Surge Protection

SG50112



SG05013



SPD Class T1 (formerly B), SPI

SG50312



SPI-35/440

Impulse Current I_{imp} (10/350)µs		Type Designation	Article No.	Units per package
Lightning current arresters SPI				
• No decoupling necessary, if SPCT2-460V (see SP-B+C) are used for combination				
35kA	L - (PE)N	SPI-35/440	263137	6 / 120
50kA	N - PE	SPI-50/NPE	263138	2 / 120
100kA	N - PE	SPI-100/NPE	263139	1 / 60

Lightning current arrester Sets, Lightning protection classes I, II, III, IV

SG50212



SPI-3+1

Description		Type Designation	Article No.	Units per package
TN-C-Set	3-pole	SPI-35/440/3	267487	1 / 40
TN-S/TT-Set	3+1-pole	SPI-3+1	267488	1 / 20

Lead-through terminal for SPI

SPB-D-125	248145	2 / 120

SPD Class T1&T2 (formerly B+C), SP-B+C

SG53712



SP-B+C/3+1

Description		Type Designation	Article No.	Units per package
Lightning current arrester - surge arrester Sets, Lightning protection classes I, II, III, IV				
TN-C-Set	3-pole	SP-B+C/3	267489	1
TN-S/TT-Set	3+1-pole	SP-B+C/3+1	267510	1
Accessories				
Auxiliary switch for SP-B+C		ASAUXSC-SPM	131785	8 / 80

Powering Business Worldwide

SPD Class T1&T2 (formerly B+C), SPBT12

Lightning current arrester - surge arrester Sets, Lightning protection classes III, IV

SG29612



SPBT12-280/3

Description		Type Designation	Article No.	Units per package
Without remote indication				
TN-S/TT-Set	1+1-pole	SPBT12-280-1+NPE	158308	1 / 40
TN-S-Set	2-pole	SPBT12-280/2	158309	1 / 60
TN-C-Set	3-pole	SPBT12-280/3	158330	1 / 40
TN-S-Set	4-pole	SPBT12-280/4	158331	1 / 30
TN-S/TT-Set	3+1-pole	SPBT12-280-3+NPE	158332	1 / 20
TN-S/TT-Set	3+1-pole	SPBT12-280-3+NPE/BB	158333	1
With remote indication				
TN-S/TT-Set	1+1-pole	SPBT12-280-1+NPE-AX	158334	1 / 30
TN-S/TT-Set	3+1-pole	SPBT12-280-3+NPE-AX	158335	1
Accessories				
Auxiliary switch for SPBT12-280		ASAUXSC-SPM	131785	4 / 120
Busbar		ZV-KSBI...		

Lightning current arrester - surge arrester SPBT12
Complete

SG27112



SPBT12-280/1

Impulse Current I_{imp} (10/350)µs		Type Designation	Article No.	Units per package
12.5kA	L - (PE) N	SPBT12-280/1	158306	12 / 120
100kA	N-PE	SPBT12-NPE100	158307	1 / 60

Lightning current arrester - surge arrester SPBT12
Insert

sg63312



12.5kA	Insert	SPBT12-280	167341	4 / 120

xPole

Powering Business Worldwide

SPD Class T2 (formerly C), SPCT2

SG04713



SPCT2-280/3

Max. Cont. Op. Volt. U_C	I_n (8/20)µs	Type Designation	Article No.	Units per package
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 135VAC	20kA	SPCT2-135/1	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 135VAC	2x20kA	SPCT2-135/2	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 135VAC	3x20kA	SPCT2-135/3	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 135VAC	4x20kA	SPCT2-135/4	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

sg08213



NEW Plug-in surge arrester SPCT2				
Insert 1-pole				
Insert 75VAC	20kA	SPCT2-075	167577	4/120
Insert 135VAC	20kA	SPCT2-135	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

Surge Protection

SG64212



SPET2-280/2

Max. Cont. Op. Volt. U_C	I_n (8/20)µs	Type Designation	Article No.	Units per package
NEW **Surge arrester SPET2, 1- to 4-pole**				
Complete (2- and multi-pole surge arresters are supplied with busbar)				
1-pole 280VAC	10kA	SPET2-280/1	168741	2/120
2-pole 280VAC	2x10kA	SPET2-280/2	168742	1/60
3-pole 280VAC	3x10kA	SPET2-280/3	168692	1/40
4-pole 280VAC	4x10kA	SPET2-280/4	168693	1/30
1-pole+N 280VAC	10kA	SPET2-280/1+NPE	168699	1/60
3-pole+N 280VAC	10kA	SPET2-280/3+NPE	168700	1/30
1-pole 335VAC	10kA	SPET2-335/1	168695	2/120
2-pole 335VAC	2x10kA	SPET2-335/2	168696	1/60
3-pole 335VAC	3x10kA	SPET2-335/3	168697	1/40
4-pole 335VAC	4x10kA	SPET2-335/4	168698	1/30
1-pole+N 335VAC	10kA	SPET2-335/1+NPE	168701	1/60
3-pole+N 335VAC	10kA	SPET2-335/3+NPE	168702	1/30

sg63412



NEW **Surge arrester SPET2**				
Insert 1-pole				
Insert 280VAC	10kA	SPET2-280	168740	2/120
Insert 335VAC	10kA	SPET2-335	168694	2/120

SG83311



NEW **Auxiliary Switch**			
for SPBT12, SPCT2, SPET2, SPDT3	ASAUXSC-SPM	131785	8 / 80

SG59511



Description	Type Designation	Article No.	Units per package
Lead-through terminal for SPB, ASLTT-63			
	ASLTT-63	131784	12 / 120

xPole

Powering Business Worldwide

SPD Class T3 (formerly D), SPDT3

	Max. Cont. Op. Volt. U_C	Type Designation	Article No.	Units per package
Surge arrester SPDT3				
Complete (2-pole surge arresters are supplied with busbar)				
1-pole+N	335VAC	SPDT3-335-1+NPE	170487	1/60
2-pole	280VAC	SPDT3-280/2	170485	1/60

SG03213

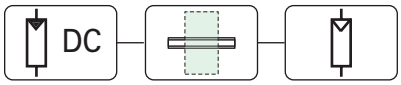


SPDT3-335-1+NPE

Surge arrester SPDT3				
Insert 1-pole				
	280VAC	SPDT3-280	170484	2/120
	335VAC	SPDT3-335	170486	2/120

sg03413





SG11009



SG11309



SG62612



Photovoltaik SPD Class T2

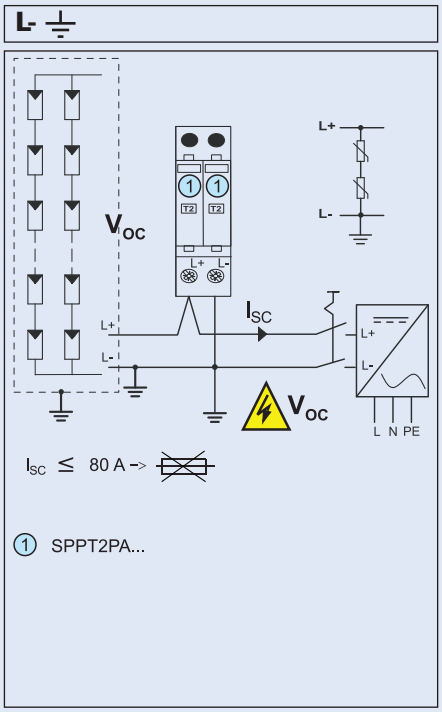
Max. Cont. Op. Volt. U_C	I_n (	Type Designation	Article No.	Units per package
Plug-in Surge Arrester SPPT2PA for Photovoltaic application				
For earthed systems				
600 V DC		SPPT2PA-600-2PE	132663	1 / 60
1000 V DC		SPPT2PA-1000-2PE	132664	1 / 60
with auxiliary switch				
1000 V DC		SPPT2PA-1000-2PE-AX	132666	1 / 60
For unearthed systems				
600 V DC		SPPT2PA-600-2+1PE	132661	1 / 40
1000 V DC		SPPT2PA-1000-2+1PE	132662	1 / 40
with auxiliary switch				
1000 V DC		SPPT2PA-1000-2+1PE-AX	132665	1 / 40
Inserts for replacement				
600 V DC	①	SPPT2PA-600	132667	1
1000 V DC	①	SPPT2PA-1000	132668	1
1100 V DC	②	SPPT2PA-1100	132669	1

$V_{OC} \leq U_c$: Open circuit voltage of PV-Generator shall be equal or less than maximum continuous operating voltage of Surge Protective Device (SPD) to prevent its damage.

V_{OC} . . . . . .Open circuit voltage of PV-Generator.
U_C . . . . . .Maximum continuous operating voltage of SPD.
Attention: Even at switched off DC-Disconnector system stays under high voltage! Before mounting ensure de-energizing and check zero-potential.

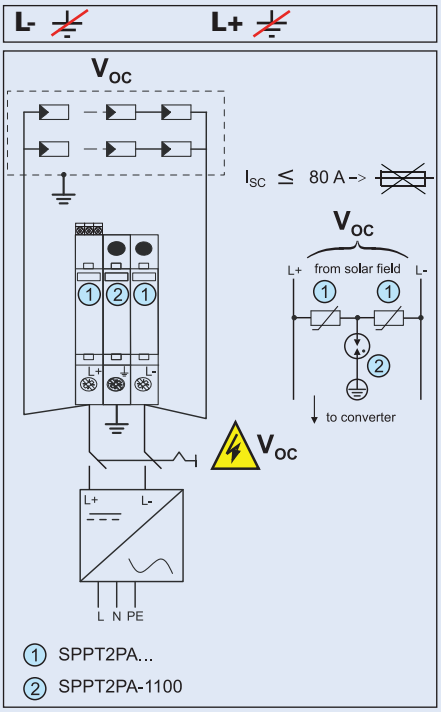
Earthed system

SPPT2PA-600-2PE
SPPT2PA-1000-2PE(-AX)



Unearthed system

SPPT2PA-600-2+1PE
SPPT2PA-1000-2+1PE(-AX)



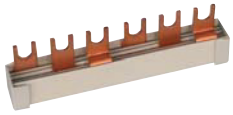
xPole

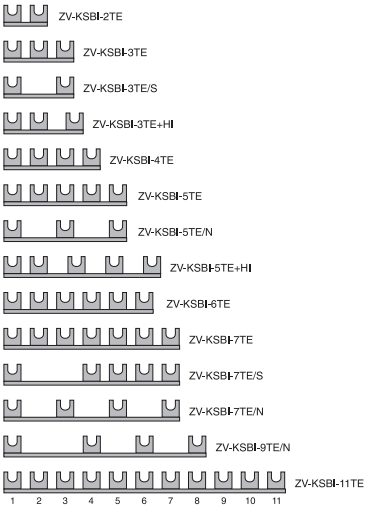
Powering Business Worldwide



Z-GV-U/9

WA_SG11202





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

Powering Business Worldwide

SPD Class T3 (formerly D), SPDT3

U1602

PHASE OUT TYPE



SPD-S-1+1

Description	Type Designation	Article No.	Units per package
Surge protective device SPD-S-1+1 for TN-, TT-systems (3-phase 4-wire)			
Complete device	SPD-S-1+1	248202	1 / 60
Insert N-PE	SPD-S-N/PE	248199	4 / 120
Insert L-N	SPD-S-L/N	248200	4 / 120
Base 1+1 2-pole	SPC-S-S2-1+1	248201	6 / 60
Auxiliary switch	SPC-S-HK	248203	8 / 80

PHASE OUT TYPE

Surge protective device SPD-S-280/2 for IT-, TT-systems (3-phase 3-wire)			
Complete device	SPD-S-280/2	269088	1 / 60
Insert	SPD-S-280	269087	4 / 120
Base	SPC-S-S2	248168	6 / 60
Auxiliary switch	SPC-S-HK	248203	8 / 80

wa_nt06713



19" Multiple Outlet Strips NWS-STL/19/7F			
7 outlets, DIN	NWS-STL/19/7F	255398	1
7 outlets, plus switch, DIN	NWS-STL/19/7F/S/BL	255399	1
7 outlets, UTE	NWS-STL/19/7F/UTE	290031	1

wa_nt06613



19" Surge Protection - Multiple Outlet Strips with Switch SPD-STL/19/7F-S/BL			
7 outlets, plus switch, DIN	SPD-STL/19/7F-S/BL	283449	1
7 outlets, UTE	SPD-STL/19/7F-S/BL/UTE	290032	1

N04011



Surge Protection Multiple Outlet Strips with High-Range Filter and Energy Absorption for full Equipment Protection SPD-STL/6F-S			
6 outlets, plus switch, DIN	SPD-STL/6F-S (68583)	130000	1
6 outlets, plus switch, DIN+ISDN	SPD-STL/6F-S/ISDN (68585)	147795	1
19" fixing bracket for SPD-STL/6F-S (1U)	NWS-HW/19/SPD-STL/6F-S	166364	1

Powering Business Worldwide

PHASE OUT TYPE

Earthing/Equipotential Bonding

wa_sg03413



Equipotential Bonding Bar PAS-7x16

- For main equipotential bonding
- Earthing strip up to 30 x 3.5 / Round conductor 7 - 10 mm



Description	Type Designation	Article No.	Units per package
7 x 2.5 - 16 mm^2	PAS-7x16	107945	10 / 50

wa_sg03513



Earthing Bar for Antenna Lines PAS-HF-6

- Earthing conductor 6 - 25 mm^2



Description	Type Designation	Article No.	Units per package
6 x HF-Cable shields	PAS-HF-6	107946	10 / 100

SG07406



Earth Clips EBS

- For copper and galvanized steel/stainless steel tubes
- Cross-section for connection 1 x 2.5 mm^2 to 2 x 16 mm^2



Description	Type Designation	Article No.	Units per package
Tube Ø 1/8″ - 1½″	EBS-210mm	107947	20 / 80
Tube Ø 1/8″ - 4″	EBS-430mm	107948	20 / 80

Powering Business Worldwide

Power Frequency Overvoltage Protective Device (POP Device)

- Monitoring of voltage between phase and neutral conductor, if voltage is too high coupled switchgear (main switch) trips
- Possible switchgear for coupling MCB and RCBO
- Single and 3-phase application possible
- Remote switch off possible
- Contact position indicator
- ON-OFF function with switching toggle
- Comprehensive range of accessories

SG41712, SG40711



Power Frequency Overvoltage Protective Device (POP Device)

SG41712



POP-270

- Monitoring of voltage between phase and neutral conductor, if voltage is too high coupled switchgear (main switch) trips
- For 3-phase application use 3 pcs. of POP-270

Rated Operational Voltage	Type Designation	Article No.	Units per package
230 V AC / 50 Hz	POP-270	131674	1 / 60

For accessories like Auxiliary Switch ZP-IHK and ZP-WHK, Tripping Signal Switch ZP-NHK, Shunt Trip Release ZP-ASA and Undervoltage Release Z-USA, Z-USD see page xx.