

VPU I 1+1 LCF 280V/25KA**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Type I/II lightning arrester for use upstream/downstream of the electrical meter**

- Can also be used for type II surge protection
- Tested according to IEC 61643-11 for type I and II surge protection
- With 35 kA (10/350 µs) suitable for protective zones I, II, III and IV (LPL I/II/III/IV)

General ordering data

Version	Surge voltage arrester, Low voltage, without telecomm. contact, Leakage-current-free, Single-phase, IT with N, IT without N, TN, TT
Order No.	1351750000
Type	VPU I 1+1 LCF 280V/25KA
GTIN (EAN)	4050118158410
Qty.	1 pc(s).
Delivery status	This article will no longer be available in the future.
Available until	2024-03-31
Replacement parts	1351540000 1351940000
Alternative product	2726680000

Creation date June 2, 2024 4:16:13 AM CEST

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Technical data

Dimensions and weights

Depth	69 mm	Depth (inches)	2.717 inch
Height	94 mm	Height (inches)	3.701 inch
Width	71.2 mm	Width (inches)	2.803 inch
Mounting dimension - height	75 mm	Net weight	576 g

Temperatures

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

General data

Colour	black, orange, blue	Design	Installation housing; 4TE, Insta IP 20
Operating altitude	≤ 2000 m	Optical function display	green = OK; red = arrester is defective - replace
Protection degree	IP20	Rail	TS 35
Segment	Power distribution	Suitable for	Count-in installation (leakage current free)
UL 94 flammability rating	V-0	Version	without telecomm. contact, Leakage-current-free

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	IV
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Rated data IEC / EN

Discharge current I_{\max} (8/20μs) N-PE	100 kA	Discharge current I_{\max} (8/20μs) wire-PE	100 kA
Discharge current I_n (8/20μs) N-PE	100 kA	Discharge current I_n (8/20μs) wire-PE	25 kA
Energy coordination (≤10 m)	Type I, Type II, Type III	Follow-on current extinguishing capability I_{fi}	Not available due for technical reasons
Fuse	No Fuse necessary ≤250 A gG, 250 A gL (if back up fuse > 250 A)	Leakage current at U_n	1 μA
Lightning test current I_{imp} (10/350 μs) (L-PE)	25 kA	Lightning test current, I_{imp} (10/350 μs) (N-PE)	100 kA
Low voltage network	Single-phase, IT with N, IT without N, TN, TT	Mains voltage	240 V
Max. continuous voltage, U_c (AC)	280 V	Max. continuous voltage, U_c (N-PE)	260 V
Number of poles	1	Protection level U_p at I_N (L/N-PE)	≤ 1.6 kV
Protection level U_p at I_N (N-PE)	≤ 1.6 kV	Rated load current I_L	100 A
Rated voltage (AC)	230 V	Requirements category acc. to IEC 61643-11	Type I, Type II
Requirements class, acc. to EN 61643-11	T1, T2	Response time	≤ 100 ns
Short-circuit current rating I_{SCCR}	25 kA	Signalling contact	No
Standards	IEC61643-11, EN61643-11	Suitable for	Count-in installation (leakage current free)
Temporary surge voltage (over-voltage) - TOV	438 V	Voltage type	AC

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Connection data

Stripping length	15 mm	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
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	27-17-90-90

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Technical data

Tender specification sheets

Long specification		Short specification
	<p>Multi-pin lightning arrester according to the requirements of Class I in accordance with IEC 61643-11, EN61643-11:2013. On interface transition from 0 to 1 (in accordance with IEC 1312-1), the arrester, made from V0 material, serves as lightning protection providing equipotential bonding and is used in applications in accordance with IEC 61643-12. The use of a non-blow-out sparkover gap, in combination with a high-power varistor, satisfies the inspection requirements for Class I surge protection systems in accordance with the VDEW (Association of German Power Stations) directive. The arrester is installed in the vicinity of the power supply for the equipment that needs protection, in a standard installation/electrical distribution enclosure. The VPU I 1+1 LCF 280 V/25 kA is used in the single-phase mains network. With thermal separation device on the varistor. If protection is no longer available, the colour in the display window changes from green to red. Rated voltage: 230 VAC lightning test current (10/350 µs): 25 kA protection level with lightning test current < 1.6 kV 25 kA short-circuit strength with max. back-up fuse of 250 A gl Type: Weidmüller VPU I 1+1 LCF 280 V/25 kA Order No. 1351750000 or equivalent</p>	<p>Class I arrester for LPL 1 with 25 kA suitable for 230/400 V single-phase mains systems. Protection level < 1.6 kV. Type: Weidmüller VPU I 1+1 LCF 280 V/25 kA Order no. 1351640000 or equivalent</p>

Important note

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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Technical data

Approvals

Approvals



ROHS

Conform

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](#)

Brochures

VPU I 1+1 LCF 280V/25KA

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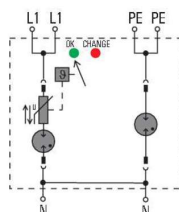
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Drawings

Electric symbol



Schematic circuit diagram

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www.weidmueller.com**Replacement parts****L-PEN 280 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 LCF 280V/25KA	Version
Order No.	1351540000	Surge voltage arrester, Low voltage, Accessories, Spare arrester
GTIN (EAN)	4050118158588	
Qty.	1 pc(s).	

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/100KA	Version
Order No.	1351940000	Surge voltage arrester, Low voltage, Accessories, Spare arrester, TT
GTIN (EAN)	4050118158267	nur für N-PE
Qty.	1 pc(s).	

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www.weidmueller.com**Accessories****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 PH1 X 80	Version
Order No.	2749890000	Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1
GTIN (EAN)	4050118897098	
Qty.	1 pc(s).	