

## VPU AC II US 3+1 277/50

**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, TN-C-S, TN-S, TT, IT with N, $U_p(L/N-PE) \leq 1.75$ kV
Order No.	<a href="#">2730670000</a>
Type	VPU AC II US 3+1 277/50
GTIN (EAN)	4050118807431
Qty.	1 pc(s).

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Catalogue status 26.02.2021 / 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	96.3 mm
Height (inches)	3.791 inch	Mounting dimension - height	75 mm
Net weight	468 g	Width	72 mm
Width (inches)	2.835 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 $U_N$	277 V	VPR (N-PE)	1,000 V
MCOV (N-PE)	305 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)	3,000 V	VPR (L-N)	1,500 V
VPR (L-PE)	3,000 V	Voltage type	AC
UL Energy Networks	High-Leg Delta		

**General data**

Colour	orange, black, blue	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		

**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 $I_{\max}$ (8/20 $\mu$ s) N-PE	65 kA
Discharge current $I_n$ (8/20 $\mu$ s) N-PE	40 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 Iscrr, 315 A gG @25 kA Iscrr	Leakage current at $U_n$	1 $\mu$ A
Low voltage network	TN-C-S, TN-S, TT, IT with 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 $U_p$ (typ.)	$\leq 1.75$ kV
Protection level $U_p$ at $I_n$ (N-PE)	$\leq 1.5$ 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	$\leq 25$ ns, $< 100\mu$ s	SPD type	T2
Short-circuit current rating $I_{SCCR}$	50 kA	Signalling contact	No
Standards	IEC61643-11, EN61643-11, UL 1449 Ed.4, NFPA 79	Temporary surge voltage (over-voltage) - TOV	403 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**

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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>

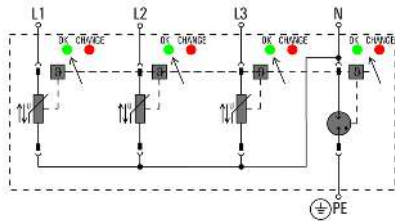
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**Drawings**

**Electric symbol**



Schematic circuit diagram