

**VPU I 1 280V/12,5KA****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Type I/II lightning arrester for use downstream/upstream of the electrical meter**

- No-leakage-current version suitable for use upstream of the electrical meter
- Suitable for protection classes III and IV (LPLIII/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**

Version	Surge voltage arrester, Low voltage, without telecomm. contact, Single-phase
Order No.	<a href="#">1352130000</a>
Type	VPU I 1 280V/12,5KA
GTIN (EAN)	4050118158113
Qty.	1 pc(s).
Replacement parts	<a href="#">1352120000</a>

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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	17.8 mm	Width (inches)	0.701 inch
Mounting dimension - height	75 mm	Net weight	174 g

## Temperatures

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

## General data

Colour	black, orange	Design	Installation housing; 1TE, 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	without telecomm. contact

## Insulation coordination acc. to EN 50178

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

Discharge current $I_{\max}$ (8/20 $\mu$ s) wire-PE	50 kA	Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	20 kA
Energy coordination ( $\leq 10$ m)	Type I, Type II, Type III	Follow-on current extinguishing capability $I_{fi}$	Not available due for technical reasons
Frequency range, max.	60 Hz	Frequency range, min.	50 Hz
Fuse	250 A gL (if back up fuse > 250 A)	Leakage current at $U_n$	100 $\mu$ A
Lightning test current $I_{\text{imp}}$ (10/350 $\mu$ s) (L-PE)	12.5 kA	Low voltage network	Single-phase
Mains voltage	240 V	Max. continuous voltage, $U_c$ (AC)	280 V
Number of poles	1	Protection level $U_p$ at $I_N$ (L/N-PE)	$\leq 1.4$ kV
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	$\leq 25$ ns
Short-circuit current rating $I_{\text{SCCR}}$	25 kA	Signalling contact	No
Standards	IEC61643-11, EN61643-11	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 <sup>2</sup>
Clamping range, min.	4 mm <sup>2</sup>	Clamping range, max.	35 mm <sup>2</sup>
Wire cross-section, solid, min.	2.5 mm <sup>2</sup>	Wire cross-section, solid, max.	16 mm <sup>2</sup>
Wire connection cross section, finely stranded, min.	2.5 mm <sup>2</sup>	Wire connection cross section, finely stranded, max.	25 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	2.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	50 mm <sup>2</sup>
Connection cross-section, stranded, min.	2.5 mm <sup>2</sup>	Connection cross-section, stranded, max.	50 mm <sup>2</sup>

## 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

Single-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. Surge protection is used in the TN, TT and IT mains system types in combination with several lightning protectors. The use of a high-performance varistor meets the inspection requirements for Class I surge protection systems according to 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 1 280 V/12.5 kA is earthed, in combination with three or four identical arresters, between the outer conductors (L1, L2, L3 and / or the neutral conductor). Reference is also made here to the 3+1 circuit and the 3+0 / 4+0 circuits. 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): 12.5 kA protection level with lightning test current < 1.4 kV 25 kA short-circuit withstand rating with max. back-up fuse of 250 A gl Type: Weidmüller VPU I 1 280 V/12.5 kA Order No. 1352130000 or equivalent

## Short specification

Class I arrester for LPL III/IV with 12.5 kA suitable for 230/400 V mains systems. Protection level < 1.4 kV. Type: Weidmüller VPU I 1 280 V/12.5 kA Order no. 1352130000 or equivalent

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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 280V/12,5KA

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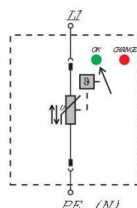
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# Drawings

## Electric symbol



Schematic circuit diagram

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## 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.	<a href="#">2749890000</a>	Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1
GTIN (EAN)	4050118897098	
Qty.	1 pc(s).	

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[www.weidmueller.com](http://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 280V/12,5KA	Version
Order No.	<a href="#">1352120000</a>	Surge voltage arrester, Low voltage, Accessories, Spare arrester
GTIN (EAN)	4050118158120	
Qty.	1 pc(s).	