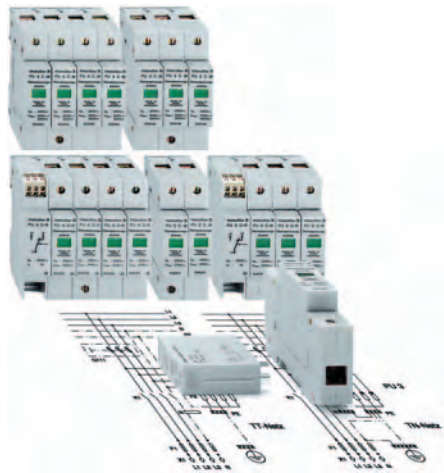


Overvoltage protection for energy distribution systems

Overvoltage protection class II with varistors



Overvoltage protection for low voltage consumers and electronic devices

Overvoltage protection class II (C arrestors)

Weidmüller's overvoltage protection type PU C protects low voltage consumers and electronic devices from overvoltage caused by atmospheric discharge (thunderstorms) or switching procedures (transients). PU C corresponds to the requirements of DIN VDE 06 part 6, class C, 11/89, draft, DIN VDE 0675 part 6, A2 10/96, ÖVE SN 60 part 4 and part 1 and IEC 61643-1 (2/98).

Electrical connection

PU C overvoltage is connected with the shortest possible leads between the outer conductors (L1, L2, L3) respectively neutral (N) and the earth of the consumer installation. Avoid routing unprotected leads (e.g. leads to the meter) parallel to protected leads. PU C arrestors are also available for "3+1" circuits.

PU C overvoltage protection is available as compact module, 3 or 4 pole, with up to 100 kV (8/20 μ s), with the PE connections within the modules already connected. Versions are available with the following rated voltages:

- 60 Vac,
- 115/230 Vac,
- 230/400 Vac,
- 470/600 Vac,
- and for "3+1" circuits and
- special types for IT networks.

Checking functions, maintenance and approval

Users check the PU C overvoltage protection modules with a visual inspection. The visual check is easy because the varistor is fitted with a thermal disconnecter. If this has been tripped, the colour in the display window changes from green to red. A tripped arrestor can be easily replaced by a qualified technician without having to disconnect any wiring.

The top section of the varistor is coded according to voltage, and integrated in a pale grey plastic housing (PA 6.6) to distinguish it from class 1 overvoltage arrestors (B arrestors). This means it is only possible to plug in the right replacement varistor.

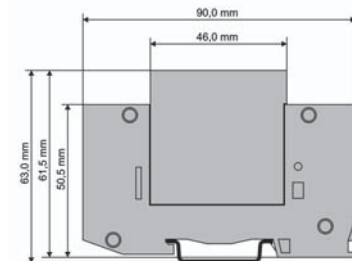
The cross-section of the earth conductor must be min. 10 mm² or half the outer conductor cross-section. The fuses for PU modules are chosen according to cross-section and type of routing. Maximum 125 A gl are allowed.

Weidmüller's PU C lightning conductors are certified to ÖVE SN 60 and UL so that they can be used worldwide.

The connection is to be rated to IEC 947-7-1 for the following cross-sections:

- solid: 6...10 mm²,
- stranded: 16...25 mm²,
- flexible: 10...25 mm².

The operating temperature range is -40 °C ... +60 °C.



PU-C dimensions

| Width | |
|-------------|-------|
| PU1C | 18 mm |
| PU2C | 36 mm |
| PU3C | 54 mm |
| PU3CR, PU4C | 72 mm |
| PU4CR | 90 mm |



Monitoring unit

Overvoltage protection for energy distribution systems

Class II with varistors

Class II overvoltage arrester

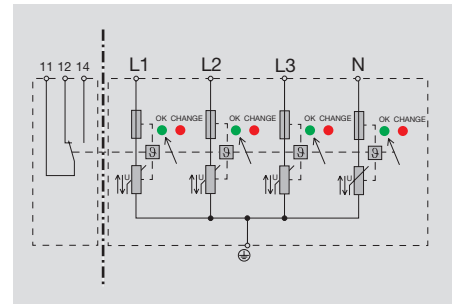
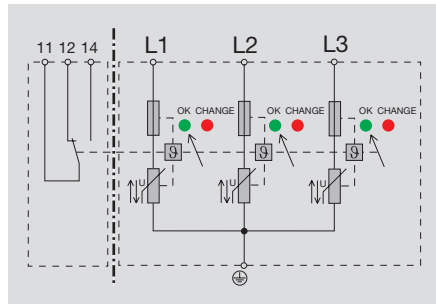
PU 3 C+CR 230 V

PU 3 C / PU 3 CR 230/400Vac



PU 4 C+CR 230 V

PU 4 C / PU 4 CR 230/400Vac



Technical data

Technical specification

Rated voltage U_n (AC)
 Operating voltage U_c (ac), max.
 Requirement class acc. to IEC 61643-1
 Rated leakage current (8/20 μ s)
 Limiting leakage current (8/20 μ s)
 Leakage current, max. (8/20 μ s)
 Response time
 Back-up fuse, max.
 Protection level U_p (typ.)
 Optical function indicator
 Monitoring contact
 Design
 Colour
 Oper. temp. min./Oper. temp. max.
 Stor. temp. min./Storage temp., max.
 Approvals

230V
 280V
 class II
 20 kA
 40kA
 100kA
 < 25 ns
 125 A gl
 1300V
 green = OK; red = arrester faulty, replace
 250V max 1A 1CO
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL, ÖVE SN 60, SABS

230V
 280V
 class II
 20 kA
 40kA
 100kA
 < 25 ns
 125 A gl
 1300V
 green = OK; red = arrester faulty, replace
 250V max 1A 1CO
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL, ÖVE SN 60, SABS

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

| Without monit. contact | Without monit. contact |
|------------------------|------------------------|
| 10 / 6 / 50 | 10 / 6 / 50 |
| 90 x 54.0 x 61 | 90 x 72.0 x 61 |

| Without monit. contact | Without monit. contact |
|------------------------|------------------------|
| 10 / 6 / 50 | 10 / 6 / 50 |
| 90 x 72.0 x 61 | 90 x 91.0 x 61 |

Information

Ordering data

| Version |
|------------------------|
| Without monit. contact |
| Without monit. contact |

| Type | Qty. | Order No. |
|-----------------|------|------------|
| PU 3 C 275 VAC | 1 | 8021490000 |
| PU 3 CR 275 VAC | 1 | 8021510000 |

| Type | Qty. | Order No. |
|-----------------|------|------------|
| PU 4 C 275 VAC | 1 | 8021500000 |
| PU 4 CR 275 VAC | 1 | 8021520000 |

Information

Accessories

Information

Pluggable spare arrester 275V PU 0 B 8339510000

Pluggable spare arrester 275V PU 0 B 8339510000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
 Delivery times see page X.2

Overvoltage protection for energy distribution systems

Class II with varistors

Class II overvoltage arrester

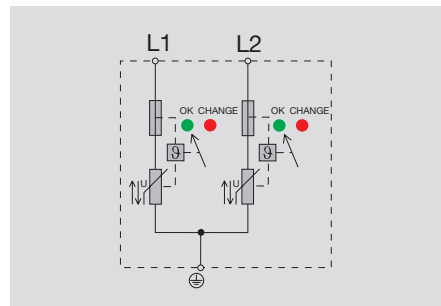
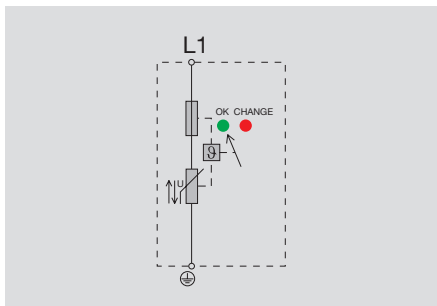
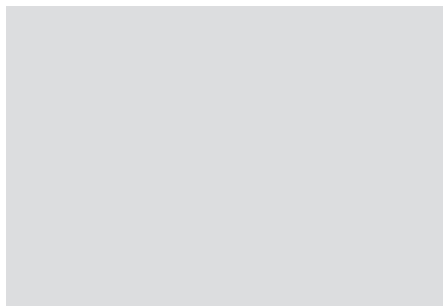
PU 1 C 230 V

PU 1 C



PU 2 C 230 V

PU 2 C



Technical data

Technical specification

Rated voltage U_n (AC)
 Operating voltage U_c (ac), max.
 Requirement class acc. to IEC 61643-1
 Rated leakage current (8/20 μ s)
 Limiting leakage current (8/20 μ s)
 Leakage current, max. (8/20 μ s)
 Response time
 Back-up fuse, max.
 Protection level U_p (typ.)
 Optical function indicator
 Monitoring contact
 Design
 Colour
 Oper. temp. min./Oper. temp. max.
 Stor. temp. min./Storage temp., max.
 Approvals

230V
 280V
 class II
 20 kA
 40kA
 40kA
 < 25 ns
 125 A gl
 1300V
 green = OK; red = arrester faulty, replace
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL, ÖVE SN 60, SABS

230V
 280V
 class II
 20 kA
 40kA
 75kA
 < 25 ns
 125 A gl
 1300V
 green = OK; red = arrester faulty, replace
 250V max 1A 1CO
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL, ÖVE SN 60, SABS

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

Without monit. contact

10 / 6 / 50
 90 x 18.0 x 61

Without monit. contact

10 / 6 / 50
 90 x 36.0 x 61

Without monit. contact

10 / 6 / 50
 90 x 54.0 x 61

Information

Ordering data

Version

Without monit. contact

| Type | Qty. | Order No. |
|----------------|------|------------|
| PU 1 C 275 VAC | 1 | 8102610000 |

| Type | Qty. | Order No. |
|-------------------|------|------------|
| PU 2 C 275 VAC | 1 | 8098170000 |
| PU 2CR 230/400VAC | | 8425240000 |

Information

Accessories

Information

Pluggable spare arrester 275V PU 0 B 8339510000

Pluggable spare arrester 275V PU 0 B 8339510000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
 Delivery times see page X.2

Overvoltage protection for energy distribution systems

Class II with varistors

Class II overvoltage arrester

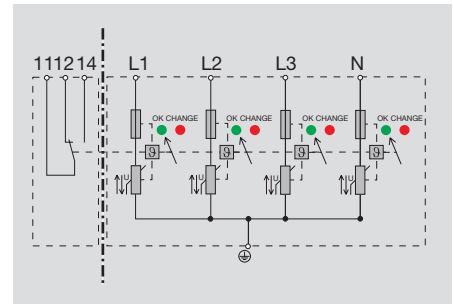
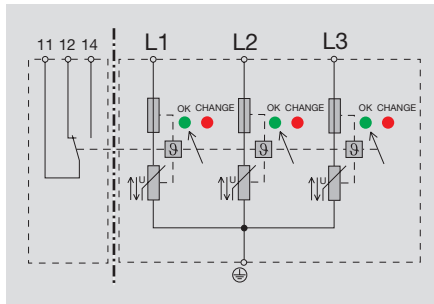
PU 3 C+CR 385 V

PU 3 C / PU 3 CR (according to Ö-Norm 8001 par. 18)



PU 4 C+CR 385 V

PU 4 C / PU 4 CR (according to Ö-Norm 8001 par. 18)



Technical data

Technical specification

Rated voltage U_n (AC)
 Operating voltage U_c (ac), max.
 Requirement class acc. to IEC 61643-1
 Rated leakage current (8/20 μ s)
 Limiting leakage current (8/20 μ s)
 Leakage current, max. (8/20 μ s)
 Response time
 Back-up fuse, max.
 Protection level U_p (typ.)
 Optical function indicator
 Monitoring contact
 Design
 Colour
 Oper. temp. min./Oper. temp. max.
 Stor. temp. min./Storage temp., max.
 Approvals

230V
 385V
 class II
 20 kA
 40kA
 100kA
 < 25 ns
 125 A gl
 1500V
 green=OK, red=faulty, replace
 250V max 1A 1CO
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C

230V
 385V
 class II
 20 kA
 40kA
 100kA
 < 25 ns
 125 A gl
 1500V
 green=OK, red=faulty, replace
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

| Without monit. contact | With monit. contact |
|------------------------|---------------------|
| 10 / 6 / 50 | 10 / 6 / 50 |
| 90 x 54.0 x 61 | 90 x 72.0 x 61 |

| Without monit. contact | With monit. Contact |
|------------------------|---------------------|
| 10 / 6 / 50 | 10 / 6 / 50 |
| 90 x 72.0 x 61 | 90 x 91.0 x 61 |

Information

Ordering data

Version

Without monit. contact
 With monit. contact

| Type | Qty. | Order No. |
|-----------------|------|------------|
| PU 3C 385VAC | 1 | 8197930000 |
| PU 3 CR 385 VAC | 1 | 8380730000 |

| Type | Qty. | Order No. |
|-----------------|------|------------|
| PU 4 C 385 VAC | 1 | 8601280000 |
| PU 4 CR 385 VAC | 1 | 8494040000 |

Information

Accessories

Information

Pluggable spare arrester 385V PU 0 C 8328670000

Pluggable spare arrester 385V PU 0 C 8328670000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
 Delivery times see page X.2

Overvoltage protection for energy distribution systems

Class II with varistors

Class II overvoltage arrester

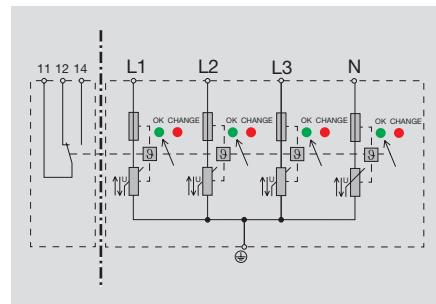
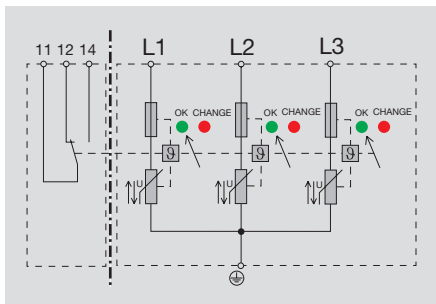
PU 3 C 115 V

PU 3 C / PU 3 CR 115/230Vac



PU 4 C 115 V

PU 4 C / PU 4 CR 115/230Vac



Technical data

Technical specification

Rated voltage Un (AC)
 Operating voltage Uc (ac), max.
 Requirement class acc. to IEC 61643-1
 Rated leakage current (8/20µs)
 Limiting leakage current (8/20µs)
 Leakage current, max. (8/20 µs)
 Response time
 Back-up fuse, max.
 Protection level Up (typ.)
 Optical function indicator
 Monitoring contact
 Design
 Colour
 Oper. temp. min./Oper. temp. max.
 Stor. temp. min./Storage temp., max.
 Approvals

115V
 130V
 class II
 20 kA
 40kA
 100kA
 < 25 ns
 125 A gl
 800V
 LED green=OK, LED red=faulty, replace
 250V max 1A 1CO
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL

115V
 130V
 class II
 20 kA
 40kA
 100kA
 < 25 ns
 125 A gl
 800V
 LED green=OK, LED red=Faulty, replace
 250V max1A 1CO
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

| Without monit. contact | Without monit. contact |
|------------------------|------------------------|
| 10 / 6 / 50 | 10 / 6 / 50 |
| 90 x 54.0 x 61 | 90 x 72.0 x 61 |

| Without monit. contact | Without monit. contact |
|------------------------|------------------------|
| 10 / 6 / 50 | 10 / 6 / 50 |
| 90 x 72.0 x 61 | 90 x 90.0 x 61 |

Information

Ordering data

Version

Without monit. contact
 Without monit. contact

| Type | Qty. | Order No. |
|-----------------|------|------------|
| PU 3 C 130 VAC | 1 | 8291660000 |
| PU 3 CR 130 VAC | 1 | 8291680000 |

| Type | Qty. | Order No. |
|-----------------|------|------------|
| PU 4 C 130 VAC | 1 | 8291670000 |
| PU 4 CR 130 VAC | 1 | 8291690000 |

Information

Accessories

Information

Pluggable spare arrester 130V PU 0 C 8432430000

Pluggable spare arrester 130V PU 0 C 8432430000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
 Delivery times see page X.2

Overvoltage protection for energy distribution systems

Class II with varistors

Class II overvoltage arrester

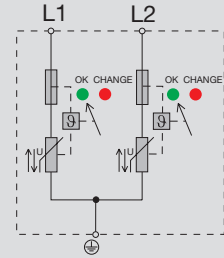
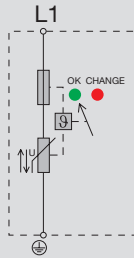
PU 1 C 115 V

PU 1 C



PU 2 C 115 V

PU 2 C



Technical data

Technical specification

Rated voltage U_n (AC)
 Operating voltage U_c (ac), max.
 Requirement class acc. to IEC 61643-1
 Rated leakage current (8/20 μ s)
 Limiting leakage current (8/20 μ s)
 Leakage current, max. (8/20 μ s)
 Response time
 Back-up fuse, max.
 Protection level U_p (typ.)
 Optical function indicator
 Monitoring contact
 Design
 Colour
 Oper. temp. min./Oper. temp. max.
 Stor. temp. min./Storage temp., max.
 Approvals

115V
 130V
 class II
 20 kA
 40kA
 40kA
 < 25 ns
 125 A gl
 800V
 green = OK; red = arrester faulty, replace

115V
 130V
 class II
 20 kA
 40kA
 75kA
 < 25 ns
 125 A gl
 800V
 green = OK; red = arrester faulty, replace

installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL

installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

Without monit. contact

10 / 6 / 50
 90 x 18.0 x 61

Without monit. contact

10 / 6 / 50
 90 x 36.0 x 61

Information

Ordering data

Version

Without monit. contact

| Type | Qty. | Order No. |
|----------------|------|------------|
| PU 1 C 130 VAC | 1 | 8215820000 |

| Type | Qty. | Order No. |
|----------------|------|------------|
| PU 2 C 130 VAC | 1 | 8291650000 |

Information

Accessories

Information

Pluggable spare arrester 130V PU 0 C 8432430000

Pluggable spare arrester 130V PU 0 C 8432430000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
 Delivery times see page X.2

Overvoltage protection for energy distribution systems

Class II with varistors

Class II overvoltage arrester

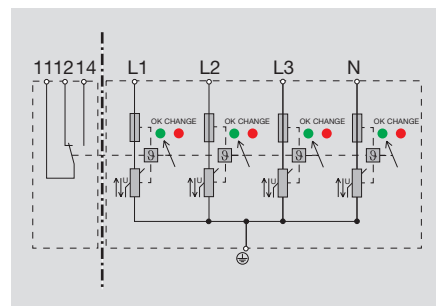
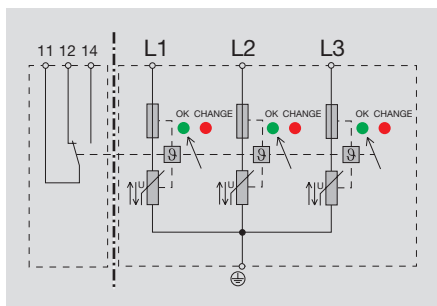
PU 3 C 470 V

PU 3 C / PU 3 CR 470/690Vac



PU 4 C+CR 470 V

PU 4 C / PU 4 CR 470/690Vac



Technical data

Technical specification

Rated voltage Un (AC)
 Operating voltage Uc (ac), max.
 Requirement class acc. to IEC 61643-1
 Rated leakage current (8/20µs)
 Limiting leakage current (8/20µs)
 Leakage current, max. (8/20 µs)
 Response time
 Back-up fuse, max.
 Protection level Up (typ.)
 Optical function indicator
 Monitoring contact
 Design
 Colour
 Oper. temp. min./Oper. temp. max.
 Stor. temp. min./Storage temp., max.
 Approvals

470V
 550V
 class II
 20 kA
 40kA
 100kA
 < 25 ns
 125 A gl
 2200V
 green = OK; red = arrester faulty, replace
 250V max1A 1CO
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL

470V
 550V
 class II
 20 kA
 40kA
 100kA
 < 25 ns
 125 A gl
 2200V
 green = OK; red = arrester faulty, replace
 250V max 1A 1CO
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

| Without monit. contact | Without monit. contact |
|------------------------|------------------------|
| 10 / 6 / 10 | 10 / 6 / 10 |
| 90 x 54.0 x 61 | 90 x 72.0 x 61 |

| Without monit. contact | Without monit. contact |
|------------------------|------------------------|
| 100 / 6 / 50 | 100 / 6 / 50 |
| 90 x 72.0 x 60 | 90 x 90.0 x 60 |

Information

Ordering data

Version

Without monit. contact
 Without monit. contact

| Type | Qty. | Order No. |
|-----------------|------|------------|
| PU 3 C 550 VAC | 1 | 8451050000 |
| PU 3 CR 550 VAC | 1 | 8451060000 |

| Type | Qty. | Order No. |
|-----------------|------|------------|
| PU 4 C 550 VAC | 1 | 8291720000 |
| PU 4 CR 550 VAC | 1 | 8451070000 |

Information

Accessories

Information

Pluggable spare arrester 550V PU 0 C 8451080000

Pluggable spare arrester 550V PU 0 C 8451080000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
 Delivery times see page X.2

Overvoltage protection for energy distribution systems

Class II with varistors

Class II overvoltage arrester

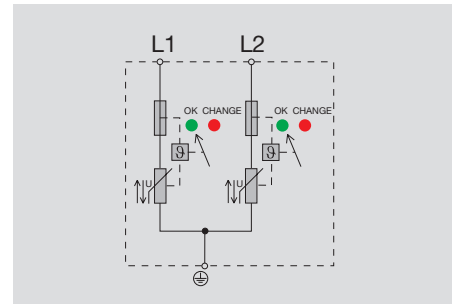
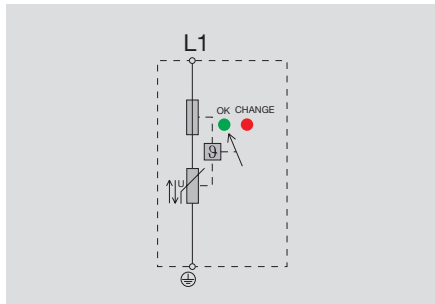
PU 1 C 470 V

PU 1 C



PU 2 C 470 V

PU 2 C



Technical data

Technical specification

Rated voltage U_n (AC)
 Operating voltage U_c (ac), max.
 Requirement class acc. to IEC 61643-1
 Rated leakage current (8/20 μ s)
 Limiting leakage current (8/20 μ s)
 Leakage current, max. (8/20 μ s)
 Response time
 Back-up fuse, max.
 Protection level U_p (typ.)
 Optical function indicator
 Monitoring contact
 Design
 Colour
 Oper. temp. min./Oper. temp. max.
 Stor. temp. min./Storage temp., max.
 Approvals

470V
 550V
 class II
 20 kA
 40kA
 40kA
 < 25 ns
 125 A gl
 2200V
 green = OK; red = arrester faulty, replace
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL

470V
 550V
 class II
 20 kA
 40kA
 75kA
 < 25 ns
 125 A gl
 2200V
 green = OK; red = arrester faulty, replace
 installation housing
 grey
 -40°C/60°C
 -40°C/80°C
 UL

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

Without monit. contact

10 / 6 / 50
 90 x 18.0 x 61

Without telecomm. contact

10 / 6 / 50
 90 x 36.0 x 61

Information

Ordering data

Version

Without monit. contact

| Type | Qty. | Order No. |
|----------------|------|------------|
| PU 1 C 550 VAC | 1 | 8291700000 |

| Type | Qty. | Order No. |
|----------------|------|------------|
| PU 2 C 550 VAC | 1 | 8291710000 |

Information

Accessories

Information

Pluggable spare arrester 550V PU 0 C 8451080000

Pluggable spare arrester 550V PU 0 C 8451080000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
 Delivery times see page X.2

Overvoltage protection for energy distribution systems

Class II with varistors

Class II overvoltage arrester

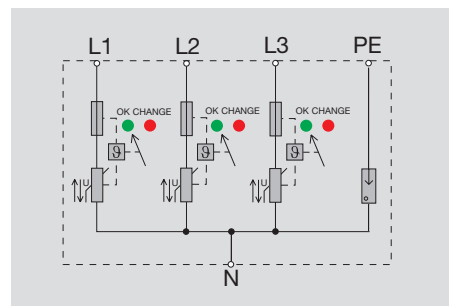
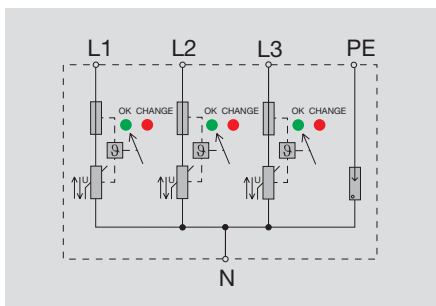
PU 3+1 C 230 V

PU 3+1 C/CR 230/400Vac



PU 3+1 C 385 V

PU 3+1 C 385Vac



Technical data

Technical specification

Rated voltage U_n (AC)
 Operating voltage U_c (ac), max.
 Requirement class acc. to IEC 61643-1
 Rated leakage current (8/20 μ s)
 Limiting leakage current (8/20 μ s)
 Leakage current, max. (8/20 μ s)
 Response time
 Back-up fuse, max.
 Protection level U_p (typ.)
 Optical function indicator
 Monitoring contact
 Design
 Colour
 Oper. temp. min./Oper. temp. max.
 Stor. temp. min./Storage temp., max.
 Approvals

| | |
|---|-------------------------------|
| Rated voltage U_n (AC) | 230V |
| Operating voltage U_c (ac), max. | 280V |
| Requirement class acc. to IEC 61643-1 | class II |
| Rated leakage current (8/20 μ s) | 20 kA |
| Limiting leakage current (8/20 μ s) | 40kA |
| Leakage current, max. (8/20 μ s) | 100kA |
| Response time | < 1 μ s |
| Back-up fuse, max. | 125 A gl |
| Protection level U_p (typ.) | 1900V |
| Optical function indicator | green=OK, red=faulty, replace |
| Monitoring contact | 250V max1A 1CO |
| Design | installation housing |
| Colour | grey/orange |
| Oper. temp. min./Oper. temp. max. | -40°C/60°C |
| Stor. temp. min./Storage temp., max. | -40°C/80°C |

| | |
|---|-------------------------------|
| Rated voltage U_n (AC) | 230V |
| Operating voltage U_c (ac), max. | 385V |
| Requirement class acc. to IEC 61643-1 | class II |
| Rated leakage current (8/20 μ s) | 20 kA |
| Limiting leakage current (8/20 μ s) | 40kA |
| Leakage current, max. (8/20 μ s) | 100kA |
| Response time | < 1 μ s |
| Back-up fuse, max. | 125 A gl |
| Protection level U_p (typ.) | 1900V |
| Optical function indicator | green=OK, red=faulty, replace |
| Monitoring contact | |
| Design | installation housing |
| Colour | grey/orange |
| Oper. temp. min./Oper. temp. max. | -40°C/60°C |
| Stor. temp. min./Storage temp., max. | -40°C/80°C |

Dimensions

Clamping range (rating- / min. / max.) mm²
 Length x width x height mm

| Without monit. contact | With monit. contact |
|------------------------|---------------------|
| 16 / 6 / 50 | 16 / 6 / 50 |
| 91 x 72.0 x 61 | 91 x 72.0 x 61 |

| Without monit. contact |
|------------------------|
| 10 / 6 / 50 |
| 91 x 72.0 x 61 |

Information

Ordering data

Version

Without monit. contact
 With monit. contact

| Type | Qty. | Order No. |
|----------------------|------|------------|
| PU 3+1 C 275 VAC | 1 | 8416370000 |
| PU 3+1C R 230/400VAC | 1 | 8576190000 |

| Type | Qty. | Order No. |
|------------------|------|------------|
| PU 3+1 C 385 VAC | 1 | 8616990000 |

Information

Accessories

Information

Pluggable spare arrester 280V PU 0 C 8339510000

Pluggable spare arrester 385V PU 0 C 8328670000

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany. Delivery times see page X.2