

VPU AC II US 1 R 120/50

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, $U_p(L/N-PE) \leq 1.25 \text{ kV}$
Order No.	2730460000
Type	VPU AC II US 1 R 120/50
GTIN (EAN)	4050118807646
Qty.	1 pc(s).

Creation date March 1, 2021 6:08:17 PM CET

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	111 mm
Height (inches)	4.37 inch	Mounting dimension - height	75 mm
Net weight	132 g	Width	18 mm
Width (inches)	0.709 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	120 V	VPR (N-PE)	600 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-PE)	600 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

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 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} cr, 315 A gG @25 kA I _{sc} cr	Leakage current at U_n	0.3 mA
Low voltage network	Single-phase	Max. continuous voltage, U_c (AC)	150 V
Number of poles	1	Protection level U_p (typ.)	≤ 1.25 kV
Rated voltage (AC)	120 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_{SCCR}	50 kA
Signalling contact	250 V 1A 1CO	Standards	IEC61643-11, EN61643-11, UL 1449 Ed.4, NFPA 79
Temporary surge voltage (over-voltage) - TOV	229 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 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
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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**VPU AC II US 1 R 120/50**

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Technical data**Approvals**

Approvals



ROHS	Conform
UL File Number Search	E354261

Downloads

Approval/Certificate/Document of Conformity	Declaration of Conformity
Engineering Data	STEP
User Documentation	IS VPU AC II US

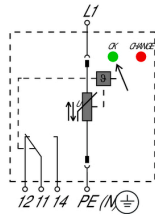
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Drawings

Electric symbol



Schematic circuit diagram