VPU III R 48V/4KV AC/DC

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com



Similar to illustration

Type III surge protection

- Compact Type III arrester for AC/DC protection acc. to IEC 61643-11:2012
- Suitable for protecting terminals
- Installed in the vicinity of the equipment to be protected
- Can be used as single-port arrester when nominal current is greater than 16 A

General ordering data

Version	Surge voltage arrester, Low voltage, with remote contact, Single-phase, U_P(L/N-PE) ≤ 220 V
Order No.	1351600000
Type	VPU III R 48V/4KV AC/DC
GTIN (EAN)	4050118158533
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	71.5 mm	Depth (inches)	2.815 inch
Height	102 mm	Height (inches)	4.016 inch
Width	18 mm	Width (inches)	0.709 inch
Net weight	86 g		

Temperatures

Storage temperature	-40 °C...70 °C	Operating temperature	-40 °C...70 °C
Humidity	5 - 95% rel. humidity		

Connection data, remote alert

Connection type	Screw connection	Cross-section for connected wire, solid core, max.	1.5 mm²
Cross-section for connected wire, solid core, min.	0.2 mm²	Max. torque	0.5 Nm
Stripping length	5 mm		

General data

Colour	orange	Design	Installation housing; 1TE, Insta IP 20
Optical function display	Green LED = OK, Red LED = arrester is defective, replace	Protection degree	IP20
Rail	TS 35	Segment	Power distribution
UL 94 flammability rating	V-0	Version	with remote contact

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	II

Rated data IEC / EN

Combined pulse U_{OC}	4 kV	Discharge current, max. (8/20 µs)	2 kA
Energy coordination (≤10 m)	Type II, Type III	Fuse	16 A
Leakage current at U_n	30 µA	Low voltage network	Single-phase
Mains frequency at 250 Vmax	50...60Hz	Max. continuous voltage, Uc (AC)	50 V
Max. continuous voltage, Uc (DC)	72 V	Number of poles	1
PE conductor current I_{PE}	30 µA	Protection level U_P (typ.)	≤ 220 V
Protection level U_p at I_N (L/N-PE)	≤ 950 V	Rated current I_N	16 A
Rated voltage (AC)	48 V	Rated voltage (DC)	68 V
Requirements category acc. to IEC 61643-11	Type III	Requirements class, acc. to EN 61643-11	T3
Response time	≤ 100 ns	Short-circuit current rating I_{SCCR}	1.5 kA
Signalling contact	250 V 10 A 1 NC	Standards	IEC61643-11, EN61643-11
Temporary surge voltage (over-voltage) - TOV	92 V	Voltage type	AC/DC

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Connection data

Stripping length	7 mm	Type of connection	Screw connection
Stripping length, rated connection	7 mm	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.5 Nm	Clamping range, rated connection	2.5 mm²
Clamping range, min.	0.5 mm²	Clamping range, max.	2.5 mm²
Wire cross-section, solid, min.	0.13 mm²	Wire cross-section, solid, max.	2.5 mm²
Wire connection cross section, finely stranded, min.	0.5 mm²	Wire connection cross section, finely stranded, max.	2.5 mm²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	2.5 mm²
Connection cross-section, stranded, min.	0.5 mm²	Connection cross-section, stranded, max.	2.5 mm²

Guarantee

Time interval	5 years

Classifications

ETIM 6.0	EC000941	ETIM 7.0	EC000941
ETIM 8.0	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

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Technical data

Tender specification sheets

Long specification	Surge protection according to the requirements of Class III in accordance with IEC 61643-11, EN61643-11:2013. The arrestor serves as surge protection and is used in applications in accordance with IEC 61643-12. The arrestor is installed in the vicinity of the equipment that needs protection in a standard installation/distributor housing. The VPU III R 48V is earthed between the phase and the neutral conductor. With thermal separation device on the varistor. If there is no longer any protection, the colour of the LEDs changes from green to red. The functional state is also displayed by a voltage-free signalling contact (NC contact). Rated voltage: 48 VAC/ DC In/max (8/20 µs): 2 kA protection level < 0.95 kV load current Il: 16 A telecommunication output: contact NC: 250 V/0.5 A 48 VDC/0.1 A Type: Weidmüller VPU III R 48V Order No. 1351600000 or equivalent	Short specification	Class III arrester with Uoc: 4 kV suitable for 48 V AC/DC mains systems. Protection level < 0.95 kV. With remote alert Type: Weidmüller VPU III R 48 V/4 kV Order no. 1351600000 or equivalent

Approvals

Approvals	
ROHS	Conform

Downloads

Approval/Certificate/Document of Conformity	EAC VPU SERIES EU_Konformitätserklärung / EU_Declaration_of_Conformity
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
Tender specification	Ausschreibungstext DE Tenderspecification EN
User Documentation	Beipackzettel / Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	

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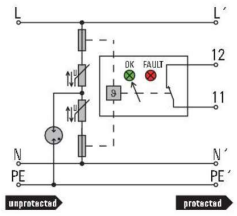
Drawings

Electric symbol



Schematic circuit diagram