

# PV HEAVY DUTY two module photovoltaic surge protective device for 600 Vdc systems

**RoHS**



Remote contact  
signaling available

easyID™ local  
visual status  
indication

## Standard local visual indication

The green and red visual indicator flags show the module protective status (green = good, red = replace).

## Optional remote contact signaling

The three-pole terminal remote contact signaling option has a floating changeover contact for use as a break or make contact, according to circuit concept.

## Specifications:

### System volts

- 600 Vdc
- 1000 Vdc

### Systems types

- Two energized poles (all voltages)
- One energized pole (600 and 1000 Vdc)

### Agency information

- UL Recognized
- CE
- RoHS compliant

### Mounting

- 35 mm DIN-Rail

### Warranty

- Five years

## Catalog symbols:

- BSPH2\_YPV
- BSPH2\_YPVR

## Description:

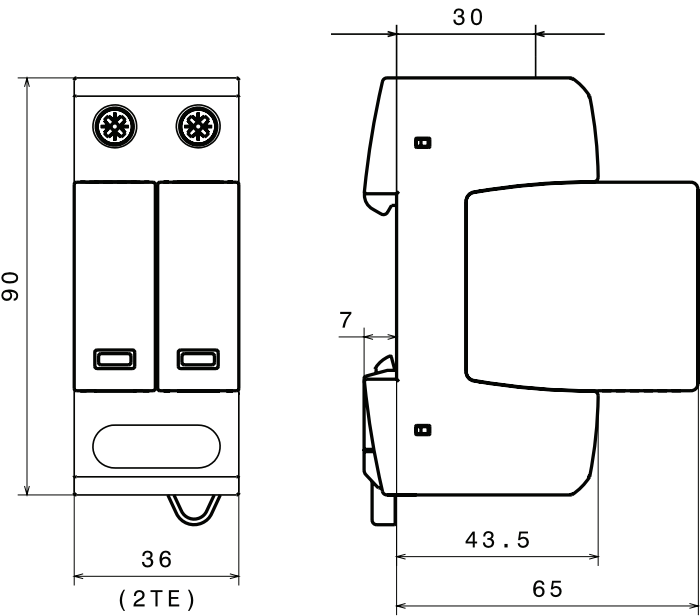
Eaton Bussmann™ series two-module photovoltaic SPD has a three-step DC switching device and feature *easyID*™ local visual indication and optional remote contact signaling.

Suitable for all PV systems in accordance with UL 1449 4<sup>th</sup> Edition and IEC 60364-7-712, these pre-wired solutions consist of a base and locking modules that are mechanically keyed to prevent the use of an incorrect replacement module.

Their short-circuit interrupting technology has a combined disconnection and short-circuiting (shunting) device for safe electrical isolation to prevent fire damage due to DC arcs along with an integrated DC fuse that allows safe module replacement without arc formation.

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

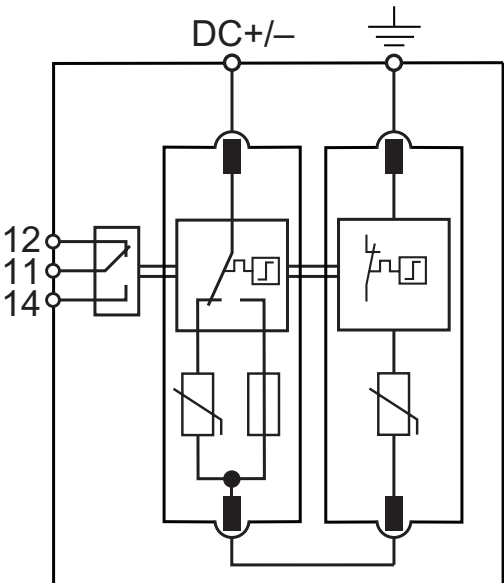
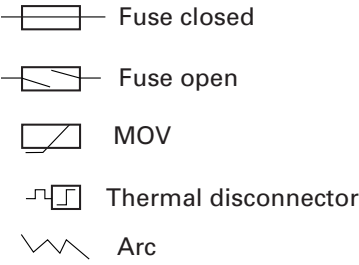
Dimensions - mm:



Shown with optional remote contact signaling.

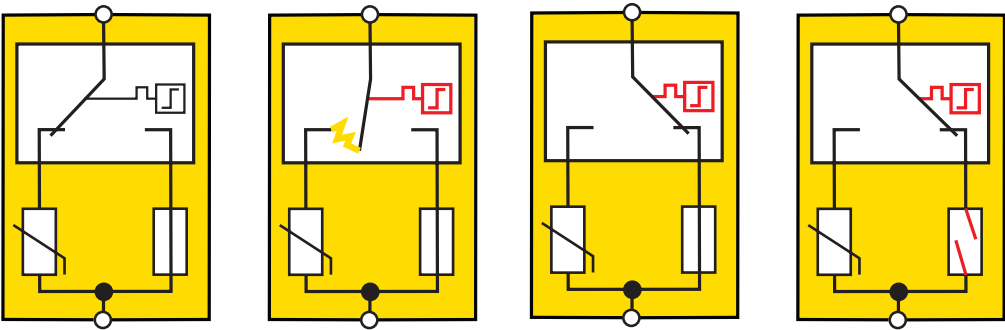
Module circuit diagrams:

Shown with optional remote contact signaling



BSPH2600YPV(R)

Short-circuit interrupting technology



1. Normal operating state

2. Short circuit activates thermal disconnecter

3. Arc extinguishes and current is switched to the internal fuse

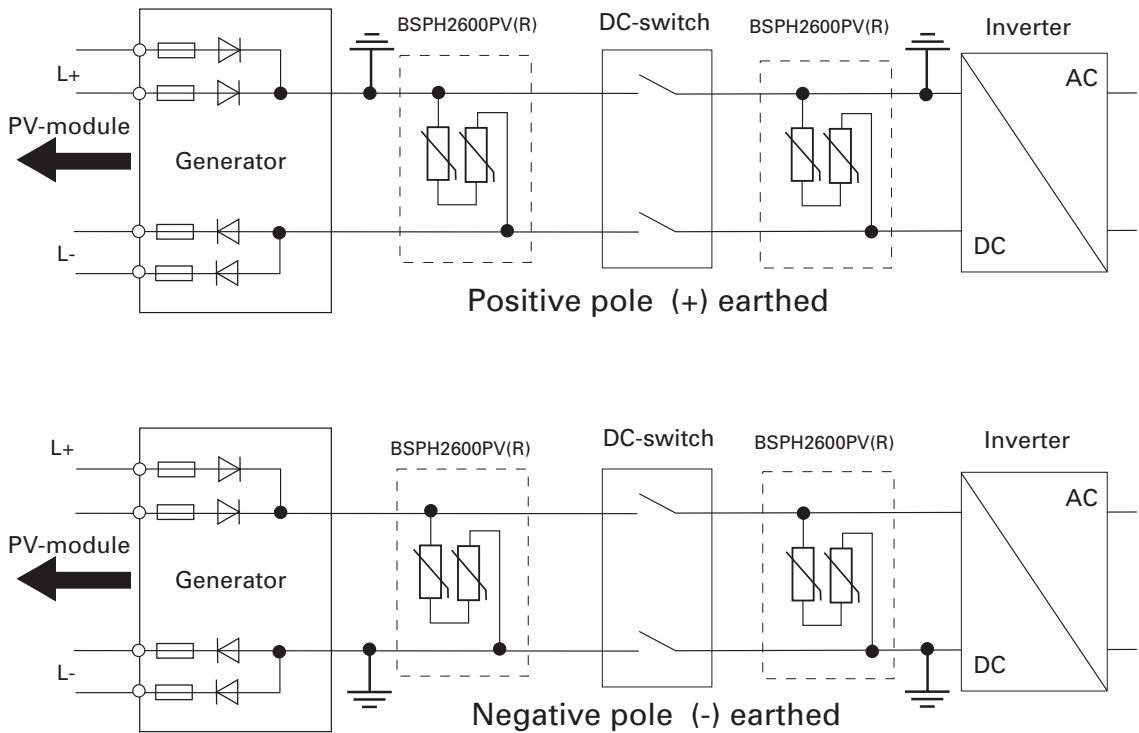
4. Fuse opens for safe electrical isolation

**Ordering information:**

Nominal PV system voltage		600 Vdc
Catalog numbers (base + modules):	W/O remote signaling	BSPH2600PV
	W/ remote signaling	BSPH2600PVR
Replacement modules:	Left	BPH300YPV
	Right	BPM300YPV
Specifications		
Conformity with prEN 50539-11		Yes
SPD classification per	EN 61643-11	Type 2
	IEC 61643-11	Class II
Max. PV voltage [ $U_{CPV}$ ]		$\leq 600$ V
Short-circuit withstand capacity [ $I_{SCWPV}$ ]		1000 A
MCOV [UCPV]		700 Vdc
Nominal discharge current (8/20 $\mu$ s) [(DC+/DC-) --> PE] [ $I_n$ ]		12.5 kA
Max. discharge current (8/20 $\mu$ s) [(DC+/DC-) --> PE] [ $I_{max}$ ]		25 kA
Voltage protection level	[ $U_p$ ]	$\leq 2.5$ kV
	at 5kA [ $U_p$ ]	$\leq 2$ kV
Response time [ $t_A$ ]		$\leq 25$ ns
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 1.5 mm <sup>2</sup> /14 AWG solid/flexible
	Max	60/75°C 35 mm <sup>2</sup> /2 AWG stranded/25 mm <sup>2</sup> /4 AWG flexible
For mounting on		35 mm DIN rail per EN 60715
Enclosure material		Thermoplastic, UL 94V0
Place of installation		Indoor
Degree of protection		IP20
Capacity		2 Modules, DIN 43880
Agency information		UL
Product warranty		Five Years*
Remote contact signaling		
Signaling type		Changeover contact
Switching capacity (volts/amps)	AC	250 V/0.1 A
	DC	250 V/0.1 A; 125 V/0.2 A; 75 V/0.5 A
Ratings and cross-sectional area		60/75°C Max. 1.5 mm <sup>2</sup> /14 AWG solid/flexible
Ordering information		Order from catalog numbers above

\* See Eaton Bussmann Division SPD limited warranty statement (3A1502) for details at [www.cooperbussmann.com/surge](http://www.cooperbussmann.com/surge).

Typical application schematic



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