ProGRID Series - Power Quality Accessories



Surge and Lightning counter Family
SPD Life-status Monitoring Accessories

ISKRA ZAŠČITE

BE ON THE SAFE SIDE

ProGRID Series

Surge and Lightning counter Family

Surge is a high frequency current event. For any kind of electrical device it presents a potentially dangerous event and can occur in electrical network for number of reasons. The most common cause is a lightning strike, but also switching of inductive loads, operation of industrial equipment, power grid disturbances and general fault or arcing conditions are all capable of producing a surge pulse. In case of a direct lightning strike the damage, caused by surge current, is sometimes clearly felt and visible, but most of other events go by unnoticed. Consequences of such 'quiet' disturbances are not always negligible.

Surge currents can cause loss of data transmission, switch tripping, disturbance of a machine control systems or a slow but noticeable degradation of circuit elements. On the other hand, a surge can be an indicator of a short circuit, inrush currents of power load after a blackout or wiring insulation damage.

The ProSEC family is a series of surge counters with different capabilities that sense and record the otherwise undetectable surge currents. This enables users to take preventive measures and plan maintenance.



ProSEC II+



ProSEC III



ProLEC Basic

SPD Life-status Monitoring Accessories

Surge Protective Devices (SPDs) are designed to be self-sacrificial, often failing in order to protect more expensive equipment downstream. SPDs will typically withstand one large surge of their Imax (class II) or Iimp (class I) rating, or many smaller surges. In essence, their life is based on the magnitude and frequency of surges they have diverted. This means, that at some point in time, they will reach the end of their life cycle. This may be due to many small surges, or one large surge which exceeds the specified rating of the SPD. Upon reaching end-of-life, a correctly designed SPD will safely “disconnect” itself from the power supply and equipment is there to protect. Such disconnection usually goes unnoticed, since it is reported only with a visual indication directly on the SPD, which because of its longevity is usually not inspected frequently enough.

With our new SPD life status indication devices, we are making it easier for user to get the information about a failed SPD device immediately, or more importantly, to get a warning when a SPD is nearing its end-of-life. With that, power supply network will never be without SPD protection, which is as important as having the SPD installed in the first place.



ProALARM II



ProSLS

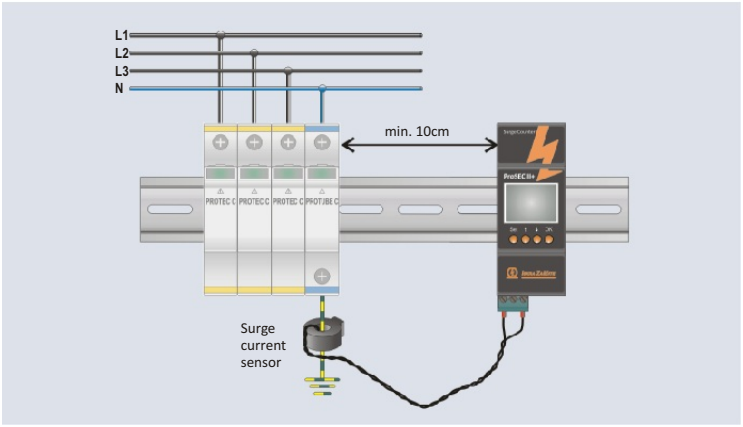
ProSEC II+



- LCD screen that shows number of surges, hour and date of surge event
- Buttons for TIME/DATE setting and log viewing
- Replacable battery, batery life minimum 4 years
- Easy to install, Snap-on surge current sensor
- Complies with: IEC/EN 62561-6, 61326-1

ProSEC II+ is a surge counter with an extra function. Beside surge number count it also logs hour and date for each surge counted. Its surge count and log of previous surges cannot be tempered with, so it can be used for cooperation with insurance companies. With additional time and date logging function, it is now possible to pinpoint the exact time of every surge and correlate it with equipment and power supply problems inside of building.

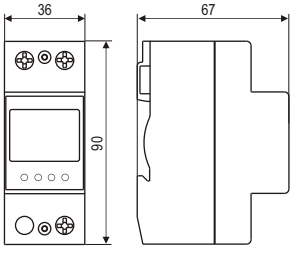
Installation example



Technical data

Type		ProSEC II+
Electrical characteristics		
Threshold current (8/20)	I_{tc}	50A
Max. counting discharge current (8/20)	I_{mcw}	50kA
Number of event logged		999
Mechanical characteristics		
Temperature range		- 20°C ... + 70°C
Degree of protection		IP 20
Housing material		Thermoplastic; extinguishing degree UL 94 V-0
Mounting		35mm DIN rail, EN 60715
Replacable battery (CR123A)		4 years
Max. wired diameter through the current sensor		14mm
Sensor cable		0.5m
Ordering code **ProSEC II+**		**130 092**

Dimensions



Dimensions, weight and packaging	
ProSEC II+	
Dimensions DIN 43880	2TE
Weight per unit	150g
Packaging dimensions (single unit)	110 x 83 x 42mm

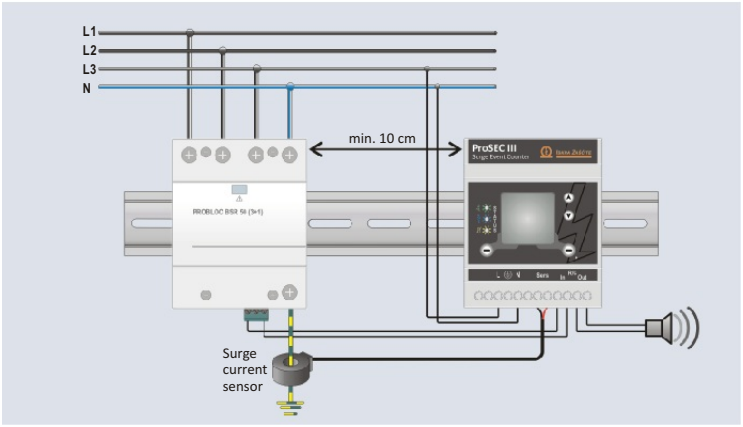
ProSEC III



- **Color LCD**
- **Surge counter displaying and logging time/date and current amplitude data**
- **Remote contact event warning**
- **“SPD check” warning**
- **Complies with: IEC/EN 62561-6, 61326-1**

ProSEC III is the new surge current counter, the only one with possibility, to not only sense and log time and date of a surge current event, but to also measure its amplitude. With ProSEC III counter the cause of surge current becomes much more obvious. Therefore, the prediction of possible consequences caused by surges, are easier to assess. We can now make a complete analysis of surge events source and type at the place of measurement and take appropriate precautions and repairs that will keep our equipment and electrical power network in working order.

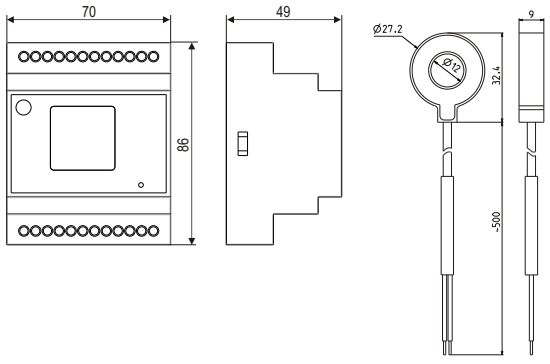
Installation example



Technical data

Type		ProSEC III
Electrical characteristics		
Threshold current (8/20)	I_{tc}	500A
Max. counting discharge current (8/20)	I_{mcw}	50kA
Power supply		85 - 264V_{AC}, 100 - 400V_{DC}
Number of stored events		999
Current amplitude resolution		0.1kA
Amplitude error		+/- 5%
Relay max. Rating		125VAC/0.5A; 250VAC/0.25A
Mechanical characteristics		
Temperature range		- 20°C ... + 60°C
Degree of protection		IP 20
Housing material		Thermoplastic; extinguishing degree UL 94 V-0
Mounting		35mm DIN rail, EN 60715
Max. wired diameter through the current sensor		11mm
Sensor cable		0.5m
Ordering code **ProSEC III**		**130 601**

Dimensions



Dimensions, weight and packaging	
ProSEC III	
Dimensions DIN 43880	4TE
Weight per unit	230g
Packaging dimensions (single unit)	109 x 76.5 x 96mm

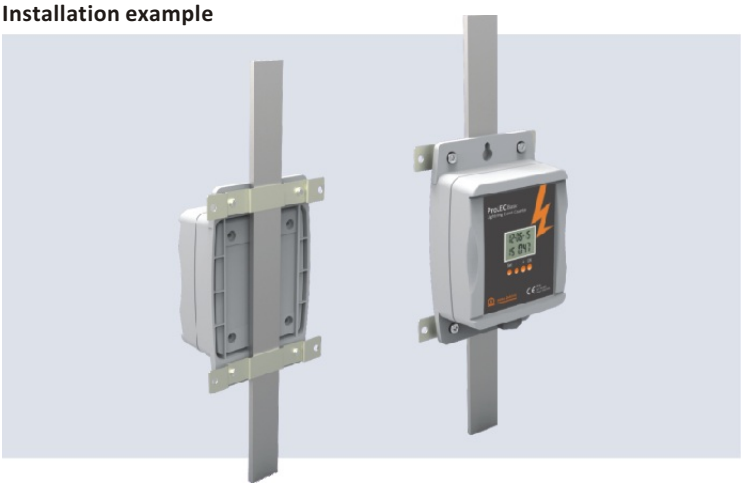
ProLEC Basic



- **LCD screen that shows number of lightning strikes, hour and date of lightning event**
- **Buttons for TIME/DATE setting and log viewing**
- **Replacable battery, working life minimum 5 years**
- **Contactless sensor-easy to install, no change in existing installation needed**
- **Complies with: IEC/EN 62561-6, 61326-1**

ProLEC Basic is the first in line of the new lightning current sensors family. It is meant to be used for sensing and logging lightning discharges that flow through lightning protection systems. ProLEC device is installed directly on lightning down conductor. It is made to withstand currents up to 100kA (10/350). By installing ProLEC on a building's lightning protection system, we gain the knowledge of frequency and time/date of atmospheric discharges that affected the object. Preventive or maintenance measures can be taken accordingly, depending on information gained from the counter.

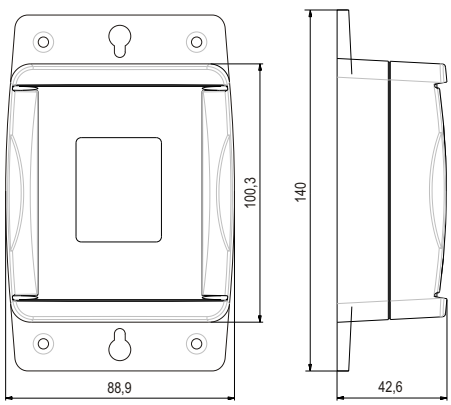
Installation example



Technical data

Type		ProLEC Basic
Electrical characteristics		
Threshold current (8/20)	I_{tc}	1kA
Max. withstand current (10/350)	I_{mcw}	100kA
Number of event logged		999
Mechanical characteristics		
Temperature range		- 20°C ... + 60°C
Degree of protection		IP 65
Housing material		Polycarbonate
Mounting		Directly on down-conductor
Ordering code **ProLECBasic**		**130 520**

Dimensions



Dimensions, weight and packaging	
ProLEC Basic	
Dimensions	144 x 88 x 44mm
Weight per unit	360g

ProALARM II



- Easy to use 'RC (remote contacts) to Ethernet' device
- Monitoring RC outputs of 8 individual devices
- Device status accessible through WEB user interface
- Device status alarm through email
- Additional power supply module is needed (5-30V DC)
- Complies with: IEC/EN 62561-6

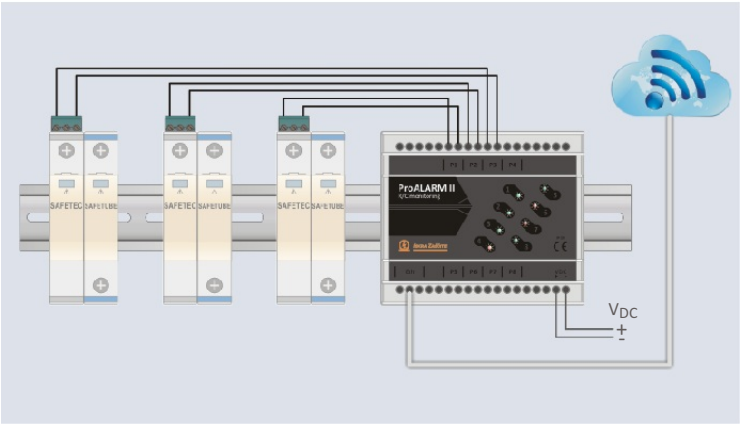
ProALARM II is a purpose designed alarm monitoring device, which interfaces with remote contact outputs RC, from many of the products designed by Iskra Zaščite. This monitoring information is conveyed by ProALARM II unit to end-user, or centralized facility monitoring system, by means of a WEB user interface.

ProALARM II can monitor up to 8 individual devices.

As a member of the Iskra ProGRID series of power quality devices, it is designed to monitor associated devices, such as ProSLS or and SPD device with RC option.

Also other devices that provide voltage-free RC contacts, such as building and fire Alarms, can be monitored with ProALARM II.

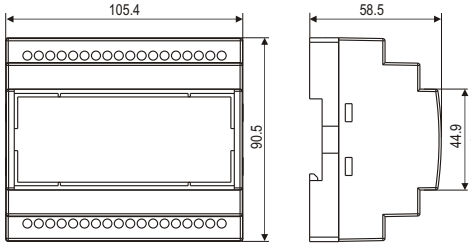
Installation example



Technical data

Type	ProALARM II
Electrical characteristics	
Communication	Ethernet
Power supply (DC)	5V - 30V
Max. number of directly connected devices	8
Mechanical characteristics	
Temperature range	- 40°C ... + 85°C
Degree of protection	IP 20
Housing material	Thermoplastic; extinguishing degree UL 94 V-0
Mounting	35mm DIN rail, EN 60715
Ordering code **ProALARM II**	**130 560**

Dimensions



Dimensions, weight and packaging	
ProALARM II	
Dimensions	104 x 90 x 45 mm
Weight per unit	160g
Packaging dimensions (single unit)	109 x 110 x 78mm

ProSLS

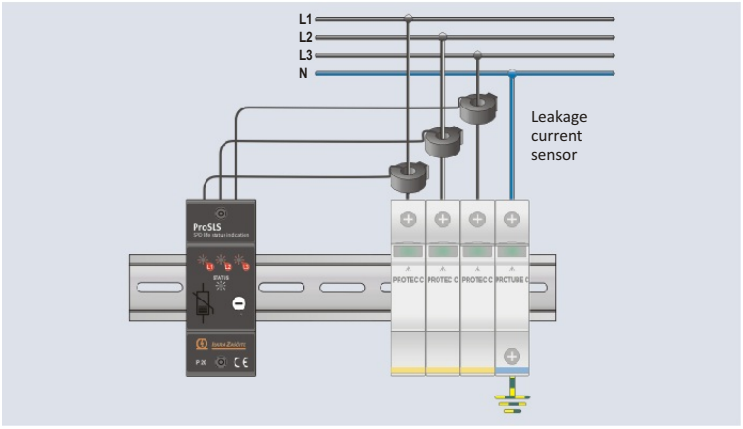


- **Automatic adjustment to all SPD sizes and models**
- **Sensing zero leakage current of a disconnected SPD**
- **Compatible with ProALARM II 'communication over ethernet' device**
- **Three states indication: SPD OK, Change Needed, Failed**
- **Complies with: IEC/EN 61326-1**

ProSLS is a device, that continuously monitors SPD's leakage current, the most accurate predictor of an SPD's life status.According to measured current, ProSLS is able to predict the advanced degradation or a sudden failure of SPD and convey this information to the user.

With a set of remote contacts, ProSLS can be connected to ProALARM II, thus warning the user about SPD state through a web interface.

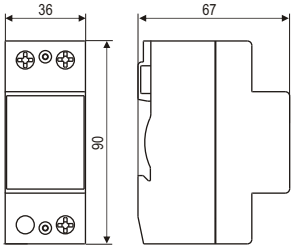
Installation example



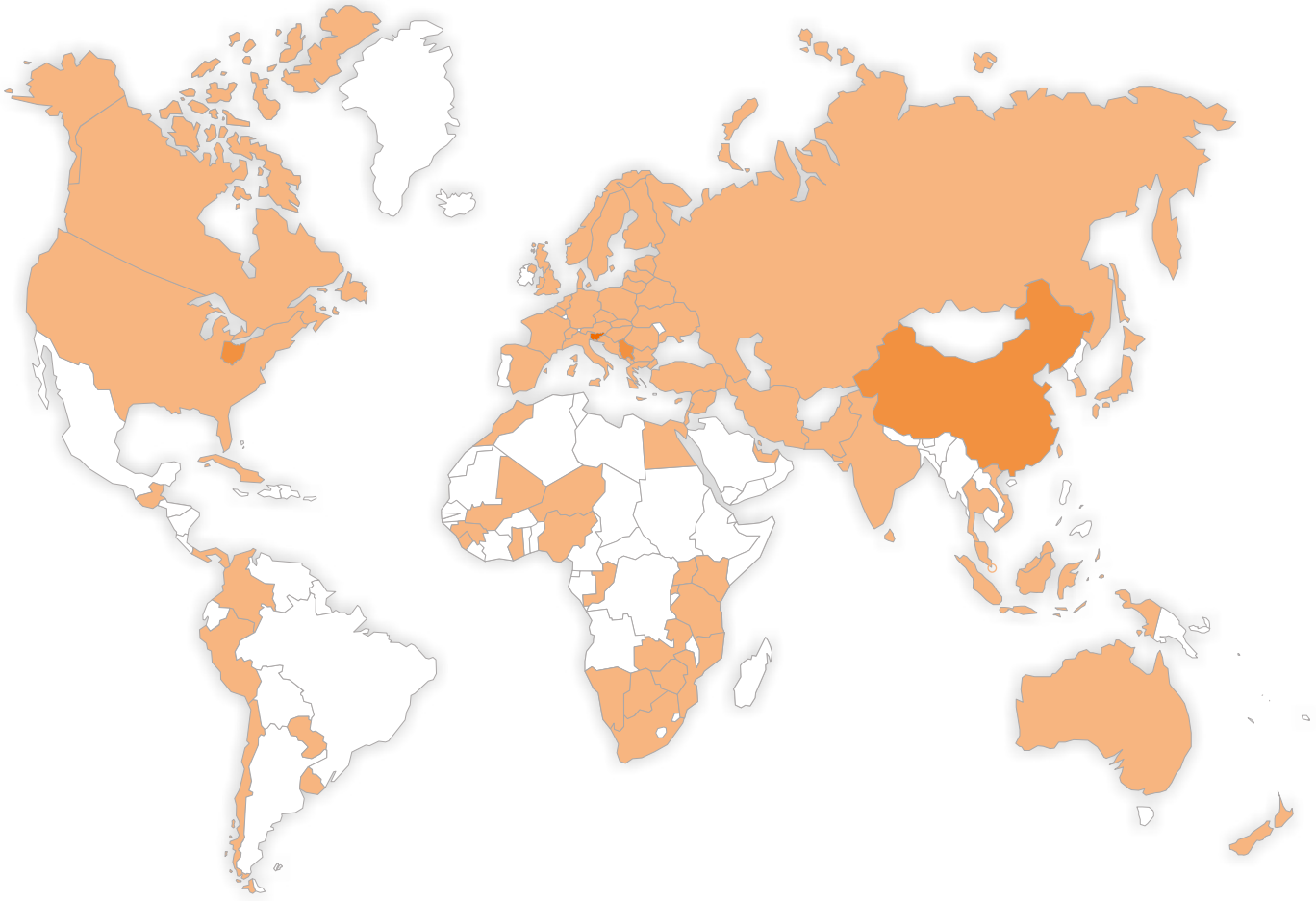
Technical data

Type	ProSLS
Electrical characteristics	
Lowest measurable current	100µA
Mechanical characteristics	
Temperature range	- 30°C ... + 70°C
Degree of protection	IP 20
Housing material	Thermoplastic; extinguishing degree UL 94 V-0
Mounting	35mm DIN rail, EN 60715
Replacable battery (CR2477)	8 years
Remote contacts	1A, 125V_{AC}/30V_{DC}
Ordering code **ProSLS**	**130 550**

Dimensions



Dimensions, weight and packaging	
ProSLS	
Dimensions DIN 43880	2TE
Weight per unit	180g
Packaging dimensions (single unit)	106 x 73.5 x 58mm



QR code
With the QR code you have direct access to our web site.

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