

VPU AC I 1+1 R 440/25 LCF

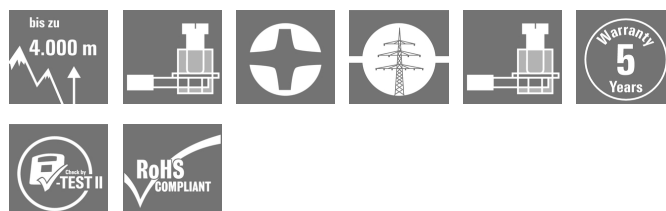
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

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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, TN-S, TT, $U_p(L/N-PE) \leq 2.5 \text{ kV}$
Order No.	2619220000
Type	VPU AC I 1+1 R 440/25 LCF
GTIN (EAN)	4050118634655
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	93 mm	Depth (inches)	3.661 inch
Height	104.5 mm	Height (inches)	4.114 inch
Net weight	25 g	Width	72 mm
Width (inches)	2.835 inch		

Temperatures

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

Probability of failure

MTBF	15 Years
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Rated data UL

Operating altitude	≤ 2000 m
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Connection data, remote alert

Connection type	Screw connection, pluggable	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	black	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	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

Operating altitude	≤ 2000 m	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	100 kA
Discharge current I_n (8/20 μ s) N-PE	100 kA
Energy coordination (≤ 10 m)	Type I, Type II, Type III
Frequency range, max.	60 Hz
Fuse	250 A gL (if back up fuse > 250 A)
Lightning test current I_{imp} (10/350 μ s) (L-PE)	25 kA
Low voltage network	Single-phase, TN, TN-S, TT
Max. continuous voltage, U_c (AC)	440 V
Number of poles	2
Protection level U_p at I_N (L/N-PE)	≤ 2.5 kV
Rated load current I_L	100 A
Requirements category acc. to IEC 61643-11	Type I, Type II
Response time	≤ 25 ns, ≤ 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 μ s) N-PE	100 kA
Discharge current I_n (8/20 μ s) wire-PE	25 kA
Follow-on current extinguishing capability I_{fi}	Not available due for technical reasons
Frequency range, min.	50 Hz
Leakage current at U_n	5 μ A
Lightning test current, I_{imp} (10/350 μ s) (N-PE)	100 kA
Mains voltage	400 V / 690 V
Max. continuous voltage, U_c (N-PE)	440 V
Protection level U_p (typ.)	≤ 2.5 kV
Protection level U_p at I_N (N-PE)	≤ 2.5 kV
Rated voltage (AC)	400 V
Requirements class, acc. to EN 61643-11	T1, T2
Short-circuit current rating I_{SCCR}	50 kA
Standards	IEC61643-11, EN61643-11, EN60068-2-27:2009, EN60068-2-64:2008, EN60068-2-6:2008
Temporary surge voltage (over-voltage) - TOV	762 V

Connection data

Wire connection method	Screw connection	Type of connection	Screw connection
Stripping length, rated connection	13 mm	Tightening torque, min.	2 Nm
Tightening torque, max.	3 Nm	Clamping range, rated connection	16 mm ²
Clamping range, min.	6 mm ²	Clamping range, max.	35 mm ²
Wire cross-section, solid, min.	6 mm ²	Wire cross-section, solid, max.	35 mm ²
Wire connection cross section, finely stranded, min.	6 mm ²	Wire connection cross section, finely stranded, max.	35 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	6 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	35 mm ²
Connection cross-section, stranded, min.	6 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
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

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
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Technical data

Approvals

Approvals



ROHS

Conform

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Conformity

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Engineering Data

[STEP](#)

Brochure/Catalogue

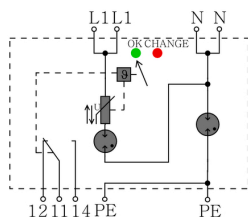
[Catalogues in PDF-format](#)

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www.weidmueller.com**Drawings****Electric symbol**

Schematic circuit diagram