

**VPU AC I F 1 275/25**
**Weidmüller Interface GmbH & Co. KG**

 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

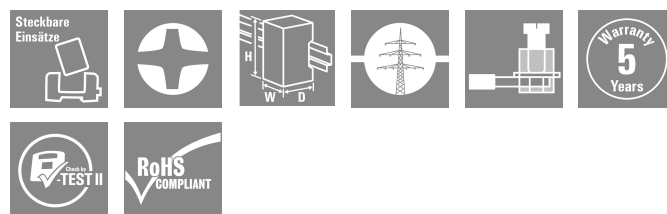
[www.weidmueller.com](http://www.weidmueller.com)
**Product image**


Abb.ähnlich

Weidmüller VPU I (Type I), VPU II (Type II) and VPU III (Type III) surge protection products effectively reduce the interference coupling that can occur due to transient surge voltages, even significantly below the limits prescribed by insulation co-ordination according to EN 60664-3 / DIN VDE 0110-3. This means that the whole installation is exposed to fewer malfunctions. The arresters are co-ordinated using technical means. This means that decoupling between Types I, II and III is unnecessary. The arresters are tested according to product standard IEC 61643-11 / DIN EN 61643-11 and can be installed in systems according to IEC 61643-12 / VDE 0675-6-12 and IEC 62305-4 / VDE 0185-4. This lightning and surge protection device is suited for installation in power supply systems. Weidmüller offers different products depending on the particular mains network type and voltage level. The VPU AC I F series is characterised by a fuse integrated in the arrester. These arresters do not require a fuse.

**General ordering data**

|            |                                                                         |
|------------|-------------------------------------------------------------------------|
| Version    | Surge voltage arrester, Low voltage, Surge protection, Single-phase, TN |
| Order No.  | <a href="#">2859330000</a>                                              |
| Type       | VPU AC I F 1 275/25                                                     |
| GTIN (EAN) | 4064675570509                                                           |
| Qty.       | 1 items                                                                 |

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## Technical data

## Approvals

Approvals



ROHS Conform

## Dimensions and weights

|            |       |                 |             |
|------------|-------|-----------------|-------------|
| Depth      | 86 mm | Depth (inches)  | 3.3858 inch |
| Height     | 90 mm | Height (inches) | 3.5433 inch |
| Width      | 36 mm | Width (inches)  | 1.4173 inch |
| Net weight | 330 g |                 |             |

## Temperatures

|                       |                |                     |                       |
|-----------------------|----------------|---------------------|-----------------------|
| Storage temperature   | -40 °C...85 °C | Ambient temperature | ...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

|                 |         |
|-----------------|---------|
| Connection type | PUSH IN |
|-----------------|---------|

## General data

|                           |                                                   |                    |                                        |
|---------------------------|---------------------------------------------------|--------------------|----------------------------------------|
| Optical function display  | green = OK; red = arrester is defective - replace | Segment            | Power distribution                     |
| Version                   | Surge protection                                  | Design             | Installation housing; 2TE, Insta IP 20 |
| UL 94 flammability rating | V-0                                               | Colour             | black, orange                          |
| Suitable for              | Count-in installation (leakage current free)      | Protection degree  | IP20 in installed state                |
| Mounting rail             | TS 35                                             | Operating altitude | ≤ 2000 m                               |

## Insulation coordination acc. to EN 50178

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

## Rated data IEC / EN

|                                                |                                              |                                                 |                           |
|------------------------------------------------|----------------------------------------------|-------------------------------------------------|---------------------------|
| Number of poles                                | 1                                            | Signalling contact                              | No                        |
| Rated voltage (AC)                             | 230 V                                        | Low voltage network                             | Single-phase, TN          |
| Voltage type                                   | AC                                           | Temporary surge voltage (overvoltage)           | 442 V                     |
| Fuse protection                                | internally available                         | Response time / fallback time                   | <100 ns                   |
| Frequency range, max.                          | 60 Hz                                        | Frequency range, min.                           | 50 Hz                     |
| Suitable for                                   | Count-in installation (leakage current free) | Standards                                       | IEC 61643-11, EN 61643-11 |
| Lightning test current limp (10/350 µs) (L-PE) | 25 kA                                        | Lightning test current, limp (10/350 µs) (N-PE) | 25 kA                     |
| Requirements class, acc. to EN 61643-11        | T1, T2, T3                                   | Requirements category acc. to IEC 61643-11      | Type I, Type II, Type III |

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|                                                    |                           |                                                |               |
|----------------------------------------------------|---------------------------|------------------------------------------------|---------------|
| Max. continuous voltage, $U_c$ (AC)                | 275 V                     | Mains voltage                                  | 230 V / 400 V |
| Energy coordination ( $\leq 10$ m)                 | Type I, Type II, Type III | Discharge current $I_n$ (8/20 $\mu$ s) wire-PE | 25 kA         |
| Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE | 65 kA                     | Protection level $U_p$ at IN (L/N-PE)          | $\leq 1.5$ kV |
| Short-circuit current rating ISCCR                 | 100 kA                    | Integrated back-up fuse                        | Yes           |

## 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 with wire end ferrule (DIN 46228-1), min. | 2.5 mm <sup>2</sup> |
| Conductor cross-section, flexible with wire end ferrule (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          | black, orange |                   |                         |

## Guarantee

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

## Important note

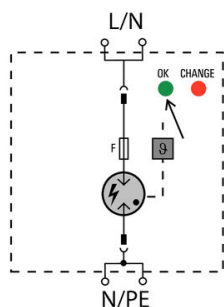
|                     |                                                                              |
|---------------------|------------------------------------------------------------------------------|
| Product information | If $F1 > 315A$ gG, then the integrated backup fuse always operates before F1 |
| Notes               | Additional tests for 100kA Isccr have been passed without certification.     |

## Classifications

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

Drawings

Electric symbol



Schematic circuit diagram