

VPU series
VPU II 1 SP 127V

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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 from transient surge voltages, even significantly below the limits prescribed by insulation co-ordination according to EN 60664-3 / DIN VDE 0110. This means that the whole installation is exposed to fewer malfunctions. The arrestors are co-ordinated using technical means. This means that decoupling between types I, II and III is not necessary. The arrestors 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 V0675-6-12 and IEC 62305-4 / VDE 0185-4. This lightning and surge protection device is suited for installation in power supply systems for the US market in accordance with UL 1449 Ed.4. Weidmüller offers different products depending on the particular mains network type and voltage level.

General ordering data

Type	VPU II 1 SP 127V
Order No.	2025830000
Version	Surge voltage arrester, Low voltage, without telecomm. contact, TN-S->L-(PE)N, N-PE($U_0 \leq 120$ V)
GTIN (EAN)	4050118405262
Qty.	1 pc(s).

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Technical data
Dimensions and weights

Width	18 mm	Width (inches)	0.709 inch
Height	94 mm	Height (inches)	3.701 inch
Depth	69 mm	Depth (inches)	2.717 inch
Mounting dimension - height	75 mm	Net weight	146 g

Temperatures

Humidity	5 - 95% rel. humidity	Operating temperature, max.	70 °C
Operating temperature, min.	-40 °C	Storage temperature, max.	85 °C
Storage temperature, min.	-40 °C	Operating temperature	-40 °C...70 °C
Storage temperature	-40 °C...85 °C		

General data

Colour	Black, Orange	Design	Installation housing; 1TE, Insta IP 20
Mounting rail	TS 35	Optical function display	green = OK; red = arrester is defective - replace
Protection degree	IP20	Segment	Power distribution
UL 94 flammability rating	V-0	Version	without telecomm. contact

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} (8/20 μ s) wire-PE	40 kA	Discharge current I_n (8/20 μ s) wire-PE	20 kA
Follow-on current extinguishing capability I_{fi}	Not available due for technical reasons	Frequency range, max.	60 Hz
Frequency range, min.	50 Hz	Fuse	125 A gL (if back-up fuse > 125 A)
Max. continuous voltage, U_c (AC)	180 V	No. of poles	1
Protection level U_p at I_N (L/N-PE)	≤ 0.9 kV	Rated voltage (AC)	120 V
Requirements category acc. to IEC 61643-11	Type II	Requirements class, acc. to EN 61643-11	T2
Response time	≤ 25 ns	Short-circuit current rating I_{SCCR}	25 kA
Voltage type	AC	low voltage network	TN-S->L-(PE)N, N-PE($U_0 \leq 120$ V)

Connection data

Type of connection	Screw connection	Stripping length, rated connection	15 mm
Tightening torque, min.	2 Nm	Tightening torque, max.	3 Nm
Wire connection cross section AWG, min.	AWG 14	Wire connection cross section AWG, max.	AWG 0
Wire cross-section, solid, min.	4 mm ²	Wire cross-section, solid, max.	16 mm ²
Wire connection cross-section, finely stranded, min.	2.5 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.	25 mm ²
Connection cross-section, stranded, min.	4 mm ²	Connection cross-section, stranded, max.	50 mm ²

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Technical data**Rated data UL**

Continuous voltage U_C , max.	180 V	Rated Voltage U_N	127 V
Test Voltage 39.1 (UL 1449)	240 V	VPR (L/N-PE)	800 V
MCOV (L/N-PE)	180 Vac	SCCR	200 kA
I_n	20 kA	Category	SPD TYPE 1CA/2CA

Ratings IECEx/ATEX/cUL

cUL certificate	UL 1449 ED.4 Certificate
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Classifications

ETIM 3.0	EC000941	ETIM 5.0	EC000510
ETIM 6.0	EC000941	UNSPSC	30-21-19-21
eClass 5.1	27-13-08-01	eClass 6.2	27-13-08-02
eClass 7.1	27-14-02-01	eClass 8.1	27-14-02-01
eClass 9.0	27-14-02-01	eClass 9.1	27-13-08-05

Product information

Descriptive text accessories	Pluggable spare arrester VPU II 0 180V - 2025070000
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Approvals

Approvals



ROHS	Conform
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Downloads

Approval/Certificate/Document of Conformity	CE PAPER
Engineering Data	STEP
User Documentation	Instruction sheet

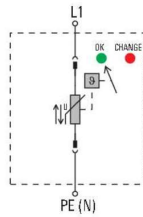
Data sheet

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Drawings

Electric symbol



Schematic circuit diagram UL / IEC / EN