

VPU AC I 1 N-PE 305/50 LH**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. A special Type I and Type II protective device is even available for photovoltaic applications.

General ordering data

Version	Surge protection, Single-phase, TN, TT nur für N-PE
Order No.	3037010000
Type	VPU AC I 1 N-PE 305/50 LH
GTIN (EAN)	4099986998919
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	70 mm	Depth (inches)	2.756 inch
Height	90 mm	Height (inches)	3.543 inch
Width	18 mm	Width (inches)	0.709 inch
Net weight	122 g		

Temperatures

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

Probability of failure

MTBF	15 a
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Rated data UL

Certificate No. (cURus)	E35426 10000
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General data

Number of poles	1	Protection degree	IP20 in installed state
Colour	black, orange, blue		

Insulation coordination acc. to EN 50178

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

Acoustic signal	No	Discharge current $I_{\max}$ (8/20 μ s) N-PE	100 kA
Discharge current I_n (8/20 μ s) N-PE	50 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
Integrated back-up fuse	No	Leakage current at U_n	1 μ A
Lightning test current, I_{imp} (10/350 μ s) (N-PE)	100 kA	Low voltage network	Single-phase, TN, TT nur für N-PE
Mains voltage	230 V / 400 V	Max. continuous voltage, U_c (N-PE)	305 V
Number of poles	1	Protection level U_p at I_N (N-PE)	≤ 1.5 kV
Protection level, U_p wire - PE	1,500 V	Protection level, U_p wire - wire	1,500 V
Rated load current I_L	100 A	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}	0.1 kA
Signalling contact	No	Standards	IEC 61643-11, EN 61643-11, UL 1449
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, max.	35 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

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	For use in DC applications, please use the fuse of SIBA Type NH2XL aR/aSF DC 1500 V
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Approvals

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319263/-T1z1mm-S800/
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ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E3542610000

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Technical data

Downloads

Approval/Certificate/Document of Conformity

[EU_Konformitätserklärung / EU_Declaration_of_Conformity](#)

Engineering Data

[CAD data – STEP](#)

Catalogues

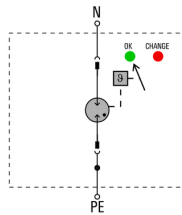
[Catalogues in PDF-format](#)

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Drawings



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www.weidmueller.com**Accessories****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 305/50 ...	Version
Order No.	2983630000	Surge protection
GTIN (EAN)	4099986839755	
Qty.	1 pc(s).	