

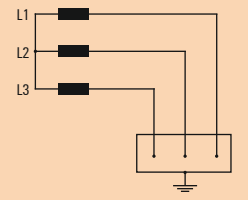
Grid system 230/400 V

Type I

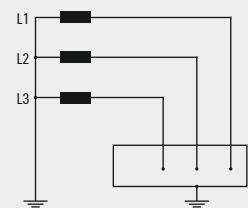
Type II

Type III

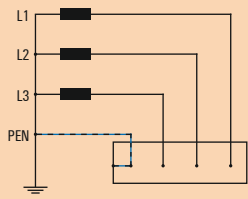
IT-grid



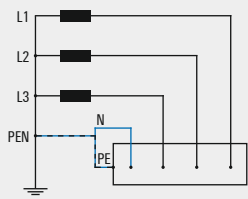
TT-grid



TN-C-grid



TN-(C)-S-grid



Without remote contact With remote contact

Without remote contact With remote contact

Without remote contact With remote contact

VPU AC I 3 440/25 LCF
2619160000

VPU AC I 3 480/10
2591530000

VPU AC I 3 R 440/25 LCF
2619170000

VPU AC I 3 R 480/10
2591540000



VPU AC II 3 480/50
2591250000

VPU AC II 3 R 480/50
2591260000



VPU AC II+III 2 440/20 S
2908440000

- can also be used as type II -

VPU AC II+III 2 R 440/20 S
2908450000



VPU AC II+III 3 440/20 S
2908460000

- can also be used as type II -

VPU AC II+III 3 R 440/20 S
2908470000



VPU AC I 3+1 275/25 LCF S 2PE
2726760000

VPU AC I 3+1 300/12.5 LH
2983580000

VPU AC I 3+1 R 275/25 LCF S 2PE
2726770000

VPU AC I 3+1 R 300/12.5 LH
2983590000



VPU AC II 3+1 300/50
2591080000

VPU AC II F 3+1 300/40
2827630000

- with integrated fuse -

VPU AC II 3+1 R 300/50
2591090000

VPU AC II F 3+1 R 300/40
2807440000



VPU AC II+III 1+1 275/20 S
2907930000

- can also be used as type II -

VPU AC II+III 1+1 R 275/20 S
2907940000



VPU AC II+III 3+1 275/20 S
2907950000

- can also be used as type II -

VPU AC II+III 3+1 R 275/20 S
2907970000



VPU AC I 3 275/25 LCF S
2726740000

VPU AC I 3 300/12.5 LH
2983570000

VPU AC I 3 R 275/25 LCF S
2726750000

VPU AC I 3 R 300/12.5 LH
2983560000



VPU AC II 3 300/50
2591160000

VPU AC II F 3 300/40
2827600000

- with integrated fuse -

VPU AC II 3 R 300/50
2591170000

VPU AC II F 3 R 300/40
2807410000



VPU AC II+III 2 275/20 S
2907830000

- can also be used as type II -

VPU AC II+III 2 R 275/20 S
2907840000



VPU AC II+III 3 275/20 S
2907870000

- can also be used as type II -

VPU AC II+III 3 R 275/20 S
2907880000



VPU III R 230V/6KV AC
1351650000



VPU AC I 3+1 275/25 LCF S 2PE
2726760000

VPU AC I 3+1 300/12.5 LH
2983580000

VPU AC I 3+1 R 275/25 LCF S 2PE
2726770000

VPU AC I 3+1 R 300/12.5 LH
2983590000



VPU AC II 3+1 300/50
2591080000

VPU AC II F 3+1 300/40
2827630000

- with integrated fuse -

VPU AC II 3+1 R 300/50
2591090000

VPU AC II F 3+1 R 300/40
2807440000



VPU AC II+III 1+1 275/20 S
2907930000

- can also be used as type II -

VPU AC II+III 1+1 R 275/20 S
2907940000



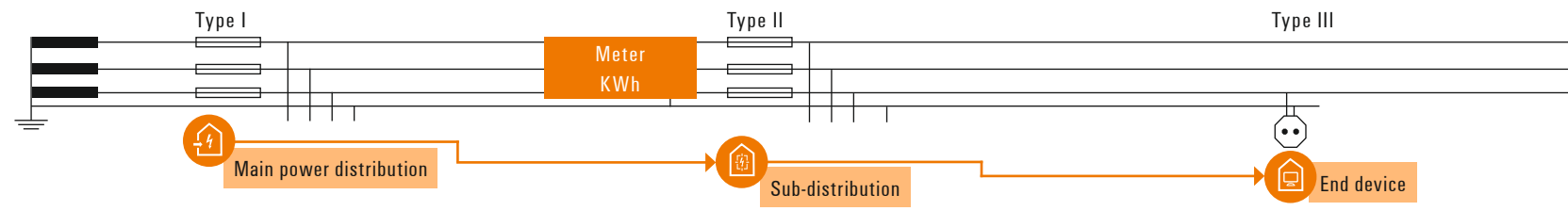
VPU AC II+III 3+1 275/20 S
2907950000

- can also be used as type II -

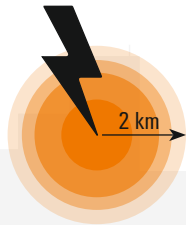
VPU AC II+III 3+1 R 275/20 S
2907970000



VPU III R 230V/6KV AC
1351650000

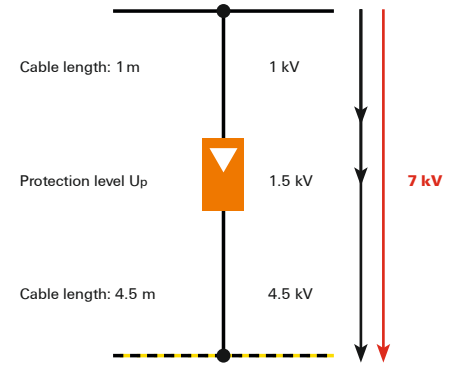


Installation information and technical basics



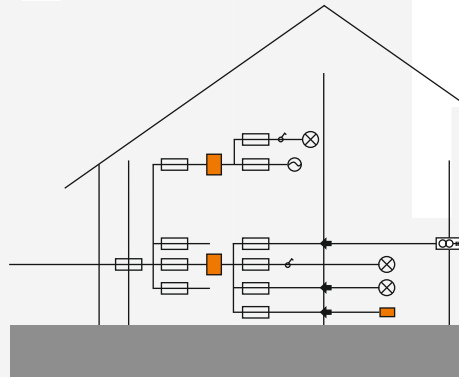
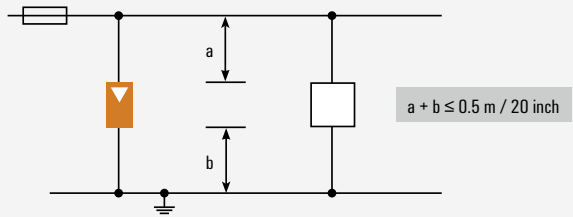
The direct lightning strike has a range of up to 2 km.

Voltage drop on the cable
 Long cables reduce the effectiveness of an SPD.
 Inductivity: 1 m cable will cause 1 kV.



Specifications for the installation location
 The standard requires a maximum cable length of the connecting lines of an SPD of ≤ 0.5 m.

Single branch wiring b must be as short as possible



Zonebased surge protection concept

	400 V	230/400 V	230 V	230 V
	6,000 V	4,000 V	2,500 V	1,500 V
Distribution	Main power distribution	Sub-distribution	Electrical machine	End device
SPD Type	Type I	Type II	Type II	Type III
Surge voltage category	IV	III	II	I

Type	Connection lines between SPD and outer conductors	Connection lines between SPD and main earth bar or protective conductor (PE or PEN)
Type I	6 mm ²	16 mm ²
Type II	2.5 mm ²	6 mm ²

Cross sections of the cables

Specifications for the protected area
 The protective area of an SPD is 10 m.
 If this is exceeded, another SPD is required.

