







# Overvoltage Protection Devices

## 5SD7 lightning arresters, type 1

### Selection and ordering data

Version	Mounting width MW	SD d	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
<b>Lightning arresters</b>							
	<b>1-pole</b> With remote signaling	..1)	<b>5SD7411-2</b>		1	1 unit	1BK
	<b>2-pole</b> For TN-S and TT systems With remote signaling	4	<b>5SD7412-1</b>		1	1 unit	1BK
	<b>3-pole</b> For TN-C systems With remote signaling	6	<b>5SD7413-1</b>		1	1 unit	1BK
	<b>4-pole</b> For TN-S and TT systems With remote signaling	8	<b>5SD7414-1</b>		1	1 unit	1BK
<b>Replacement plugs</b>							
	<b>N-PE:</b> • 5SD7412-1 • 5SD7414-1		<b>5SD7418-0</b>		1	1 unit	1BK
	<b>L-N / L-PEN:</b> • 5SD7412-1 • 5SD7413-1 • 5SD7414-1		<b>5SD7418-1</b>		1	1 unit	1BK

1) No modular installation device.

## Overview

Combination surge arresters, type 1 + type 2 are compact designs comprising 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. All combination surge arresters have a remote signaling contact, which signals if the device fails.

## Technical specifications

		5SD7442-1	5SD7443-1	5SD7444-1
<b>Standards Approvals</b>		IEC 61643-11; EN 61643-11 KEMA, UL/cUL		
<b>Rated voltage <math>U_N</math></b>	V AC	240	240/415	
<b>Rated arrester voltage <math>U_C</math></b>	V AC	350		
<b>Lightning impulse current <math>I_{imp}</math> (10/350 s)</b>				
• L-N or L-(PE)N	kA	25	25	25
• N-PE	kA	100	--	100
<b>Rated discharge surge current <math>I_n</math> (8/20 s)</b>				
• L-N or L-(PE)N	kA	25	25	25
• N-PE	kA	100	--	100
<b>Protection level <math>U_p</math></b>				
• L-(PE)N	kV	1.50	1.50	1.50
• L-PE	kV	2.20	--	2.20
• N-PE	kV	1.50	--	1.50
<b>Follow current discharge capacity <math>I_{fi}</math> (AC)</b>				
• L-N or L-(PE)N	kA	25	25	25
• N-PE	kA	100	--	100
<b>Response time <math>t_A</math></b>				
• L-N or L-(PE)N	ns	25	25	25
• L-(N)-PE	ns	100	--	100
<b>Max. back-up fuse</b>	Acc. to IEC 61643-1			
• For stub wiring	A	315 gL/gG		
• For V-wiring	A	125 gL/gG		
<b>Short-circuit withstand current</b> with max. back-up fuse	kA	25		
<b>Temperature range</b>	°C	-40 ... +80		
<b>Degree of protection</b>		IP20, with connected conductors		
<b>Conductor cross-section</b>				
• Finely stranded	mm <sup>2</sup>	2.5 ... 25		
• Solid	mm <sup>2</sup>	2.5 ... 35		
<b>Mounting width</b>	Acc. to DIN 43880	MW	4	6
<b>Visual function/fault indication</b>			4	8
			Yes	