

VPU III R 12V/4KV AC/DC

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

www.weidmueller.com



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
Order No.	1351550000
Type	VPU III R 12V/4KV AC/DC
GTIN (EAN)	4050118158571
Qty.	1 items

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Technical data

Approvals

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ROHS Conform

Dimensions and weights

Depth	71.5 mm	Depth (inches)	2.815 inch
Height	102 mm	Height (inches)	4.0157 inch
Width	18 mm	Width (inches)	0.7087 inch
Net weight	66 g		

Temperatures

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

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

Connection data, remote alert

Cross-section for connected wire, solid core, min.	0.2 mm ²	Stripping length	5 mm
Connection type	Screw connection	Cross-section for connected wire, solid core, max.	1.5 mm ²
Max. torque	0.5 Nm		

General data

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

Insulation coordination acc. to EN 50178

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

Number of poles	2	Combined pulse UOC	4 kV
Leakage current at Un	30 µA	Signalling contact	250 V 10 A 1 NC
Rated voltage (AC)	12 V	Rated voltage (DC)	16 V
Rated current IN	16 A	Low voltage network	Single-phase
Mains frequency at 250 Vmax	50...60Hz	Voltage type	AC/DC
Temporary surge voltage (over-voltage) - TOV	23 V	Fuse protection	16 A

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Response time / fallback time	≤ 100 ns	Standards	IEC 61643-11, EN 61643-11
Requirements class, acc. to EN 61643-11	T3	Requirements category acc. to IEC 61643-11	Type III
Energy coordination (≤10 m)	Type II, Type III	Protection level Up at IN (L/N-PE)	≤ 0.98 kV
Short-circuit current rating ISCCR	1.5 kA	Discharge current (type III)	3 kA
Integrated back-up fuse	No	PE conductor current IPE	30 µA

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 mm ²
Clamping range, min.	0.5 mm ²	Clamping range, max.	2.5 mm ²
Wire cross-section, solid, min.	0.13 mm ²	Wire cross-section, solid, max.	2.5 mm ²
Wire connection cross section, finely stranded, min.	0.5 mm ²	Wire connection cross section, finely stranded, max.	2.5 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	2.5 mm ²
Connection cross-section, stranded, min.	0.5 mm ²	Connection cross-section, stranded, max.	2.5 mm ²

Electrical data

Voltage type	AC/DC
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General data

Number of poles	2	Protection degree	IP20
Colour	orange		

Guarantee

Time interval	5 years
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Classifications

ETIM 8.0	EC000942	ETIM 9.0	EC000942
ETIM 10.0	EC000942	ECLASS 14.0	27-17-12-03
ECLASS 15.0	27-17-12-03		

Tender specification sheets

Long specification	Surge protection according to the requirements of Class III in accordance with IEC 61643-11, EN61643-11:2013. The arrester serves as surge protection and is used in applications in accordance with IEC 61643-12. The arrester is installed in the vicinity of the equipment that needs protection in a standard installation/distributor housing. The VPU III R 12 V AC/DC is earthed between the phase and the neutral conductor. With thermal	Short specification	Class III arrester with Uoc: 4 kV suitable for 12 V AC/DC mains systems. Protection level < 0.98 kV. With remote alert Type: Weidmüller VPU III R 12 V/4 kV Order no. 1351550000 or equivalent
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VPU III R 12V/4KV AC/DC

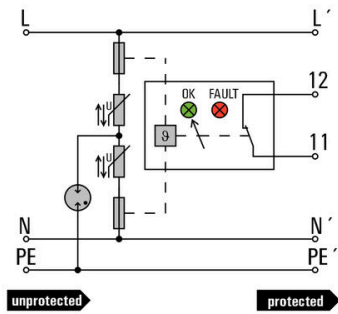
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separation device on the varistor. If there is no longer any protection, the colour of the LEDs changes from green to red. The functional state is also displayed by a voltage-free signalling contact (NC contact).
Rated voltage: 12 VAC/
DC In/max (8/20 µs): 2 kA protection level < 0.98 kV load current II: 16 A telecommunication output: contact NC: 250 V/0.5 A 48 VDC/0.1 A Type: Weidmüller VPU III R 12V Order No. 1351550000 or equivalent

Electric symbol



Schematic circuit diagram