

PV ADVANCE combined lightning and surge arrester for photovoltaic systems up to 1000 Vdc



Specifications:

System volts

- Up to 1000 Vdc

Agency information

- CE
- RoHS compliant

Mounting

- 35 mm DIN-Rail

Warranty

- Five years

Catalog symbol:

- BSPS31000PV

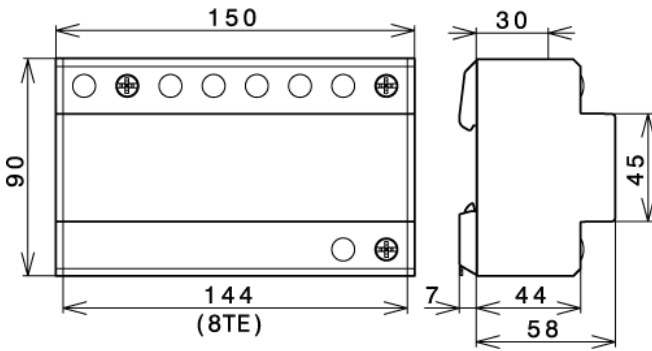
Description:

Eaton's Bussmann™ series combined lightning current and surge arrester (SPD Class I according to IEC 61643-11) is for use in photovoltaic power supply systems.

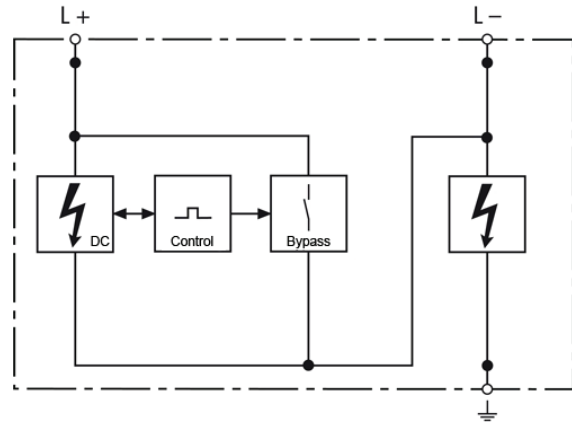
The pre-wired unit combines lightning current and surge arrester for use in photovoltaic generator circuits up to 1000 V UCPV.

The high lightning current discharge capacity, using spark gap technology, maximizes system availability with DC current extinction.

Dimensions - mm:

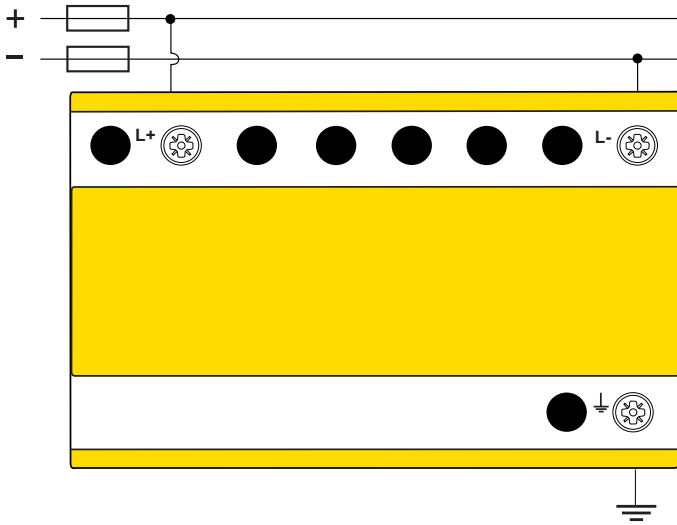


Arrester circuit diagrams:



BSPS31000PV

Typical application schematic:



Ordering information:

| Max. PV system voltage | | 1000 Vdc |
|--|---------------------------|--|
| Catalog number: | | BSPS31000PV |
| Specifications | | |
| SPD Classification according to | EN 61643-11 | Type 1 |
| | IEC 61643-11 | Class I |
| Max. PV voltage [$U_{C_{PV}}$] of the PV generator | | 1000 V |
| Continuous operating DC voltage | Max. [$U_{max DC}$] | 1000 V |
| | Min. [$U_{min DC}$] | 100 V |
| Follow current extinguishing capability DC [$I_f DC$] | | 100 A |
| Nominal discharge current (8/20 μ s) [I_n] | | 100 kA |
| Lightning impulse current (10/350 μ s) [L+/L- -> PE] [I_{imp}] | | 50 kA |
| Specific energy [L+/L- -> PE] [W/R] | | 625.00 kJ/ohms |
| Lightning impulse current (10/350 μ s) [L+ -> L-] [I_{imp}] | | 25 kA |
| Specific energy [L+ -> L-] [W/R] | | 156.25 kJ/ohms |
| Voltage protection level | [L+ -> L-] [U_p] | ≤ 3.3 kV |
| | [(L+/L-) -> PE] [U_p] | ≤ 4 kV |
| Operating current [$I_{IN DC}$] | | ≤ 5 mA |
| Response time [L+ -> L-] [t_A] | | ≤ 20 ns |
| Protective conductor current [I_{PE}] | | ≤ 1 μ A |
| Operating temperature range [T_v] | | -40°C to +60°C |
| Number of ports | | 1 |
| Cross-sectional area | Min | 10 mm ² /6 AWG solid/flexible |
| | Max. | 50 mm ² /2 AWG stranded/ 35 mm ² /1 AWG flexible |
| Mounting | | 35 mm DIN rail per EN 60715 |
| Enclosure material | | Thermoplastic, UL 94V0 |
| Place of installation | | Indoor |
| Degree of protection | | IP20 |
| Capacity | | 8 Mods., DIN 4 |
| Product warranty | | Five years* |

* See Eaton's Bussmann Division SPD limited warranty statement (3A1502) for details at www.cooperbussmann.com/surge.