

**VPU AC I 3+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, TN-C-S, TN-S, TT, IT with N, IT without N |
| Order No.         | <a href="#">2638070000</a>                                                                                                                  |
| Type              | VPU AC I 3+1 R 275/25 LCF MB                                                                                                                |
| GTIN (EAN)        | 4050118679496                                                                                                                               |
| Qty.              | 1 pc(s).                                                                                                                                    |
| Replacement parts | <a href="#">2855300000</a>                                                                                                                  |

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## Technical data

## Dimensions and weights

|                             |        |                 |            |
|-----------------------------|--------|-----------------|------------|
| Depth                       | 71 mm  | Depth (inches)  | 2.795 inch |
| Height                      | 99 mm  | Height (inches) | 3.898 inch |
| Width                       | 144 mm | Width (inches)  | 5.669 inch |
| Mounting dimension - height | 76 mm  | Net weight      | 0.9 g      |

## Temperatures

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

## Connection data, remote alert

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

## General data

|                 |      |                   |                         |
|-----------------|------|-------------------|-------------------------|
| Number of poles | 4    | Protection degree | IP20 in installed state |
| Colour          | grey |                   |                         |

## Insulation coordination acc. to EN 50178

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

## Rated data IEC / EN

|                                                      |                                                                 |                                                     |                                           |
|------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------|
| Discharge current $I_{\max}$ (8/20μs) N-PE           | 100 kA                                                          | Discharge current $I_{\max}$ (8/20μs) wire-PE       | 100 kA                                    |
| Discharge current $I_n$ (8/20μs) N-PE                | 100 kA                                                          | Discharge current $I_n$ (8/20μs) wire-PE            | 25 kA                                     |
| Energy coordination (≤10 m)                          | Type I, Type II, Type III                                       | Follow-on current extinguishing capability $I_{fi}$ | Not available due for technical reasons   |
| Frequency range, max.                                | 60 Hz                                                           | Frequency range, min.                               | 50 Hz                                     |
| Fuse                                                 | No Fuse necessary ≤250 A gG, 250 A gL (if back up fuse > 250 A) | Integrated back-up fuse                             | No                                        |
| Leakage current at $U_n$                             | 1 μA                                                            | Lightning test current $I_{imp}$ (10/350 μs) (L-PE) | 25 kA                                     |
| Lightning test current, $I_{imp}$ (10/350 μs) (N-PE) | 100 kA                                                          | Low voltage network                                 | TN-C-S, TN-S, TT, IT with N, IT without N |
| Mains voltage                                        | 230 V / 400 V                                                   | Max. continuous voltage, $U_c$ (AC)                 | 275 V                                     |
| Max. continuous voltage, $U_c$ (N-PE)                | 255 V                                                           | Number of poles                                     | 4                                         |
| PE conductor current $I_{PE}$                        | 1 μA                                                            | Protection level $U_p$ at $I_N$ (L/N-PE)            | ≤ 1.5 kV                                  |
| Protection level $U_p$ at $I_N$ (N-PE)               | ≤ 1.5 kV                                                        | Rated load current $I_L$                            | 100 A                                     |
| Rated voltage (AC)                                   | 230 V                                                           | Requirements category acc. to IEC 61643-11          | Type I, Type II                           |
| Requirements class, acc. to EN 61643-11              | T1, T2                                                          | Response time                                       | ≤ 25 ns                                   |
| SPD type                                             | T1, T2                                                          | Short-circuit current rating $I_{SCCR}$             | 50 kA                                     |
| Signalling contact                                   | 250 V 1A 1CO                                                    | Standards                                           | IEC 61643-11, EN 61643-11                 |
| Temporary surge voltage (over-voltage) - TOV         | 438 V                                                           | Voltage type                                        | AC                                        |

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## 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 |
|--------------|----|

## Guarantee

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

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC000941    | ETIM 7.0    | EC000941    |
| ETIM 8.0    | EC000941    | ETIM 9.0    | EC000941    |
| ETIM 10.0   | 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 |
| ECLASS 15.0 | 27-17-90-90 |             |             |

## Environmental Product Compliance

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

## Important note

|                     |                                                                                                                                                                                           |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product information | Only applicable to IT power systems where the earth on the distribution transformer is interconnected with the earth on the consumer side (RE=RA in Figure 44.A1 of IEC 60634-4-44:2018). |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Approvals

Approvals



|                 |                                                                                                                                                                             |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approvals MAMID | <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/</a> |
| ROHS            | Conform                                                                                                                                                                     |

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## Technical data

### Downloads

Approval/Certificate/Document of Conformity

[EU\\_Konformitätserklärung / EU\\_Declaration\\_of\\_Conformity](#)

Engineering Data

[CAD data – STEP](#)

User Documentation

[Beipackzettel / Instruction sheet](#)

Catalogues

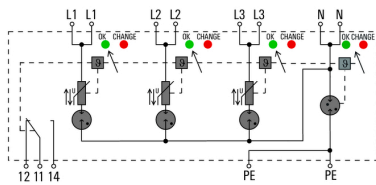
[Catalogues in PDF-format](#)

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## Drawings



Principle circuit diagram

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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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## Replacement parts

### VPU Series



Extensive accessories round off the product range

### General ordering data

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