

VPU AC I 3 R 440/25 LCF

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, TN-C |
| Order No. | 2619170000 |
| Type | VPU AC I 3 R 440/25 LCF |
| GTIN (EAN) | 4050118634617 |
| Qty. | 1 items |

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Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

| | | | |
|------------|----------|-----------------|-------------|
| Depth | 93 mm | Depth (inches) | 3.6614 inch |
| Height | 104.5 mm | Height (inches) | 4.1142 inch |
| Width | 108 mm | Width (inches) | 4.252 inch |
| Net weight | 25 g | | |

Temperatures

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

Probability of failure

MTBF 15 a

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. | 0.14 mm ² | Stripping length | 8 mm |
| Connection type | Screw connection, pluggable | 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; 6 TE, Insta IP 20 |
| UL 94 flammability rating | V-0 | Colour | black |
| Suitable for | Count-in installation (leakage current free) | Protection degree | IP20 in installed state |
| Mounting rail | TS 35 | Operating altitude | ≤ 2000 m |

Insulation coordination acc. to EN 50178

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

Rated data IEC / EN

| | | | |
|--|--------------|-------------------------------|---------|
| Number of poles | 4 | Leakage current at Un | 5 µA |
| Signalling contact | 250 V 1A 1CO | Rated voltage (AC) | 400 V |
| Low voltage network | TN-C | Voltage type | AC |
| Temporary surge voltage (over-voltage) - TOV | 762 V | Response time / fallback time | ≤ 25 ns |

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Technical data

| | | | |
|---|--|--|---|
| Frequency range, max. | 60 Hz | Frequency range, min. | 50 Hz |
| Suitable for | Count-in installation (leakage current free) | Standards | IEC 61643-11, EN 61643-11 |
| Lightning test current limp (10/350 µs) (L-PE) | 25 kA | Requirements class, acc. to EN 61643-11 | T1, T2 |
| Requirements category acc. to IEC 61643-11 | Type I, Type II | Max. continuous voltage, U _c (AC) | 440 V |
| Mains voltage | 400 V / 690 V | Energy coordination (≤10 m) | Type I, Type II, Type III |
| Rated load current I _L | 100 A | Discharge current I _n (8/20µs) wire-PE | 25 kA |
| Discharge current I _{max} (8/20µs) wire-PE | 100 kA | Protection level Up at IN (L/N-PE) | ≤ 2.5 kV |
| Short-circuit current rating ISCCR | 50 kA | Follow-on current extinguishing capability I _{fi} | Not available due for technical reasons |
| Integrated back-up fuse | No | | |

Connection data

| | | | |
|--|--------------------|--|-------------------|
| Stripping length | 13 mm | Wire connection method | Screw connection |
| Type of connection | Screw connection | Stripping length, rated connection | 13 mm |
| Tightening torque, min. | 2 Nm | Tightening torque, max. | 3 Nm |
| Clamping range, rated connection | 16 mm ² | Clamping range, min. | 6 mm ² |
| Clamping range, max. | 35 mm ² | Wire cross-section, solid, min. | 6 mm ² |
| Wire cross-section, solid, max. | 35 mm ² | Wire connection cross section, finely stranded, min. | 6 mm ² |
| Wire connection cross section, finely stranded, max. | 25 mm ² | Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 6 mm ² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 35 mm ² | Connection cross-section, stranded, min. | 6 mm ² |
| Connection cross-section, stranded, max. | 35 mm ² | | |

Electrical data

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

General data

| | | | |
|-----------------|-------|-------------------|-------------------------|
| Number of poles | 4 | Protection degree | IP20 in installed state |
| Colour | black | | |

Guarantee

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

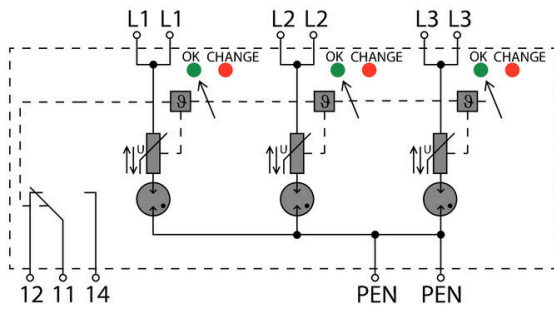
Important note

| | |
|---------------------|---|
| Product information | For use in DC applications, please use the fuse of SIBA Type NH2XL aR/aSF DC 1500 V |
| Notes | Only applicable to IT power systems where the earth on the distribution transformer is interconnected with the earth on the consumer side (RE=RA in Figure 44.A1 of IEC 60634-4-44:2018). |

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC001457 | ETIM 9.0 | EC001457 |
| ETIM 10.0 | EC001457 | ECLASS 14.0 | 27-17-12-04 |
| ECLASS 15.0 | 27-17-12-04 | | |

Electric symbol



Schematic circuit diagram