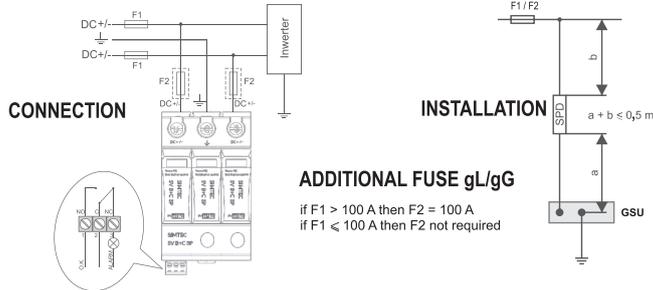


WIRING DIAGRAM



The device should be installed in accordance with the regulations in force in a given country. When installing the device, the instructions included in the attached manual and the markings on the device should be followed. Do not use the device in conditions and with parameters differing from those presented in the manual.

ENVIRONMENTAL PROTECTION



After their use, electrical products (marked with a crossed bin symbol with an underbar) must not be disposed of with other household waste. The user is obliged to return the used product to an entity collecting used electrical and electronic equipment, creating a system for collecting such waste – including an appropriate store, local collection point or municipal unit. Waste equipment may have a negative impact on the environment and human health due to the potential content of hazardous substances, mixtures and components. The household plays an important role in contributing to the reuse and recovery of secondary raw materials, including the recycling of waste equipment. At this stage, attitudes are formed that affect the preservation of the common good, which is a clean natural environment.

WARRANTY

The warranty period of the surge arrester SV B+C 3P is 2 years from the date of sale, subject to compliance with the rules of use, transport and storage. In the event of the surge arrester malfunction, please contact the seller.

STANDARDS

- ✓ Compliance with Directive 2014/35/EU
- ✓ Standard EN 61643-31:2019-07



SIMET S.A.
 Al. Jana Pawła II 33
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Surge arrester for photovoltaics SV B+C 3P



SIMTEC

PURPOSE OF A SURGE ARRESTER SV B+C 3P

A two-stage SV B+C 3P surge arrester is used for protection against direct and indirect effects of lightning or other transient overvoltage. This arrester is designed to be connected to the DC side of photovoltaic installations with a voltage range of up to 1000 V. The device contains a non-linear element - a varistor and is designed to limit surge voltages and reverse surge currents. It is dedicated only to the installation on the DC side of photovoltaic generators and the DC side of inverters.

INSTALLATION

Please read the instructions before installing. The installation of the surge arrester should be performed by a qualified person.

Before the installation it is required to:

- make sure that the connected cables are voltage-free
- make sure the surge arrester is not damaged, deformed and that there are no missing components.



Installation by qualified personnel is recommended

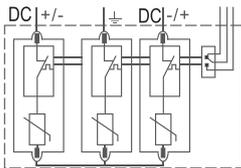


Mounting on TS 35 rail

INSTALLATION AND SAFETY INSTRUCTIONS

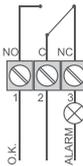
- use only insulated tools to operate the device;
- do not install the product in potentially explosive areas or in areas where it will be exposed to dust, oil mist, mold or insects;
- make sure that the connection cables have the correct cross-section and are properly insulated;
- before applying voltage for the first time, make sure that the cables are connected to the appropriate mounting clamps of the surge arrester;
- touching the mounting clamps of the surge arrester or the insulated cables with bare hands, metal objects or other conductive objects poses the risk of electric shock;
- the surge arrester should be protected against falling and mechanical impacts.

REMOTE INDICATION OCFM



In the case, when the surge arrester is triggered and damaged, red colour will appear in the control window. The signalling of damage can also be implemented remotely by means of a connector equipped with three contacts. They allow for the connection of two pairs of contacts implemented as potential-free connector. In such case, the following can be used: normally open contact or normally closed contact.

AC 250 V / 0,5 A
 DC 250 V / 0,1 A
 DC 125 V / 0,2 A
 DC 75 V / 0,5 A



INDICATOR OCFM

In the case, when the surge arrester is triggered and damaged, red colour will appear in the control window



RED: Replace the SPD pad

Nominal cross-section of connected cables

rigid	4 ... 25 mm ²
flexible	4 ... 25 mm ²

Cross-section of remote signaling cables

rigid, flexible	max 1,5 mm ²
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Tightening torque

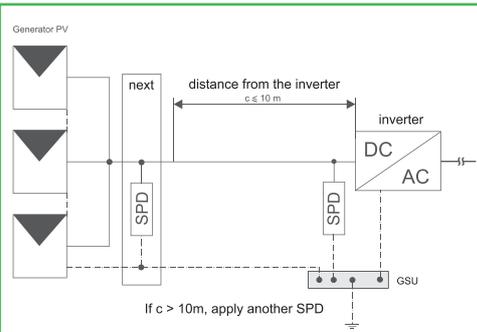
2 Nm

SYMBOL



VARISTOR

PROTECTION



TECHNICAL DATA

Specification

Rated voltage of the DC PV system (U _n)	1000 V DC
Maximum continuous operating voltage (U _{ocn})	1060 V DC
Surge current (I _{imp} 10/350 μs)	6,25 kA
Discharge current (I _d 8/20 μs)	20 kA
Maximum discharge current (I _{max} 8/20 μs)	40 kA
Maximum short circuit current (I _{SCPV})	100 A
Voltage protection level (U _p)	≤ 4,5 kV
Response time (t _r)	< 25 ns
Maximum additional fuse (g/L/g/G)	100 A
Insulation resistance (R _{so})	> 10 ³ MΩ
Fork connection rail	modular spacing 18 mm

Performance characteristics

Maximum relative ambient humidity (R _n)	5 % ... 95 %
Operating temperature	-40 °C ... +85 °C
Housing material	PA 6
Flammability class	UL94 V0
Protection level	IP20
Thermal overload protection	Yes

The surge arrester should be stored and transported under the conditions that meet performance criteria.

EXTERNAL DIMENSIONS

