

**VPU AC I 1 R 275/25 LCF MB****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

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

- With 25 kA (10/350  $\mu$ s) suitable for protective zones I, II, III and IV (LPL I/II/III/IV)
- With remote monitoring function, one changeover contact
- Tested according to IEC 61643-11 for type I and II surge protection

**General ordering data**

|            |                                                                                                                    |
|------------|--------------------------------------------------------------------------------------------------------------------|
| Version    | Surge voltage arrester, Low voltage, Surge protection, Leakage-current-free, with remote contact, Single-phase, TN |
| Order No.  | <a href="#">2774940000</a>                                                                                         |
| Type       | VPU AC I 1 R 275/25 LCF MB                                                                                         |
| GTIN (EAN) | 4064675038863                                                                                                      |
| Qty.       | 1 items                                                                                                            |

## VPU AC I 1 R 275/25 LCF MB

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Approvals

Approvals



ROHS

Conform

## Dimensions and weights

|            |       |                 |             |
|------------|-------|-----------------|-------------|
| Depth      | 71 mm | Depth (inches)  | 2.7953 inch |
| Height     | 99 mm | Height (inches) | 3.8976 inch |
| Width      | 35 mm | Width (inches)  | 1.378 inch  |
| Net weight | 286 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%       |

## Connection data, remote alert

|                                                    |                             |                                                    |                     |
|----------------------------------------------------|-----------------------------|----------------------------------------------------|---------------------|
| Cross-section for connected wire, solid core, min. | 0.14 mm <sup>2</sup>        | Stripping length                                   | 8 mm                |
| Connection type                                    | Screw connection: pluggable | Cross-section for connected wire, solid core, max. | 1.5 mm <sup>2</sup> |
| Max. torque                                        | 0.25 Nm                     |                                                    |                     |

## General data

|                           |                                                             |               |                                        |
|---------------------------|-------------------------------------------------------------|---------------|----------------------------------------|
| Optical function display  | green = OK; red = arrester is defective - replace           | Segment       | Power distribution                     |
| Version                   | Surge protection, Leakage-current-free, with remote contact | Design        | Installation housing; 2TE, Insta IP 20 |
| UL 94 flammability rating | V-0                                                         | Colour        | grey                                   |
| Protection degree         | IP20 in installed state                                     | Mounting rail | TS 35                                  |
| Operating altitude        | ≤ 2000 m                                                    |               |                                        |

## Insulation coordination acc. to EN 50178

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

## Rated data IEC / EN

|                                              |                  |                       |                                                                 |
|----------------------------------------------|------------------|-----------------------|-----------------------------------------------------------------|
| Number of poles                              | 1                | Leakage current at Un | 1 µA                                                            |
| Signalling contact                           | 250 V 1A 1CO     | Rated voltage (AC)    | 230 V                                                           |
| Low voltage network                          | Single-phase, TN | Voltage type          | AC                                                              |
| Temporary surge voltage (over-voltage) - TOV | 438 V            | Fuse protection       | No Fuse necessary ≤250 A gG, 250 A gL (if back up fuse > 250 A) |

## VPU AC I 1 R 275/25 LCF MB

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

|                                                   |                           |                                                            |                                         |
|---------------------------------------------------|---------------------------|------------------------------------------------------------|-----------------------------------------|
| Response time / fallback time                     | ≤ 25 ns                   | Frequency range, max.                                      | 60 Hz                                   |
| Frequency range, min.                             | 50 Hz                     | Standards                                                  | IEC 61643-11, EN 61643-11               |
| Lightning test current Iimp (10/350 µs) (L-PE)    | 25 kA                     | Requirements class, acc. to EN 61643-11                    | T1, T2                                  |
| Requirements category acc. to IEC 61643-11        | Type I, Type II           | Max. continuous voltage, U <sub>c</sub> (AC)               | 275 V                                   |
| Energy coordination (≤10 m)                       | Type I, Type II, Type III | Rated load current I <sub>L</sub>                          | 100 A                                   |
| Discharge current I <sub>n</sub> (8/20µs) wire-PE | 25 kA                     | Discharge current I <sub>max</sub> (8/20µs) wire-PE        | 100 kA                                  |
| SPD type                                          | T1, T2                    | Protection level Up at I <sub>N</sub> (L/N-PE)             | ≤ 1.5 kV                                |
| Short-circuit current rating ISCCR                | 50 kA                     | Follow-on current extinguishing capability I <sub>fi</sub> | Not available due for technical reasons |
| Integrated back-up fuse                           | No                        | PE conductor current I <sub>PE</sub>                       | 1 µA                                    |

## 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 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.       | 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. | 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 | 1    | Protection degree | IP20 in installed state |
| Colour          | grey |                   |                         |

## Guarantee

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

## Classifications

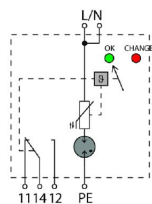
|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 7.0    | EC001457    | ETIM 8.0    | EC001457    |
| ETIM 9.0    | EC001457    | ETIM 10.0   | EC001457    |
| ECLASS 12.0 | 27-17-12-04 | ECLASS 13.0 | 27-17-12-04 |
| ECLASS 14.0 | 27-17-12-04 | ECLASS 15.0 | 27-17-12-04 |

**VPU AC I 1 R 275/25 LCF MB**

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

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

Drawings



Principle circuit diagram

**VPU AC I 1 R 275/25 LCF MB****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

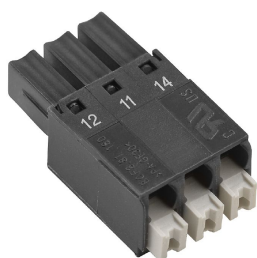
Germany

[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 ST                       |                                                                   |  |

**VPU Series**

Extensive accessories round off the product range

**General ordering data**

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