

**Surge protection**  
**VPU I 3 LCF 280V/25KA**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

**Type I/II lightning arrester for use downstream/  
upstream of the electrical meter**

- No-leakage-current version suitable for use upstream of the electrical meter
- Suitable for protective zones III and IV (LPL III/IV)
- Can also be used as Type II surge protection
- Tested according to IEC 61643-11 for Type I and II surge protection
- Pluggable arrester

**General ordering data**

|            |                                                                                                                                  |
|------------|----------------------------------------------------------------------------------------------------------------------------------|
| Order No.  | <a href="#">1351690000</a>                                                                                                       |
| Type       | VPU I 3 LCF 280V/25KA                                                                                                            |
| Version    | Surge protection, Low voltage, Type I + II, 230 V, 25 kA , without telecomm. contact, LPL: I, II, III, U <sub>p</sub> : ≤ 1.6 kV |
| GTIN (EAN) | 4050118158465                                                                                                                    |
| Qty.       | 1 pc(s).                                                                                                                         |

## Surge protection VPU I 3 LCF 280V/25KA

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com

## Technical data

### Dimensions and weights

|            |         |                             |       |
|------------|---------|-----------------------------|-------|
| Width      | 108 mm  | Height                      | 94 mm |
| Depth      | 69 mm   | Mounting dimension - height | 75 mm |
| Net weight | 1,051 g |                             |       |

### Temperatures

|                     |                            |                       |                 |
|---------------------|----------------------------|-----------------------|-----------------|
| Humidity            | 0...95 % (no condensation) | Operating temperature | -40 °C...+70 °C |
| Storage temperature | -40 °C...+80 °C            |                       |                 |

### Discharge surge current of top part

|                                                 |        |                                         |       |
|-------------------------------------------------|--------|-----------------------------------------|-------|
| Limiting discharge current (8/20 µs) $I_{\max}$ | 100 kA | Rated discharge current (8/20 µs) $I_N$ | 25 kA |
|-------------------------------------------------|--------|-----------------------------------------|-------|

### General data

|                           |                                         |                          |                                                   |
|---------------------------|-----------------------------------------|--------------------------|---------------------------------------------------|
| Acoustic signal           | No                                      | Colour                   | Black, Arrester red                               |
| Design                    | Installation housing; 6 TE, Insta IP 20 | Lightning arrester       | Yes                                               |
| Mounting rail             | TS 35, TS 35 x 15, TS 35 x 7.5          | Optical function display | green = OK; red = arrester is defective - replace |
| Protection degree         | IP 20                                   | Segment                  | Power distribution                                |
| UL 94 flammability rating | V-0                                     |                          |                                                   |

### Insulation coordination acc. to EN 50178

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

### technical data

|                                                     |                            |                                                            |                     |
|-----------------------------------------------------|----------------------------|------------------------------------------------------------|---------------------|
| Rated voltage (AC)                                  | 230 V                      | Rated voltage                                              | 230 V               |
| Max. continuous voltage, $U_c$ (AC)                 | 280 V                      | Temporary surge voltage (over-voltage) - TOV               | 440 V               |
| Discharge current $I_n$ (8/20µs) wire-PE            | 100 kA                     | Discharge current $I_{\max}$ (8/20µs) wire-PE              | 100 kA              |
| Discharge current, max. (10/350 µs)                 | 25 kA                      | Limiting discharge current (8/20 µs) $I_{\max}$            | 100 kA              |
| Rated discharge current (8/20 µs) $I_N$             | 25 kA                      | Fuse, max.                                                 | 250 A gL            |
| Short-circuit current rating $I_{SCCR}$             | 25 kA                      | Discharge current, nominal, per path, (8/20 µs)            | 25 kA               |
| Total discharge current $I_{\text{total}}$          | 75 kA                      | Discharge current, max. (8/20 µs)                          | 100 kA              |
| Short-circuit strength with max. back-up fuse       | 25 kA <sub>eff</sub>       | Protection level $U_p$ (typ.)                              | ≤ 1.6 kV            |
| Leakage current at $U_n$                            | 30 µA                      | Signalling contact                                         | No                  |
| Standards                                           | IEC61643-11, EN61643-11    | Colour                                                     | Black, Arrester red |
| Humidity                                            | 0...95 % (no condensation) | Requirements class, acc. to EN 61643-11                    | T1, T2              |
| Requirements category acc. to IEC 61643-11          | Type I, Type II            | Response time                                              | ≤ 100 ns            |
| Lightning test current $I_{\text{imp}}$ (10/350 µs) | 25 kA                      | Lightning test current $I_{\text{imp}}$ (10/350 µs) [L-PE] | 25 kA               |

**Surge protection**  
**VPU I 3 LCF 280V/25KA**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com

**Technical data**
**Connection data**

|                                                                 |                    |                                                                 |                     |
|-----------------------------------------------------------------|--------------------|-----------------------------------------------------------------|---------------------|
| Clamping range, rated connection                                | 16 mm <sup>2</sup> | Clamping range, rated connection, min.                          | 4 mm <sup>2</sup>   |
| Clamping range, rated connection, max.                          | 50 mm <sup>2</sup> | Wire connection cross section, stranded, rated connection, min. | 1.5 mm <sup>2</sup> |
| Wire connection cross section, stranded, rated connection, max. | 50 mm <sup>2</sup> | Tightening torque, min.                                         | 2 Nm                |
| Tightening torque, max.                                         | 3 Nm               | Stripping length, rated connection                              | 15 mm               |
| Wire connection cross section, finely stranded, max.            | 25 mm <sup>2</sup> |                                                                 |                     |

**Classifications**

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 3.0   | EC000381    | UNSPSC     | 30-21-19-22 |
| eClass 4.1 | 27-14-02-01 | eClass 5.1 | 27-14-02-01 |
| eClass 6.2 | 27-13-08-02 | eClass 7.1 | 27-14-02-01 |

**Approvals**

Approvals



ROHS

Conform

**Downloads**

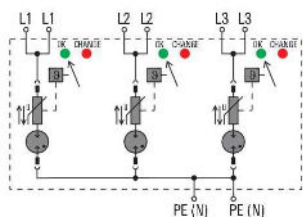
|                           |                                   |
|---------------------------|-----------------------------------|
| Package insert            | <a href="#">Instruction sheet</a> |
| Declaration of Conformity | <a href="#">K503_09_12.pdf</a>    |
| EPLAN                     | <a href="#">1351690000.ema</a>    |

**Surge protection**  
**VPU I 3 LCF 280V/25KA**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

**Drawings**

**Electric symbol**



Circuit diagram