

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

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

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 voltage arrester, Low voltage, Surge protection, with remote contact, TN-C-S, TN-S, TT, IT with N, IT without N
Order No.	<a href="#">2636920000</a>
Type	VPU AC I 3+1 R 300/12.5 LCF
GTIN (EAN)	4050118679236
Qty.	1 pc(s).
Replacement parts	<a href="#">2636900000</a> <a href="#">2591590000</a> <a href="#">2855300000</a>

## VPU AC I 3+1 R 300/12.5 LCF

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Dimensions and weights

Depth	91 mm	Depth (inches)	3.583 inch
Height	104.5 mm	Height (inches)	4.114 inch
Width	72 mm	Width (inches)	2.835 inch
Net weight	665 g		

## Temperatures

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

## Rated data UL

Ambient temperature (operational), max. 85 °C		Rated Voltage $U_N$	240 V
VPR (N-PE)	1,800 V	MCOV (L-PE)	300 V
MCOV (N-PE)	305 V	$I_n$	20 kA
Category	SPD TYPE 4CA	Ambient temperature (operational), min. -40 °C	
Certificate No. (cURus)	E354261	MODE	all modes
Measured. Limiting Voltage	3,020 V	VPR (L-L)	2,440 V
VPR (L-N)	1,220 V	VPR (L-PE)	3,020 V
Voltage type	AC		

## 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

Colour	orange, black, blue	Design	Installation housing; 4TE, 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
Segment	Power distribution	Suitable for	Count-in installation (leakage current free)
UL 94 flammability rating	V-0	Version	Surge protection, with remote contact

## Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	IV, III, II, I
--------------------	---	------------------------	----------------

## VPU AC I 3+1 R 300/12.5 LCF

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Rated data IEC / EN

Discharge current $I_{\max}$ (8/20 $\mu$ s) N-PE	50 kA
Discharge current $I_n$ (8/20 $\mu$ s) N-PE	50 kA
Energy coordination ( $\leq 10$ m)	Type I, Type II, Type III
Frequency range, max.	60 Hz
Fuse	No Fuse necessary $\leq 315$ A gG, 250 A gG @50 kA Iscrr, 315 A gG @25 kA Iscrr
Lightning test current $I_{\text{imp}}$ (10/350 $\mu$ s) (L-PE)	12.5 kA
Low voltage network	TN-C-S, TN-S, TT, IT with N, IT without N
Max. continuous voltage, $U_c$ (AC)	300 V
Number of poles	4
Protection level $U_p$ at $I_N$ (N-PE)	$\leq 1.5$ kV
Requirements category acc. to IEC 61643-11	Type I, Type II
Response time	$\leq 25$ ns, $\leq 100$ ns
Signalling contact	250 V 1A 1CO
Suitable for	Count-in installation (leakage current free)
Voltage type	AC

Discharge current $I_{\max}$ (8/20 $\mu$ s) wire-PE	65 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	20 kA
Follow-on current extinguishing capability $I_{fi}$	Not available due for technical reasons
Frequency range, min.	50 Hz
Leakage current at $U_n$	1 $\mu$ A
Lightning test current, $I_{\text{imp}}$ (10/350 $\mu$ s) (N-PE)	50 kA
Mains voltage	230 V / 400 V
Max. continuous voltage, $U_c$ (N-PE)	305 V
Protection level $U_p$ at $I_N$ (L/N-PE)	$\leq 1.5$ kV
Rated voltage (AC)	230 V
Requirements class, acc. to EN 61643-11	T1, T2
Short-circuit current rating $I_{\text{SCCR}}$	50 kA
Standards	IEC61643-11, EN61643-11, UL 1449
Temporary surge voltage (over-voltage) - TOV	442 V

## Connection data

Stripping length	15 mm
Type of connection	Screw connection
Tightening torque, min.	2 Nm
Clamping range, rated connection	16 mm <sup>2</sup>
Clamping range, max.	35 mm <sup>2</sup>
Wire cross-section, solid, max.	35 mm <sup>2</sup>
Wire connection cross section, finely stranded, max.	25 mm <sup>2</sup>
Connection cross-section, stranded, max.	35 mm <sup>2</sup>

Wire connection method	Screw connection
Stripping length, rated connection	15 mm
Tightening torque, max.	4.5 Nm
Clamping range, min.	4 mm <sup>2</sup>
Wire cross-section, solid, min.	1.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, min.	1.5 mm <sup>2</sup>
Connection cross-section, stranded, min.	1.5 mm <sup>2</sup>

## Guarantee

Time interval	5 years
---------------	---------

## 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	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). For use in DC applications, please use the fuse of SIBA Type NH2XL aR/aSF DC 1500 V
---------------------	---

Creation date May 4, 2024 4:36:26 AM CEST

Catalogue status 20.04.2024 / We reserve the right to make technical changes.

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

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Approvals**

Approvals



ROHS Conform

UL File Number Search UL Website

Certificate No. (cURus) E354261

**Downloads**

Approval/Certificate/Document of Conformity

[EU Konformitätserklärung / EU Declaration of Conformity](#)

Engineering Data

[CAD data – STEP](#)

Tender specification

[Ausschreibungstext DE](#)[Tenderspecification EN](#)

User Documentation

[Beipackzettel / Instruction sheet](#)

Catalogues

[Catalogues in PDF-format](#)

## VPU AC I 3+1 R 300/12.5 LCF

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

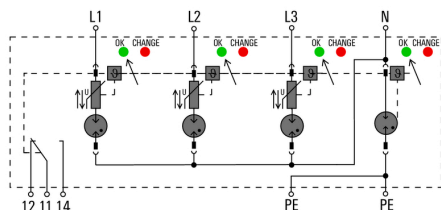
D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

## Drawings

### Electric symbol



Schematic circuit diagram

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

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Replacement parts****VPU Series**

Extensive accessories round off the product range

**General ordering data**

Type	PLUG VPU AC
Order No.	<a href="#">2855300000</a>
GTIN (EAN)	4064675533283
Qty.	10 pc(s).

**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 O 300/12.5 LCF	Version
Order No.	<a href="#">2636900000</a>	Surge protection, $U_p(L/N-PE) \leq 1.5 \text{ kV}$
GTIN (EAN)	4050118679243	
Qty.	1 pc(s).	
Type	VPU AC I O N-PE 305/50	Version
Order No.	<a href="#">2591590000</a>	Spare arrester, Surge protection
GTIN (EAN)	4050118599350	
Qty.	1 pc(s).	

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

Klingenbergstraße 26

D-32758 Detmold

Germany

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

ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc.

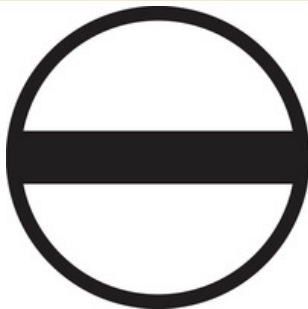
Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

**General ordering data**

Type	ESG 6/15 K MC NE WS	Version
Order No.	<a href="#">1880100000</a>	ESG, Device markers x 15 mm, PA 66, Colour: white, Self-adhesive
GTIN (EAN)	4032248478781	
Qty.	200 pc(s).	

**Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

**General ordering data**

Type	SDIS 1.0X5.5X125	Version
Order No.	<a href="#">2749850000</a>	Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade
GTIN (EAN)	4050118897050	thickness (A): 1 mm
Qty.	1 pc(s).	

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

Klingenbergstraße 26

D-32758 Detmold

Germany

[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).	