

## VPU series

### VPU II 3W WYE 277V R

**Weidmüller Interface GmbH & Co. KG**  
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Similar to illustration

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 from transient surge voltages, even significantly below the limits prescribed by insulation co-ordination according to EN 60664-3 / DIN VDE 0110. This means that the whole installation is exposed to fewer malfunctions. The arrestors are co-ordinated using technical means. This means that decoupling between types I, II and III is not necessary. The arrestors 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 V0675-6-12 and IEC 62305-4 / VDE 0185-4. This lightning and surge protection device is suited for installation in power supply systems for the US market in accordance with UL 1449 Ed.4. Weidmüller offers different products depending on the particular mains network type and voltage level.

#### General ordering data

|                     |  |
|---------------------|--|
| Delivery status     | <b>This article will no longer be available in the future.</b>                         |
| Available until     | 2020-05-01   |
| Type                | VPU II 3W WYE 277V R   |
| Order No.           | <a href="#">2024810000</a>   |
| Version             | Surge voltage arrester, Low voltage, with remote contact, TN-C ( $U_0 \leq 230/400$ V) |
| GTIN (EAN)          | 4050118404708  |
| Qty.                | 1 pc(s).   |
| Alternative product | <a href="#">2591110000</a>   |

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**Technical data**
**Dimensions and weights**

|                             |        |                 |            |
|-----------------------------|--------|-----------------|------------|
| Width                       | 54 mm  | Width (inches)  | 2.126 inch |
| Height                      | 106 mm | Height (inches) | 4.173 inch |
| Depth                       | 69 mm  | Depth (inches)  | 2.717 inch |
| Mounting dimension - height | 75 mm  | Net weight      | 418 g      |

**Temperatures**

|                             |                       |                             |                |
|-----------------------------|-----------------------|-----------------------------|----------------|
| Humidity                    | 5 - 95% rel. humidity | Operating temperature, max. | 70 °C          |
| Operating temperature, min. | -40 °C                | Storage temperature, max.   | 85 °C          |
| Storage temperature, min.   | -40 °C                | Operating temperature       | -40 °C...70 °C |
| Storage temperature         | -40 °C...85 °C        |                             |                |

**Rated data UL**

|                         |                  |                                 |         |
|-------------------------|------------------|---------------------------------|---------|
| Certificate No. (cURus) | E354261          | Continuous voltage $U_C$ , max. | 385 V   |
| Rated Voltage $U_N$     | 277 V            | Test Voltage 39.1 (UL 1449)     | 480 V   |
| VPR (L/N-PE)            | 1,500 V          | MCOV (L/N-PE)                   | 385 Vac |
| SCCR                    | 200 kA           | $I_n$                           | 20 kA   |
| Category                | SPD TYPE 1CA/2CA |                                 |         |

**Connection data, remote alert**

|  |                      |  |        |
|--|----------------------|--|--------|
| Connection type                                    | PUSH IN              | Stripping length   | 8 mm   |
| Cross-section for connected wire, solid core, min. | 0.14 mm <sup>2</sup> | Cross-section for connected wire, solid core, min. (AWG) | AWG 25 |
| Cross-section for connected wire, solid core, max. | 1.5 mm <sup>2</sup>  | Cross-section for connected wire, solid core, max. (AWG) | AWG 15 |

**General data**

|                           |   |                   |  |
|---------------------------|---|-------------------|--|
| Colour                    | black, orange                                     | Design            | Installation housing; 3TE, Insta IP 20 |
| Optical function display  | green = OK; red = 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 | III |
|--------------------|---|------------------------|-----|

**Rated data IEC / EN**

|   |   |  |                                      |
|---|---|--|--------------------------------------|
| Discharge current $I_{max}$ (8/20µs) wire-PE        | 40 kA                                   | Discharge current $I_n$ (8/20µs) wire-PE   | 20 kA                                |
| Follow-on current extinguishing capability $I_{fi}$ | Not available due for technical reasons | Fuse                                       | 125 A gL > (if back up fuse > 125 A) |
| Low voltage network                                 | TN-C ( $U_0 \leq 230/400$ V)            | Max. continuous voltage, $U_C$ (AC)        | 385 V                                |
| Protection level $U_p$ at $I_N$ (L/N-PE)            | $\leq 1,85$ kV                          | Requirements category acc. to IEC 61643-11 | Type II                              |
| Requirements class, acc. to EN 61643-11             | T2                                      | Response time                              | $\leq 25$ ns                         |
| Short-circuit current rating $I_{SCCR}$             | 25 kA                                   | Signalling contact                         | 250 V 1A 1CO                         |
| Voltage type  | AC                                      |  |                                      |

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**Technical data**
**Connection data**

|  |                     |  |                    |
|--|---------------------|--|--------------------|
| Type of connection   | Screw connection    | Stripping length, rated connection                         | 15 mm              |
| Tightening torque, min.                                    | 2 Nm                | Tightening torque, max.                                    | 3 Nm               |
| Wire connection cross section AWG, min.                    | AWG 14              | Wire connection cross section AWG, max.                    | AWG 0              |
| Wire cross-section, solid, min.                            | 4 mm <sup>2</sup>   | Wire cross-section, solid, max.                            | 16 mm <sup>2</sup> |
| Wire connection cross-section, finely stranded, min.       | 2.5 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. | 2.5 mm <sup>2</sup> | Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 25 mm <sup>2</sup> |
| Connection cross-section, stranded, min.                   | 4 mm <sup>2</sup>   | Connection cross-section, stranded, max.                   | 50 mm <sup>2</sup> |

**Ratings IECEx/ATEX/cUL**

|                 |                          |
|-----------------|--------------------------|
| cUL certificate | UL 1449 ED.4 Certificate |
|-----------------|--------------------------|

**Classifications**

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 3.0   | EC000941    | ETIM 5.0   | EC000510    |
| ETIM 6.0   | EC000941    | UNSPSC     | 30-21-19-21 |
| eClass 5.1 | 27-13-08-01 | eClass 6.2 | 27-13-08-02 |
| eClass 7.1 | 27-14-02-01 | eClass 8.1 | 27-14-02-01 |
| eClass 9.0 | 27-13-08-05 | eClass 9.1 | 27-13-08-05 |

**Approvals**

Approvals



|      |         |
|------|---------|
| ROHS | Conform |
|------|---------|

**Downloads**

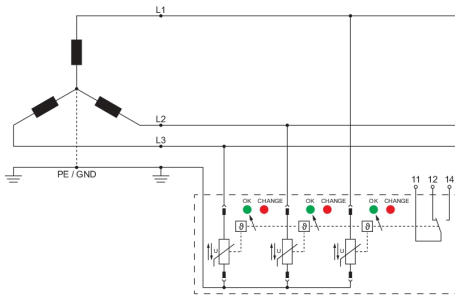
|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">EAC VPU SERIES</a><br><a href="#">CE PAPER</a><br><a href="#">Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">STEP</a>  |
| User Documentation                          | <a href="#">Instruction sheet</a>   |

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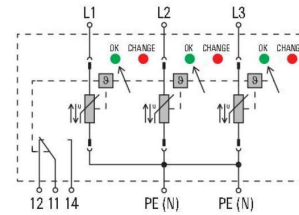
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**Drawings**

**Electric symbol**



Schematic circuit diagram UL



Schematic circuit diagram IEC / EN