

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
Order No.	2730460000
Type	VPU AC II US 1 R 120/50
GTIN (EAN)	4050118807646
Qty.	1 pc(s).
Replacement parts	2730440000 2855300000

Creation date October 3, 2022 6:24:37 PM CEST

Catalogue status 23.09.2022 / 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	Width	18 mm
Width (inches)	0.709 inch	Mounting dimension - height	75 mm
Net weight	132 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	120 V
VPR (N-PE)	600 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)	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

Pollution severity	2	Surge voltage category	III
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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 at I_N (L/N-PE)	≤ 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, NFPA 79
Temporary surge voltage (over-voltage) - TOV	229 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
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Guarantee

Time interval	5 years
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Classifications

ETIM 6.0	EC000941	ETIM 7.0	EC000941
ETIM 8.0	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

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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
Engineering Data	EPLAN
User Documentation	Beipackzettel / Instruction sheet
Catalogues	Catalogues in PDF-format

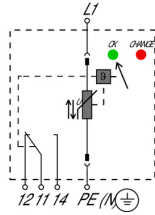
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Drawings

Electric symbol



Schematic circuit diagram