

VPU series

VPU II 3W WYE 277V

Weidmüller Interface GmbH & Co. KG

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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

| | |
|------------|--|
| Type | VPU II 3W WYE 277V |
| Order No. | 2025530000 |
| Version | Surge voltage arrester, Low voltage, without telecomm. contact, TN-C ($U_0 \leq 230/400$ V) |
| GTIN (EAN) | 4050118405224 |
| Qty. | 1 pc(s). |

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Technical data

Dimensions and weights

| | | | |
|-----------------------------|-------|-----------------|------------|
| Width | 54 mm | Width (inches) | 2.126 inch |
| Height | 94 mm | Height (inches) | 3.701 inch |
| Depth | 69 mm | Depth (inches) | 2.717 inch |
| Mounting dimension - height | 75 mm | Net weight | 412 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 | | |

General data

| | | | |
|---------------------------|---------------|--------------------------|---|
| Colour | Black, Orange | Design | Installation housing; 3TE, Insta IP 20 |
| Mounting rail | TS 35 | Optical function display | green = OK; red = arrester is defective - replace |
| Protection degree | IP20 | Segment | Power distribution |
| UL 94 flammability rating | V-0 | Version | without telecomm. contact |

Insulation coordination acc. to EN 50178

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

Rated data IEC / EN

| | | | |
|---|---|--|------------------------------------|
| Discharge current I_{max} (8/20 μ s) wire-PE | 40 kA | Discharge current I_n (8/20 μ s) wire-PE | 20 kA |
| Follow-on current extinguishing capability I_{fi} | Not available due for technical reasons | Frequency range, max. | 60 Hz |
| Frequency range, min. | 50 Hz | Fuse | 125 A gL (if back-up fuse > 125 A) |
| Max. continuous voltage, U_c (AC) | 385 V | No. of poles | 3 |
| Protection level U_p at I_N (L/N-PE) | $\leq 1,85$ kV | Rated voltage (AC) | 230 V |
| Requirements category acc. to IEC 61643-11 | Type II | Requirements class, acc. to EN 61643-11 | T2 |
| Response time | ≤ 25 ns | Short-circuit current rating I_{SCCR} | 25 kA |
| Voltage type | AC | low voltage network | TN-C ($U_0 \leq 230/400$ V) |

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 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. | 25 mm ² |
| Connection cross-section, stranded, min. | 4 mm ² | Connection cross-section, stranded, max. | 50 mm ² |

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Technical data

Rated data UL

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

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 | 27-14-02-01 | eClass 9.1 | 27-13-08-05 |

Product information

Descriptive text accessories Pluggable spare arrester VPU II 0 385V - 2025100000

Approvals

Approvals



ROHS Conform

Downloads

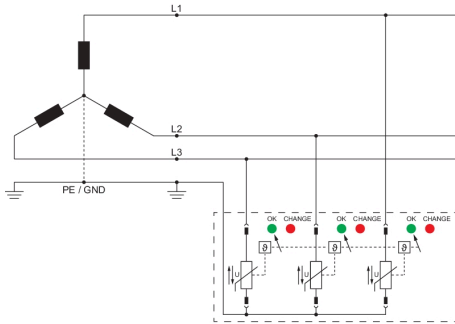
| | |
|---|-----------------------------------|
| Approval/Certificate/Document of Conformity | CE PAPER |
| Engineering Data | STEP |
| User Documentation | Instruction sheet |

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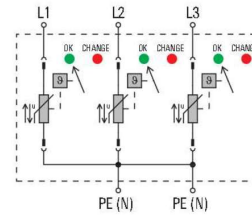
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Drawings

Electric symbol



Schematic circuit diagram UL



Schematic circuit diagram IEC / EN