

**VPU AC I 3+1 R 300/12.5 LH****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Product image**

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 protection, with remote contact, TT, TN-S, TN-C-S
Order No.	<a href="#">2983590000</a>
Type	VPU AC I 3+1 R 300/12.5 LH
GTIN (EAN)	4099986839717
Qty.	1 pc(s).

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## Technical data

## Dimensions and weights

Depth	91 mm	Depth (inches)	3.583 inch
Height	70 mm	Height (inches)	2.756 inch
Width	72 mm	Width (inches)	2.835 inch
Net weight	653.5 g		

## Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-40 °C...85 °C
Humidity at operating temperature	5 - 95% rel. humidity	Humidity	5 - 95% rel. humidity

## Connection data, remote alert

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

## General data

Acoustic signal	No	Colour	orange, black
Design	Installation housing, Insta IP 20	Operating altitude	≤ 4000 m
Optical function display	green = OK; red = arrester is defective - replace	Protection degree	IP20 in installed state
Rail	TS 35	UL 94 flammability rating	V-0
Version	Surge protection, with remote contact		

## Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
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## Technical data

## Rated data IEC / EN

Acoustic signal	No	Discharge current $I_{\max}$ (8/20 $\mu$ s) N-PE	100 kA
Discharge current $I_{\max}$ (8/20 $\mu$ s) wire-PE	50 kA	Discharge current $I_n$ (8/20 $\mu$ s) N-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	No Fuse necessary $\leq 315$ A gG, 250 A gG @50 kA $I_{sc}$ , 315 A gG @25 kA $I_{sc}$
Leakage current at $U_n$	6 $\mu$ A	Lightning test current $I_{imp}$ (10/350 $\mu$ s) (L-PE)	12.5 kA
Lightning test current $I_{imp}$ (10/350 $\mu$ s)	12.5 kA	Lightning test current, $I_{imp}$ (10/350 $\mu$ s) (N-PE)	50 kA
Low voltage network	TT, TN-S, TN-C-S	Mains voltage	230 V / 400 V
Max. continuous voltage, $U_c$ (AC)	300 V	Number of poles	4
Protection level $U_p$ at $I_N$ (L/N-PE)	$\leq 1500$ V	Protection level $U_p$ at $I_N$ (N-PE)	$\leq 1.5$ kV
Protection level, $U_p$ wire - PE	1,500 V	Protection level, $U_p$ wire - wire	1,500 V
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	Short-circuit current rating $I_{sc}$	50 kA
Signalling contact	Yes, 250 V 1A 1CO	Standards	IEC61643-11, EN61643-11
Temporary surge voltage (over-voltage) - TOV	337 V	Voltage type	AC

## Connection data

Stripping length	15 mm	Wire connection method	Screw connection
Tightening torque, min.	2 Nm	Tightening torque, max.	4.5 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.	1.5 mm <sup>2</sup>
Wire cross-section, solid, max.	35 mm <sup>2</sup>	Wire connection cross section, finely stranded, min.	1.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, max.	25 mm <sup>2</sup>	Connection cross-section, stranded, min.	1.5 mm <sup>2</sup>
Connection cross-section, stranded, max.	35 mm <sup>2</sup>		

## Guarantee

Time interval	5 years
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## 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

## Important note

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

### Approvals

Approvals



ROHS

Conform

### Downloads

Engineering Data

[CAD data – STEP](#)

User Documentation

[Beipackzettel / Instruction sheet](#)

Catalogues

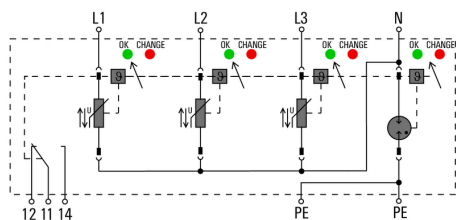
[Catalogues in PDF-format](#)

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[www.weidmueller.com](http://www.weidmueller.com)**Drawings****Electric symbol**

Schematic circuit diagram

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Spare arrester**

In the event of a defective arrester, you can easily reorder this spare arrester, replace the defective arrester and thus restore protection.

**General ordering data**

Type	VPU AC I 0 N-PE 305/50 ...	Version
Order No.	<a href="#">2983630000</a>	Surge protection
GTIN (EAN)	4099986839755	
Qty.	1 pc(s).	
Type	VPU AC I 0 300/12.5 LH	Version
Order No.	<a href="#">2983620000</a>	Surge protection
GTIN (EAN)	4099986839748	
Qty.	1 pc(s).	