



**VPU III R 120V/6KV AC/DC**

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

www.weidmueller.com

**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**

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	Response time / fallback time	≤ 100 ns

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### Technical data

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 U <sub>p</sub> 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.	25 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

Protection degree	IP20	Colour	orange
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### Guarantee

Time interval	5 years
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### Classifications

ETIM 7.0	EC000942	ETIM 8.0	EC000942
ETIM 9.0	EC000942	ETIM 10.0	EC000942
ECLASS 12.0	27-17-12-03	ECLASS 13.0	27-17-12-03
ECLASS 14.0	27-17-12-03	ECLASS 15.0	27-17-12-03

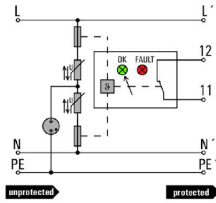
### Tender specification sheets

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 between the phase and	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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## Technical data

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  
I<sub>n</sub>/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. 1351630000  
or equivalent

**Electric symbol**



Schematic circuit diagram