

**VPU AC II US 4 R 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="#">2730500000</a>                                             |
| Type       | VPU AC II US 4 R 120/50                                                |
| GTIN (EAN) | 4050118807608                                                          |
| Qty.       | 1 items                                                                |

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## Technical data

## Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E354261

## Dimensions and weights

|                          |             |                             |             |
|--------------------------|-------------|-----------------------------|-------------|
| Depth                    | 68 mm       | Depth (inches)              | 2.6772 inch |
| Depth including DIN rail | 76 mm       | Height                      | 104.5 mm    |
| Height (inches)          | 4.1142 inch | Width                       | 72 mm       |
| Width (inches)           | 2.8346 inch | Mounting dimension - height | 75 mm       |
| Net weight               | 457 g       |                             |             |

## Temperatures

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

## Environmental Product Compliance

|                        |                             |
|------------------------|-----------------------------|
| RoHS Compliance Status | Compliant without exemption |
| REACH SVHC             | No SVHC above 0.1 wt%       |

## Rated data UL

|                                                |                                          |            |
|------------------------------------------------|------------------------------------------|------------|
| Ambient temperature (operational), max. 85 °C  | Rated Voltage UN                         | 120 V      |
| VPR (N-PE) 600 V                               | MCOV (L-PE)                              | 150 V      |
| MCOV (N-PE) 150 V                              | SCCR                                     | 200 kA     |
| In 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) 1000 V                               | VPR (L-N)                                | 1000 V     |
| VPR (L-PE) 600 V                               | Voltage type                             | AC         |
| UL Energy Networks 3-phase WYE                 |                                          |            |

## Connection data, remote alert

|                                                                         |                                                          |         |
|-------------------------------------------------------------------------|----------------------------------------------------------|---------|
| Cross-section for connected wire, solid core, min. 0.25 mm <sup>2</sup> | Stripping length                                         | 12 mm   |
| Cross-section for connected wire, solid core, max. (AWG) AWG 10         | Connection type                                          | PUSH IN |
| Cross-section for connected wire, solid core, max. 1.5 mm <sup>2</sup>  | Cross-section for connected wire, solid core, min. (AWG) | AWG 30  |

## General data

|                           |                                                   |               |                                        |
|---------------------------|---------------------------------------------------|---------------|----------------------------------------|
| Optical function display  | green = OK; red = arrester is defective - replace | Segment       | Power distribution                     |
| Version                   | Surge protection II                               | Design        | Installation housing; 4TE, Insta IP 20 |
| UL 94 flammability rating | V-0                                               | Colour        | orange, black                          |
| Protection degree         | IP20 in installed state                           | Mounting rail | TS 35                                  |

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## Technical data

Operating altitude ≤ 4000 m

## Insulation coordination acc. to EN 50178

Surge voltage category III Pollution severity 2

## Rated data IEC / EN

|                                            |                                                                              |                                                     |                                               |
|--------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------|
| Number of poles                            | 4                                                                            | Leakage current at $U_n$                            | 0.7 mA                                        |
| Signalling contact                         | 250 V 1A 1CO                                                                 | Rated voltage (AC)                                  | 120 V                                         |
| Low voltage network                        | TN-C-S, TN-S                                                                 | Protection level Up at IN (N-PE)                    | ≤ 1.25 kV                                     |
| Voltage type                               | AC                                                                           | Temporary surge voltage (over-voltage) - TOV        | 229 V                                         |
| Fuse protection                            | No Fuse necessary ≤ 315 A gG, 250 A gG @ 50 kA Isccr, 315 A gG @ 25 kA Isccr | Response time / fallback time                       | ≤ 25 ns                                       |
| Frequency range, max.                      | 60 Hz                                                                        | Frequency range, min.                               | 50 Hz                                         |
| Standards                                  | IEC 61643-11, EN 61643-11, UL 1449, NFPA 79                                  | Requirements class, acc. to EN 61643-11             | T2                                            |
| Requirements category acc. to IEC 61643-11 | Type II                                                                      | Max. continuous voltage, $U_c$ (AC)                 | 150 V                                         |
| Mains voltage                              | 120 V / 240 V                                                                | Discharge current $I_{max}$ (8/20µs) N-PE           | 50 kA                                         |
| Discharge current $I_n$ (8/20µs) N-PE      | 40 kA                                                                        | Energy coordination (≤ 10 m)                        | Type II, Type III                             |
| Discharge current $I_n$ (8/20µs) wire-PE   | 20 kA                                                                        | Discharge current $I_{max}$ (8/20µs) wire-PE        | 50 kA                                         |
| SPD type                                   | T2                                                                           | Protection level Up at IN (L/N-PE)                  | ≤ 1.25 kV                                     |
| Short-circuit current rating ISCCR         | 50 kA                                                                        | Follow-on current extinguishing capability $I_{fi}$ | Follow current need not be taken into account |

## 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.                                    | 3 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 16              |
| Wire connection cross section AWG, max.                    | AWG 2              | Wire cross-section, solid, min.                            | 1.5 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.                   | 1.5 mm <sup>2</sup> |
| Connection cross-section, stranded, max.                   | 35 mm <sup>2</sup> |                                                            |                     |

## Electrical data

Voltage type AC

## General data

|                 |               |                   |                         |
|-----------------|---------------|-------------------|-------------------------|
| Number of poles | 4             | Protection degree | IP20 in installed state |
| Colour          | orange, black |                   |                         |

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[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Ratings IECEx/ATEX/cUL**

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

**Guarantee**

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

**Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 7.0    | EC000941    | ETIM 8.0    | EC000941    |
| ETIM 9.0    | EC000941    | ETIM 10.0   | EC000941    |
| ECLASS 12.0 | 27-17-12-02 | ECLASS 13.0 | 27-17-12-02 |
| ECLASS 14.0 | 27-17-12-02 | ECLASS 15.0 | 27-17-12-02 |

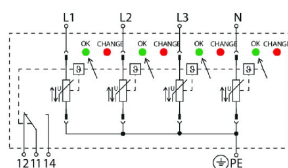
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## Drawings

### 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 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 ST                       |                                                                   |

## Slotted screwdriver

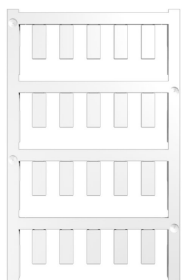


VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

## 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 ST                       |                                                                   |

## 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.

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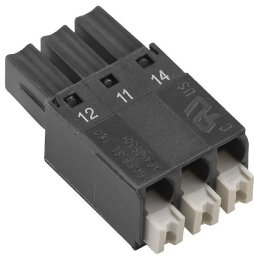
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## Accessories

## 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 ST                     |                                                                  |

## VPU Series

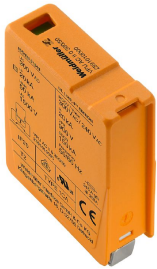


Extensive accessories round off the product range

## General ordering data

|            |                            |         |
|------------|----------------------------|---------|
| Type       | VPU AC EXTENDER            | Version |
| Order No.  | <a href="#">3123500000</a> |         |
| GTIN (EAN) | 4099987270175              |         |
| Qty.       | 8 ST                       |         |

## 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

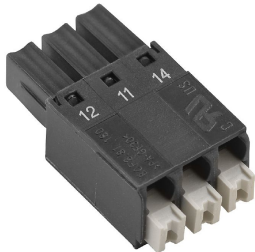
|            |                            |                                                    |
|------------|----------------------------|----------------------------------------------------|
| Type       | VPU AC II US 0 120/50      | Version                                            |
| Order No.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

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

Extensive accessories round off the product range

**General ordering data**

|            |                            |         |
|------------|----------------------------|---------|
| Type       | VPU LOCKING CLIP S         | Version |
| Order No.  | <a href="#">2735080000</a> |         |
| GTIN (EAN) | 4050118826050              |         |
| Qty.       | 10 ST                      |         |
| Type       | PLUG VPU AC                | Version |
| Order No.  | <a href="#">2855300000</a> |         |
| GTIN (EAN) | 4064675533283              |         |
| Qty.       | 10 ST                      |         |