

Surge Protection Made Simple™ for Photovoltaic Applications

Combined Lightning Current & Surge Arrester for PV Systems up to 1000Vdc



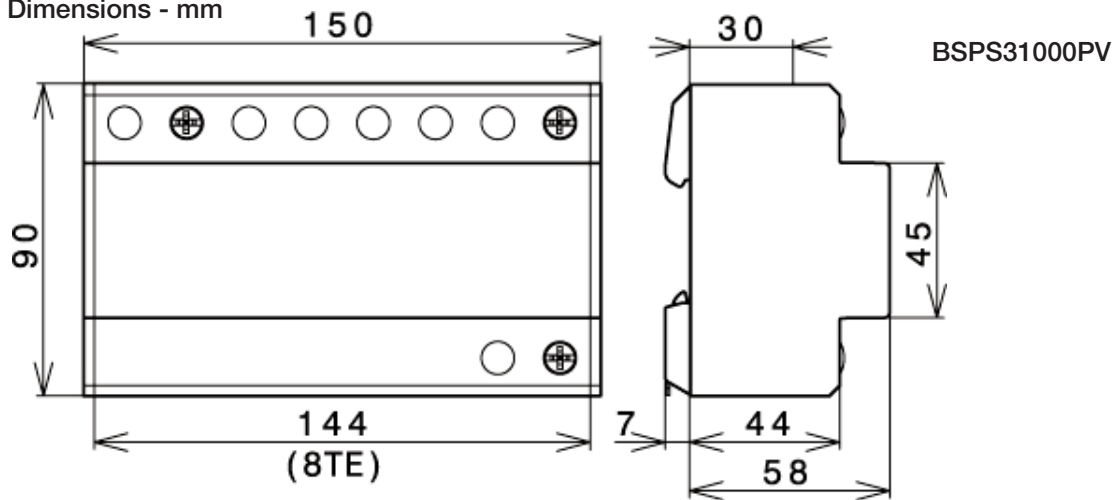
Description

The Cooper Bussmann combined lightning current and surge arrester (SPD Class I according to IEC 61643-1) is for use in photovoltaic power supply systems.

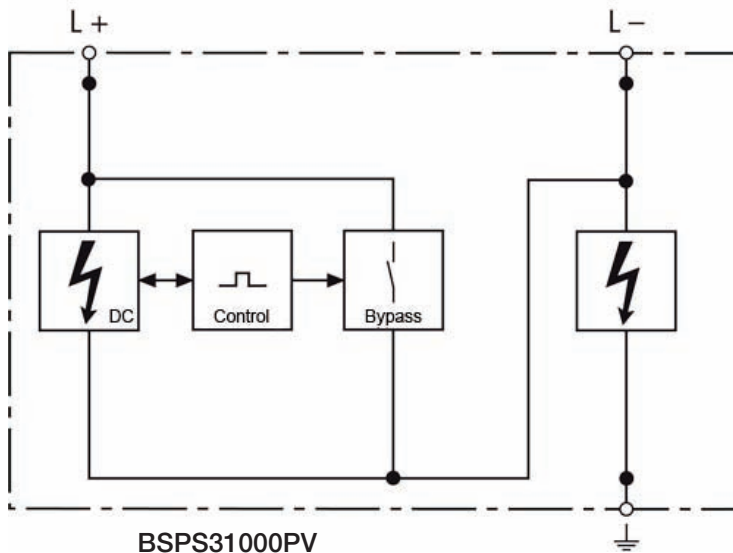
- Prewired combined lightning current and surge arrester for use in photovoltaic generator circuits
- For use in photovoltaic installations up to 1000V U_{CPV}
- High lightning current discharge capacity using spark gap technology
- Maximum system availability due to spark gap technology with DC current extinction



Dimensions - mm



Module Circuit Diagrams



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

* See Cooper Bussmann document 3A1502 on the web at www.cooperbussmann.com.

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