

VPU AC II 1 R 750/35

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Weidmüller VPU I (Type I), VPU II (Type II) and VPU III (Type III) surge protection products effectively reduce the interference coupling that can occur due to transient surge voltages, even significantly below the limits prescribed by insulation co-ordination according to EN 60664-3 / DIN VDE 0110-3. This means that the whole installation is exposed to fewer malfunctions. The arresters are co-ordinated using technical means. This means that decoupling between Types I, II and III is unnecessary. The arresters are tested according to product standard IEC 61643-11 / DIN EN 61643-11 and can be installed in systems according to IEC 61643-12 / VDE 0675-6-12 and IEC 62305-4 / VDE 0185-4. This lightning and surge protection device is suited for installation in power supply systems. Weidmüller offers different products depending on the particular mains network type and voltage level. A special Type I and Type II protective device is even available for photovoltaic applications.

General ordering data

| | |
|------------|--|
| Version | Surge voltage arrester, Low voltage, Surge protection, with remote contact, Single-phase, TN |
| Order No. | 2591300000 |
| Type | VPU AC II 1 R 750/35 |
| GTIN (EAN) | 4050118599633 |
| Qty. | 1 items |

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Technical data

Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (cURus) E354261

Dimensions and weights

| | | | |
|--------------------------|-------------|----------------|-------------|
| Depth | 68 mm | Depth (inches) | 2.6772 inch |
| Depth including DIN rail | 76 mm | Height | 111 mm |
| Height (inches) | 4.3701 inch | Width | 18 mm |
| Width (inches) | 0.7087 inch | Net weight | 166 g |

Temperatures

| | | | |
|-----------------------|----------------|---------------------|-----------------------|
| Storage temperature | -40 °C...85 °C | Ambient temperature | -40 °C...85 °C |
| Operating temperature | -40 °C...85 °C | Humidity | 5 - 95% rel. humidity |

Environmental Product Compliance

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

Rated data UL

| | | |
|--|-------------------------|--------------|
| Ambient temperature (operational), max. 85 °C | Rated Voltage UN | 600 V |
| MCOV (L-PE) | SCCR | 200 kA |
| In | Category | SPD TYPE 1CA |
| Ambient temperature (operational), min. -40 °C | Certificate No. (cURus) | E354261 |
| VPR (L-PE) | Voltage type | AC |
| UL Energy Networks | Split-Phase | |

Connection data, remote alert

| | | | |
|--|----------------------|--|---------------------|
| Cross-section for connected wire, solid core, min. | 0.25 mm ² | Stripping length | 8 mm |
| Connection type | PUSH IN | Cross-section for connected wire, solid core, max. | 1.5 mm ² |

General data

| | | | |
|---------------------------|---|---------------|--|
| Optical function display | green = OK; red = arrester is defective - replace | Segment | Power distribution |
| Version | Surge protection, with remote contact | Design | Installation housing; 1TE, Insta IP 20 |
| UL 94 flammability rating | V-0 | Colour | orange, black |
| Protection degree | IP20 in installed state | Mounting rail | TS 35 |
| Operating altitude | ≤ 4000 m | | |

Insulation coordination acc. to EN 50178

| | | | |
|------------------------|-----|--------------------|---|
| Surge voltage category | III | Pollution severity | 2 |
|------------------------|-----|--------------------|---|

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Rated data IEC / EN

| | | | |
|---|--|--|---|
| Number of poles | 1 | Combined pulse UOC | 6 kV |
| Leakage current at Un | 0.3 mA | Signalling contact | 250 V 1A 1CO |
| Rated voltage (AC) | 690 V | Low voltage network | Single-phase, TN |
| Voltage type | AC | Temporary surge voltage (over-voltage) - TOV | 871 V |
| Fuse protection | No Fuse necessary ≤ 315 A gG, 250 A gG @50 kA I _{sc} , 315 A gG @25 kA I _{sc} | Response time / fallback time | ≤ 25 ns |
| Frequency range, max. | 60 Hz | Frequency range, min. | 50 Hz |
| Standards | IEC 61643-11, EN 61643-11, UL 1449 | Requirements class, acc. to EN 61643-11 | T2, T3 |
| Requirements category acc. to IEC 61643-11 | Type II, Type III | Max. continuous voltage, U _c (AC) | 750 V |
| Energy coordination (≤ 10 m) | Type II, Type III | Discharge current I _n (8/20 μ s) wire-PE | 20 kA |
| Discharge current I _{max} (8/20 μ s) wire-PE | 35 kA | SPD type | T2 |
| Protection level Up at IN (L/N-PE) | ≤ 3.4 kV | Short-circuit current rating ISCCR | 50 kA |
| Discharge current (type III) | 3 kA | Follow-on current extinguishing capability I _{fi} | Follow current need not be taken into account |
| Integrated back-up fuse | No | | |

Connection data

| | | | |
|--|--------------------|--|---------------------|
| Stripping length | 18 mm | Wire connection method | Screw connection |
| Type of connection | Screw connection | Stripping length, rated connection | 18 mm |
| Tightening torque, min. | 3 Nm | Tightening torque, max. | 4.5 Nm |
| Clamping range, rated connection | 16 mm ² | Clamping range, min. | 1.5 mm ² |
| Clamping range, max. | 35 mm ² | Wire connection cross section AWG, min. | AWG 16 |
| Wire connection cross section AWG, max. | AWG 2 | Wire cross-section, solid, min. | 1.5 mm ² |
| Wire cross-section, solid, max. | 35 mm ² | Wire connection cross section, finely stranded, min. | 1.5 mm ² |
| Wire connection cross section, finely stranded, max. | 25 mm ² | Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 2.5 mm ² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 35 mm ² | Connection cross-section, stranded, min. | 1.5 mm ² |
| Connection cross-section, stranded, max. | 35 mm ² | | |

Electrical data

| | |
|--------------|----|
| Voltage type | AC |
|--------------|----|

General data

| | | | |
|-----------------|---------------|-------------------|-------------------------|
| Number of poles | 1 | Protection degree | IP20 in installed state |
| Colour | orange, black | | |

Guarantee

| | |
|---------------|---------|
| Time interval | 5 years |
|---------------|---------|

Important note

| | |
|---------------------|---|
| Product information | For use in DC applications, please use the fuse of SIBA Type NH2XL aR/aSF DC 1500 V |
|---------------------|---|

Technical data

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC000941 | ETIM 9.0 | EC000941 |
| ETIM 10.0 | EC000941 | ECLASS 14.0 | 27-17-12-02 |
| ECLASS 15.0 | 27-17-12-02 | | |

Electric symbol



Schematic circuit diagram