

VPU AC II US 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, Single-phase
Order No.	2730580000
Type	VPU AC II US 1 R 277/50
GTIN (EAN)	4050118807523
Qty.	1 pc(s).
Replacement parts	2730560000 2855300000

Creation date September 26, 2023 9:43:39 PM CEST

VPU AC II US 1 R 277/50

Weidmüller Interface GmbH & 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	111 mm
Height (inches)	4.37 inch	Width	18 mm
Width (inches)	0.709 inch	Mounting dimension - height	75 mm
Net weight	140 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-40 °C...85 °C
Operating temperature, min.	-40 °C	Operating temperature, max.	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
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-PE)	1,000 V
Voltage type	AC	UL Energy Networks	Split-Phase

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	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
--------------------	---	------------------------	-----

VPU AC II US 1 R 277/50

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Rated data IEC / EN

Discharge current $I_{\max}$ (8/20 μ s) wire-PE	50 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_{sc} , 315 A gG @25 kA I_{sc}	Leakage current at U_n	0.3 mA
Low voltage network	Single-phase	Max. continuous voltage, U_c (AC)	350 V
Number of poles	1	Protection level U_p at I_N (L/N-PE)	≤ 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	≤ 25 ns
SPD type	T2	Short-circuit current rating I_{sc}	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 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
---------------	---------

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	27179090

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Technical data****Approvals**

Approvals



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

Downloads

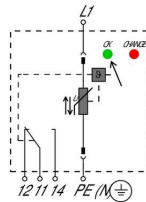
Approval/Certificate/Document of Conformity	EU_Konformitätserklärung / EU_Declaration_of_Conformity
Engineering Data	CAD data – STEP
User Documentation	Beipackzettel / Instruction sheet
Catalogues	Catalogues in PDF-format

VPU AC II US 1 R 277/50

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
www.weidmueller.com

Drawings

Electric symbol



Schematic circuit diagram