

Selection guide for lightning and surge protection in industrial buildings

Main distribution

With ext. lightning protection SPD type 1+2

≤315 A*

≥400 A

TN-S/TT systems		TN-C systems	
L1 L2 L3 N PE 5-conductor system	FLT-SEC-P-T1-3S-350/25-FM Order No. 2905421	L1 L2 L3 PEN 4-conductor system	FLT-SEC-P-T1-3C-350/25-FM Order No. 2905419
 		 	
TN-S/TT systems		TN-C systems	
L1 L2 L3 N PE 5-conductor system	3 x FLT-SEC-H-T1-1C-264/25-FM Order No. 2801615 1 x FLT-SEC-P-T1-N/PE-350/100-FM Order No. 2905472 1 x FLT-SEC-H MPB-3+1 Order No. 2910501	L1 L2 L3 PEN 4-conductor system	FLT-SEC-H-T1-3C-264/25-FM Order No. 2905871
		 	
 A 3+1 circuit can be set up using a wiring bridge and the corresponding N-PE spark gap.			

No ext. lightning protection SPD type 2

≤315 A*

>315 A

TN-S/TT systems		TN-C systems	
L1 L2 L3 N PE 5-conductor system	VAL-SEC-T2-3S-350/40-FM Order No. 2909635	L1 L2 L3 PEN 4-conductor system	VAL-SEC-T2-3C-350-FM ORDER NO. 2905339
		 	
TN-S/TT systems		TN-C systems	
L1 L2 L3 N PE 5-conductor system	VAL-CP-MCB-3S-350/40/FM Order No. 2882750	L1 L2 L3 PEN 4-conductor system	VAL-CP-MCB-3C-350/40/FM Order No. 2882776
 		 	

Operational protection: *) Can be used without additional fuse up to this nominal value. A separate backup fuse is needed for higher nominal values.

**) A connection with 2 x 10 mm² is necessary above 100 A.

***) Can also be used with F1 <315 A. The integrated miniature circuit breakers have a breaking capacity of 25 kA_{eff}

Subdistribution

Type 2

≤125 A***

≤315 A*

>315 A***

>315 A***

TN-S/TT systems	
L1 L2 L3 N PE 5-conductor system	VAL-MS 230/3+1 FM-PT Order No. 1248960
 	
TN-S/TT systems	
L1 L2 L3 N PE 5-conductor system	VAL-SEC-T2-3S-350-FM Order No. 2905340
 	
TN-S/TT systems	
L1 L2 L3 N PE 5-conductor system	VAL-CP-MCB-3S-350/40/FM Order No. 2882750
 	
TN-S/TT systems	
L1 L2 L3 N PE 5-conductor system	VAL-CP-MOSO 60-3S-FM Order No. 2804403
 	

Type 3

≤32 A*

≤16 A*

TN-S/TT systems	
L1 N PE 3-conductor system	PLT-SEC-T3-230-FM-PT Order No. 2907928
 	
TN-S/TT systems	
L1 N PE 3-conductor system	BLT-T3-230-A Order No. 1038841
 	

End device

Rapid selection of surge protection for data cables and signal lines

Protection for signal lines

Can be used in a large number of applications in data and signal technology. Features a visual status indicator and optional remote messaging possibilities.

Can be used for

- 0(4) mA ... 20 mA current loops
- 0 V ... 10 V analog signals
- Fieldbuses up to 500 kb



 TTC-6P-1X2-24DC-PT-I
Order No. [2906815](#)

Are digital signals protected?	Is the rated current too low?	Is resistance unwanted?	Is the transmission rate insufficient?
			
For two digital signals with reference potential	For a rated current up to 6 A without resistances in the signal path	For sensitive measurements without resistance in the signal path	For transmission speeds of up to 30 Mbits
TTC-6P-2X1-24DC-PT-I Order No. 2906816	TTC-6P-2-HC-24DC-PT-I Order No. 2906817	TTC-6P-3-5DC-PT-I Order No. 1061385	TTC-6P-3-HF-12DC-PT-I Order No. 1065313
			

Protection for data cables

Universal protection without affecting the signal at network speeds of up to 10 Gbps. Network integration using RJ45 jacks and suitable for Power over Ethernet.

LAN	Patch panels
	
For protecting Ethernet cables and servers up to 10 Gbps	For protecting the connection between field and control cabinet cabling up to 1 Gbps
DT-LAN-CAT.6+ Order No. 2881007	PP-RJ-SCC-F Order No. 2703022
	

For resistance-dependent measurements

You will find further versions in the online catalog with:

- Screw connection
- Indirect reference potential grounding
- Disconnect knife in the signal path
- Further voltage versions

 Online configurator for MCR technology surge protection

	
For protecting a 3-conductor floating signal circuit. HART-compatible	For protecting a 4-conductor floating signal circuit.
TTC-6P-4-24DC-PT-I Order No. 1061383	TTC-6P-3-24DC-PT-I Order No. 1106014
	