

## VPU AC II US 3 400/50

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

www.weidmueller.com



Abb.ähnlich

- compact SPD to install in application by NFPA 79
- no additional overcurrent protection devices needed
- short circuit current rating (SCCR) up to 200 kA
- tested according to IEC/EN 61643-11 and UL 1449 4.Ed

### General ordering data

|                   |   |
|-------------------|---|
| Version           | Surge voltage arrester, Low voltage, Surge protection, TN-C |
| Order No.         | <a href="#">2730720000</a>                                  |
| Type              | VPU AC II US 3 400/50                                       |
| GTIN (EAN)        | 4050118807387   |
| Qty.              | 1 pc(s).  |
| Replacement parts | <a href="#">2730690000</a>                                  |

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## Technical data

### Dimensions and weights

|                          |            |                             |            |
|--------------------------|------------|-----------------------------|------------|
| Depth                    | 68 mm      | Depth (inches)              | 2.677 inch |
| Depth including DIN rail | 76 mm      | Height                      | 96.3 mm    |
| Height (inches)          | 3.791 inch | Width                       | 54 mm      |
| Width (inches)           | 2.126 inch | Mounting dimension - height | 75 mm      |
| Net weight               | 396 g      |                             |            |

### Temperatures

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

### Rated data UL

|   |              |   |         |
|---|--------------|---|---------|
| Ambient temperature (operational), max. | 85 °C        | Rated Voltage $U_N$                     | 400 V   |
| SCCR                                    | 200 kA       | $I_n$                                   | 20 kA   |
| Category                                | SPD TYPE 1   | Connection cross-section AWG, min.      | AWG 14  |
| Connection cross-section AWG, max.      | AWG 6        | Ambient temperature (operational), min. | -40 °C  |
| MODE                                    | all modes    | VPR (L-L)                               | 3,000 V |
| VPR (L-PE)                              | 1,500 V      | Voltage type                            | AC      |
| UL Energy Networks                      | Delta System |   |         |

### General data

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

### Insulation coordination acc. to EN 50178

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

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## Rated data IEC / EN

|   |  |   |   |
|---|--|---|---|
| Discharge current $I_{\max}$ (8/20 $\mu$ s) wire-PE | 50 kA  | Discharge current $I_n$ (8/20 $\mu$ s) wire-PE      | 20 kA   |
| Energy coordination ( $\leq 10$ m)                  | Type II, Type III  | Follow-on current extinguishing capability $I_{fi}$ | Follow current need not be taken into account |
| Frequency range, max.                               | 60 Hz  | Frequency range, min.                               | 50 Hz   |
| Fuse  | No Fuse necessary $\leq 315$ A gG, 250 A gG @50 kA<br>$I_{scrr}$ , 315 A gG @25 kA<br>$I_{scrr}$ | Leakage current at $U_n$                            | 0.3 mA  |
| Low voltage network                                 | TN-C   | Mains voltage                                       | 230 V / 400 V                                 |
| Max. continuous voltage, $U_c$ (AC)                 | 480 V  | Number of poles                                     | 3   |
| Protection level $U_p$ at $I_N$ (L/N-PE)            | $\leq 2.3$ kV  | Rated voltage (AC)                                  | 400 V   |
| Requirements category acc. to IEC 61643-11          | Type II  | Requirements class, acc. to EN 61643-11             | T2  |
| Response time                                       | $\leq 25$ ns   | SPD type  | T2  |
| Short-circuit current rating $I_{SCCR}$             | 50 kA  | Signalling contact                                  | No  |
| Standards   | IEC61643-11, EN61643-11, UL 1449, NFPA 79  | Temporary surge voltage (over-voltage) - TOV        | 581 V   |
| Voltage type  | AC   |   |   |

## 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.                                    | 2 Nm               | Tightening torque, max.                                    | 4.5 Nm              |
| Clamping range, rated connection                           | 16 mm <sup>2</sup> | Clamping range, min.                                       | 4 mm <sup>2</sup>   |
| Clamping range, max.                                       | 35 mm <sup>2</sup> | Wire connection cross section AWG, min.                    | AWG 14              |
| Wire connection cross section AWG, max.                    | AWG 6              | Wire cross-section, solid, min.                            | 2.5 mm <sup>2</sup> |
| Wire cross-section, solid, max.                            | 35 mm <sup>2</sup> | Wire connection cross section, finely stranded, min.       | 4 mm <sup>2</sup>   |
| Wire connection cross section, finely stranded, max.       | 35 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. | 35 mm <sup>2</sup> | Connection cross-section, stranded, min.                   | 2.5 mm <sup>2</sup> |
| Connection cross-section, stranded, max.                   | 35 mm <sup>2</sup> |  |                     |

## Ratings IECEx/ATEX/cUL

|                         |         |
|-------------------------|---------|
| Certificate no. (cULus) | E354261 |
|-------------------------|---------|

## Guarantee

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

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC000941    | ETIM 7.0    | EC000941    |
| ETIM 8.0    | EC000941    | ECLASS 9.0  | 27-13-08-05 |
| ECLASS 9.1  | 27-13-08-05 | ECLASS 10.0 | 27-13-08-05 |
| ECLASS 11.0 | 27-13-08-05 | ECLASS 12.0 | 27-17-90-90 |

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## Technical data

### Approvals

Approvals



|                         |            |
|-------------------------|------------|
| ROHS                    | Conform    |
| UL File Number Search   | UL Website |
| Certificate no. (cULus) | E354261    |

### Downloads

|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">EU_Konformitätserklärung / EU_Declaration_of_Conformity</a> |
| Engineering Data                            | <a href="#">CAD_data – STEP</a>   |
| Engineering Data                            | <a href="#">EPLAN</a>   |
| User Documentation                          | <a href="#">Beipackzettel / Instruction sheet</a>                       |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>                                |

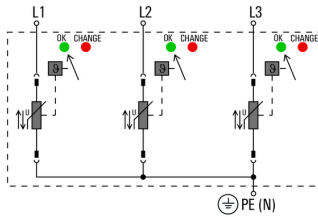
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Drawings

Electric symbol



Schematic circuit diagram