

**VPU AC II US 4 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
Order No.	<a href="#">2730620000</a>
Type	VPU AC II US 4 R 277/50
GTIN (EAN)	4050118807486
Qty.	1 pc(s).
Replacement parts	<a href="#">2730560000</a> <a href="#">2855300000</a>

## VPU AC II US 4 R 277/50

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## 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	489 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)	350 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)	2,000 V	VPR (L-N)	2,000 V
VPR (L-PE)	1,000 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 <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; 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
--------------------	---	------------------------	-----

## VPU AC II US 4 R 277/50

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Rated data IEC / EN

Discharge current $I_{\max}$ (8/20 $\mu$ s) N-PE	50 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 $U_n$	0.7 mA
Low voltage network	TN-C-S, TN-S	Mains voltage	277 V / 480 V
Max. continuous voltage, $U_c$ (AC)	350 V	Number of poles	4
Protection level $U_p$ at $I_N$ (L/N-PE)	$\leq 1.75$ 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	SPD type	T2
Short-circuit current rating $I_{SCCR}$	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.	3 Nm	Tightening torque, max.	4.5 Nm
Clamping range, rated connection	16 mm <sup>2</sup>	Clamping range, min.	1.5 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
ECLASS 14.0	27-17-90-90		

Creation date October 6, 2024 1:01:00 AM CEST

Catalogue status 28.09.2024 / We reserve the right to make technical changes.

**VPU AC II US 4 R 277/50****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Environmental Product Compliance**

REACH SVHC	/
RoHS Compliance Status	Compliant without exemption

**Approvals**

Approvals



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

**Downloads**

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

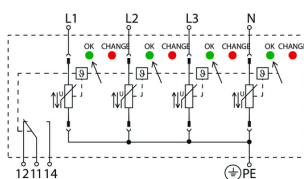
## VPU AC II US 4 R 277/50

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)

## Drawings

### Electric symbol



### Schematic circuit diagram

**VPU AC II US 4 R 277/50****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**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.	<a href="#">1880100000</a>	ESG, Device markers x 15 mm, PA 66, Colour: white, Self-adhesive
GTIN (EAN)	4032248478781	
Qty.	200 pc(s).	

**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="#">2749850000</a>	Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade
GTIN (EAN)	4050118897050	thickness (A): 1 mm
Qty.	1 pc(s).	

**VPU AC II US 4 R 277/50****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**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 X 80	Version
Order No.	<a href="#">2749890000</a>	Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1
GTIN (EAN)	4050118897098	
Qty.	1 pc(s).	

**VPU AC II US 4 R 277/50**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)

**Replacement parts****VPU Series**

Extensive accessories round off the product range

**General ordering data**

Type	PLUG VPU AC
Order No.	<a href="#">2855300000</a>
GTIN (EAN)	4064675533283
Qty.	10 pc(s).

**Spare arrester**

- 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 0 277/50	Version
Order No.	<a href="#">2730560000</a>	Spare arrester, Surge protection, $U_p(L/N-PE) \leq 1.75 \text{ kV}$
GTIN (EAN)	4050118807547	
Qty.	1 pc(s).	