

# Where will the VPU Series be installed in your power network?

## An overview of the most common network configurations

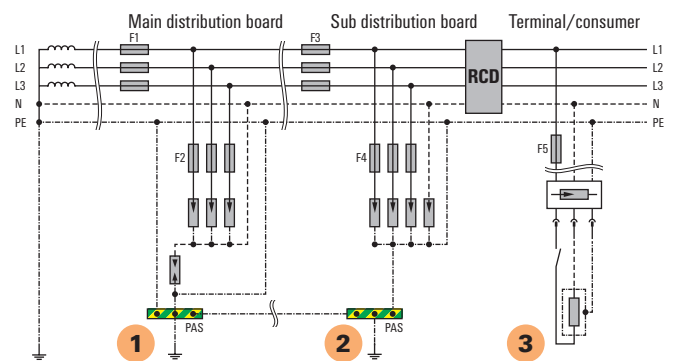
Network configurations are individually defined by energy supply companies (ESCs). This means that the network configuration for the building in question will have to be individually determined or requested for each country, region and application and the lightning and surge protection designed after that. The most common network configuration is the TN-S network.



### TN-S systems

Neutral conductor and protective earth conductor are separated throughout the network.

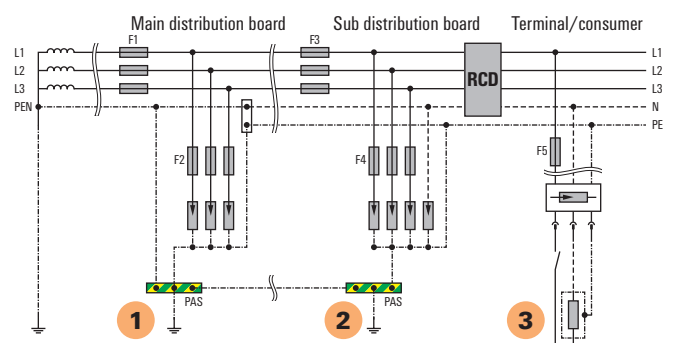
Position	LPL	Type	Order No.
1	I/II	VPU I 3+1 LCF 280 V/25 kA	1351780000
	III/IV	VPU I 3+1 LCF 280 V/12,5 kA	1352020000
2		VPU II 3+1 280 V/40 kA	1352650000
		VPU II 4 280/40 kA	1352680000
3		VPU III R 230 V/6 KV AC/DC	1351650000



### TN-C-S-System ("modern earthing")

Neutral conductor, PEN conductor and equipotential bonding system are connected once at the main distribution board or after the incoming supply to the building. Therefore, a TN-C system becomes a TN-S system (TN-C-S system) from this point onwards.

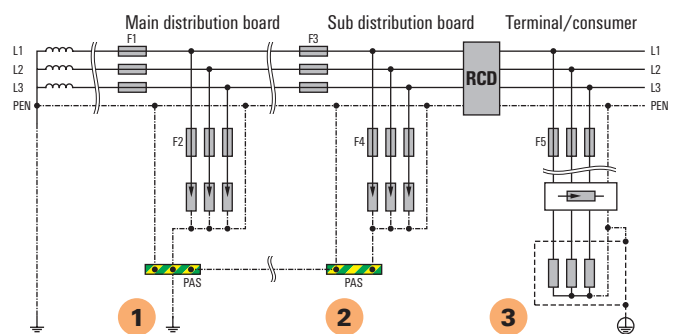
Position	LPL	Type	Order No.
1	I/II	VPU I 3 LCF 280 V/25 kA	1351690000
	III/IV	VPU I 3 LCF 280V/12,5 kA	1352090000
2		VPU II 3+1 280 V/40 kA	1352650000
		VPU II 4 280/40 kA	1352680000
3		VPU III R 230 V/6 KV AC/DC	1351650000



## TN-C-System ("classic earthing")

Neutral conductor and protective earth conductor functions are combined throughout the network in a single conductor, the PEN conductor (4-conductor-system).

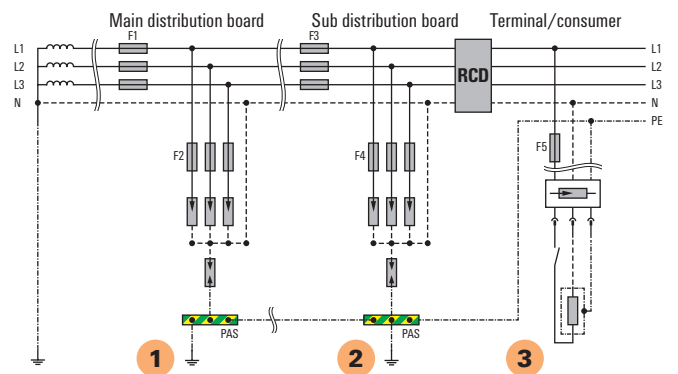
Position	LPL	Type	Order No.
1	I/II	VPU I 3 LCF 280 V/25 kA	1351690000
	III/IV	VPU I 3 280 V/12,5 kA	1352200000
2		VPU II 3 280 V/40 kA	1352700000
3		VPU III R 230 V/6 KV AC/DC	1351650000



## TT systems

One point is earthed directly (operational earth). The exposed conductive parts of the electrical installation are connected to earth lines separate from the operational earth.

Position	LPL	Type	Order No.
1	I/II	VPU I 3+1 LCF 280 V/25 kA	1351780000
	III/IV	VPU I 3+1 LCF 280 V/12,5 kA	1352020000
2		VPU II 3+1 280 V/40 kA	1352650000
3		VPU III R 230 V/6 KV AC/DC	1351650000



## IT systems

There is no direct connection between active conductors and earthed parts. The exposed conductive parts of the electrical installation are earthed.

Position	LPL	Type	Order No.
1	I/II	VPU I 3+1 LCF 280 V/25 kA	1351780000
	III/IV	VPU I 3+1 LCF 280 V/12,5 kA	1352020000
2		VPU II 3+1 280 V/40 kA	1352650000
3		VPU III R 230 V/6 KV AC/DC	1351650000

