

## VPU AC II US 1 R 120/50

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Abb.ähnlich

- compact SPD to install in application by NFPA 79
- no additional overcurrent protection devices needed
- short circuit current rating (SCCR) up to 200 kA
- tested according to IEC/EN 61643-11 and UL 1449 4.Ed

### General ordering data

Version	Surge voltage arrester, Low voltage, Surge protection, with remote contact, Single-phase, $U_p(L/N-PE) \leq 1.25 \text{ kV}$
Order No.	<a href="#">2730460000</a>
Type	VPU AC II US 1 R 120/50
GTIN (EAN)	4050118807646
Qty.	1 pc(s).

Creation date February 22, 2021 2:31:49 PM CET

Catalogue status 12.02.2021 / We reserve the right to make technical changes.

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## Technical data

### Dimensions and weights

Depth	68 mm	Depth (inches)	2.677 inch
Depth including DIN rail	76 mm	Height	111 mm
Height (inches)	4.37 inch	Mounting dimension - height	75 mm
Net weight	132 g	Width	18 mm
Width (inches)	0.709 inch		

### Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-40 °C...85 °C
Humidity	5 - 95% rel. humidity		

### Rated data UL

Operating altitude	≤ 4000 m	Ambient temperature (operational), max.	85 °C
Rated Voltage $U_N$	120 V	VPR (N-PE)	600 V
SCCR	200 kA	$I_n$	20 kA
Category	SPD TYPE 1CA	Connection cross-section AWG, min.	AWG 14
Connection cross-section AWG, max.	AWG 6	Ambient temperature (operational), min.	-40 °C
MODE	all modes	VPR (L-PE)	600 V
Voltage type	AC	UL Energy Networks	Split-Phase

### Connection data, remote alert

Connection type	PUSH IN	Cross-section for connected wire, solid core, max.	1.5 mm <sup>2</sup>
Cross-section for connected wire, solid core, max. (AWG)	AWG 10	Cross-section for connected wire, solid core, min.	0.14 mm <sup>2</sup>
Cross-section for connected wire, solid core, min. (AWG)	AWG 30	Stripping length	12 mm

### General data

Colour	orange, black	Design	Installation housing, Insta IP 20
Operating altitude	≤ 4000 m	Optical function display	green = OK; red = arrester is defective - replace
Protection degree	IP20 in installed state	Rail	TS 35
Segment	Power distribution	UL 94 flammability rating	V-0
Version	Surge protection, with remote contact		

### Insulation coordination acc. to EN 50178

Operating altitude	≤ 4000 m	Pollution severity	2
Surge voltage category	III		

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## Technical data

### Rated data IEC / EN

Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE	50 kA	Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	20 kA
Energy coordination ( $\leq 10$ m)	Type II, Type III	Follow-on current extinguishing capability $I_{fi}$	Follow current need not be taken into account
Frequency range, max.	60 Hz	Frequency range, min.	50 Hz
Fuse	No Fuse necessary $\leq 315$ A gG, 250 A gG @50 kA I <sub>sc</sub> cr, 315 A gG @25 kA I <sub>sc</sub> cr	Leakage current at $U_n$	0.3 mA
Low voltage network	Single-phase	Max. continuous voltage, $U_c$ (AC)	150 V
Number of poles	1	Protection level $U_p$ (typ.)	$\leq 1.25$ kV
Rated voltage (AC)	120 V	Requirements category acc. to IEC 61643-11	Type II
Requirements class, acc. to EN 61643-11	T2	Response time	$\leq 25$ ns
SPD type	T2	Short-circuit current rating $I_{SCCR}$	50 kA
Signalling contact	250 V 1A 1CO	Standards	IEC61643-11, EN61643-11, UL 1449 Ed.4, NFPA 79
Temporary surge voltage (over-voltage) - TOV	229 V	Voltage type	AC

### Connection data

Wire connection method	Screw connection	Type of connection	Screw connection
Stripping length, rated connection	18 mm	Tightening torque, min.	2 Nm
Tightening torque, max.	4.5 Nm	Clamping range, rated connection	16 mm <sup>2</sup>
Clamping range, min.	4 mm <sup>2</sup>	Clamping range, max.	35 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 14	Wire connection cross section AWG, max.	AWG 6
Wire cross-section, solid, min.	2.5 mm <sup>2</sup>	Wire cross-section, solid, max.	35 mm <sup>2</sup>
Wire connection cross section, finely stranded, min.	4 mm <sup>2</sup>	Wire connection cross section, finely stranded, max.	35 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	2.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	35 mm <sup>2</sup>
Connection cross-section, stranded, min.	2.5 mm <sup>2</sup>	Connection cross-section, stranded, max.	35 mm <sup>2</sup>

### Ratings IECEx/ATEX/cUL

Certificate no. (cULus)	E354261
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### Guarantee

Time interval	5 years
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### 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	ECLASS 11.0	27-13-08-05

**Data sheet****VPU AC II US 1 R 120/50**

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**Technical data****Approvals**

Approvals



ROHS	Conform
UL File Number Search	E354261

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">STEP</a>
User Documentation	<a href="#">IS VPU AC II US</a>

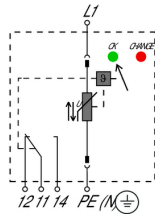
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**Drawings**

**Electric symbol**



Schematic circuit diagram

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## Accessories

### Crosshead screwdriver Phillips

VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip



### General ordering data

Type	SDIK PH1	Version
Order No.	<a href="#">9008570000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056569	
Qty.	1 pc(s).	

### VPU Series

Versatile accessories round off the surge protection range. E.g. the all-purpose measuring device V-TEST, which is used to check the function of pluggable arresters such as VSPC.



### General ordering data

Type	PLUG VPU	Version
Order No.	<a href="#">1402570000</a>	VPU series, Accessories
GTIN (EAN)	4050118204360	
Qty.	10 pc(s).	

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## Accessories

### Slotted screwdriver

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip



### General ordering data

Type	SDIS 1.0X5.5X125	Version
Order No.	<a href="#">9008410000</a>	Screwdriver, Screwdriver
GTIN (EAN)	4032248056378	
Qty.	1 pc(s).	

### Blank



ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc. Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

### General ordering data

Type	ESG 6/15 K MC NE WS	Version
Order No.	<a href="#">1880100000</a>	ESG, Device markers x 15 mm, PA 66, Colour: white, Self-adhesive
GTIN (EAN)	4032248478781	
Qty.	200 pc(s).	

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**Accessories****Spare Parts**

- compact SPD to install in application by NFPA 79
- no additional overcurrent protection devices needed
- short circuit current rating (SCCR) up to 200 kA
- tested according to IEC/EN 61643-11 and UL 1449 4.Ed

**General ordering data**

Type	VPU AC II US 0 120/50	Version
Order No.	<a href="#">2730440000</a>	Spare arrester, Surge protection, $U_p(L/N-PE) \leq 1.25$ kV
GTIN (EAN)	4050118807660	
Qty.	1 pc(s).	