

Surge protection for low-voltage consumer installations and electronics

Surge protection of class II

The Weidmüller PU II series surge protection protects low-voltage consumer installations and electronic devices against voltage surges that arise through, for example, atmospheric discharge (lightning) or switching activities (transients).

The PU II series satisfies the requirements of class II to IEC 61643-1 (March 2005); type 2 to EN 61643-11 and class C to DIN VDE0675 pt 6 (Nov 1989) A1 (Feb 1996)/A2 (Oct 1996)

Electrical connection

F

Connect the PU II surge protection between the phase conductors (L1, L2, L3) or, as the case may be, the neutral conductor (N) and earth of the consumer installation. The connecting conductors should be kept as short as possible. Ensure that unprotected conductors (e.g. wires to the meter) are not run parallel to protected wires.

The universal "3+1" circuit for TN or TT systems is available from the Weidmüller product range.

The PU II surge protection device is available as a 2, 3 or 4-pole compact module, the PE connections of the discs being already internally connected to each other.

We can supply the following voltage rating versions:

U_N : 60 V AC = U_C : 75 V

U_N : 115/230 V AC = U_C : 130 V

U_N : 230/400 V AC = U_C : 280 V

U_N : 400/690 V AC = U_C : 385 V

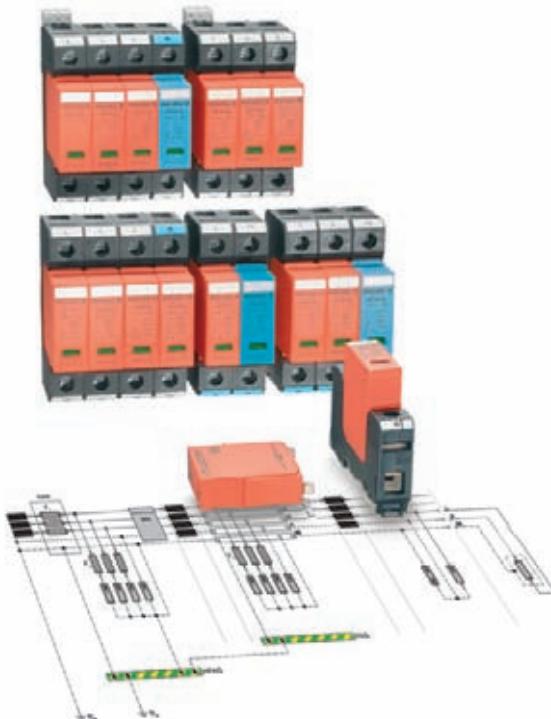
U_N : 470/600 V AC = U_C : 550 V

as well as for the 3+1 circuit and special types for IT networks.

The PU II series offers a choice of voltage ($U_N < U_C$) and number of arresters to satisfy the various power systems. The national regulations and safety information must be observed, see IEC60364-5-53 or DIN VDE 0100 pt 534.

Functional checks, maintenance and approvals

PU II surge modules can be checked visually by the user. The visual check is simple to perform because the arrester is provided with a thermal disconnector. If this has responded, i.e. is no longer providing protection, the flag in the status window changes from green to red.



A non-functioning arrester can be replaced by a qualified technician without having to disconnect any wiring. The plug-in top sections of varistors are coded according to voltage. This means it is not possible to plug in the wrong replacement varistor.

EWS system

The EWS system has a yellow indicator in the sight window in addition to the green and red indicators. This is a wear indicator that shows if the varistor has aged as a result of energy loads. This is also indicated via the optional telecommunication contact. Replacement of the plug-in arrester is recommended.

LCF function

The leakage current free protection circuit (LCF function) is achieved by connecting the varistor and sparkover gap in series. This protection circuit is needed in the case of an insulation monitoring device, for example.

Connection

The cross-section of the earthing conductor must be at least 10 mm² or half the cross-section of the phase conductors. The fuse for PU II modules is selected on the basis of conductor cross-section and type of routing. A maximum of 125 A gG/gL is permitted.

PU II series arresters from Weidmüller are suitable for the following cross-sections:

solid conductor: 4 ... 35 mm²

stranded conductor: 4... 25 mm²

flexible conductor: 4 ... 25 mm²

The operating temperature range is -40 °C ... +80 °C.

RCD

When installing the PU II series in the direction of power flow after a residual-current circuit-breaker (RCD), the surge current withstand strength must be taken into account. For measuring insulation in the installation, the plug-in insert must be removed and reinserted after measurement is completed.

V-form connection

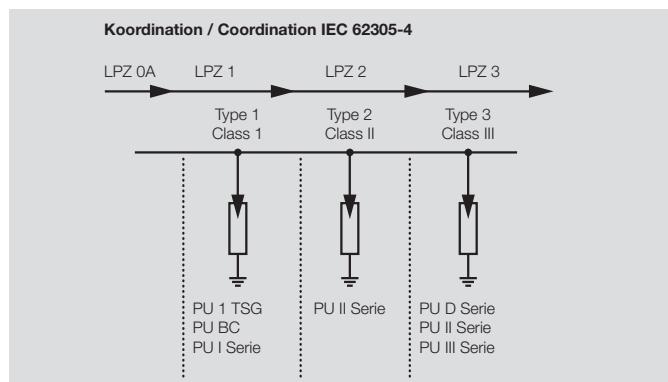
When using cross-connections from the RCD or fuses to the PU II, a V-form wiring arrangement can be used.

Telecommunication contact

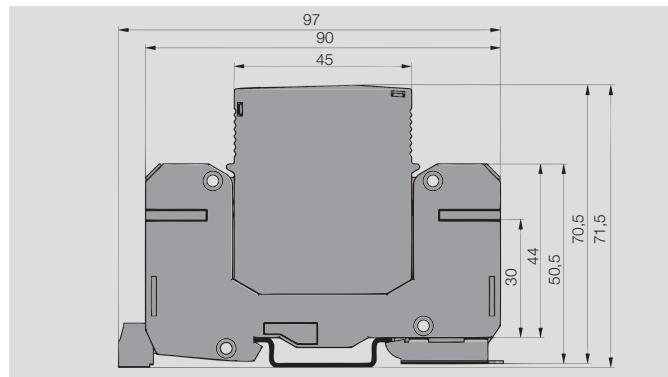
All modules of the PU II series are optionally available with telecommunication contact. This potential-free contact should be connected as a change-over contact via a screw / plug-in connection. The electrical data of the contact are: 250 V AC/1 A or 24 V DC/0.1 A.

Coordination with other arresters

The PU II series can be installed with the following Weidmüller surge protection devices without decoupling.



Dimensional drawing PU-II series



Overall width

PU II, single-pole 18 mm

PU II, two-pole 36 mm

PU II, three-pole 54 mm

PU II, four-pole 72 mm

Accessories

Type	grey	blue
QB 18-4 insulated	8877520000	8877510000
QB 18-3 insulated	8877500000	8877530000
QB 18-2 insulated	8877540000	8877550000

Surge protection for low-voltage supplies

Class II with varistors

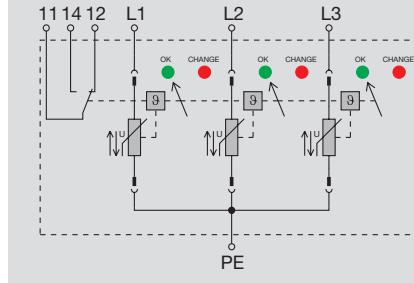
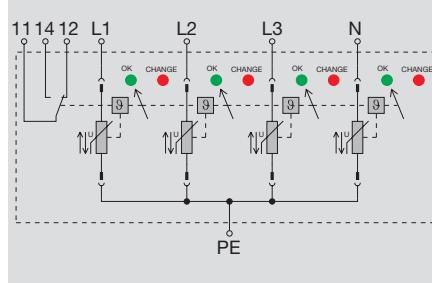
Surge protection of class II with Uc: 280 V

- plug-in varistor top section
- coded voltage level, var. voltgs.
- high energy absorption with short response time
- 180° rotatable insert
- no follow current
- installation in Insta distributor
- thermal safety function
- coordination between class I with Up: < 900 V

PU II 4/R 280 V / 40 kA



PU II 3/R 280 V / 40 kA



Technical data

Technical data

Nominal voltage	230 V / 400 V
max. continuous voltage, Uc (AC)	280 V
max. continuous voltage, Uc (DC)	350 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	40 kA
Discharge current, max. (8/20 µs)	150 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Protection level at In (Up)	< 1450 V
Protection level at 5 kA (Up)	< 850 V
Temporary surge - U _{TOV}	335 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 4 R
Design	4 unit widths; installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

230 V / 400 V	230 V / 400 V
280 V	280 V
350 V	350 V
Class II *	Class II *
20 kA	20 kA
40 kA	40 kA
150 kA	110 kA
≤ 25 ns	≤ 25 ns
125 A gL	125 A gL
< 1450 V	< 1450 V
< 850 V	< 850 V
335 V	335 V
green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 4 R	250 V 1A 1CO at PU II 3 R
4 unit widths; installation housing	3 unit widths; installation housing
-40 ... 80°C	-40 ... 80°C
-40 ... 85°C	-40 ... 85°C
CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 72 x 64	97 x 72 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 54 x 64	97 x 54 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version	Type	Qty.	Order No.
without telecomm. contact	PU II 4 280V/40kA	1	8859640000
with telecomm. contact	PU II 4 R 280V/40kA	1	8859660000

Type	Qty.	Order No.
PU II 3 280V/40kA	1	8859630000
PU II 3 R 280V/40kA	1	8859650000

Note

Plug-in spare arrester PU II 0 280V / 40kA - 8859750000

Plug-in spare arrester PU II 0 280V / 40kA - 8859750000

Accessories

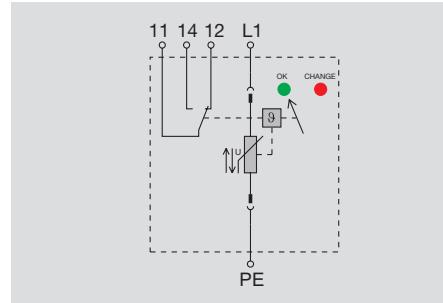
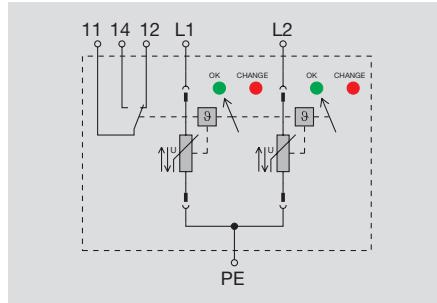
Note	Product
	Plug-in spare arrester PU II 0 280V / 40kA - 8859750000

Note	Product
	Plug-in spare arrester PU II 0 280V / 40kA - 8859750000

Class II with varistors

Surge protection of class II with Uc: 280 V

- plug-in varistor top section
- coded voltage level, var. voltgs.
- high energy absorption with short response time
- 180° rotatable insert
- no follow current
- installation in Insta distributor
- thermal safety function
- coordination between class I with Up: < 900 V

PU II 2/R 280 V / 40 kA**PU II 1/R 280 V / 40 kA****Technical data****Technical data**

Nominal voltage	230 V
max. continuous voltage, Uc (AC)	280 V
max. continuous voltage, Uc (DC)	350 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	40 kA
Discharge current, max. (8/20 µs)	75 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Protection level at In (Up)	< 1450 V
Protection level at 5 kA (Up)	< 850 V
Temporary surge - U _{TOV}	335 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 2 R
Design	2 unit widths; installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

230 V	230 V
280 V	280 V
350 V	350 V
Class II *	Class II *
20 kA	20 kA
40 kA	40 kA
75 kA	40 kA
≤ 25 ns	≤ 25 ns
125 A gL	125 A gL
< 1450 V	< 1450 V
< 850 V	< 850 V
335 V	335 V
green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 1 R	250 V 1A 1CO at PU II 1 R
1 unit width; installation housing	1 unit width; installation housing
-40 ... 80°C	-40 ... 80°C
-40 ... 85°C	-40 ... 85°C
CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 36 x 64	97 x 36 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 18 x 64	97 x 18 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data**Version**

without telecomm. contact
with telecomm. contact

Type

PU II 2 280V/40kA	1	8859680000
PU II 2 R 280V/40kA	1	8859670000

Type

PU II 1 280V/40kA	1	8859690000
PU II 1 R 280V/40kA	1	8859700000

Note

Plug-in spare arrester PU II 0 280V / 40kA - 8859750000

Plug-in spare arrester PU II 0 280V / 40kA - 8859750000

Accessories**Note**

Plug-in spare arrester PU II 0 280V / 40kA - 8859750000

Surge protection for low-voltage supplies

Class II with varistors

Surge protection of class II

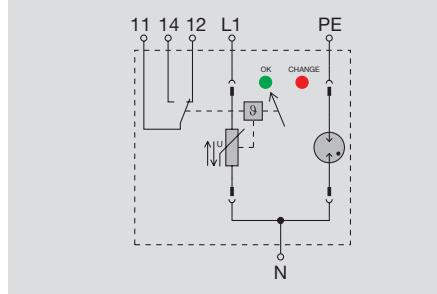
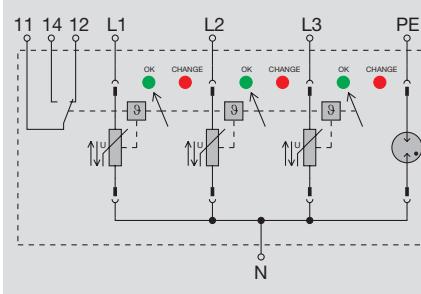
with Uc: 280 V

- 3+1 surge protection, suitable for TN and TT systems
- plug-in varistor top part
- coded voltage level
- high energy absorption with short response time
- 180° rotatable insert
- no follow current
- installation in Insta distributor
- thermal safety function
- coordination between class I with Up: < 900 V

PU II 3+1/R 280 V / 40 kA



PU II 1+1/R 280 V / 40 kA



Technical data

Technical data

Nominal voltage	230 V / 400 V
max. continuous voltage, Uc (AC)	280 V
max. continuous voltage, Uc (DC)	350 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	40 kA
Discharge current, max. (8/20 µs)	150 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Maximum continuous voltage, Uc (N-PE)	260 V
Limiting leakage current per path 8/20 µs (N-PE)	40 kA
Protection level for In (N-PE)	< 1350 V
Protection level at In (Up)	< 1450 V
Protection level at 5 kA (Up)	< 850 V
Temporary surge - U _{TOV}	335 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 3+1 R
Design	4 unit widths; Installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 72 x 64	97 x 72 x 64

Note

* This product also fulfills the requirements for Class III with Uoc: 6 kV

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 36 x 64	97 x 36 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version

without telecomm. contact
with telecomm. contact

Type

PU II 3+1 280V/40kA	1	8859710000
PU II 3+1R 280V/40kA	1	8859720000

Type

PU II 1+1 280V/40kA	1	8859730000
PU II 1+1R 280V/40kA	1	8859740000

Note

Accessories

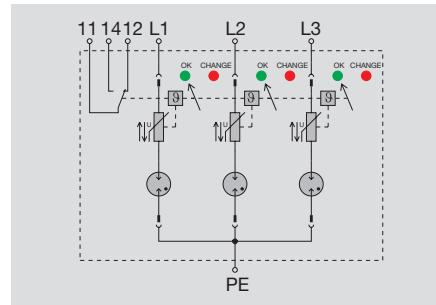
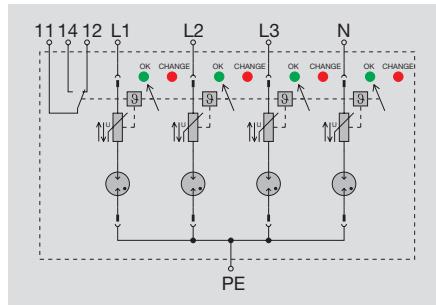
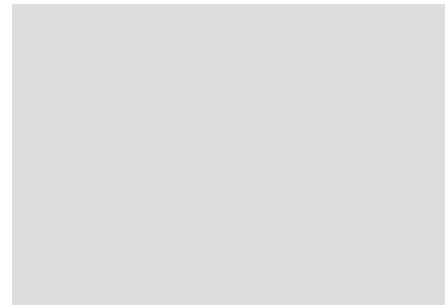
Note

Plug-in spare arrester PU II 0 280V / 40kA - 8859750000
Plug-in spare arrester PU II 0 N-PE 280V / 40kA - 8871940000

Plug-in spare arrester PU II 0 280V / 40kA - 8859750000
Plug-in spare arrester PU II 0 N-PE 280V / 40kA - 8871940000

Class II with varistors

- Surge protection of class II with Uc: 280 V
- plug-in varistor top section
 - coded voltage level, var. voltgs.
 - high energy absorption with short response time
 - 180° rotatable insert
 - no follow current
 - installation in Insta distributor
 - thermal safety function
 - coordination between class I with Up: < 900 V
 - leakage current free design for installation before meter

PU II 4 LCF/R LCF 280 V / 40 kA**PU II 3 LCF/R LCF 280 V / 40 kA****Technical data****Technical data**

Nominal voltage	230 V / 400 V
max. continuous voltage, Uc (AC)	280 V
max. continuous voltage, Uc (DC)	350 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	20 kA
Discharge current, max. (8/20 µs)	80 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Protection level at In (Up)	< 2500 V
Protection level at 5 kA (Up)	< 850 V
Temporary surge - U _{TOV}	335 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 4 R
Design	4 unit widths; Installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

280 V
350 V
Class II *
20 kA
20 kA
60 kA
≤ 25 ns
125 A gL
< 2500 V
< 850 V
335 V
green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 4 R
3 unit widths; Installation housing
-40 ... 80°C
-40 ... 85°C
CE, ÖVE, cURus in preparation

230 V / 400 V
280 V
350 V
Class II *
20 kA
20 kA
60 kA
≤ 25 ns
125 A gL
< 2500 V
< 850 V
335 V
green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 3 R
3 unit widths; Installation housing
-40 ... 80°C
-40 ... 85°C
CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 72 x 64	97 x 72 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 54 x 64	97 x 54 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version	without telecomm. contact	with telecomm. contact
	PU II 4 LCF 280V/20kA	1 8859770000
	PU II 4 R LCF 280V/20kA	1 8859790000

Type	Qty.	Order No.
PU II 4 LCF 280V/20kA	1	8859770000
PU II 4 R LCF 280V/20kA	1	8859790000

Type	Qty.	Order No.
PU II 3 LCF 280V/20kA	1	8859760000
PU II 3 R LCF 280V/20kA	1	8859780000

Note

Plug-in spare arrester PU II 0 LCF 280V/40kA - 888934000

Plug-in spare arrester PU II 0 LCF 280V/40kA - 888934000

Accessories

Note
Plug-in spare arrester PU II 0 LCF 280V/40kA - 888934000

Plug-in spare arrester PU II 0 LCF 280V/40kA - 888934000
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Surge protection for low-voltage supplies

Class II with varistors

- Surge protection of class II
with Uc: 280 V
- failure warning through yellow LED
 - plug-in varistor top section
 - coded voltage level
 - high energy absorption with short response time
 - 180° rotatable insert
 - no follow current
 - installation in Insta distributor
 - thermal safety function
 - coordination between class I with Up: < 900 V

PU II 4 EWS/R EWS 280 V / 40 kA



PU II 3 EWS/R EWS 280 V / 40 kA



F

Technical data

Technical data

Nominal voltage	230 V / 400 V	230 V / 400 V
max. continuous voltage, Uc (AC)	280 V	280 V
max. continuous voltage, Uc (DC)	350 V	350 V
Requirements class to IEC 61643-1	Class II *	Class II *
Rated discharge current (8/20 µs)	20 kA	20 kA
Limiting discharge current (8/20 µs)	40 kA	40 kA
Discharge current, max. (8/20 µs)	150 kA	110 kA
Response time	≤ 25 ns	≤ 25 ns
Fuse, max.	125 A gL	125 A gL
Protection level at In (Up)	< 1450 V	< 1450 V
Protection level at 5 kA (Up)	< 850 V	< 850 V
Temporary surge - U _{TOV}	335 V	335 V
Optical function indicator	green = ok, yellow = warning, red = arrester faulty, replace	green = ok, yellow = warning, red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 4 R	250 V 1A 1CO at PU II 3 R
Design	4 unit widths; installation housing	3 unit widths; installation housing
Ambient temperature (operational)	-40 ... 80°C	-40 ... 80°C
Storage temperature	-40 ... 85°C	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²	25 / 4 / 25	25 / 4 / 25
Length x width x height	mm	90 x 72 x 64	97 x 72 x 64

Note

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25	25 / 4 / 25
90 x 54 x 64	97 x 54 x 64	97 x 54 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 54 x 64	97 x 54 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version	Type	Qty.	Order No.
without telecomm. contact	PU II 4 EWS 280V/40kA	1	8859810000
with telecomm. contact	PU II 4 R EWS 280V/40kA	1	8859830000

Note

Type	Qty.	Order No.
PU II 3 EWS 280V/40kA	1	8859800000
PU II 3 R EWS 280V/40kA	1	8859820000

Note

Note

Accessories

Note	Plug-in spare arrester PU II 0 EWS 280V/40kA - 8889350000	Plug-in spare arrester PU II 0 EWS 280V/40kA - 8889350000

Surge protection for low-voltage supplies

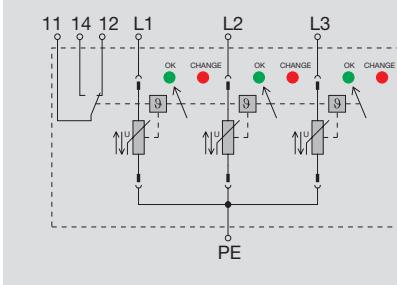
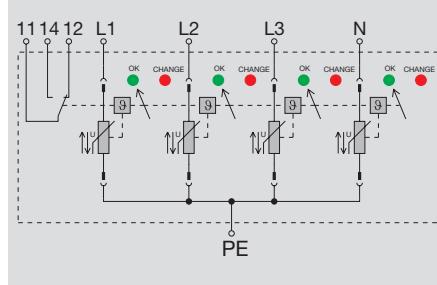
Class II with varistors

- Surge protection of class II with Uc: 385 V
- plug-in varistor top section
 - coded voltage level, var. voltgs.
 - high energy absorption with short response time
 - 180° rotatable insert
 - no follow current
 - installation in Insta distributor
 - thermal safety function

PU II 4/R 385 V / 40 kA



PU II 3/R 385 V / 40 kA



Technical data

Technical data

Nominal voltage	385 V / 660 V
max. continuous voltage, Uc (AC)	385 V
max. continuous voltage, Uc (DC)	500 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	40 kA
Discharge current, max. (8/20 µs)	150 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Protection level at In (Up)	< 1800 V
Protection level at 5 kA (Up)	< 1300 V
Temporary surge - U _{TOV}	400 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 4 R
Design	4 unit widths; Installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

385 V / 660 V
385 V
500 V
Class II *
20 kA
40 kA
110 kA
≤ 25 ns
125 A gL
< 1800 V
< 1300 V
400 V
green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 3 R
3 unit widths; Installation housing
-40 ... 80°C
-40 ... 85°C
CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 72 x 64	97 x 72 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 54 x 64	97 x 54 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version	without telecomm. contact	with telecomm. contact

Type	Qty.	Order No.
PU II 4 385V/40kA	1	8859860000
PU II 4 R 385V/40kA	1	8859870000

Type	Qty.	Order No.
PU II 3 385V/40kA	1	8859840000
PU II 3 R 385V/40kA	1	8859850000

Note

Plug-in spare arrester PU II 0 385V / 40kA - 8859940000

Plug-in spare arrester PU II 0 385V / 40kA - 8859940000

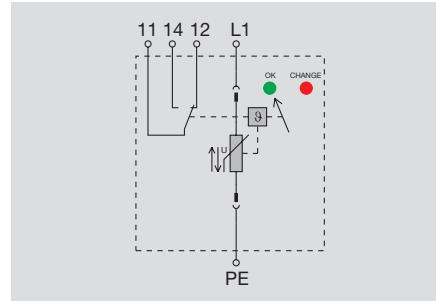
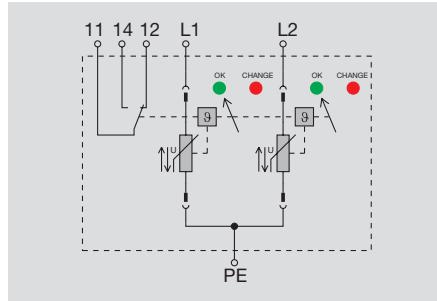
Accessories

Note
Plug-in spare arrester PU II 0 385V / 40kA - 8859940000

Plug-in spare arrester PU II 0 385V / 40kA - 8859940000

Class II with varistors

- Surge protection of class II with Uc: 385 V
- plug-in varistor top section
 - coded voltage level, var. voltgs.
 - high energy absorption with short response time
 - 180° rotatable insert
 - no follow current
 - installation in Insta distributor
 - thermal safety function

PU II 2/R 385 V / 40 kA**PU II 1/R 385 V / 40 kA****Technical data****Technical data**

Nominal voltage	385 V
max. continuous voltage, Uc (AC)	385 V
max. continuous voltage, Uc (DC)	500 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	40 kA
Discharge current, max. (8/20 µs)	75 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Protection level at In (Up)	< 1800 V
Protection level at 5 kA (Up)	< 1300 V
Temporary surge - U _{TOV}	400 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 2 R
Design	2 unit widths; installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

385 V	385 V
385 V	385 V
500 V	500 V
Class II *	Class II *
20 kA	20 kA
40 kA	40 kA
75 kA	40 kA
≤ 25 ns	≤ 25 ns
125 A gL	125 A gL
< 1800 V	< 1800 V
< 1300 V	< 1300 V
400 V	400 V
green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 2 R	250 V 1A 1CO at PU II 1 R
2 unit widths; installation housing	1 unit width; installation housing
-40 ... 80°C	-40 ... 80°C
-40 ... 85°C	-40 ... 85°C
CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

385 V	385 V
385 V	385 V
500 V	500 V
Class II *	Class II *
20 kA	20 kA
40 kA	40 kA
40 kA	40 kA
≤ 25 ns	≤ 25 ns
125 A gL	125 A gL
< 1800 V	< 1800 V
< 1300 V	< 1300 V
400 V	400 V
green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 1 R	250 V 1A 1CO at PU II 2 R
1 unit width; installation housing	2 unit widths; installation housing
-40 ... 80°C	-40 ... 80°C
-40 ... 85°C	-40 ... 85°C
CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 36 x 64	97 x 36 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 18 x 64	97 x 18 x 64

Note

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version	
	without telecomm. contact
	with telecomm. contact

Type	Qty.	Order No.
PU II 2 385V/40kA	1	8859900000
PU II 2R 385V/40kA	1	8859910000

Type	Qty.	Order No.
PU II 1 385V/40kA	1	8859920000
PU II 1 R 385V/40kA	1	8859930000

Note

Plug-in spare arrester PU II 0 385V / 40kA - 8859940000

Plug-in spare arrester PU II 0 385V / 40kA - 8859940000

Accessories

Note	
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Plug-in spare arrester PU II 0 385V / 40kA - 8859940000

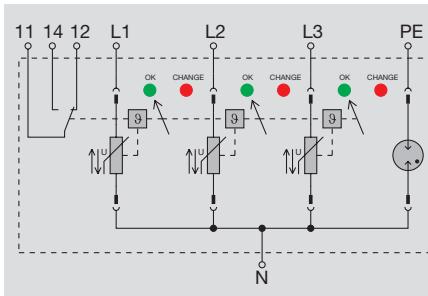
Plug-in spare arrester PU II 0 385V / 40kA - 8859940000

Surge protection for low-voltage supplies

Class II with varistors

- Surge protection of class II
with Uc: 385 V
- plug-in varistor top section
 - coded voltage level, var. voltgs.
 - high energy absorption with short response time
 - 180° rotatable insert
 - no follow current
 - installation in Insta distributor
 - thermal safety function

PU II 3+1/R 385 V / 40 kA



Technical data

Technical data

Nominal voltage	385 V / 660 V
max. continuous voltage, Uc (AC)	385 V
max. continuous voltage, Uc (DC)	500 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	40 kA
Discharge current, max. (8/20 µs)	110 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Protection level for In (N-PE)	< 1350 V
Protection level at In (Up)	< 1800 V
Protection level at 5 kA (Up)	< 1300 V
Temporary surge - U _{TOV}	400 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 3+1 R
Design	4 unit widths; Installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²	without telecomm. contact with telecomm. contact	25 / 4 / 25	25 / 4 / 25
Length x width x height	mm		90 x 72 x 64	97 x 72 x 64

Note

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version

without telecomm. contact
with telecomm. contact

Type	Qty.	Order No.
PU II 3+1 385V/40kA	1	8859880000
PU II 3+1R 385V/40kA	1	8859890000

Note

Plug-in spare arrester PU II 0 385V / 40kA - 8859940000
Plug-in spare arrester PU II 0 N-PE 280V / 40kA - 8871940000

Accessories

Note

Surge protection for low-voltage supplies

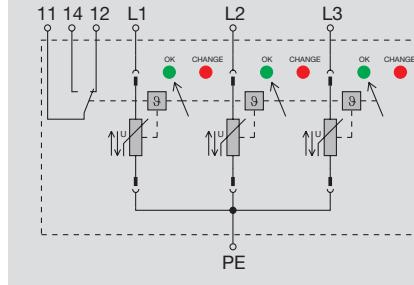
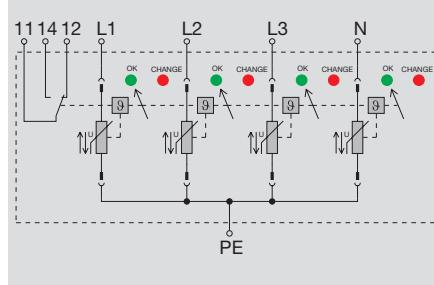
Class II with varistors

- Surge protection of class II
with Uc: 130 V
- plug-in varistor top section
 - coded voltage level, var. voltgs.
 - high energy absorption with short response time
 - 180° rotatable insert
 - no follow current
 - installation in Insta distributor
 - thermal safety function

PU II 4/R 130 V / 40 kA



PU II 3/R 130 V / 40 kA



Technical data

Technical data

Nominal voltage	120 V / 230 V
max. continuous voltage, Uc (AC)	130 V
max. continuous voltage, Uc (DC)	170 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	40 kA
Discharge current, max. (8/20 µs)	150 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Protection level at In (Up)	< 850 V
Protection level at 5 kA (Up)	< 500 V
Temporary surge - U _{TOV}	150 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 4 R
Design	4 unit widths; installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

120 V / 230 V
130 V
170 V
Class II *
20 kA
40 kA
150 kA
≤ 25 ns
125 A gL
< 850 V
< 500 V
150 V
green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 3 R
3 unit widths; installation housing
-40 ... 80°C
-40 ... 85°C
CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

Note

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 72 x 64	97 x 72 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 54 x 64	97 x 54 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version

without telecomm. contact
with telecomm. contact

Type

PU II 4 130V/40kA	1	8860010000
PU II 4 R 130V/40kA	1	8860020000

Type

PU II 3 130V/40kA	1	8859990000
PU II 3 R 130V/40kA	1	8860000000

Note

Plug-in spare arrester PU II 0 130V / 40kA - 8860030000

Plug-in spare arrester PU II 0 130V / 40kA - 8860030000

Accessories

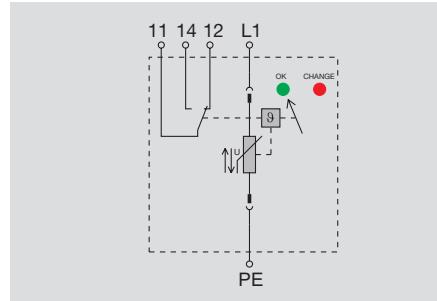
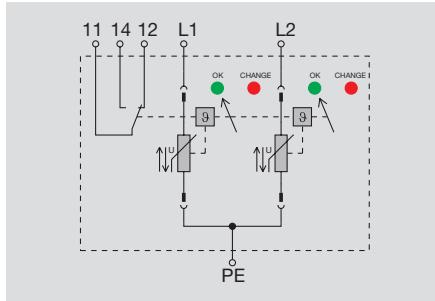
Note

Plug-in spare arrester PU II 0 130V / 40kA - 8860030000

Plug-in spare arrester PU II 0 130V / 40kA - 8860030000

Class II with varistors

- Surge protection of class II with Uc: 130 V
- plug-in varistor top section
 - coded voltage level, var. voltgs.
 - high energy absorption with short response time
 - 180° rotatable insert
 - no follow current
 - installation in Insta distributor
 - thermal safety function

PU II 2/R 130 V / 40 kA**PU II 1/R 130 V / 40 kA****Technical data****Technical data**

Nominal voltage	120 V
max. continuous voltage, Uc (AC)	130 V
max. continuous voltage, Uc (DC)	170 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	40 kA
Discharge current, max. (8/20 µs)	75 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Protection level at In (Up)	< 850 V
Protection level at 5 kA (Up)	< 500 V
Temporary surge - U _{TOV}	150 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 2 R
Design	2 unit widths; installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

130 V	120 V
170 V	130 V
Class II *	170 V
20 kA	Class II *
40 kA	20 kA
75 kA	40 kA
≤ 25 ns	≤ 25 ns
125 A gL	125 A gL
< 850 V	< 850 V
< 500 V	< 500 V
150 V	150 V
green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 2 R	250 V 1A 1CO at PU II 1 R
2 unit widths; installation housing	1 unit width; installation housing
-40 ... 80°C	-40 ... 80°C
-40 ... 85°C	-40 ... 85°C
CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

170 V	120 V
Class II *	130 V
20 kA	170 V
40 kA	Class II *
40 kA	20 kA
≤ 25 ns	≤ 25 ns
125 A gL	125 A gL
< 850 V	< 850 V
< 500 V	< 500 V
150 V	150 V
green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 1 R	250 V 1A 1CO at PU II 2 R
1 unit width; installation housing	2 unit widths; installation housing
-40 ... 80°C	-40 ... 80°C
-40 ... 85°C	-40 ... 85°C
CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 36 x 64	97 x 36 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 18 x 64	97 x 18 x 64

Note

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version	without telecomm. contact	with telecomm. contact

Type	Qty.	Order No.
PU II 2 130V/40kA	1	8859970000
PU II 2 R 130V/40kA	1	8859980000

Type	Qty.	Order No.
PU II 1 130V/40kA	1	8859950000
PU II 1 R 130V/40kA	1	8859960000

Note

Plug-in spare arrester PU II 0 130V / 40kA - 8860030000

Plug-in spare arrester PU II 0 130V / 40kA - 8860030000

Accessories

Note

Plug-in spare arrester PU II 0 130V / 40kA - 8860030000

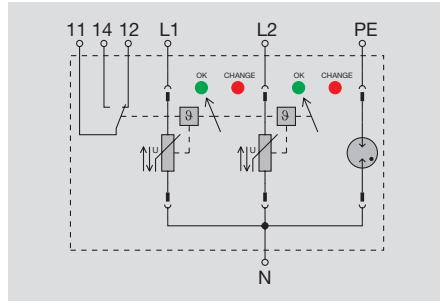
Plug-in spare arrester PU II 0 130V / 40kA - 8860030000

Surge protection for low-voltage supplies

Class II with varistors

- Surge protection of class II
with Uc: 550 V
for photovoltaic applications
- plug-in varistor top section
 - Coded voltage levels, diverse voltage
 - high energy absorption with short time to sparkover
 - insert can be rotated through 180°
 - no follow current
 - installed in Insta distributor
 - thermal protection
 - coordination between class I with Up: <1.5 kV

PU II 2+1/R 550 V / 40 kA



Technical data

Technical data

PV voltage to IEC 60364-7-712
max. continuous voltage, DC [(L+/L-) ->PE]
Nominal voltage
max. continuous voltage, Uc (AC)
max. continuous voltage, Uc (DC)
Requirements class to IEC 61643-1
Rated discharge current (8/20 µs)
Limiting discharge current (8/20 µs)
Discharge current, max. (8/20 µs)
Response time
Fuse, max.
Protection level at In (Up)
Protection level at 5 kA (Up)
Temporary surge - U_{TOV}
Optical function indicator
Signalling contact
Design
Ambient temperature (operational)
Storage temperature
Approvals

≤ 1000 V
900 V AC / 1200 V DC
550 V
550 V
745 V
Class II *
20 kA
40 kA
40 kA
≤ 25 ns
125 A gL
< 2650 V
< 1700 V
550 V
green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 2+1 R
3 unit widths; installation housing
-40 ... 80°C
-40 ... 85°C
CE, ÖVE, cURus in preparation

Dimensions

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

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 54 x 58	99 x 54 x 58

Note

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version

without telecomm. contact
with telecomm. contact

Type

PU II 2+1 550V/40kA	1	8882340000
PU II 2+1R 550V/40kA	1	8882350000

Note

Accessories

Note

Plug-in spare arrester PU II 0 550V / 40kA - 8860120000
Plug-in spare arrester PU II 0 N-PE 280V / 40kA - 8871940000

Surge protection for low-voltage supplies

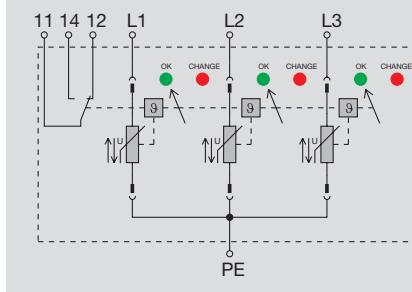
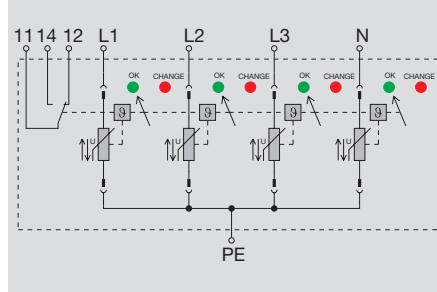
Class II with varistors

- Surge protection of class II
with Uc: 550 V
- plug-in varistor top section
 - coded voltage level, var. voltgs.
 - high energy absorption with short response time
 - 180° rotatable insert
 - no follow current
 - installation in Insta distributor
 - thermal safety function
 - coordination between class I with Up: <1.5 kV

PU II 4/R 550 V / 40 kA



PU II 3/R 550 V / 40 kA



Technical data

Technical data

Nominal voltage
max. continuous voltage, Uc (AC)
max. continuous voltage, Uc (DC)
Requirements class to IEC 61643-1
Rated discharge current (8/20 µs)
Limiting discharge current (8/20 µs)
Discharge current, max. (8/20 µs)
Response time
Fuse, max.
Protection level at In (Up)
Protection level at 5 kA (Up)
Temporary surge - U_{TOV}
Optical function indicator
Signalling contact
Design
Ambient temperature (operational)
Storage temperature
Approvals

470 V / 690 V

550 V

745 V

Class II *

20 kA

40 kA

150 kA

≤ 25 ns

125 A gL

< 2650 V

< 1700 V

550 V

green = OK; red = arrester faulty, replace

250 V 1A 1CO at PU II 4 R

4 unit widths; Installation housing

-40 ... 80°C

-40 ... 85°C

CE, ÖVE, cURus in preparation

470 V / 690 V

550 V

745 V

Class II *

20 kA

40 kA

110 kA

≤ 25 ns

125 A gL

< 2650 V

< 1700 V

550 V

green = OK; red = arrester faulty, replace

250 V 1A 1CO at PU II 3 R

3 unit widths; Installation housing

-40 ... 80°C

-40 ... 85°C

CE, ÖVE, cURus in preparation

Dimensions

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

mm²
mm

Note

without telecomm. contact with telecomm. contact

25 / 4 / 25 25 / 4 / 25
90 x 72 x 64 97 x 72 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25 25 / 4 / 25
90 x 54 x 64 97 x 54 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data

Version

without telecomm. contact
with telecomm. contact

Type

PU II 4 550V/40kA 1 8860060000
PU II 4 R 550V/40kA 1 8860070000

Type

PU II 3 550V/40kA 1 8860080000
PU II 3 R 550V/40kA 1 8860090000

Note

Plug-in spare arrester PU II 0 550V / 40kA - 8860120000

Plug-in spare arrester PU II 0 550V / 40kA - 8860120000

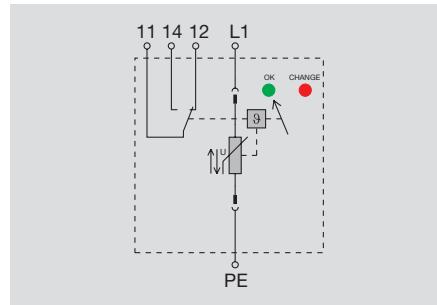
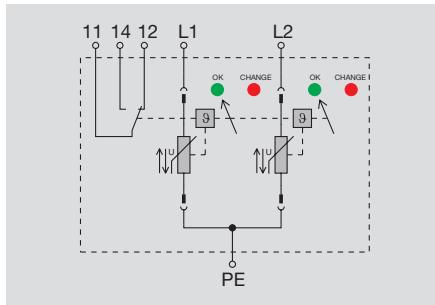
Accessories

Note

Class II with varistors

Surge protection of class II with Uc: 550 V

- plug-in varistor top section
- coded voltage level, var. voltgs.
- high energy absorption with short response time
- 180° rotatable insert
- no follow current
- installation in Insta distributor
- thermal safety function
- coordination between class I with Up: <1.5 kV

PU II 2/R 550 V / 40 kA**PU II 1/R 550 V / 40 kA****Technical data****Technical data**

Nominal voltage
max. continuous voltage, Uc (AC)
max. continuous voltage, Uc (DC)
Requirements class to IEC 61643-1
Rated discharge current (8/20 µs)
Limiting discharge current (8/20 µs)
Discharge current, max. (8/20 µs)
Response time
Fuse, max.
Protection level at In (Up)
Protection level at 5 kA (Up)
Temporary surge - U_{TOV}
Optical function indicator
Signalling contact
Design
Ambient temperature (operational)
Storage temperature
Approvals

470 V	470 V
550 V	550 V
745 V	745 V
Class II *	Class II *
20 kA	20 kA
40 kA	40 kA
75 kA	40 kA
≤ 25 ns	≤ 25 ns
125 A gL	125 A gL
< 2650 V	< 2650 V
< 1700 V	< 1700 V
550 V	550 V
green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 2 R	250 V 1A 1CO at PU II 1 R
2 unit widths; installation housing	1 unit width; installation housing
-40 ... 80°C	-40 ... 80°C
-40 ... 85°C	-40 ... 85°C
CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

Dimensions

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

without telecomm. contact with telecomm. contact

25 / 4 / 25 25 / 4 / 25
90 x 36 x 64 97 x 36 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25 25 / 4 / 25
90 x 18 x 64 97 x 18 x 64

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Ordering data**Version**

without telecomm. contact
with telecomm. contact

Type	Qty.	Order No.
PU II 2 550V/40kA	1	8860100000
PU II 2 R 550V/40kA	1	8860110000

Type	Qty.	Order No.
PU II 1 550V/40kA	1	8860040000
PU II 1 R 550V/40kA	1	8860050000

Note

Plug-in spare arrester PU II 0 550V / 40kA - 8860120000

Plug-in spare arrester PU II 0 550V / 40kA - 8860120000

Accessories**Note**

Plug-in spare arrester PU II 0 550V / 40kA - 8860120000

Surge protection for low-voltage supplies

Class II with varistors

- Surge protection of class II
with Uc: 75 V
- plug-in varistor top section
 - coded voltage level, var. voltgs.
 - high energy absorption with short response time
 - 180° rotatable insert
 - no follow current
 - installation in Insta distributor
 - thermal safety function

PU II 2/R 75 V / 40 kA



PU II 1/R 75 V / 40 kA



F

Technical data

Technical data

Nominal voltage	60 V
max. continuous voltage, Uc (AC)	75 V
max. continuous voltage, Uc (DC)	100 V
Requirements class to IEC 61643-1	Class II *
Rated discharge current (8/20 µs)	20 kA
Limiting discharge current (8/20 µs)	40 kA
Discharge current, max. (8/20 µs)	75 kA
Response time	≤ 25 ns
Fuse, max.	125 A gL
Protection level at In (Up)	< 700 V
Protection level at 5 kA (Up)	< 300 V
Temporary surge - U _{TOV}	75 V
Optical function indicator	green = OK; red = arrester faulty, replace
Signalling contact	250 V 1A 1CO at PU II 2 R
Design	2 unit widths; installation housing
Ambient temperature (operational)	-40 ... 80°C
Storage temperature	-40 ... 85°C
Approvals	CE, ÖVE, cURus in preparation

60 V	60 V
75 V	75 V
100 V	100 V
Class II *	Class II *
20 kA	20 kA
40 kA	40 kA
75 kA	40 kA
≤ 25 ns	≤ 25 ns
125 A gL	125 A gL
< 700 V	< 700 V
< 300 V	< 300 V
75 V	75 V
green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 2 R	250 V 1A 1CO at PU II 1 R
2 unit widths; installation housing	1 unit width; installation housing
-40 ... 80°C	-40 ... 80°C
-40 ... 85°C	-40 ... 85°C
CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

60 V	60 V
75 V	75 V
100 V	100 V
Class II *	Class II *
20 kA	20 kA
40 kA	40 kA
40 kA	40 kA
≤ 25 ns	≤ 25 ns
125 A gL	125 A gL
< 700 V	< 700 V
< 300 V	< 300 V
75 V	75 V
green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
250 V 1A 1CO at PU II 1 R	250 V 1A 1CO at PU II 2 R
1 unit width; installation housing	2 unit widths; installation housing
-40 ... 80°C	-40 ... 80°C
-40 ... 85°C	-40 ... 85°C
CE, ÖVE, cURus in preparation	CE, ÖVE, cURus in preparation

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 36 x 64	97 x 36 x 64

without telecomm. contact with telecomm. contact

25 / 4 / 25	25 / 4 / 25
90 x 18 x 64	97 x 18 x 64

Ordering data

Version	Type	Qty.	Order No.
without telecomm. contact	PU II 2 75V/40kA	1	8860130000
with telecomm. contact	PU II 2 R 75V/40kA	1	8860140000

Type	Qty.	Order No.
PU II 2 75V/40kA	1	8860130000
PU II 2 R 75V/40kA	1	8860140000

Type	Qty.	Order No.
PU II 1 75V/40kA	1	8860150000
PU II 1 R 75V/40kA	1	8860160000

Note

* This product also fulfills the requirements for Class III with Uoc: 6 kV

* This product also fulfills the requirements for Class III with Uoc: 6 kV

Accessories

Note	Plug-in spare arrester PU II 0 75V / 40kA - 8879950000
	Plug-in spare arrester PU II 0 75V / 40kA - 8879950000

Plug-in spare arrester PU II 0 75V / 40kA - 8879950000	Plug-in spare arrester PU II 0 75V / 40kA - 8879950000