

# Surge Protection Made Simple™ Photovoltaic Applications Two-Module DIN Rail SPD Solutions



Type 4



## Description

The Cooper Bussmann® modular Surge Protective Device (SPD) (with two-step DC switching device) features *easyID™* visual indication and optional remote contact signaling (floating changeover contact) for use in photovoltaic systems.

This complete surge protective device is suitable for all PV systems in accordance with UL 1449 3<sup>rd</sup> Edition and IEC 60364-7-712. Includes a five year limited warranty.

This prewired solution consist of a base and locking modules that feature a combined disconnection and short-circuiting (shunting) device with safe electrical isolation to prevent fire damage due to DC arcs. An integrated DC fuse allows safe module replacement without arc formation.

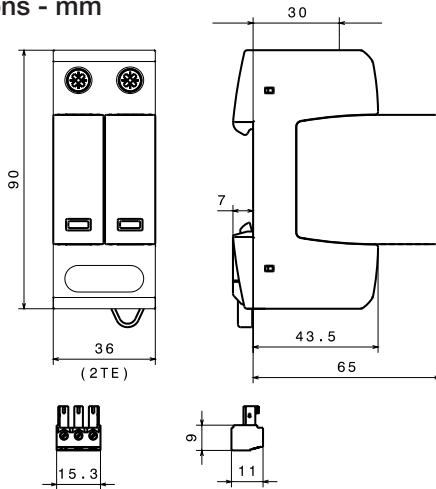
In case of insulation faults in the generator circuit, a reliable and tested fault-resistant circuit prevents damage to the surge protective devices.



**BSPH2600PV(R)**

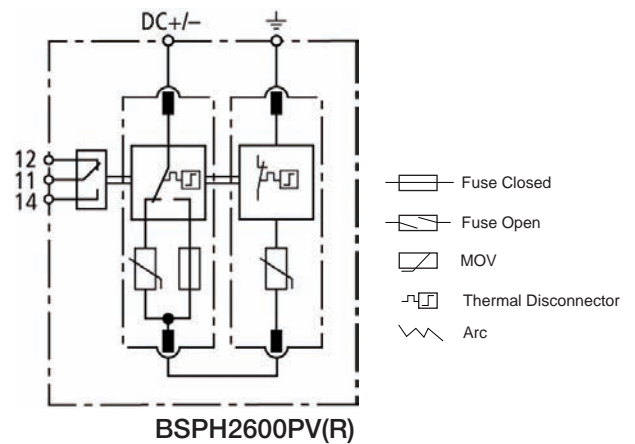


## Dimensions - mm



Shown with optional remote contact signaling

## Module Circuit Diagrams

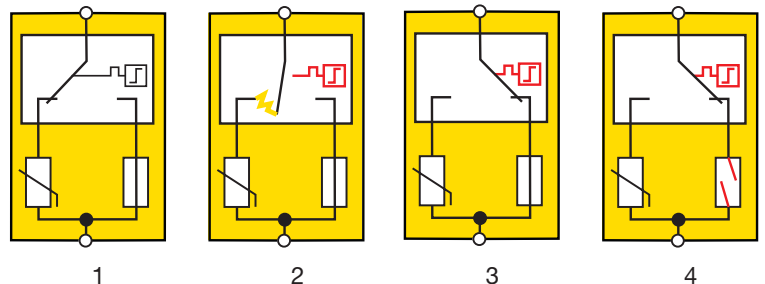


Shown with optional remote contact signaling

## Short-Circuit Interrupting (SCI) Technology

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.

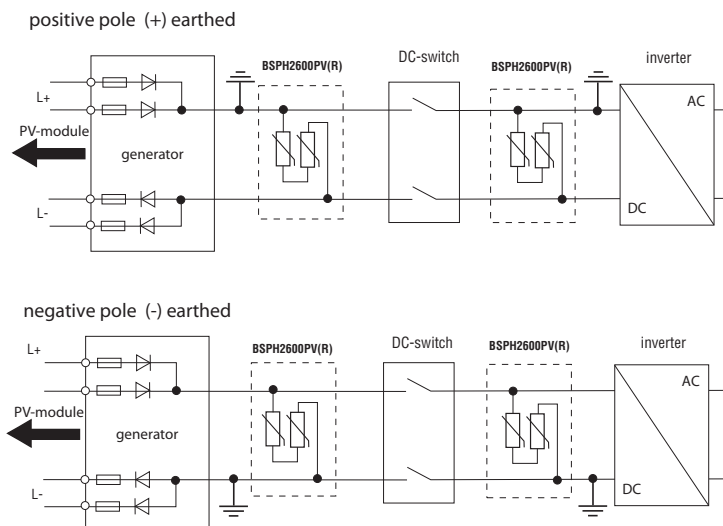
1. Original State
2. Disconnection Device Response
3. Arc Extinguishes
4. Safe Electrical Isolation



Ordering Information		
Nominal PV System Voltage		600Vdc
Catalogue Numbers (Base + Modules)	Without Remote Signaling	BSPH2600PV
	With Remote Signaling	BSPH2600PVR
Replacement Modules	Left	BPH300YPV
	Right	BPM300YPV
Specifications		
Conformity with prEN 50539-11		Yes
SPD Classification per EN 61643-11		Type 2
SPD Classification per IEC 61643-11		Class II
Max. PV Voltage [ $U_{CPV}$ ]		$\leq 600V$
Short-Circuit Withstand Capacity [ $I_{SCWPV}$ ]		1000A
MCOV [ $U_{CPV}$ ]		700Vdc
Nominal Discharge Current (8/20 $\mu s$ ) [(DC+/DC-) --> PE] [ $I_n$ ]		12.5kA
Max. Discharge Current (8/20 $\mu s$ ) [(DC+/DC-) --> PE] [ $I_{max}$ ]		25kA
Voltage Protection Level [ $U_p$ ]		$\leq 2.5kV$
Voltage Protection Level at 5kA [ $U_p$ ]		$\leq 2kV$
Response Time [ $t_A$ ]		$\leq 25ns$
Operating Temperature Range [ $T_U$ ]		-40°C to +80°C
Operating State/Fault Indication		Green (good) /Red (replace)
Number of Ports		1
Cross-Sectional Area (min.)		60/75°C 1.5mm <sup>2</sup> /14AWG Solid/Flexible
Cross-Sectional Area (max.)		60/75°C 35mm <sup>2</sup> /2AWG Stranded/25mm <sup>2</sup> /4AWG Flexible
For Mounting On		35mm DIN rail per EN 60715
Enclosure Material		Thermoplastic, UL 94V0
Place of Installation		Indoor
Degree of Protection		IP20
Capacity		2 Modules, DIN 43880
Standards Information		UL
Product Warranty		Five 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 <sup>2</sup> /14AWG Solid/Flexible
Ordering information		Order from Catalogue Numbers

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

### Typical Application Schematics



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