

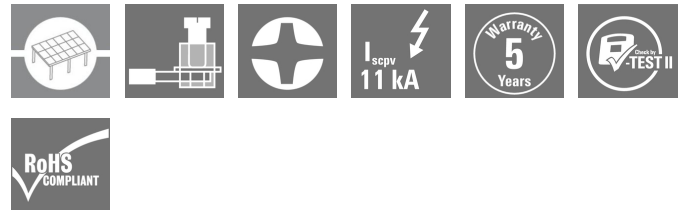
**VPU PV II 3 1000****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image****Type II surge voltage arrester for use in photovoltaic applications**

- Pluggable arrester
- Suitable for protecting DC systems
- High energy absorption with short response time
- Tested in accordance with EN 50539-11
- Suitable for use in accordance with IEC 60364-7-712 / EN 50539-12
- Coded voltage level
- Installation in distribution board
- Thermal protection function

**General ordering data**

|                   |                                     |
|-------------------|-------------------------------------|
| Version           | Surge voltage arrester, Low voltage |
| Order No.         | <a href="#">2530550000</a>          |
| Type              | VPU PV II 3 1000                    |
| GTIN (EAN)        | 4050118540550                       |
| Qty.              | 1 pc(s).                            |
| Replacement parts | <a href="#">2530660000</a>          |

## VPU PV II 3 1000

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Dimensions and weights

|                             |       |                 |            |
|-----------------------------|-------|-----------------|------------|
| Depth                       | 70 mm | Depth (inches)  | 2.756 inch |
| Height                      | 96 mm | Height (inches) | 3.78 inch  |
| Width                       | 54 mm | Width (inches)  | 2.126 inch |
| Mounting dimension - height | 75 mm | Net weight      | 386 g      |

## Temperatures

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

## Rated data UL

|                         |         |                                                |              |
|-------------------------|---------|------------------------------------------------|--------------|
| Certificate No. (UR)    | E354261 | Ambient temperature (operational), max. 85 °C  |              |
| Rated Voltage $U_N$     | 1,100 V | SCCR                                           | 50 kA        |
| $I_n$                   | 20 kA   | Category                                       | SPD TYPE 1CA |
| Rated current (UL)      | 1,100 V | Ambient temperature (operational), min. -40 °C |              |
| Certificate No. (cURus) | E354261 | VPR (DC+/DC-)                                  | 2,500 V      |
| VPR (DC-/G)             | 2,500 V | Voltage type                                   | DC           |

## General data

|                           |               |                          |                                                   |
|---------------------------|---------------|--------------------------|---------------------------------------------------|
| Colour                    | black, orange | Design                   | Installation housing; 3TE, Insta IP 20            |
| Operating altitude        | $\leq 2000$ m | Optical function display | green = OK; red = arrester is defective - replace |
| Protection degree         | IP20          | Rail                     | TS 35                                             |
| UL 94 flammability rating | V-0           | auxiliary contact        | No                                                |

## Insulation coordination acc. to EN 50178

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

## Photovoltaic technical data

|                                            |                      |                                                    |                                       |
|--------------------------------------------|----------------------|----------------------------------------------------|---------------------------------------|
| Discharge current $I_n$ (8/20 $\mu$ s)     | 20 kA                | Discharge current, max. (8/20 $\mu$ s)             | 40 kA                                 |
| Operating height in the grounded PV system | $\leq 2000$ m        | Operating height in ungrounded PV system           | < 4,000 m, see operating instructions |
| PV system voltage, max. $U_{cpv}$          | 1,100 V              | Protection level $U_p$ (+/-, -/PE, +/-PE)          | $\leq 3.8$ kV                         |
| Requirements class                         | Type II              | Short-circuit current $I_{SCPv}$                   | 11,000 A                              |
| Standards                                  | EN 50539-11, UL 1449 | Total discharge current $I_{total}$ (8/20 $\mu$ s) | 50 kA                                 |

## Rated data IEC / EN

|                                                    |                      |                                        |              |
|----------------------------------------------------|----------------------|----------------------------------------|--------------|
| Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE | 40 kA                | Discharge current, max. (8/20 $\mu$ s) | 40 kA        |
| Leakage current at $U_n$                           | 30 $\mu$ A           | Number of poles                        | 3            |
| Rated voltage (DC)                                 | 1000 V               | Response time                          | $\leq 25$ ns |
| SPD type                                           | T2                   | Signalling contact                     | No           |
| Standards                                          | EN 50539-11, UL 1449 | Voltage type                           | DC           |

## VPU PV II 3 1000

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Connection data

|                                                            |                    |                                                            |                     |
|------------------------------------------------------------|--------------------|------------------------------------------------------------|---------------------|
| Type of connection                                         | Screw connection   | Stripping length, rated connection                         | 18 mm               |
| Tightening torque, min.                                    | 2 Nm               | Tightening torque, max.                                    | 4 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 cross-section, solid, min.                            | 1.5 mm <sup>2</sup> |
| Wire cross-section, solid, max.                            | 16 mm <sup>2</sup> | Wire connection cross section, finely stranded, min.       | 1.5 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. | 1.5 mm <sup>2</sup> |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 25 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> |                                                            |                     |

## 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 |             |             |

## Approvals

Approvals



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

## Downloads

|                                             |                                                                                 |
|---------------------------------------------|---------------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">EAC VPU SERIES</a><br><a href="#">CE_VPU_PV</a>                     |
| Engineering Data                            | <a href="#">STEP</a>                                                            |
| Tender specification                        | <a href="#">Ausschreibungstext DE</a><br><a href="#">Tenderspecification EN</a> |
| User Documentation                          | <a href="#">Beipackzettel / Instruction sheet</a>                               |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>                                        |

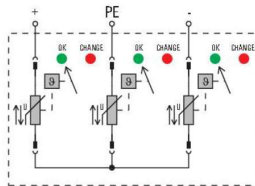
## VPU PV II 3 1000

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

[www.weidmueller.com](http://www.weidmueller.com)

# Drawings

## Electric symbol



Circuit diagram