







Overvoltage Protection Devices

5SD7 combination surge arresters, type 1 + type 2

Selection and ordering data

Version	Mounting width	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	MW	d					
Combination surge arresters							
	2-pole For TN-S and TT systems With remote signaling	4	5SD7442-1		1	1 unit	1BK
	3-pole For TN-C systems With remote signaling	6	5SD7443-1		1	1 unit	1BK
	4-pole For TN-S and TT systems With remote signaling	8	5SD7444-1		1	1 unit	1BK
Replacement plugs							
	N-PE: • 5SD7442-1 • 5SD7444-1		5SD7418-0		1	1 unit	1BK
	L-N / L-PEN (type 2): • 5SD7442-1 • 5SD7443-1 • 5SD7444-1		5SD7428-1		1	1 unit	1BK
	L-N / L-PEN (type 1): • 5SD7442-1 • 5SD7443-1 • 5SD7444-1		5SD7448-1		1	1 unit	1BK

Overview

Combination surge arresters type 1 / type 2 are compact designs which can be used as both lightning arresters type 1 and surge arresters type 2.

They protect low-voltage systems against overvoltages triggered by lightning strikes or by switching operations in the network.

A thermal isolating arrester for the varistors offers a high degree of protection against overload. The protective modules are available as connectors. The combination surge arresters can be fitted either with or without a remote signaling contact, which signals if the device fails.

Technical specifications

		5SD7411-2	5SD7412-2	5SD7413-2 5SD7413-3	5SD7414-2 5SD7414-3	5SD7483-6
Standards		IEC 61643-11				EN 50539
Approvals		KEMA				
Rated voltage U_N	V AC	690	240	240/415		--
Rated arrester voltage U_C		800 AC				1000 DC
• L-L-N, N-PE, L-(PE)N	V	800 AC				1000 DC
Lightning impulse current I_{imp} (10/350 s)						
• L-N or L-(PE)N	kA	35	12.5	12.5	12.5	5
• N-PE	kA	--	50	--	50	--
Rated discharge surge current I_n (8/20 s)						
• L-N or L-(PE)N	kA	35	12.5	12.5	12.5	15
• N-PE	kA	--	50	--	--	--
Max. discharge surge current I_{max} (8/20 s)						
• L-N	kA	100	12.5	50	50	40
• N-PE	kA	--	50	--	50	--
Protection level U_p						
• L-(PE)N	kV	4.50	1.20	1.20	1.20	3.50
• L-PE	kV	--	--	--	2.0	--
• N-PE	kV	--	1.70	--	1.70	--
Response time t_A						
• L-N or L-(PE)N	ns	100	25	--	--	--
• L-(N)-PE	ns	--	100	--	100	25
Max. back-up fuse acc. to IEC 61643-1						
• For stub wiring	A	400 gL/gG	160 gL/gG	--	--	--
• For V-wiring	A	125 gL/gG	80 gL/gG	--	--	--
Short-circuit withstand current With max. back-up fuse	kA	50	25	--	--	--
Temperature range	°C	-40 ... +80				
Degree of protection		IP20, with connected conductors				
Conductor cross-section						
• Finely stranded	mm ²	16 ... 50	1.5 ... 25	--	--	--
• Solid	mm ²	16 ... 50	1.5 ... 35	--	--	--