

VPU AC II US 3 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, TN-C, $U_p(L/N-PE) \leq 1.25 \text{ kV}$
Order No.	2730520000
Type	VPU AC II US 3 R 120/50
GTIN (EAN)	4050118807585
Qty.	1 pc(s).

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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	104.5 mm
Height (inches)	4.114 inch	Mounting dimension - height	75 mm
Net weight	363 g	Width	54 mm
Width (inches)	2.126 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	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-L)	1,000 V	VPR (L-PE)	600 V
Voltage type	AC	UL Energy Networks	3-phase WYE

Connection data, remote alert

Connection type	PUSH IN	Cross-section for connected wire, solid core, max.	1.5 mm ²
Cross-section for connected wire, solid core, max. (AWG)	AWG 10	Cross-section for connected wire, solid core, min.	0.14 mm ²
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 μ s) wire-PE	50 kA	Discharge current I_n (8/20 μ s) wire-PE	20 kA
Energy coordination (≤ 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 ≤ 315 A gG, 250 A gG @50 kA I_{scCR} , 315 A gG @25 kA I_{scCR}	Leakage current at U_n	0.4 mA
Low voltage network	TN-C	Mains voltage	120 V / 240 V
Max. continuous voltage, U_c (AC)	150 V	Number of poles	3
Protection level U_p (typ.)	≤ 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	≤ 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 ²
Clamping range, min.	4 mm ²	Clamping range, max.	35 mm ²
Wire connection cross section AWG, min.	AWG 14	Wire connection cross section AWG, max.	AWG 6
Wire cross-section, solid, min.	2.5 mm ²	Wire cross-section, solid, max.	35 mm ²
Wire connection cross section, finely stranded, min.	4 mm ²	Wire connection cross section, finely stranded, max.	35 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	2.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	35 mm ²
Connection cross-section, stranded, min.	2.5 mm ²	Connection cross-section, stranded, max.	35 mm ²

Ratings IECEx/ATEX/cUL

Certificate no. (cULus) E354261

Guarantee

Time interval 5 years

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 3 R 120/50**

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Technical data**Approvals**

Approvals



ROHS	Conform
UL File Number Search	E354261

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	STEP
User Documentation	IS VPU AC II US

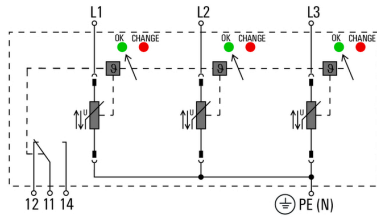
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Drawings

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.	9008570000	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.	1402570000	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.	9008410000	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.	1880100000	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**

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- 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.	2730440000	Spare arrester, Surge protection, $U_p(L/N-PE) \leq 1.25$ kV
GTIN (EAN)	4050118807660	
Qty.	1 pc(s).	