

VPU series SPD II 2 R PV 1000VDC

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Similar to illustration

Surge protection for use on the DC side of photovoltaic installations. The SPD II PV series is tested according to UL 1449 ed. 3 (file E354261) as type 4 for use in type 2 applications. This series is assembled according to the respective PV voltage (600 V, 1000 V, 1200 V) and has a nominal discharge current of up to 50 kA (8/20 μ s) per path. The SPD II has a compact and modular structure and a module width of 17.8 mm per element; it allows rapid and simple exchange of the varistor protection. The SPD PV arrester consists of 2 elements.

General ordering data

Delivery status	Discontinued
Available until	2018-05-31
Type	SPD II 2 R PV 1000VDC
Order No.	134850000
Version	Surge protection, Low voltage, with remote contact
GTIN (EAN)	4050118153705
Qty.	1 pc(s).
Alternative product	253018000

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Technical data
Dimensions and weights

Width	36 mm	Width (inches)	1.417 inch
Height	100 mm	Height (inches)	3.937 inch
Depth	73.5 mm	Depth (inches)	2.894 inch
Net weight	328 g		

Temperatures

Operating temperature, max.	70 °C	Operating temperature, min.	-40 °C
Storage temperature, max.	85 °C	Storage temperature, min.	-40 °C
Operating temperature	-40 °C...70 °C	Storage temperature	-40 °C...85 °C

Rated data UL

UL certificate	E-File 354261 Type 2 by UL1449 Ed.3	Test Voltage 39.1 (UL 1449)	1,000 V
VPR (L/N-PE)	4 V	MCOV (L/N-PE)	1,000 Vdc
SCCR	200 kA	I _{max}	20 kA
I _n	10 kA	Category	Typ 2

Connection data, remote alert

Connection type	Screw connection, pluggable	Max. torque	0.22 Nm
Stripping length	5 mm	Cross-section for connected wire, solid core, min.	0.5 mm ²
Cross-section for connected wire, solid core, max.	1.5 mm ²		

General data

Colour	Light Grey	Design	Installation housing; 2TE
Height with TS 35	74 mm	Optical function display	grey = ok, red = arrester is defective, replace it
Protection degree	IP20	Rail	TS 35, TS 35 x 15, TS 35 x 7.5
UL 94 flammability rating	V-0	Version	with remote contact

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
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Photovoltaic technical data

Discharge current, max. (8/20 μs)	20 kA	I _{cc}	70 A
Maximum continuous operating voltage UCPV mode +/-, -/PE, +/-PE	1,000 V DC	Protection level U _p at I _n (per module)	4000 V
Protection level U _p mode (+/-, -/PE, +/-PE)	4000 V	Total discharge current I _{total}	40 kA

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Technical data
Rated data IEC / EN

Discharge current I_n (8/20 μ s) wire-wire	20 kA	Discharge current, max. (8/20 μ s)	20 kA
Max. continuous voltage, U_c (DC)	1000 V	Number of poles	2
Protection level U_p at I_N (L/N-PE)	≤ 2.6 kV	Rated voltage (DC)	1000 V
Response time	≤ 100 ns	Signalling contact	250 V / 0,5 A, 48 VDC / 0,1 A
Total discharge current I_{total}	40 kA	Voltage type	DC

Connection data

Wire connection method	Screw connection	Type of connection	Screw connection
Stripping length, rated connection	15 mm	Tightening torque, min.	2.5 Nm
Tightening torque, max.	3 Nm	Clamping range, rated connection	25 mm ²
Clamping range, min.	4 mm ²	Clamping range, max.	35 mm ²
Wire cross-section, solid, min.	4 mm ²	Wire cross-section, solid, max.	16 mm ²
Wire connection cross-section, finely stranded, min.	2.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	2.5 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	25 mm ²	Connection cross-section, stranded, min.	2.5 mm ²
Connection cross-section, stranded, max.	25 mm ²		

Classifications

ETIM 6.0	EC000941	ETIM 7.0	EC000941
eClass 9.0	27-13-08-05	eClass 9.1	27-13-08-05
eClass 10.0	27-13-08-05	UNSPSC	30-21-19-21

Approvals

ROHS	Conform
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Downloads

Engineering Data	WSCAD
User Documentation	Instruction sheet

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Drawings

Electric symbol

