

**VPU AC I 3+1 R 275/25 LCF S 2N****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Similar to illustration**

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, Leakage-current-free, with remote contact, TN-C-S, TN-S, TT, IT with N, IT without N
Order No.	<a href="#">2730290000</a>
Type	VPU AC I 3+1 R 275/25 LCF S 2N
GTIN (EAN)	4050118813890
Qty.	1 pc(s).
Replacement parts	<a href="#">2730850000</a> <a href="#">2730860000</a> <a href="#">2855300000</a>

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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	72 mm	Width (inches)	2.835 inch
Net weight	691 g		

## Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-40 °C...85 °C
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

Colour	black, orange, blue	Design	Installation housing; 4TE, Insta IP 20
Operating altitude	≤ 2000 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, Leakage-current-free, with remote contact		

## Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	IV
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## Technical data

## Rated data IEC / EN

Discharge current $I_{\max}$ (8/20 $\mu$ s) N-PE	150 kA
Discharge current $I_n$ (8/20 $\mu$ s) N-PE	100 kA
Energy coordination ( $\leq 10$ m)	Type I, Type II, Type III
Frequency range, max.	60 Hz
Fuse	No Fuse necessary $\leq 315$ A gL
Lightning test current $I_{\text{imp}}$ (10/350 $\mu$ s) (L-PE)	25 kA
Low voltage network	TN-C-S, TN-S, TT, IT with N, IT without N
Max. continuous voltage, $U_c$ (AC)	275 V
Note follow current capability	No tripping of a 16 A gG fuse up to prospective 50 kA <sub>eff</sub>
PE conductor current $I_{PE}$	1 $\mu$ A
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	$< 100$ ns
Signalling contact	250 V 1A 1CO
Temporary surge voltage (over-voltage) - TOV	442 V

Discharge current $I_{\max}$ (8/20 $\mu$ s) wire-PE	65 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	25 kA
Follow-on current extinguishing capability $I_{fi}$	50 kA
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)	100 kA
Mains voltage	230 V / 400 V
Max. continuous voltage, $U_c$ (N-PE)	305 V
Number of poles	4
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 $I_{SCCR}$	50 kA
Standards	IEC 61643-11, EN 61643-11
Voltage type	AC

## 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.	35 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	35 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.	2.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, min.	2.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	2.5 mm <sup>2</sup>
Connection cross-section, stranded, min.	2.5 mm <sup>2</sup>

## 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

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

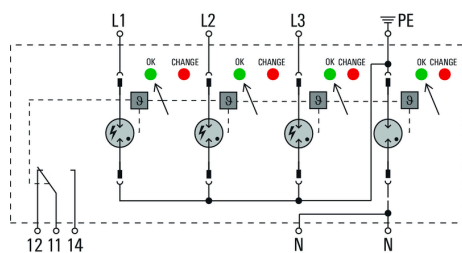
[Catalogues in PDF-format](#)

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## Drawings



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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).	

**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).	

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[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).	

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## Replacement parts

### 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 305/100 ...	Version
Order No.	<a href="#">2730850000</a>	Spare arrester, Leakage-current-free, Surge protection, TT nur für N-PE,
GTIN (EAN)	4050118808018	$U_p(L/N-PE) \leq 1.5 \text{ kV}$
Qty.	1 pc(s).	
Type	VPU AC I 0 275/25 LCF S	Version
Order No.	<a href="#">2730860000</a>	Spare arrester, Leakage-current-free, Surge protection, $U_p(L/N-PE) \leq$
GTIN (EAN)	4050118808025	1.5 kV
Qty.	1 pc(s).	

### 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).