

Surge Protection Made Simple™

Photovoltaic Applications

Modular DIN Rail SPD Solutions



Type 4



Description

The Cooper Bussmann three-module photovoltaic Surge Protective Device (SPD) features *easyID™* visual indication and optional remote contact signaling (floating changeover contact) for use in PV systems.

These complete surge protective devices are suitable for all PV systems in accordance with UL 1449 3rd Edition, EN 50539-11 and IEC 60364-7-712. Includes a two year limited warranty.

These prewired solutions consist of a base and modules that feature a disconnection device in the event of an overload.

In case of insulation faults in the generator circuit, a reliable and tested fault-resistant Y circuit prevents damage to the surge protective devices.

The green and red visual indicator flags show the module protective status (green = good, red = replace). Apart from this visual indication, the remote signaling option features a three terminal floating changeover contact that can be used as a make or break contact depending on the particular monitoring system design employed.



BSPP _____ YPV(R)

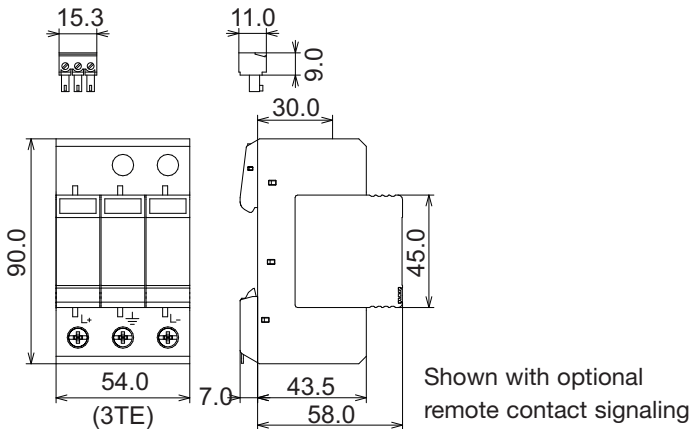
easyID™
Visual Status
Indication



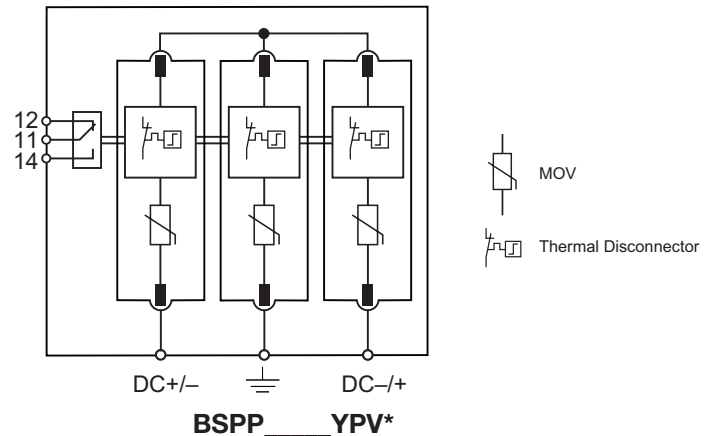
Remote Signal
Contact
Available



Dimensions - mm



Module Circuit Diagrams



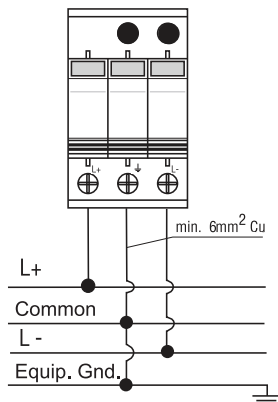
Shown with optional remote contact signaling

* For remote signaling contact, add "R" suffix to the part number.
E.g., BSPP3600YPV**R**

| Ordering Information | | | |
|---|----------------------------------|---|---------------|
| Nominal PV System Voltage | | 600Vdc | 1000Vdc |
| Catalog Numbers: (Base + Modules) | Without Remote Contact Signaling | BSPP3600YPV | BSPP31000YPV |
| | With Remote Contact Signaling | BSPP3600YPVR | BSPP31000YPVR |
| Replacement Modules: | | BPP300SYPV | BPP500SYPV |
| Specifications | | | |
| Nominal PV System Voltage | | 600V | 1000V |
| U_{CPV} per EN50539-11* | | 600Vdc | 1000Vdc |
| System MOV MCOV | | 700Vdc | 1170Vdc |
| Max System Discharge Current (8/20 μ s) [I_{max}] | | 40kA | 40kA |
| Voltage Protection Level [U_p] | | $\leq 2.5kV$ | $\leq 4.0kV$ |
| Voltage Protection Level at 5kA [U_p] | | $\leq 2.0kV$ | $\leq 3.5kV$ |
| Short-Circuit Withstand Capability [I_{SCP}] | | 125A | |
| Technology | | Fault Resistant Y MOV Circuit | |
| Operating Temperature Range [T_{Uj}] | | -40°C to +80°C | |
| Nominal Discharge Current (8/20 μ s) (DC+ \rightarrow DC-) (DC+/DC- \rightarrow PE) [I_n] | | 20kA | |
| Response Time [t_A] | | $\leq 25ns$ | |
| Operating State/Fault Indication | | Green (good) / Red (replace) | |
| Conductor Ratings and Cross-Sectional Area: | Minimum | 60/75°C 1.5mm ² / 14AWG Solid/Flexible | |
| | Maximum | 60/75°C 35mm ² / 2AWG Stranded / 25mm ² / 4AWG Flexible | |
| Mounting | | 35mm DIN-Rail per EN 60715 | |
| Enclosure Material | | UL 94V0 Thermoplastic | |
| Degree of Protection | | IP20 | |
| Capacity | | 3 Modules, DIN 43880 | |
| Standards Information: | UL | UL 1449 3 rd Edition (Type 2) | |
| | IEC | EN 50539-11, IEC 61643-11 Type 2, IEC 61643-1 Class II | |
| Product Warranty | | Two Years* | |
| Remote Contact Signaling | | | |
| Remote Contact Signaling Type | | Changeover Contact | |
| AC Switching Capacity (Volts/Amps) | | 250V / 0.1A | |
| DC Switching Capacity (Volts/Amps) | | 250V / 0.1A; 125V / 0.2A; 75V / 0.5A | |
| Conductor Ratings and Cross-Sectional Area for Remote Contact Signal Terminals | | 60/75°C Max. 1.5mm ² / 14AWG Solid/Flexible | |
| Ordering Information | | Order from Catalog Numbers Above | |

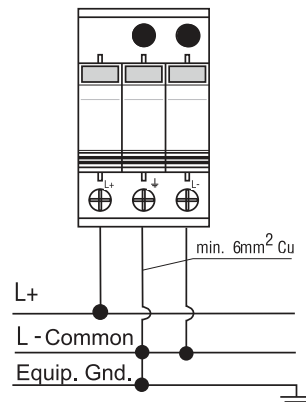
* Maximum continuous operating voltage for PV applications.

Typical Application Schematics



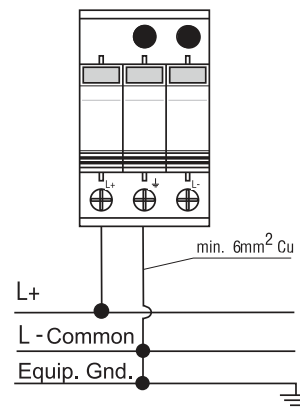
Application A

Two energized poles/modes
600 & 1000Vdc systems



Application B

One energized pole/mode
600Vdc & 1000Vdc systems only



Application C

One energized pole/mode
600Vdc & 1000Vdc** systems

* See Cooper Bussmann SPD Limited Warranty Statement (3A1502) for details at www.cooperbussmann.com/surge.

** BSPP31000YPV(R) 1000Vdc one energized pole/mode requires the following:

1. Use a suitable electrical insulator to keep a 10mm min. safety distance from the PV-SPD and other grounded parts in the housing.
2. No metal covers are in the area of the module release buttons as shown.

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<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9