on the front panel of the switch allow setting the level of intensity at which the light is switched on and off with an accuracy of 1 lx in the entire measuring range. Thanks the moment of switching the lighting delayed by 1 minute the digiLux switch avoids instability (short-term switching on and off cycles) caused by e.g. momentary lighting of the sensor. digiLUX allows you to switch the lighting on also during the day in case of very bad weather conditions.

FEATURES OF THE DEVICE

- digital measurement of light intensity
- ease and precision of setting the switching threshold (measurement resolution 1 lux)
- resistance to short-time lighting or masking of the sensor
- relay output (closing contact)

TECHNICAL SPECIFICATIONS

- supply voltage: 230 V +10/–20%, 50 Hz
- driver size (width / height / depth): 52 x 95 x 58 mm
- width of the device: 3 modules
- number of outputs: 1
- measurement scope: 0-3500 lx
- outputs current capacity: 16 A/230 V
- operating temperature: from -20°C to +50°C
- protection degree: digiLUX – IP20, sensor – IP56
- DIN rail mounting

WIRING DIAGRAM
PZS-5 / PZS-6

REMOTE CONTROL RELAYS

PZS - is remote street lighting network control relay in the cascade set.

Giving phase voltage on any number of control inputs closes the passage between the output terminals. Between the input and the output side there is a full galvanic isolation.

FEATURES OF THE DEVICE

- direct interaction with contactor
- optical indication for work
- galvanic isolation of the output circuit from control inputs

TECHNICAL SPECIFICATIONS

- supply voltage: 230 V +10/-30%, 50 Hz
- driver size (width / height / depth):
  PZS-5 - 35 x 95 x 58 mm
  PZS-6 - 52 x 95 x 58 mm
- width of the device:
  PZS-5 - 2 modules
  PZS-6 - 3 modules
- number of outputs: 1
- outputs current capacity: 16 A/230 V
- number of inputs:
  PZS-5 - 3 control inputs
  PZS-6 - 9 control inputs
- operating temperature: from –30 °C to +50°C
- protection degree: IP20
- DIN rail mounting
**microBOX 12A**

**POWER REDUCER**

microBOX 12A is a low-power reducer designed to work in lighting networks, in which it is possible to reduce power consumption by reducing the voltage. microBOX 12A regulator is the smallest reducer on the market. Thanks to small dimensions and low weight it will fit in almost any lighting cabinet.

The device uses the transformer method of lowering voltage and at the same time power, allowing up to 40 percent energy savings. microBOX 12A does not introduce harmonic distortion and does not adversely affect the work of lighting.

microBOX 12A is used where it is possible to reduce illumination intensity at certain times e.g.: on the streets, stadiums, railway stations and parks.

**FEATURES OF THE DEVICE**

- Voltage optimization of street lighting network
- available 1- and 3-phase versions
- adjustable power reduction level of 20% or 40%
- possibility to activate or deactivate reduction at any time
- lack of harmonic distortion
- automatic bypass of the device in case of power failure or damage
- control by any CPA series astronomical programmer or any timer
- possibility to chose voltage on the terminal block
- 3 LEDs on the front panel of the device, indicating the status of work
- possibility to use in cable networks, overhead lines, for external and internal lighting
- environmentally friendly device - by reducing power consumption it reduces CO₂ emissions
- innovation, reliability, easy operation
- high economic efficiency - reducing costs up to 40%

**TECHNICAL SPECIFICATIONS**

- supply voltage: 230, 238, 240 V, 50Hz
- output voltage: 230 V - 180 V
- size (width / height / depth): 140 x 215 x 125 mm
- capacity range up to 2.5 kVA for a 1-phase and up to 7.5 kVA for 3-phase
- outputs current capacity: 12 A
- 1st reduction level by 20 %
- 2nd reduction level by 40 %
- operating temperature: from -40°C to +40 °C
- protection degree: IP20
- installation in the lighting cabinet and on the board
- weight 4.7 kg (for one phase)
microBOX 16A, 20A, 25A

POWER REDUCER

microBOX 16A, 20A, 25A is medium power reducer, designed to work in lighting network,
in which it is possible to reduce power consumption by reducing voltage. Due to its small size and low weight it will fit in almost any lighting cabinet. The device uses the transformer method of lowering voltage and power at the same time, which allows energy savings of up to 40%. With this solution we extend the life of luminaires, ballasts and light sources, as well as lower the additional costs of operation and maintenance of the lighting networks. microBOX does not introduce harmonic distortion and does not adversely affect the work of lighting. The device is equipped with thermal protection: internal temperature sensor that if required switches the device off and indicates exceeding the allowed temperature. On the front panel of the device there is a switch that allows the user to easily select the appropriate voltage or, if necessary, a manual bypass.

FEATURES OF THE DEVICE

- Voltage optimization of street lighting network
- available 1- and 3-phase versions
- adjustable power reduction level of 20% or 40%
- possibility to activate or deactivate reduction at any time
- lack of harmonic distortion
- possibility to use in cable networks, overhead lines, for external and internal lighting
- on the front panel of the device there is a switch that allows selection of supply voltage
- automatic and manual bypass of the device in case of power failure or damage
- control by any CPA series astronomical programmer or any timer
- 4 LEDs on the front panel of the device, indicating the status of work
- environmentally friendly device - by limiting power consumption it reduces CO₂ emissions
- innovation, reliability, easy operation
- high economic efficiency - reducing costs up to 40%

WIRING DIAGRAM

TECHNICAL SPECIFICATIONS

- supply voltage: 230, 238, 245 V, 50Hz
- reception voltage: 230 V - 180 V
- size (width / height / depth): 165 x 325 x 135 mm
- power range
  16A up to 3.5 kVA for a 1-phase and up to 10.5 kW for 3-phase
  20A up to 4.5 kVA for a 1-phase and up to 13.5 kW for 3-phase
  25A up to 5.5 kVA for a 1-phase and up to 17 kW for 3-phase
- outputs current capacity: 16 A, 20A, 25A (depending on the version)
- 1st reduction level by 20 %
- 2nd reduction level by 40 %
- operating temperature: -40 °C to +40 °C
- protection degree: IP20
- installation in the lighting cabinet and on the board
- weight 10.8 kg (for one phase)
GreenBoX

POWER REDUCER

GreenBoX reducer is a modern device, reducing energy consumption in lighting circuits.

The transformer method of lowering voltage and therefore power used in the reducer allows to save energy. Thanks to application of modern solutions and small dimensions GreenBoX can be connected to any lighting system: both the newly designed and already existing. GreenBoX series reducers were primarily used in low-power lighting circuits, and as they do not introduce harmonic distortion, they are readily used.

GreenBoX is manufactured in single-phase and three-phase versions for currents 15 A/25 A/35 A/45 A per phase. We offer it as an external IP44 cabinet (attached to lighting cabinet) or interior one (for mounting in lighting cabinets or switchboards).

The outdoor IP44 version is manufactured in aluminium or thermosetting housing.

The device is used in public and commercial buildings requiring long-term illumination: in the streets, stadiums, railway stations or in parks.

Legend:
- **Uz** - nominal voltage of 230 V
- **Us** - stabilization voltage 200-220 V
- **Ur** - power reduction voltage 180 V-200 V

Stage:
- 0-1 - a series of heating sources, about 15 minutes;
- 1-2 - nominal work - stabilization voltage;
- 2-3 - process of power reduction (several-stage voltage reduction to Ur);
- 3-4 - power reduction process (user adjustable threshold)
FEATURES OF THE DEVICE

- Voltage optimization of street lighting network
- Available 1- and 3-phase versions
- Adjustable level of power reduction to 40% (multi-stage voltage reduction)
- Possibility to activate or deactivate reduction at any time
- Lack of harmonic distortion
- Possibility to use in cable networks, overhead lines, for external and internal lighting
- Automatic bypass of the device in case of power failure or damage
- Control by any CPA series astronomical programmer
- Environmentally friendly device - by reducing power consumption it reduces CO₂ emissions
- Innovation, reliability, easy operation
- High economic efficiency - reducing costs up to 40%

TECHNICAL SPECIFICATIONS

- Supply voltage: 250 V - 230 V
- Reception voltage: 230 V - 180 V
- Size (width / height / depth):
  - 15A, 25A: 220 x 530 x 210 mm
  - 35A, 45A: 220 x 590 x 210 mm
- Capacity range:
  - 15A up to 3.3 kVA for a 1-phase and up to 9.9 kVA for 3-phase
  - 25A up to 5.5 kVA for a 1-phase and up to 16.5 kVA for 3-phase
  - 35A up to 8 kVA for a 1-phase and up to 24 kVA for 3-phase
  - 45A up to 10 kVA for a 1-phase and up to 30 kVA for 3-phase
- Outputs current capacity: 15 – 45 A (depending on the version)
- Operating temperature: from -40°C to +40°C
- Protection degree: IP20
- Installation in the lighting cabinet or on the board
- Weight up to 23.5 kg (depending on the version)
Its unique feature is the ability to determine the current time on the basis of on/off switching log. The unit is fitted inside light fixtures equipped with appropriate tapped ballast.

Switching and duration of full/reduced-power operation are programmable in 30 minutes increments. Fixtures supplied from a single circuit are switched simultaneously with to-the-second accuracy. APC-2 is integrated into the light fixture at the factory.

APC-2 PROG is used to program and reprogram the APC-2 power reducing devices integrated in lighting fixtures. It enables to easily and simultaneously change the settings of all fixtures supplied from the same circuit which are fitted with APC-2. It can also be programmed from CPA.net system.

APC-2 PROG

**FEATURES OF THE DEVICE**

- no external control line
- no clock, no built-in battery
- supports simultaneous change of settings in all fixtures
- status indication for maintenance-related purposes
- can be fitted in 70W to 400W fixtures
- relay programmable from APC-2 PROG or CPA.net controller
- maintenance free and easy to install

**TECHNICAL PARAMETERS OF APC-2**

- supply voltage: 230 V ±5/–15%, 50 Hz
- driver size (alt. / diameter): 95 x Ø 35 mm
- number of outputs: 1 changeover
- power consumption 0.5 W
- operating temperature: from –30°C to +80°C
- protection degree: IP20

**TECHNICAL PARAMETERS OF APC-2 PROG**

- supply voltage: 230 V ±10/–20%, 50 Hz
- driver size (width / height / depth): 52 x 90 x 58 mm
- width of the device: 3 modules
- number of outputs: 1
- outputs current capacity: 6 A/230 V
- operating temperature: from -20°C to +50°C
- protection degree: IP20
- DIN rail mounting
A unique feature of the system is the ability to determine the current time based on the history of switching on and off. The start time of full or partial reduction of power and its duration are set with an accuracy of 30 minutes. Switching in luminaires supplied from a single line takes place simultaneously with second precision. APC-LED is designed for control LED power supplies with integrated intensity reduction system (1 ~ 10 Vdc interface is used, changing fulfillment of PWM signal or resistance).

APC-LED allows a temporary reduction in light stream output of different types LED luminaires. The system has two pre-programmed time intervals, which light output on two different levels is reduced. The user can reprogram the system so that it will change both the scope of both time intervals and the level of reduction. Programming is based on the use of an appropriate sequence of switching the power on and off.

APC-LED PROG is used to program and reprogram the APC-LED power reducing devices integrated in lighting fixtures. It enables to easily and simultaneously change the settings of all fixtures supplied from a single circuit which are fitted with APC-LED devices. APC-LED may also be programmed via the CPAnet system.

**FEATURES OF THE DEVICE**

- no external control line
- no clock, no built-in battery
- supports simultaneous change of settings in all fixtures
- status indication for maintenance-related purposes
- relay programmable from APC-2 PROG or CPAnet controller
- maintenance free and easy to install

**TECHNICAL PARAMETERS OF APC-LED**

- supply voltage: 230 V +10/−20%, 50 Hz
- driver size (width / height / depth): 52 x 90 x 58 mm
- width of the device: 3 modules
- number of outputs: 1
- outputs current capacity: 6 A/230 V
- operating temperature: from -20°C to +50°C
- protection degree: IP20
- DIN rail mounting

**TECHNICAL PARAMETERS OF APC-LED PROG**

- supply voltage: 230 V +5/-15%, 50 Hz
- driver size (height / diameter): 95 x Ø 35 mm
- number of outputs: 1 changeover
- power consumption 0.5 W
- operating temperature: from −30°C to +80°C
- protection degree: IP20
Devices offered by our company are designed for operation in street lighting circuits fitted with sodium lamps or LED lamps. The devices are parameterized to specific circuits during production and during installation additionally regulated so as to ensure optimum performance of circuits. RMB can work with street lighting controllers CPAnet type, this solution provides automatic, remote monitoring of the compensation process. RMB should be build in during the design and construction of a new lighting cabinet. Such solution significantly reduces the cost of the entire project.

**RMB**

**REACTIVE POWER REDUCER**

Reactive power reducer is a device limiting the reactive power consumption both induction and capacity.

**FEATURES OF THE DEVICE**

- optimization of reactive power lighting circuits
- available 1- and 3-phase versions
- reading of all measured parameters on the device display
- possibility to use in cable networks, overhead lines, for external and internal lighting
- cooperation with the CPAnet system remote management and monitoring of the network
- high economic efficiency enables lowering bills for reactive power and thus improves the quality of energy
- environmentally friendly device - by reducing reactive power consumption it reduces CO₂ emissions
- rate of purchase return already from 3 months

**TECHNICAL SPECIFICATIONS**

- supply voltage: 230 V / 400 V / 415 V
- size (width / height / depth): 380 x 670 x 210 mm
- power range from 1 kVAr to 40 kVAr.
- operating temperature: -20°C to +55°C
- protection degree: IP20
- installation in the lighting cabinet or on the board
- weight depending on the version
SSOU

STREET LIGHTING SYSTEM CABINET

SSOU is a modern street lighting cabinet.

SSOU in one enclosure integrates the measuring and distribution part, the system for central power reduction (power reducer) and the system for control and remote monitoring (CPA).

The cabinet housing houses three sections. These are:

1. measuring section
2. distribution section
3. power regulator section

Measuring section always has a separate door and closing. In the measuring section there are upstream of the counter protection and measurement devices that are installed depending on the needs and requirements of the energy supply company.

Distribution section contains typical elements of control circuits: contactors, security of lines powering individual lighting circuits and terminal blocks. In this section, the circuit of remote control and supervision CPAnet was placed. The last section contains power reducer with parameters corresponding to the needs of a specific location.

Cabinets are made according to customer requirements. At the step of order picking technical details are determined with the ordering party. A final draft is prepared, which after approval is implemented. As a standard the cabinets are mounted in housings made of aluminium, powder coated, although it is also possible to use other housings. We offer single-phase versions of cabinets or three-phase, with power range from 3.5 kVA to 120 kVA. The use of modern control system based on the CPAnet controller and power reducer allowed to create a solution fully corresponding to European standards. With the remote exchange of software, it is also flexible, because it can be adapted to customer needs changing over time.

TECHNICAL SPECIFICATIONS

- available power range:
  - single-phase versions: 3.5 kVA to 20 kVA
  - three-phase versions: 7.5 kVA to 120 kVA
- dimensions and weight depend on the version
The company Rabbit offers you a service of comprehensive lighting projects implementation. We treat each task individually and offer the best solutions that take into account both technical aspects and cost: we aim to rationalize the investment costs and operational savings.

**EXPERT ADVICE**

– we advise our Customers how to select the lighting system solutions ranging from performing a preliminary audit of the lighting infrastructure, through analyzing the technical condition and current energy costs, up to submitting a concrete solution that is most advantageous for the Customer.

**SERVICE**

– we offer post-warranty service and remote support of Service Department in installing and commissioning our equipment, as well as by everyday use. In addition, we guarantee CPAnet system users a free support of Service Desk from 6:00 to 22:00.

**EXECUTION**

– we offer a comprehensive execution of the electrical installation works by the lighting, as well as installation and commissioning of our equipment, which ensures correctness of their operation. We also provide services of comprehensive modernization of the lighting from design to turnkey delivery.

**MAINTENANCE OF LIGHTING**

– we offer total care over the lighting system in the area. At the outset, we conduct a detailed inventory of the lighting infrastructure on the entrusted area. We analyze its condition, indicating the possibility of optimizing costs and improving functionality. As part of our service we i.a. provide service and overhaul of equipment, measurement and performance tests of road lighting, elimination of failures, renovation of lighting poles and cabinets, repair or replacement of damaged cables.

**TRAINING**

– in a relaxed atmosphere, in a clear and transparent manner we will train your employees how to operate our devices. We believe that your staff, supported our experience, will more effectively manage the lighting infrastructure entrusted to them. We remain at your disposal and we offer our knowledge and experience.
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