

VPU AC I 2 R 300/12.5

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

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, Single-phase, TN
Order No.	2591410000
Type	VPU AC I 2 R 300/12.5
GTIN (EAN)	4050118599534
Qty.	1 pc(s).
Replacement parts	2591370000 2855300000

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Technical data

Dimensions and weights

Depth	91 mm	Depth (inches)	3.583 inch
Height	104.5 mm	Height (inches)	4.114 inch
Width	36 mm	Width (inches)	1.417 inch
Net weight	356 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)	900 V	MCOV (L/N-PE)	300 V
SCCR	150 kA	I_n	20 kA
Category	SPD TYPE 1CA	Ambient temperature (operational), min. -40 °C	
Certificate No. (cURus)	E354261	MODE	L-N, L-G, N-G
VPR (L-N)	1,800 V	VPR (L-PE)	900 V
Voltage type	AC		

Connection data, remote alert

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

General data

Colour	orange, black	Design	Installation housing; 2TE, 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	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

Discharge current I_{\max} (8/20 μ s) wire-PE 50 kAEnergy coordination (≤ 10 m)

Type I, Type II, Type III

Frequency range, max.

60 Hz

Fuse

No Fuse necessary ≤ 315
A gG, 250 A gG @50 kA
 I_{scrr} , 315 A gG @25 kA
 I_{scrr} Lightning test current I_{imp} (10/350 μ s)
(L-PE)

12.5 kA

Mains voltage

230 V / 400 V

Number of poles

2

Rated voltage (AC)

230 V

Requirements class, acc. to EN
61643-11

T1, T2

Short-circuit current rating I_{SCCR}

50 kA

Standards

IEC61643-11,
EN61643-11, UL 1449

Voltage type

AC

Discharge current I_n (8/20 μ s) wire-PE 20 kAFollow-on current extinguishing capability I_{fi} Not available due for technical reasons

Frequency range, min.

50 Hz

Leakage current at U_n

0.6 mA

Low voltage network

Single-phase, TN

Max. continuous voltage, U_c (AC)

300 V

Protection level U_p at I_N (L/N-PE) ≤ 1.5 kVRequirements category acc. to IEC
61643-11

Type I, Type II

Response time

 ≤ 25 ns

Signalling contact

250 V 1A 1CO

Temporary surge voltage (over-voltage) -
TOV

337 V

Connection data

Stripping length 15 mm

Type of connection Screw connection

Tightening torque, min. 2 Nm

Clamping range, rated connection 16 mm²Clamping range, max. 35 mm²Wire cross-section, solid, max. 35 mm²Wire connection cross section, finely
stranded, max. 25 mm²Connection cross-section, stranded,
max. 35 mm²

Wire connection method Screw connection

Stripping length, rated connection 15 mm

Tightening torque, max. 4.5 Nm

Clamping range, min. 4 mm²Wire cross-section, solid, min. 1.5 mm²Wire connection cross section, finely
stranded, min. 1.5 mm²Connection cross-section, stranded, min. 1.5 mm²

Guarantee

Time interval 5 years

Classifications

ETIM 6.0 EC000941

ETIM 8.0 EC000941

ECLASS 9.0 27-13-08-05

ECLASS 10.0 27-13-08-05

ECLASS 12.0 27-17-90-90

ETIM 7.0 EC000941

ETIM 9.0 EC000941

ECLASS 9.1 27-13-08-05

ECLASS 11.0 27-13-08-05

ECLASS 13.0 27-17-90-90

Environmental Product Compliance

REACH SVHC

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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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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](#)

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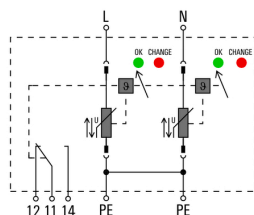
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Drawings

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.	2749890000	Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1
GTIN (EAN)	4050118897098	
Qty.	1 pc(s).	

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.	1880100000	ESG, Device markers x 15 mm, PA 66, Colour: white, Self-adhesive
GTIN (EAN)	4032248478781	
Qty.	200 pc(s).	

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www.weidmueller.com**Accessories****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.	2749850000	Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade
GTIN (EAN)	4050118897050	thickness (A): 1 mm
Qty.	1 pc(s).	

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www.weidmueller.com**Replacement parts****VPU Series**

Extensive accessories round off the product range

General ordering data

Type	PLUG VPU AC
Order No.	2855300000
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	Version
Order No.	2591370000	Spare arrester, Surge protection, $U_p(L/N-PE) \leq 1.5 \text{ kV}$
GTIN (EAN)	4050118599565	
Qty.	1 pc(s).	