

VPU series

VPU I 1+1 R 280V/12,5KA

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
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Type I/II lightning arrester for use downstream of the electrical meter

- Version suitable for use upstream of the electrical meter
- Suitable for protective zones III and IV (LPL III/IV)
- Can also be used as Type II surge protection
- Tested according to IEC 61643-11 for Type I and II surge protection
- Pluggable arrester

General ordering data

Type	VPU I 1+1 R 280V/12,5KA
Order No.	1352270000
Version	Surge voltage arrester, Low voltage, with remote contact, Single-phase, IT with N, IT without N, TN
GTIN (EAN)	4050118158007
Qty.	1 pc(s).

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Catalogue status 17.04.2020 / We reserve the right to make technical changes.

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Technical data
Dimensions and weights

Width	35.6 mm	Width (inches)	1.402 inch
Height	106 mm	Height (inches)	4.173 inch
Depth	69 mm	Depth (inches)	2.717 inch
Mounting dimension - height	75 mm	Net weight	300 g

Temperatures

Humidity	5 - 95% rel. humidity	Operating temperature, max.	70 °C
Operating temperature, min.	-40 °C	Storage temperature, max.	80 °C
Storage temperature, min.	-40 °C	Operating temperature	-40 °C...70 °C
Storage temperature	-40 °C...80 °C		

Connection data, remote alert

Connection type	PUSH IN	Stripping length	8 mm
Cross-section for connected wire, solid core, min.	0.14 mm ²	Cross-section for connected wire, solid core, max.	1.5 mm ²

General data

Colour	black, orange, blue	Design	Installation housing; 2TE, Insta IP 20
Optical function display	green = OK; red = arrester is defective - replace	Protection degree	IP20
Rail	TS 35	Segment	Power distribution
UL 94 flammability rating	V-0	Version	with remote contact

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	IV
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Technical data

Rated data IEC / EN

Rated voltage (AC)	230 V	Voltage type	AC
Max. continuous voltage, U_c (AC)	280 V	Max. continuous voltage, U_c (N-PE)	260 V
Low voltage network	Single-phase, IT with N, IT without N, TN	Discharge current I_n (8/20 μ s) N-PE	50 kA
Discharge current I_{max} (8/20 μ s) N-PE	100 kA	Discharge current I_n (8/20 μ s) wire-PE	20 kA
Discharge current I_{max} (8/20 μ s) wire-PE	50 kA	Lightning test current I_{imp} (10/350 μ s) (L-PE)	12.5 kA
Lightning test current, I_{imp} (10/350 μ s) (N-PE)	50 kA	Frequency range, max.	60 Hz
Frequency range, min.	50 Hz	Fuse	125 A gL > (if back up fuse > 125 A), No Fuse necessary \leq 125 A gG
Short-circuit current rating I_{SCCR}	25 kA	Follow-on current extinguishing capability I_{fi}	Not available due for technical reasons
Standards	IEC61643-11, EN61643-11	Energy coordination (\leq 10 m)	Type I, Type II, Type III
Protection level U_p at I_N (L/N-PE)	\leq 1.4 kV	Protection level U_p at I_N (N-PE)	\leq 1.5 kV
Leakage current at U_n	100 μ A	Temporary surge voltage (over-voltage) - TOV	438 V
Number of poles	2	Requirements category acc. to IEC 61643-11	Type I, Type II
Requirements class, acc. to EN 61643-11	T1, T2	Response time	\leq 25 ns, \leq 100 ns
Signalling contact	250 V 1A 1CO		

Connection data

Type of connection	Screw connection	Stripping length, rated connection	15 mm
Tightening torque, min.	2 Nm	Tightening torque, max.	3 Nm
Clamping range, rated connection	16 mm ²	Clamping range, min.	4 mm ²
Clamping range, max.	35 mm ²	Wire cross-section, solid, min.	2.5 mm ²
Wire cross-section, solid, max.	16 mm ²	Wire connection cross-section, finely stranded, min.	2.5 mm ²
Wire connection cross section, finely stranded, max.	25 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	2.5 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	50 mm ²	Connection cross-section, stranded, min.	2.5 mm ²
Connection cross-section, stranded, max.	50 mm ²		

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	UNSPSC	30-21-19-22

Product information

Product information	Only applicable to IT power systems where the earth on the distribution transformer is interconnected with the earth on the consumer side (RE=RA in Figure 44.A1 of IEC 60634-4-44:2018).
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Data sheet**VPU series**
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Approvals



ROHS

Conform

Downloads

Approval/Certificate/Document of Conformity	EAC VPU SERIES CE PAPER Declaration of Conformity
Brochure/Catalogue	CAT 4.4 ELECTR 16/17 EN
Engineering Data	EPLAN_WSCAD
Engineering Data	STEP
User Documentation	Instruction sheet

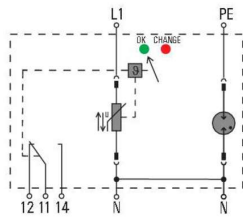
Data sheet

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Drawings

Electric symbol



Schematic circuit diagram

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Accessories
N-PE 260 V

Spare arrester Type I

Weidmüller VPU I surge protection products protect low-voltage consumer installations and electronic devices against overvoltages that can occur as a result of atmospheric discharges (thunderstorms) or switching operations (transients). The VPU I series meets the Type I and Type II requirements acc. to IEC 61643-11 and the Type 1 and Type 2 requirements acc. to EN 61643-11. The spare arresters are coded and can only be inserted into suitable bases.

General ordering data

Type	VPU I 0 N-PE 260V/50KA	Version
Order No.	1351930000	Surge voltage arrester, Low voltage, Accessories, Spare arrester, TT
GTIN (EAN)	4050118158274	nur für N-PE
Qty.	1 pc(s).	

Crosshead screwdriver Phillips

VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip


General ordering data

Type	SDIK PH 1	Version
Order No.	9008570000	Screwdriver, Blade length: 80 mm
GTIN (EAN)	4032248056569	
Qty.	1 pc(s).	

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Accessories
L-PEN 280 V

Spare arrester Type I

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General ordering data

Type	VPU I 0 280V/12,5KA	Version
Order No.	1352120000	Surge voltage arrester, Low voltage, Accessories, Spare arrester
GTIN (EAN)	4050118158120	
Qty.	1 pc(s).	

VPU series accessories


Versatile accessories round off the surge protection range. E.g. the all-purpose measuring device V-TEST, which is used to check the function of pluggable arresters such as VSPC.

General ordering data

Type	PLUG VPU	Version
Order No.	1402570000	VPU series, Accessories
GTIN (EAN)	4050118204360	
Qty.	10 pc(s).	