

Surge Protection



Surge Protection

SG14902



SPCT2-280

NEW

Plug-in surge arrester SPCT2

Insert 1-pole

Insert 75VAC	20kA	SPCT2-075	167577	4/120
Insert 130VAC	20kA	SPCT2-130	167582	4/120
Insert 175VAC	20kA	SPCT2-175	167587	4/120
Insert 280VAC	20kA	SPCT2-280	167592	4/120
Insert 335VAC	20kA	SPCT2-335	167597	4/120
Insert 385VAC	20kA	SPCT2-385	167602	4/120
Insert 460VAC	20kA	SPCT2-460	167607	4/120
Insert 580VAC	20kA	SPCT2-580	167612	4/120
Insert 260VAC	30kA	SPCT2-NPE60	167617	4/120

NEW

Plug-in surge arrester SPCT2, 1- to 4-pole

Complete (2- and multi-pole surge arresters are supplied with busbar)

1-pole	75VAC	20kA	SPCT2-075/1	167578	12/120
1-pole	130VAC	20kA	SPCT2-130/1	167583	12/120
1-pole	175VAC	20kA	SPCT2-175/1	167588	12/120
1-pole	280VAC	20kA	SPCT2-280/1	167593	12/120
1-pole	335VAC	20kA	SPCT2-335/1	167598	12/120
1-pole	385VAC	20kA	SPCT2-385/1	167603	12/120
1-pole	460VAC	20kA	SPCT2-460/1	167608	12/120
1-pole	580VAC	20kA	SPCT2-580/1	167613	12/120
1+N	260VAC	30kA	SPCT2-NPE60/1	167618	12/120
2-pole	75VAC	2x20kA	SPCT2-075/2	167579	1/60
2-pole	130VAC	2x20kA	SPCT2-130/2	167584	1/60
2-pole	175VAC	2x20kA	SPCT2-175/2	167589	1/60
2-pole	280VAC	2x20kA	SPCT2-280/2	167594	1/60
2-pole	335VAC	2x20kA	SPCT2-335/2	167599	1/60
2-pole	385VAC	2x20kA	SPCT2-385/2	167604	1/60
2-pole	460VAC	2x20kA	SPCT2-460/2	167609	1/60
2-pole	580VAC	2x20kA	SPCT2-580/2	167614	1/60
3-pole	75VAC	3x20kA	SPCT2-075/3	167580	1/40
3-pole	130VAC	3x20kA	SPCT2-130/3	167585	1/40
3-pole	175VAC	3x20kA	SPCT2-175/3	167590	1/40
3-pole	280VAC	3x20kA	SPCT2-280/3	167595	1/40
3-pole	335VAC	3x20kA	SPCT2-335/3	167600	1/40
3-pole	385VAC	3x20kA	SPCT2-385/3	167605	1/40
3-pole	460VAC	3x20kA	SPCT2-460/3	167610	1/40
3-pole	580VAC	3x20kA	SPCT2-580/3	167615	1/40
4-pole	75VAC	4x20kA	SPCT2-075/4	167581	1/30
4-pole	130VAC	4x20kA	SPCT2-130/4	167586	1/30
4-pole	175VAC	4x20kA	SPCT2-175/4	167591	1/30
4-pole	280VAC	4x20kA	SPCT2-280/4	167596	1/30
4-pole	335VAC	4x20kA	SPCT2-335/4	167601	1/30
4-pole	385VAC	4x20kA	SPCT2-385/4	167606	1/30
4-pole	460VAC	4x20kA	SPCT2-460/4	167611	1/30
4-pole	580VAC	4x20kA	SPCT2-580/4	167616	1/30
1+N	280VAC	20kA	SPCT2-280-1+NPE	167619	1/60
1+N	335VAC	20kA	SPCT2-335-1+NPE	167621	1/60
1+N	385VAC	20kA	SPCT2-385-1+NPE	167623	1/60
1+N	460VAC	20kA	SPCT2-460-1+NPE	167625	1/60
1+N	580VAC	20kA	SPCT2-580-1+NPE	167627	1/60
3+N	280VAC	20kA	SPCT2-280-3+NPE	167620	1/30
3+N	335VAC	20kA	SPCT2-335-3+NPE	167622	1/30
3+N	385VAC	20kA	SPCT2-385-3+NPE	167624	1/30
3+N	460VAC	20kA	SPCT2-460-3+NPE	167626	1/30
3+N	580VAC	20kA	SPCT2-580-3+NPE	167628	1/30
3+N/BB	280VAC	3x20kA	SPCT2-280-3+NPE/BB	167629	1
3+N/BB	335VAC	3x20kA	SPCT2-335-3+NPE/BB	167630	1
3+N/BB	385VAC	3x20kA	SPCT2-385-3+NPE/BB	167631	1
3+N/BB	460VAC	3x20kA	SPCT2-460-3+NPE/BB	167632	1



SPCT2-280/3

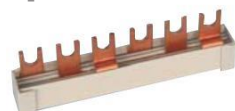
xPole

Surge Protection



Z-GV-U/9

WA_SG11202



ZV-KSBI-2TE



ZV-KSBI-3TE



ZV-KSBI-3TE/S



ZV-KSBI-3TE+HI



ZV-KSBI-4TE



ZV-KSBI-5TE



ZV-KSBI-5TE/N



ZV-KSBI-5TE+HI



ZV-KSBI-6TE



ZV-KSBI-7TE



ZV-KSBI-7TE/S



ZV-KSBI-7TE/N



ZV-KSBI-9TE/N



ZV-KSBI-11TE

Poles	Type Designation	Article No.	Units per package
Busbars Z-GV-U/ for SPI, SP-B+C			
2	Z-GV-U/2	272588	20 / 1200
3	Z-GV-U/3	272589	20 / 1200
4	Z-GV-U/4	274080	20 / 1200
5	Z-GV-U/5	274081	20 / 1200
6	Z-GV-U/6	274082	20 / 400
8	Z-GV-U/8	274083	20 / 200
9	Z-GV-U/9	274084	20 / 200

Busbar Z-GV-16/3P-3TE/6

for SPI and SPC	Z-GV-16/3P-3TE/6	267511	12 / 240
-----------------	------------------	--------	----------

Busbars ZV-KSBI for SPC

2MU	ZV-KSBI-2TE	263961	10 / 600
3MU	ZV-KSBI-3TE	263962	10 / 600
3MU	ZV-KSBI-3TE/S	263963	10 / 600
2MU+1.5MU	ZV-KSBI-3TE+HI	112370	50 / 150
4MU	ZV-KSBI-4TE	263964	10 / 600
5MU	ZV-KSBI-5TE	263965	10 / 200
5MU	ZV-KSBI-5TE/N	263966	10 / 200
2MU+3x1.5MU	ZV-KSBI-5TE+HI	112371	50 / 150
6MU	ZV-KSBI-6TE	113118	50 / 500
7MU	ZV-KSBI-7TE	263967	50 / 500
7MU	ZV-KSBI-7TE/S	263968	10 / 100
7MU	ZV-KSBI-7TE/N	263969	10 / 100
9MU	ZV-KSBI-9TE/N	266874	50 / 500
11MU	ZV-KSBI-11TE	263970	50 / 500

xPole

Surge Protection

SPD Class C, Plug-in Surge Arresters SPCT2

Field of application:

For the protection of low voltage distribution systems against transient overvoltage caused by indirect lightning stroke and switching operations.

- Test class **II** according to IEC 61643-1+A1
- SPD-type **T2** according to EN 61643-11
- Auxiliary switch SPC-S-HK for remote message transmission can be mounted onto the device
- Suitable for busbar connection to all Xtra Combinations switchgear
- Busbars ZV-KSBI are available for all customary applications

Symbol



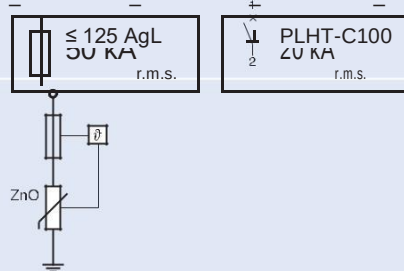
Technical Data

Inserts **SPCT2-075** **SPCT2-130** **SPCT2-175** **SPCT2-280** **SPCT2-335** **SPCT2-385** **SPCT2-460**

Electrical

Mechanical coding	x	x	x	x	x	x	x
Responding time (rate of voltage rise 5 kV/μs)	< 25 ns	< 25 ns	< 25 ns	< 25 ns	< 25 ns	< 25 ns	< 25 ns
Voltage protection level at nominal discharge current / $U_{OC} < 550$ V	< 800 V	< 1.0 kV	< 1.4 kV	< 1.6 kV	< 1.8 kV	< 2.2 kV	
Voltage protection level at 5 kA (8/20) μs	400 V	550 V	700 V	1000 V	1200 V	1350 V	1700 V
Maximum continuous operating voltage U_C	75 VAC	130 VAC	175 VAC	280 VAC	335 VAC	385 VAC	460 VAC
Temporary overvoltage test value U_T (5 s)	= U_C	= U_C	= U_C	350 VAC	415 VAC	415 VAC	580 VAC
Rated frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Open circuit voltage U_{OC}	—	—	—	10 kV	5 kV	—	—
Nominal discharge current (8/20) μs I_N	15 kA	20 kA	15 kA	20 kA	20 kA	20 kA	20 kA
Charge Q at I_N	0.43 As	0.57 As	0.57 As	0.57 As	0.57 As	0.57 As	0.57 As
Specific energy at I_N	3.2 kJ/Ω	5.7 kJ/Ω	5.7 kJ/Ω	5.7 kJ/Ω	5.7 kJ/Ω	5.7 kJ/Ω	5.7 kJ/Ω
Maximum discharge current I_{max}	30 kA	40 kA	40 kA	40 kA	40 kA	40 kA	40 kA
Follow current interrupt rating I_{fi} Permissible back-up fuse	—	—	—	—	—	—	—

Maximum short-circuit current



Connection diagram

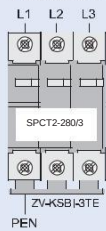
Mechanical

Frame size	45 mm
Device height	80 mm
Device width	
1-pole	17.5 mm (1MU)
1+1-pole	35 mm (2MU)
2-pole	35 mm (2MU)
3-pole	52.5 mm (3MU)
3+1-pole	70 mm (4MU)
4-pole	70 mm (4MU)
Mechanical coding	
1-pole	x
1+1-pole	yx
2-pole	xx
3-pole	xxx
3+1-pole	yxxx
4-pole	xxxx
Weight Base 1P, 1+1P, 2P, 3P, 3+1P, 4P	53/120/120/180/240/240 g
Weight Complete Devices 1P, 1+1P, 2P, 3P, 3+1P, 4P	110/201/220/330/412/440 g
Permitted ambient temperature	-40°C to +70°C
Degree of protection (built-in)	IP40
Upper and lower lift terminal capacity	4 - 25 mm ²
Upper and lower open mouthed terminals for busbar thickness up to	1.5 mm
Tightening torque of terminal screws	2.4 - 3 Nm
Quick fastening on DIN rail according to	IEC/EN 60715
Accessories: busbars 16 mm ²	Type ZV-KSBI ...

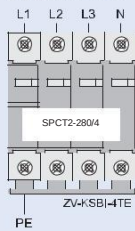
Surge Protection

Application Examples SPCT2 according to IEC 60364-5-53 Clause 534

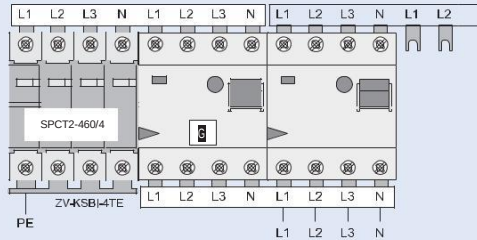
TN-C-System
3 x 240/415 VAC
3 x 230/400 VAC
3 x 220/380 VAC



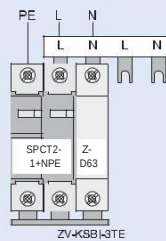
TN-S-System
3 x 240/415 VAC
3 x 230/400 VAC
3 x 220/380 VAC



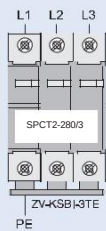
TT-System
3 x 230/400 VAC
3 x 220/380 VAC



TN-S/TT-System
3 x 240/415 VAC
3 x 230/400 VAC
3 x 220/380 VAC



IT-System
3 x 230 VAC
3 x 220 VAC



IT-System
3 x 230/400 VAC
3 x 220/380 VAC

