

Technical specifications

Design		Lightning arresters		
Order No.		5SD7 412-1	5SD7 413-1	5SD7 414-1
Approvals		KEMA (available soon)		
Requirement category		B to E DIN VDE 06754-6; SPD class I according to IEC 61643-11; SPD type 1 according to EN 61643-1		
Rated voltage U_N	V AC	230/400	230/400	230/400
Rated arrester voltage U_c				
• L/N, N/PE, L/PEN	V AC	350	350	350
Lightning impulse current I_{imp} (10/350 μ s)				
• L/N or L/PEN, 1-pole/3-pole	kA	25/100	25/75	25/100
• N/PE	kA	100	--	100
Rated discharge surge current I_n (8/20 μ s)				
• L/N or L/PEN, 1-pole/3-pole	kA	25/100	25/75	25/100
• N/PE	kA	100	--	100
Protection level U_p				
• L/N, N/PE, L/PEN	kV	≤ 1.5	≤ 1.5	≤ 1.5
Follow current discharge capacity I_{fi} (AC)				
• L/N or L/PEN	kA	50	50	50
• N/PE	A	100	--	100
Response time t_A				
• L/N or L/PEN	ns	≤ 100	≤ 100	≤ 100
• L-(N)-PE	ns	≤ 100	--	≤ 100
Max. required back-up protection	A	315 gL/gG	315 gL/gG	315 gL/gG
Short-circuit strength at max. back-up protection	kA _{rms}	50	50	50
TOV voltage U_T				
• L/N	V/s	415/5	415/5	415/5
• N/PE	V/ms	1200/200	--	1200/200
Temperature range	°C	-40 ... +80		
Degree of protection		IP20		
Conductor cross-section				
• Finely stranded	mm ²	0.5 ... 25		
• Solid	mm ²	0.5 ... 35		
Mounting width according to DIN 43880	MW	4	6	8
Remote signaling		yes		
Contact type		Floating CO contact (plug-in)		
Operational voltage, max.	V AC V DC	250 125		
Operational current, max.				
• Resistive/inductive load AC		1 A/1 A		
• Resistive/inductive load DC		0.2 A/30 mA		
Conductor cross-section				
• Finely stranded/solid	mm ²	1.5/1.5		