

VPU III R 24V/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, $U_P(L/N-PE) \leq 220$ V |
| Order No. | 1351580000 |
| Type | VPU III R 24V/4KV AC/DC |
| GTIN (EAN) | 4050118158557 |
| Qty. | 1 pc(s). |

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Catalogue status 11.03.2022 / We reserve the right to make technical changes.

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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 | 84 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 mm ² |
| Cross-section for connected wire, solid core, min. | 0.2 mm ² | Max. torque | 0.5 Nm |
| Stripping length | 5 mm | | |

General data

| | | | |
|--------------------|---------------------|---------------------------|--|
| Colour | orange | Design | Installation housing; 1TE, Insta IP 20 |
| Operating altitude | ≤ 3000 m | 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 μ s) | 2 kA |
| Energy coordination (≤ 10 m) | Type II, Type III | Fuse | 16 A |
| Leakage current at U_n | 30 μ A | Low voltage network | Single-phase |
| Mains frequency at 250 Vmax | 50...60Hz | Max. continuous voltage, U_c (AC) | 32 V |
| Max. continuous voltage, U_c (DC) | 42 V | Number of poles | 1 |
| PE conductor current I_{PE} | 30 μ A | Protection level U_p (typ.) | ≤ 220 V |
| Protection level U_p at I_N (L/N-PE) | ≤ 0.9 kV | Rated current I_N | 16 A |
| Rated voltage (AC) | 24 V | Rated voltage (DC) | 32 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 | 46 V | Voltage type | AC/DC |

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Technical data
Connection data

| | | | |
|--|---------------------|--|----------------------|
| 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 | | |

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 | | |

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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 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 24V 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: 24 VAC/DC In/max (8/20 µs): 2 kA protection level < 0.89 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 24 V Order No. 1351580000 or equivalent | Short specification |
|--------------------|---|--|
| | | Class III arrester with Uoc: 4 kV suitable for 24 V AC/DC mains systems. Protection level < 0.89 kV. With remote alert Type: Weidmüller VPU III R 24 V/4 kV Order no. 1351580000 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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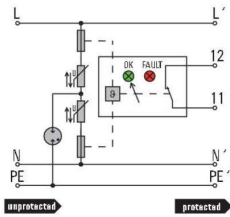
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Drawings

Electric symbol



Schematic circuit diagram