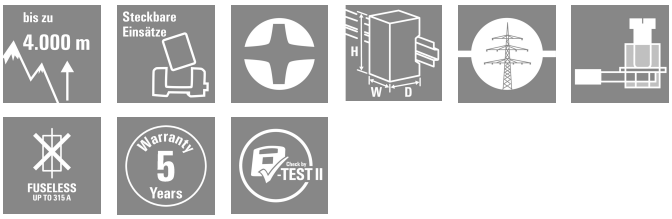
Data sheet

VPU AC I 1+1 300/12.5 LH

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

www.weidmueller.com



Weidmüller VPU I (Type I), VPU II (Type II) and VPU III (Type III) surge protection products effectively reduce the interference coupling that can occur due to transient surge voltages, even significantly below the limits prescribed by insulation co-ordination according to EN 60664-3 / DIN VDE 0110-3. This means that the whole installation is exposed to fewer malfunctions. The arresters are co-ordinated using technical means. This means that decoupling between Types I, II and III is unnecessary. The arresters are tested according to product standard IEC 61643-11 / DIN EN 61643-11 and can be installed in systems according to IEC 61643-12 / VDE 0675-6-12 and IEC 62305-4 / VDE 0185-4. This lightning and surge protection device is suited for installation in power supply systems. Weidmüller offers different products depending on the particular mains network type and voltage level. A special Type I and Type II protective device is even available for photovoltaic applications.

General ordering data

Version	Surge voltage arrester, Low voltage, Surge protection, Single-phase, TN, TT, IT with N, IT without N
Order No.	2983520000
Type	VPU AC I 1+1 300/12.5 LH
GTIN (EAN)	4099986839649
Qty.	1 items

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Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E354261

Dimensions and weights

Depth	70 mm	Depth (inches)	2.7559 inch
Height	90 mm	Height (inches)	3.5433 inch
Width	36 mm	Width (inches)	1.4173 inch
Net weight	308 g		

Temperatures

Storage temperature	-40 °C...85 °C	Ambient temperature	...85 °C
Operating temperature	-40 °C...85 °C	Humidity at operating temperature	5 - 95% rel. humidity
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 (UL), max.	85 °C	Rated Voltage UN	240 V
MCOV (L-PE)	600 V	MCOV (N-PE)	305 V
In	20 kA	Category	SPD TYPE 4CA
Ambient temperature operational (UL), min.	-40 °C	Certificate No. (cURus)	E354261
MODE	L-G	Measured limiting voltage	2700 V
Voltage type	AC	UL Energy Networks	Split-Phase

Connection data, remote alert

Stripping length	8 mm	Connection type	PUSH IN

General data

Optical function display	green = OK; red = arrester is defective - replace	Version	Surge protection
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

Insulation coordination acc. to EN 50178

Surge voltage category	III	Pollution severity	2

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Technical data

Rated data IEC / EN

Number of poles	2	Leakage current (nominal voltage)	6 µA
Signalling contact	No	Rated voltage (AC)	230 V
Low voltage network	Single-phase, TN, TT, IT with N, IT without N	Protection level Up at IN (N-PE)	≤ 1.5 kV
Protection level, UP wire - wire	1500 V	Protection level, UP wire - PE	1500 V
Voltage type	AC	Temporary surge voltage (overvoltage)	337 V
Fuse protection	No Fuse neccessary ≤160 A gG	Response time / fallback time	≤ 25 ns
Frequency range, max.	60 Hz	Frequency range, min.	50 Hz
Standards	IEC 61643-11, EN 61643-11, UL 1449	Lightning test current limp (10/350 µs) (L-PE)	12.5 kA
Lightning test current, limp (10/350 µs) (N-PE)	50 kA	Requirements class, acc. to EN 61643-11	T1, T2
Requirements category acc. to IEC 61643-11	Type I, Type II	Max. continuous voltage, Uc (AC)	300 V
Mains voltage	230 V / 400 V	Discharge current Imax (8/20µs) N-PE	100 kA
Discharge current In (8/20µs) N-PE	50 kA	Energy coordination (≤10 m)	Type I, Type II, Type III
Discharge current In (8/20µs) wire-PE	20 kA	Discharge current Imax (8/20µs) wire-PE	50 kA
Protection level Up at IN (L/N-PE)	≤ 1.5 kV	Short-circuit current rating ISCCR	50 kA
Follow-on current extinguishing capability Ifi	Not available due for technical reasons	Integrated back-up fuse	No

Connection data

Stripping length	18 mm	Wire connection method	Screw connection
Tightening torque, min.	3 Nm	Tightening torque, max.	4.5 Nm
Clamping range, rated connection	16 mm²	Clamping range, min.	1.5 mm²
Clamping range, max.	35 mm²	Wire cross-section, solid, min.	1.5 mm²
Wire cross-section, solid, max.	35 mm²	Wire connection cross section, finely stranded, min.	1.5 mm²
Wire connection cross-section, finely stranded, max.	25 mm²	Connection cross-section, stranded, min.	1.5 mm²
Connection cross-section, stranded, max.	35 mm²		

Electrical data

Voltage type	AC

General data

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

Guarantee

Time interval	5 years

Important note

Product information	For use in DC applications, please use the fuse of SIBA Type NH2XL aR/aSF DC 1500 V

Classifications

ETIM 8.0	EC001457	ETIM 9.0	EC001457
ETIM 10.0	EC001457	ECLASS 14.0	27-17-12-04
ECLASS 15.0	27-17-12-04		

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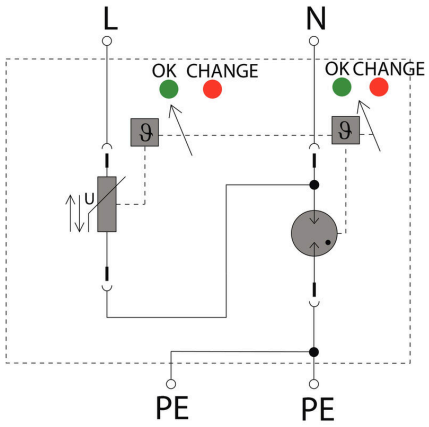
Drawings

Electric symbol



Schematic circuit diagram