

VPU AC II US 3+1 R 277/50**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-S, TN-S, TT, IT with N, IT without N
Order No.	2730680000
Type	VPU AC II US 3+1 R 277/50
GTIN (EAN)	4050118807424
Qty.	1 pc(s).
Replacement parts	2730560000 2726820000 2855300000

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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	Width	72 mm
Width (inches)	2.835 inch	Mounting dimension - height	75 mm
Net weight	473 g		

Temperatures

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

Rated data UL

Ambient temperature (operational), max. 85 °C		Rated Voltage U_N	277 V
VPR (N-PE)	1,000 V	MCOV (L-PE)	350 V
MCOV (N-PE)	305 V	SCCR	200 kA
I_n	20 kA	Category	SPD TYPE 1
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)	3,000 V	VPR (L-N)	1,500 V
VPR (L-PE)	3,000 V	Voltage type	AC
UL Energy Networks	3-phase WYE, High-Leg Delta		

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, blue	Design	Installation housing; 4TE, 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

Pollution severity	2	Surge voltage category	III
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Rated data IEC / EN

Discharge current I_{\max} (8/20 μ s) N-PE	65 kA	Discharge current I_{\max} (8/20 μ s) wire-PE	50 kA
Discharge current I_n (8/20 μ s) N-PE	40 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_{scrr} , 315 A gG @25 kA I_{scrr}	Leakage current at U_n	1 μ A
Low voltage network	TN-C-S, TN-S, TT, IT with N, IT without N	Mains voltage	277 V / 480 V
Max. continuous voltage, U_c (AC)	350 V	Max. continuous voltage, U_c (N-PE)	305 V
Number of poles	4	Protection level U_p at I_N (L/N-PE)	≤ 1.75 kV
Protection level U_p at I_N (N-PE)	≤ 1.5 kV	Rated voltage (AC)	277 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_{scrr}	50 kA	Signalling contact	250 V 1A 1CO
Standards	IEC 61643-11, EN 61643-11, UL 1449, NF-PA 79	Temporary surge voltage (over-voltage) - TOV	403 V
Voltage type	AC		

Connection data

Stripping length	18 mm	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

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Technical data

Classifications

ETIM 6.0	EC000941	ETIM 7.0	EC000941
ETIM 8.0	EC000941	ETIM 9.0	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
ECLASS 12.0	27-17-90-90	ECLASS 13.0	27-17-90-90
ECLASS 14.0	27-17-90-90		

Environmental Product Compliance

REACH SVHC	/
RoHS Compliance Status	Compliant without exemption

Important note

Product information	Only applicable to IT power systems where the earth on the distribution transformer is interconnected with the earth on the consumer side (RE=RA in Figure 44.A1 of IEC 60634-4-44:2018).
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Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E354261

Downloads

Approval/Certificate/Document of Conformity	EU_Konformitätserklärung / EU_Declaration_of_Conformity
Engineering Data	CAD data – STEP
User Documentation	Beipackzettel / Instruction sheet
Catalogues	Catalogues in PDF-format

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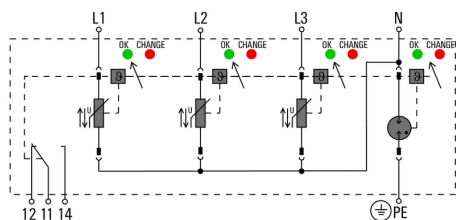
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Drawings

Electric symbol



Schematic circuit diagram

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www.weidmueller.com**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.	2749850000	Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade
GTIN (EAN)	4050118897050	thickness (A): 1 mm
Qty.	1 pc(s).	

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 X 80	Version
Order No.	2749890000	Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1
GTIN (EAN)	4050118897098	
Qty.	1 pc(s).	

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Accessories**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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Replacement parts

Spare arrester



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- 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 0 277/50	Version
Order No.	2730560000	Spare arrester, Surge protection, $U_p(L/N-PE) \leq 1.75 \text{ kV}$
GTIN (EAN)	4050118807547	
Qty.	1 pc(s).	
Type	VPU AC II US 0 N-PE 240 ...	Version
Order No.	2726820000	Spare arrester, Surge protection, TT nur für N-PE
GTIN (EAN)	4050118802467	
Qty.	1 pc(s).	

VPU Series



Extensive accessories round off the product range

General ordering data

Type	PLUG VPU AC
Order No.	2855300000
GTIN (EAN)	4064675533283
Qty.	10 pc(s).