

**VPU I 4 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, TN-C-S, TN-S
Order No.	<a href="#">1352180000</a>
Type	VPU I 4 280V/12,5KA
GTIN (EAN)	4050118158076
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	71.2 mm	Width (inches)	2.803 inch
Mounting dimension - height	75 mm	Net weight	672 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; 4TE, 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	TN-C-S, TN-S
Mains voltage	230 V / 400 V	Max. continuous voltage, $U_c$ (AC)	280 V
Number of poles	4	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

Multi-pole lightning arrester according to the requirements of Class I acc. to IEC 61643-11, EN61643-11:2013. On interface transition from 0 to 1 (acc. to IEC 1312-1), the arrester, consisting of V0 material, serves as lightning protection providing equipotential bonding and is used in applications according to IEC 61643-12. 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 a commercially available installation/electrical distribution enclosure, in the vicinity of the power-supply unit for the equipment that needs protection. The VPU I 4 280 V/12.5 kA is used in the TN-S mains network. With thermal separation device on the varistor. In case of insufficient protection, 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 4 280 V/12.5 kA Order No. 1352180000 or equivalent

## Short specification

Class I arrester for LPL III/IV with 12.5 kA suitable for 230/400 V TN-S mains systems. Protection level < 1.4 kV. Type: Weidmüller VPU I 4 280 V/12.5 kA Order no. 1352180000 or equivalent

## Approvals

## Approvals



ROHS

Conform

### VPU I 4 280V/12,5KA

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## Technical data

### 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

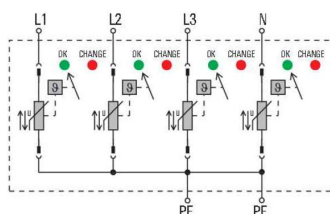
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# Drawings

## Electric symbol



Schematic circuit diagram

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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).	

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