

VPU AC I F 3+1 R 275/25

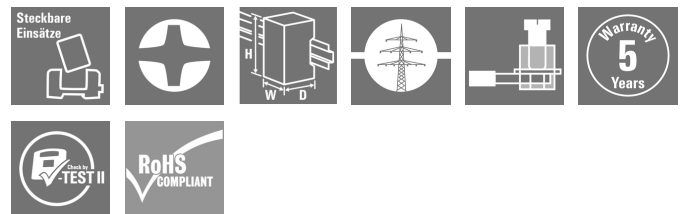
Weidmüller Interface GmbH & Co. KG

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. The VPU AC I F series is characterised by a fuse integrated in the arrester. These arresters do not require a fuse.

General ordering data

Version	Surge voltage arrester, Low voltage, with remote contact, Surge protection, TN-S, TT
Order No.	3022920000
Type	VPU AC I F 3+1 R 275/25
GTIN (EAN)	4099986942202
Qty.	1 pc(s).
Replacement parts	3056190000 3022930000

VPU AC I F 3+1 R 275/25

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Technical data

Dimensions and weights

Depth	86 mm	Depth (inches)	3.386 inch
Height	105 mm	Height (inches)	4.134 inch
Width	144 mm	Width (inches)	5.669 inch
Net weight	1,041 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 ²
Cross-section for connected wire, solid core, min.	0.14 mm ²	Stripping length	8 mm

General data

Number of poles	4	Protection degree	IP20 in installed state
Colour	orange, black		

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
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Rated data IEC / EN

Discharge current $I_{\max}$ (8/20μs) N-PE	130 kA	Discharge current $I_{\max}$ (8/20μs) wire-PE	65 kA
Discharge current I_n (8/20μs) N-PE	100 kA	Discharge current I_n (8/20μs) wire-PE	25 kA
Energy coordination (≤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	Not required, internally available	Integrated back-up fuse	Yes
Lightning test current I_{imp} (10/350 μs) (L-PE)	25 kA	Lightning test current, I_{imp} (10/350 μs) (N-PE)	100 kA
Low voltage network	TN-S, TT	Mains voltage	230 V / 400 V
Max. continuous voltage, U_c (AC)	275 V	Max. continuous voltage, U_c (N-PE)	305 V
Number of poles	4	Protection level U_p at I_N (L/N-PE)	≤ 1.9 kV
Protection level U_p at I_N (N-PE)	≤ 1.5 kV	Rated voltage (AC)	230 V
Requirements category acc. to IEC 61643-11	Type I, Type II, Type III	Requirements class, acc. to EN 61643-11	T1, T2, T3
Response time	<100 ns	Short-circuit current rating I_{SCCR}	100 kA
Signalling contact	250 V 1A 1CO	Standards	IEC 61643-11, EN 61643-11
Suitable for	Count-in installation (leakage current free)	Temporary surge voltage (over-voltage) - TOV	442 V
Voltage type	AC		

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Technical data

Connection data

Stripping length	18 mm	Wire connection method	Screw connection
Type of connection	Screw connection	Stripping length, rated connection	18 mm
Tightening torque, min.	3 Nm	Tightening torque, max.	4.5 Nm
Clamping range, rated connection	16 mm ²	Clamping range, min.	1.5 mm ²
Clamping range, max.	35 mm ²	Wire cross-section, solid, min.	1.5 mm ²
Wire cross-section, solid, max.	35 mm ²	Wire connection cross section, finely stranded, min.	1.5 mm ²
Wire connection cross section, finely stranded, max.	25 mm ²	Connection cross-section, stranded, min.	1.5 mm ²
Connection cross-section, stranded, max.	35 mm ²		

Electrical data

Voltage type	AC
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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
ETIM 10.0	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	ECLASS 14.0	27-17-90-90
ECLASS 15.0	27-17-90-90		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

Important note

Product information	If F1 > 315A gG, then the integrated backup fuse always operates before F1
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Approvals

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/
ROHS	Conform

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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](#)

[FL_Application Note_Protection of SPDs_EN_WEB](#)

[FL_Applikationsnotiz_Absicherung von SPDs_DE_WEB](#)

Catalogues

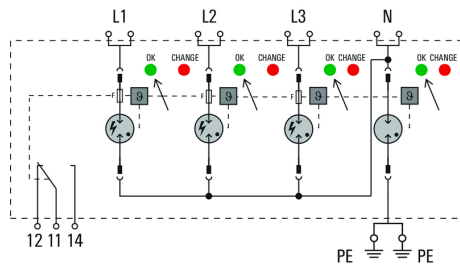
[Catalogues in PDF-format](#)

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Drawings



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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).	

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).	

VPU AC I F 3+1 R 275/25**Weidmüller Interface GmbH & Co. KG**

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

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www.weidmueller.com**Replacement parts****Spare arrester**

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General ordering data

Type	VPU AC I F 0 N-PE 275/25	Version
Order No.	3022930000	Surge voltage arrester, Low voltage, Surge protection
GTIN (EAN)	4099986942226	
Qty.	1 pc(s).	

Type	VPU AC I F 0 275/25 MP	Version
Order No.	3056190000	Surge voltage arrester, Low voltage, Surge protection
GTIN (EAN)	4099987030458	
Qty.	1 pc(s).	