

## VPU III R 120V/6KV 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.	<a href="#">1351630000</a>
Type	VPU III R 120V/6KV AC/DC
GTIN (EAN)	4050118158519
Qty.	1 items

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**Technical data**

**Approvals**

Approvals



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	67 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 <sup>2</sup>	Stripping length	5 mm
Connection type	PUSH IN	Cross-section for connected wire, solid core, max.	1.5 mm <sup>2</sup>
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
Operating altitude	≤ 4000 m		

**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	6 kV
Leakage current at Un	30 µA	Signalling contact	250 V 10 A 1 NC
Rated voltage (AC)	120 V	Rated voltage (DC)	150 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	229 V	Fuse protection	16 A

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### Technical data

Response time / fallback time	≤ 100 ns	Frequency range, max.	60 Hz
Frequency range, min.	50 Hz	Standards	IEC 61643-11, EN 61643-11
Requirements class, acc. to EN 61643-11	T3	Requirements category acc. to IEC 61643-11	Type III
Max. continuous voltage, U <sub>c</sub> (AC)	150 V	Energy coordination (≤10 m)	Type II, Type III
Protection level Up at IN (L/N-PE)	≤ 1.75 kV	Short-circuit current rating ISCCR	1.5 kA
Discharge current (type III)	3 kA	Follow-on current extinguishing capability I <sub>fi</sub>	Follow current need not be taken into account
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 <sup>2</sup>
Clamping range, min.	0.5 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire cross-section, solid, min.	0.13 mm <sup>2</sup>	Wire cross-section, solid, max.	2.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, min.	0.5 mm <sup>2</sup>	Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	2.5 mm <sup>2</sup>
Connection cross-section, stranded, min.	0.5 mm <sup>2</sup>	Connection cross-section, stranded, max.	2.5 mm <sup>2</sup>

### 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 120 V is earthed	Short specification	Class III arrester with U <sub>oc</sub> : 6 kV suitable for 120 V AC/DC mains systems. Protection level < 1.75 kV. With remote alert Type: Weidmüller VPU III R 120 V/6 kV Order no. 1351630000 or equivalent
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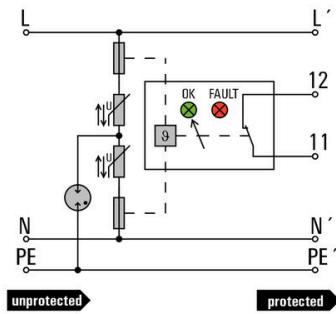
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## Technical data

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: 120 V AC/DC  
In/max (8/20 µs): 3 kA  
protection level < 1.75 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 120 V  
Order No. 135 1630000 or equivalent

Drawings

Electric symbol



Schematic circuit diagram

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## Accessories

### Crosshead screwdriver Phillips



VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

### General ordering data

Type	SDIK PH0 X 60	Version	
Order No.	<a href="#">2749880000</a>	Screwdriver, Blade width (B): 0 mm, 60 mm, Blade thickness (A): 0	
GTIN (EAN)	4050118897081		
Qty.	1 ST		