

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Abb.ähnlich

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, Surge protection, TT nur für L-N, TN-C, TN-S, Single-phase, TN
Order No.	2859340000
Type	VPU AC I F 1 R 275/25
GTIN (EAN)	4064675570516
Qty.	1 pc(s).
Replacement parts	2859350000 2855300000

VPU AC I F 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	36 mm	Width (inches)	1.417 inch
Net weight	339 g		

Temperatures

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

General data

Colour	black, orange	Design	Installation housing; 2TE, 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	Suitable for	Count-in installation (leakage current free)
UL 94 flammability rating	V-0	Version	Surge protection

Insulation coordination acc. to EN 50178

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

Discharge current I_{\max} (8/20μs) wire-PE	65 kA	Discharge current I_n (8/20μs) wire-PE	25 kA
Discharge current, I_{imp} (10/350 μs)	25 kA	Energy coordination (≤10 m)	Type I, Type II, Type III
Frequency range, max.	60 Hz	Frequency range, min.	50 Hz
Fuse	Not required	Lightning test current I_{imp} (10/350 μs) (L-PE)	25 kA
Low voltage network	TT nur für L-N, TN-C, TN-S, Single-phase, TN	Mains voltage	230 V / 400 V
Max. continuous voltage, U_c (AC)	275 V	Number of poles	1
Protection level U_p at I_N (L/N-PE)	≤ 1.5 kV	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
Response time	<100 ns	Short-circuit current rating I_{SCCR}	75 kA
Signalling contact		Standards	EN 61643-11, IEC 61643-11, IEC61643-11, EN61643-11
	250 V 1A 1CO	Temporary surge voltage (over-voltage) - TOV	442 V
Suitable for	Count-in installation (leakage current free)		
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.	2 Nm	Tightening torque, max.	4.5 Nm
Clamping range, rated connection	16 mm ²	Clamping range, min.	4 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	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	2.5 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	35 mm ²	Connection cross-section, stranded, min.	1.5 mm ²
Connection cross-section, stranded, max.	35 mm ²		

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

Environmental Product Compliance

REACH SVHC	/
RoHS Compliance Status	Compliant without exemption

Important note

Product information	If F1 > 315A gG, then the integrated backup fuse always operates before F1
Notes	Additional tests for 100kA Isccr have been passed without certification.

Approvals

Approvals



ROHS	Conform
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Downloads

Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
User Documentation	Beipackzettel / Instruction sheet Installationshinweise / installation advice
Catalogues	Catalogues in PDF-format

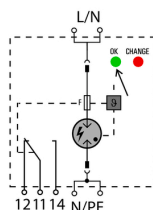
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Drawings

Electric symbol



Schematic circuit diagram

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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).	

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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Accessories

Crosshead screwdriver Phillips

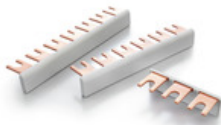


VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

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).	

VPU Busbar



General ordering data

Type	VPU AC FB 16-2
Order No.	2904360000
GTIN (EAN)	4099986009769
Qty.	12 pc(s).
Type	VPU AC FB 16-3
Order No.	2904370000
GTIN (EAN)	4099986009783
Qty.	20 pc(s).
Type	VPU AC FB 16-4
Order No.	2904380000
GTIN (EAN)	4099986009790
Qty.	1 pc(s).
Type	VPU AC FB 16-6
Order No.	2904390000
GTIN (EAN)	4099986009806
Qty.	1 pc(s).
Type	VPU AC FB 16-7
Order No.	2904400000
GTIN (EAN)	4099986009813
Qty.	1 pc(s).

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www.weidmueller.com**Accessories****N-PE**

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General ordering data

Type	VPU AC I 1 N-PE 305/100 ...	Version
Order No.	2726800000	Surge voltage arrester, Low voltage, Surge protection, TT nur für N-PE,
GTIN (EAN)	4050118802481	TN, Single-phase, $U_p(L/N-PE) \leq 1.5 \text{ kV}$
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

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

Type	VPU AC I F 0 275/25	Version
Order No.	2859350000	Surge voltage arrester, Low voltage, Surge protection
GTIN (EAN)	4064675570578	
Qty.	1 pc(s).	