

## VPU AC II US 2 R 277/50

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

www.weidmueller.com



Picture similar

- 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, Single-phase, TN-S
Order No.	<a href="#">2730640000</a>
Type	VPU AC II US 2 R 277/50
GTIN (EAN)	4050118807462
Qty.	1 items

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## Technical data

## Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E354261

## Dimensions and weights

Depth	68 mm	Depth (inches)	2.6772 inch
Depth including DIN rail	76 mm	Height	104.5 mm
Height (inches)	4.1142 inch	Width	36 mm
Width (inches)	1.4173 inch	Mounting dimension - height	75 mm
Net weight	268 g		

## Temperatures

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

## Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

## Rated data UL

Ambient temperature (operational), max.	85 °C	Rated Voltage UN	277 V
VPR (N-PE)	1000 V	MCOV (L-PE)	350 V
MCOV (N-PE)	350 V	SCCR	200 kA
In	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-N)	2000 V	VPR (L-PE)	1000 V
Voltage type	AC	UL Energy Networks	Split-Phase

## Connection data, remote alert

Cross-section for connected wire, solid core, min.	0.25 mm <sup>2</sup>	Stripping length	12 mm
Cross-section for connected wire, solid core, max. (AWG)	AWG 10	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, min. (AWG)	AWG 30

## General data

Optical function display	green = OK; red = arrester is defective - replace	Segment	Power distribution
Version	Surge protection, with remote contact	Design	Installation housing; 2TE, Insta IP 20
UL 94 flammability rating	V-0	Colour	orange, black
Protection degree	IP20 in installed state	Mounting rail	TS 35
Operating altitude	≤ 4000 m		

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## Technical data

### Insulation coordination acc. to EN 50178

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

Number of poles	2	Leakage current at $U_n$	0.4 mA
Signalling contact	250 V 1A 1CO	Rated voltage (AC)	277 V
Low voltage network	Single-phase, TN-S	Voltage type	AC
Temporary surge voltage (over-voltage) - TOV	403 V	Fuse protection	No Fuse necessary $\leq 315$ A gG, 250 A gG @50 kA Iscrr, 315 A gG @25 kA Iscrr
Response time / fallback time	$\leq 25$ ns	Frequency range, max.	60 Hz
Frequency range, min.	50 Hz	Standards	IEC 61643-11, EN 61643-11, UL 1449, NFPA 79
Requirements class, acc. to EN 61643-11	T2, T3	Requirements category acc. to IEC 61643-11	Type II
Max. continuous voltage, $U_c$ (AC)	350 V	Discharge current $I_{max}$ (8/20 $\mu$ s) N-PE	50 kA
Discharge current $I_n$ (8/20 $\mu$ s) N-PE	20 kA	Energy coordination ( $\leq 10$ m)	Type II, Type III
Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	20 kA	Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE	50 kA
SPD type	T2	Protection level $U_p$ at IN (L/N-PE)	$\leq 1.75$ kV
Short-circuit current rating ISCCR	50 kA	Follow-on current extinguishing capability I <sub>fi</sub>	Follow current need not be taken into account
Integrated back-up fuse	No		

### 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 16
Wire connection cross section AWG, max.	AWG 2	Wire cross-section, solid, min.	1.5 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.	25 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.	1.5 mm <sup>2</sup>
Connection cross-section, stranded, max.	35 mm <sup>2</sup>		

### Electrical data

Voltage type	AC
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### General data

Number of poles	2	Protection degree	IP20 in installed state
Colour	orange, black		

### Ratings IECEx/ATEX/cUL

Certificate no. (cULus)	E354261
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**Technical data**

**Guarantee**

Time interval 5 years

**Classifications**

ETIM 8.0	EC000941	ETIM 9.0	EC000941
ETIM 10.0	EC000941	ECLASS 14.0	27-17-12-02
ECLASS 15.0	27-17-12-02		

Drawings

Electric symbol



Schematic circuit diagram