

**VPU AC II US 4 120/50****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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 II, TN-C-S, TN-S |
| Order No.         | <a href="#">2730490000</a>   |
| Type              | VPU AC II US 4 120/50  |
| GTIN (EAN)        | 4050118807615  |
| Qty.              | 1 pc(s).   |
| Replacement parts | <a href="#">2730440000</a>   |

Creation date October 6, 2024 12:34:25 AM CEST

Catalogue status 28.09.2024 / We reserve the right to make technical changes.

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## Technical data

## Dimensions and weights

|                          |            |                             |            |
|--------------------------|------------|-----------------------------|------------|
| Depth                    | 68 mm      | Depth (inches)              | 2.677 inch |
| Depth including DIN rail | 76 mm      | Height                      | 90 mm      |
| Height (inches)          | 3.543 inch | Width                       | 72 mm      |
| Width (inches)           | 2.835 inch | Mounting dimension - height | 75 mm      |
| Net weight               | 448 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 $U_N$                | 120 V      |
| VPR (N-PE)                                     | 600 V       | MCOV (L-PE)                        | 150 V      |
| MCOV (N-PE)                                    | 150 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)                                      | 1,000 V     | VPR (L-N)                          | 1,000 V    |
| VPR (L-PE)                                     | 600 V       | Voltage type                       | AC         |
| UL Energy Networks                             | 3-phase WYE |                                    |            |

## General data

|                    |                         |                           |   |
|--------------------|-------------------------|---------------------------|---|
| Colour             | orange, black           | Design                    | Installation housing; 4TE, 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 II     |                           |   |

## Insulation coordination acc. to EN 50178

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

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## Technical data

## Rated data IEC / EN

|  |   |   |   |
|--|---|---|---|
| Discharge current $I_{\max}$ (8/20 $\mu$ s) N-PE | 50 kA   | Discharge current $I_{\max}$ (8/20 $\mu$ s) wire-PE | 50 kA   |
| Discharge current $I_n$ (8/20 $\mu$ s) N-PE      | 40 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>Iscrr, 315 A gG @25 kA<br>Iscrr | Leakage current at $U_n$                            | 0.7 mA  |
| Low voltage network                              | TN-C-S, TN-S  | Mains voltage                                       | 120 V / 240 V                                 |
| Max. continuous voltage, $U_c$ (AC)              | 150 V   | Number of poles                                     | 4   |
| Protection level $U_p$ at $I_N$ (L/N-PE)         | $\leq 1.25$ kV  | Protection level $U_p$ at $I_N$ (N-PE)              | $\leq 1.25$ kV                                |
| Rated voltage (AC)                               | 120 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   | IEC 61643-11, EN 61643-11, UL 1449, NF-PA 79  |
| Temporary surge voltage (over-voltage) - TOV     | 229 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.                                       | 1.5 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.       | 1.5 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

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[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC000941    | ETIM 7.0    | EC000941    |
| ETIM 8.0    | EC000941    | ETIM 9.0    | 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 | ECLASS 13.0 | 27-17-90-90 |
| ECLASS 14.0 | 27-17-90-90 |             |             |

**Environmental Product Compliance**

|                        |                             |
|------------------------|-----------------------------|
| REACH SVHC             | /                           |
| RoHS Compliance Status | Compliant without exemption |

**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>   |
| User Documentation                          | <a href="#">Beipackzettel / Instruction sheet</a>                       |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>                                |

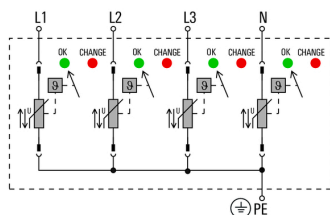
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## Drawings

### Electric symbol



Schematic circuit diagram

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Blank**

ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc.

Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

**General ordering data**

|            |                            |  |
|------------|----------------------------|--|
| Type       | ESG 6/15 K MC NE WS        | Version  |
| Order No.  | <a href="#">1880100000</a> | ESG, Device markers x 15 mm, PA 66, Colour: white, Self-adhesive |
| GTIN (EAN) | 4032248478781              |  |
| Qty.       | 200 pc(s).                 |  |

**Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

**General ordering data**

|            |                            |   |
|------------|----------------------------|---|
| Type       | SDIS 1.0X5.5X125           | Version   |
| Order No.  | <a href="#">2749850000</a> | Screwdriver, Blade width (B): 5.5 mm, Blade length: 125 mm, Blade |
| GTIN (EAN) | 4050118897050              | thickness (A): 1 mm   |
| Qty.       | 1 pc(s).                   |   |

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[www.weidmueller.com](http://www.weidmueller.com)**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 X 80              | Version   |
| Order No.  | <a href="#">2749890000</a> | Screwdriver, Blade width (B): 1 mm, 80 mm, Blade thickness (A): 1 |
| GTIN (EAN) | 4050118897098              |   |
| Qty.       | 1 pc(s).                   |   |

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[www.weidmueller.com](http://www.weidmueller.com)**Replacement parts****Spare arrester**

- 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**

|            |                            |                                  |
|------------|----------------------------|----------------------------------|
| Type       | VPU AC II US 0 120/50      | Version                          |
| Order No.  | <a href="#">2730440000</a> | Spare arrester, Surge protection |
| GTIN (EAN) | 4050118807660              |                                  |
| Qty.       | 1 pc(s).                   |                                  |