

**VPU AC II US 3+1 R 277/50****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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
Order No.	<a href="#">2730680000</a>
Type	VPU AC II US 3+1 R 277/50
GTIN (EAN)	4050118807424
Qty.	1 pc(s).
Replacement parts	<a href="#">2730560000</a> <a href="#">2726820000</a> <a href="#">2855300000</a>

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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 <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, 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, 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 $\mu$ s) N-PE	65 kA	Discharge current $I_{\max}$ (8/20 $\mu$ s) wire-PE	50 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 $I_{sc}$ , 315 A gG @25 kA $I_{sc}$	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 $U_p$ at $I_N$ (L/N-PE)	$\leq 1.75$ 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	250 V 1A 1CO
Standards	IEC61643-11, EN61643-11, UL 1449, NFPA 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 <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

## Guarantee

Time interval 5 years

## 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

Creation date May 7, 2024 1:35:38 PM CEST

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## 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).

## Approvals

## Approvals



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

Approval/Certificate/Document of Conformity	<a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
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Engineering Data	<a href="#">CAD data – STEP</a>
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User Documentation	<a href="#">Beipackzettel / Instruction sheet</a>
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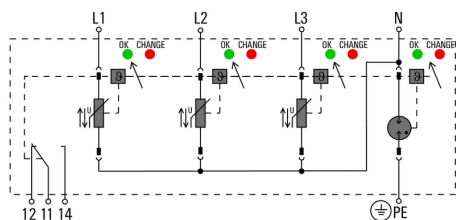
Catalogues	<a href="#">Catalogues in PDF-format</a>
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Schematic circuit diagram