

VPU series
VPU I 1 R LCF 280V/25KA

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com



Type I/II lightning arrester for use upstream of the electrical meter

- With 25 kA (10/350 μ s) suitable for protective zones I, II, III and IV (LPL I/II/III/IV)
- With remote monitoring function, one changeover contact
- Tested according to IEC 61643-11 for type I and II surge protection
- Pluggable arrester

General ordering data

| | |
|------------|--|
| Type | VPU I 1 R LCF 280V/25KA |
| Order No. | 1351570000 |
| Version | Surge voltage arrester, Low voltage, with remote contact, Leakage-current-free, Single-phase |
| GTIN (EAN) | 4050118158564 |
| Qty. | 1 pc(s). |

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Catalogue status 17.04.2020 / We reserve the right to make technical changes.

Data sheet

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Technical data

Dimensions and weights

| | | | |
|-----------------------------|---------|-----------------|------------|
| Width | 35.6 mm | Width (inches) | 1.402 inch |
| Height | 106 mm | Height (inches) | 4.173 inch |
| Depth | 69 mm | Depth (inches) | 2.717 inch |
| Mounting dimension - height | 75 mm | Net weight | 369 g |

Temperatures

| | | | |
|-----------------------------|-----------------------|-----------------------------|----------------|
| Humidity | 5 - 95% rel. humidity | Operating temperature, max. | 70 °C |
| Operating temperature, min. | -40 °C | Storage temperature, max. | 80 °C |
| Storage temperature, min. | -40 °C | Operating temperature | -40 °C...70 °C |
| Storage temperature | -40 °C...80 °C | | |

Connection data, remote alert

| | | | |
|--|----------------------|--|---------------------|
| Connection type | PUSH IN | Stripping length | 8 mm |
| Cross-section for connected wire, solid core, min. | 0.14 mm ² | Cross-section for connected wire, solid core, max. | 1.5 mm ² |

General data

| | | | |
|--------------------------|---|---------------------------|--|
| Colour | black, orange | Design | Installation housing; 2TE, Insta IP 20 |
| Optical function display | green = OK; red = arrester is defective - replace | Protection degree | IP20 |
| Rail | TS 35 | Segment | Power distribution |
| Suitable for | Count-in installation (leakage current free) | UL 94 flammability rating | V-0 |
| Version | with remote contact, Leakage-current-free | | |

Insulation coordination acc. to EN 50178

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

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Technical data
Rated data IEC / EN

| | | | |
|--|-------------------------|---|---|
| Rated voltage (AC) | 230 V | Voltage type | AC |
| Max. continuous voltage, U_c (AC) | 280 V | Low voltage network | Single-phase |
| Discharge current I_n (8/20 μ s) wire-PE | 25 kA | Discharge current I_{max} (8/20 μ s) wire-PE | 100 kA |
| Lightning test current I_{imp} (10/350 μ s) (L-PE) | 25 kA | Frequency range, max. | 60 Hz |
| Frequency range, min. | 50 Hz | Fuse | No Fuse necessary \leq 250 A gG, 250 A gL (if back up fuse > 250 A) |
| Short-circuit current rating I_{SCCR} | 25 kA | Follow-on current extinguishing capability I_{fi} | Not available due for technical reasons |
| Standards | IEC61643-11, EN61643-11 | Energy coordination (\leq 10 m) | Type I, Type II, Type III |
| Protection level U_p at I_N (L/N-PE) | \leq 1.6 kV | Leakage current at U_n | 1 μ A |
| Temporary surge voltage (over-voltage) - TOV | 438 V | Number of poles | 1 |
| Rated load current I_L | 125 A | Requirements category acc. to IEC 61643-11 | Type I, Type II |
| Requirements class, acc. to EN 61643-11 | T1, T2 | Response time | \leq 100 ns |
| Signalling contact | 250 V 1A 1CO | Suitable for | Count-in installation (leakage current free) |

Connection data

| | | | |
|--|--------------------|--|---------------------|
| Type of connection | Screw connection | Stripping length, rated connection | 15 mm |
| Tightening torque, min. | 2 Nm | Tightening torque, max. | 3 Nm |
| Clamping range, rated connection | 16 mm ² | Clamping range, min. | 4 mm ² |
| Clamping range, max. | 35 mm ² | Wire cross-section, solid, min. | 2.5 mm ² |
| Wire cross-section, solid, max. | 16 mm ² | Wire connection cross-section, finely stranded, min. | 2.5 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. | 50 mm ² | Connection cross-section, stranded, min. | 2.5 mm ² |
| Connection cross-section, stranded, max. | 50 mm ² | | |

Classifications

| | | | |
|-------------|-------------|------------|-------------|
| ETIM 6.0 | EC000941 | ETIM 7.0 | EC000941 |
| eClass 9.0 | 27-13-08-05 | eClass 9.1 | 27-13-08-05 |
| eClass 10.0 | 27-13-08-05 | UNSPSC | 30-21-19-22 |

Approvals

Approvals



ROHS

Conform

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Technical data**Downloads**

| | |
|---|---|
| Approval/Certificate/Document of Conformity | EAC VPU SERIES CE PAPER Declaration of Conformity |
| Brochure/Catalogue | CAT 4.4 ELECTR 16/17 EN |
| Engineering Data | EPLAN, WSCAD |
| Engineering Data | STEP |
| User Documentation | Instruction sheet |

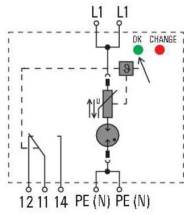
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Drawings

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 PH1 | Version |
|------------|----------------------------|----------------------------------|
| Order No. | 9008570000 | Screwdriver, Blade length: 80 mm |
| GTIN (EAN) | 4032248056569 | |
| Qty. | 1 pc(s). | |

L-PEN 280 V

Spare arrester Type I

Weidmüller VPU I surge protection products protect low-voltage consumer installations and electronic devices against overvoltages that can occur as a result of atmospheric discharges (thunderstorms) or switching operations (transients). The VPU I series meets the Type I and Type II requirements acc. to IEC 61643-11 and the Type 1 and Type 2 requirements acc. to EN 61643-11. The spare arresters are coded and can only be inserted into suitable bases.

General ordering data

| Type | VPU I 0 LCF 280V/25KA | Version |
|------------|----------------------------|--|
| Order No. | 1351540000 | Surge voltage arrester, Low voltage, Accessories, Spare arrester |
| GTIN (EAN) | 4050118158588 | |
| Qty. | 1 pc(s). | |

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Versatile accessories round off the surge protection range. E.g. the all-purpose measuring device V-TEST, which is used to check the function of pluggable arresters such as VSPC.

General ordering data

| | | |
|------------|----------------------------|-------------------------|
| Type | PLUG VPU | Version |
| Order No. | 1402570000 | VPU series, Accessories |
| GTIN (EAN) | 4050118204360 | |
| Qty. | 10 pc(s). | |