



Lightning arrester Type 1, 1-pole, for 2-wire networks (L, pen), UC 800V AC with remote signaling No modular installation device

General data	
standard	IEC 61643-11: 2011, EN 61643-11: 2012
product designation	Surge protection device
SPD classification / acc. to EN 61643-11	
• Test Class I, Type 1	Yes
• Test Class II, Type 2	Yes
• Test Class III, Type 3	No
number of SPD ports	1
Product version	Combination surge arresters
design of pole	1
designation of the protective paths	L-PE
fastening method	other
material / of the enclosure	Aluminum, salt water-resistant
Degree of pollution	3
overvoltage category / acc. to IEC 61010-1	IV (600V), III (1000V)
protection class IP / at connection all terminals	IP20
Ambient temperature / during operation / minimum permissible ... ambient temperature / during operation / maximum permissible	-40 °C ... 80 °C
ambient temperature / during storage and transport	-40 °C ... 80 °C
relative humidity / during operation	5 % ... 95 %
installation altitude / at height above sea level / maximum	4 000 m
Width	56 mm
Height	191 mm
depth	280 mm
net weight	3 150 g
Electrical data	
type of distribution system	TN-C, IT
operating voltage	554 / 960 V AC ...90 V AC (IT)
operating voltage	690 V
operating frequency	50/60 Hz
continuous operating voltage	
• maximum	800 V
• between L and PE	800 V
load current	150 A
protective conductor current	20 µA (760 V AC)
apparent power consumption / maximum	16 mVA
discharge current	

<ul style="list-style-type: none"> <li>• 1 phase / at (8/20) <math>\mu</math>s</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• between L and PE / at (8/20) <math>\mu</math>s</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• between L and PE / at (8/20) <math>\mu</math>s</li> </ul>	35 kA
lightning current peak value / at (10/350) $\mu$ s	
<ul style="list-style-type: none"> <li>• lightning current peak value / between L and PE</li> </ul>	35 kA
charge of the flash / at (10/350) $\mu$ s	
<ul style="list-style-type: none"> <li>• charge of the flash / between L and PE</li> </ul>	17.5 A·s
specific energy of the flash / at (10/350) $\mu$ s	
<ul style="list-style-type: none"> <li>• between L and PE</li> </ul>	305
follow current extinguishing capability	50 kA
short-circuit rating (SCCR) / at 264 V	50 kA
protection level	4.5 kV
<ul style="list-style-type: none"> <li>• between L and PE</li> </ul>	4.5 kV
residual voltage	
<ul style="list-style-type: none"> <li>• between L and PE <ul style="list-style-type: none"> <li>— at rated value of discharge current / maximum</li> <li>— at 10 kA / maximum</li> <li>— at 5 kA / maximum</li> <li>— at 3 kA / maximum</li> </ul> </li> </ul>	2.7 kV
	2.3 kV
	2.2 kV
	2.1 kV
response value of the surge voltage / at 6 kV / at (1.2/50) $\mu$ s	
<ul style="list-style-type: none"> <li>• between L and PE</li> </ul>	4.5 kV
<ul style="list-style-type: none"> <li>• Response time</li> </ul>	100 ns
adjustable response factor / of tripping current	1.6
fuse protection type / at V-shaped connection	125 A AC (gG)
fuse protection type / for T-connector	400 A AC (gG)
<b>Connections/ Terminals</b>	
type of electrical connection	Screw terminal
stripped length	24 mm
tightening torque	8 ... 9
stripped length	24 mm
connectable conductor cross-section	
<ul style="list-style-type: none"> <li>• for finely stranded conductor</li> </ul>	16 ... 50
<ul style="list-style-type: none"> <li>• for rigid conductor</li> </ul>	16 ... 50
<ul style="list-style-type: none"> <li>• finely stranded</li> </ul>	16 ... 50
AWG number / as coded connectable conductor cross section	6 ... 1
design of the thread / of the connection screw	M6
signal design	Defect signaling contact
<b>Indicator/remote signaling</b>	
switching function / of the remote signaling contacts	2 x N/C contacts
operating voltage / of the remote signaling contacts	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	30 ... 30
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	30 V
operational current / of the remote signaling contacts	
<ul style="list-style-type: none"> <li>• at AC</li> </ul>	1 500 mA ... 1.5 A
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	1.5 A DC (30 V DC)
connection type of remote signaling contact	M3
connectable conductor cross-section	
<ul style="list-style-type: none"> <li>• for remote signaling contacts / for rigid conductor</li> </ul>	0.2 ... 2.5
<ul style="list-style-type: none"> <li>• for finely stranded conductor / for remote signaling contacts</li> </ul>	0.2 ... 2.5
AWG number / as coded connectable conductor cross section / for remote signaling contacts / minimum	24
AWG number / as coded connectable conductor cross section / for remote signaling contacts / maximum	12
tightening torque / for remote signaling contacts	0.55 N·m
stripped length / of the cable / for remote signaling contacts	7 mm

## NEMA/UL - Data

type of surge protective device (SPD) / according to UL	4CA
type of distribution system / according to UL	1
type of distribution system	TN-C, IT
designation of the protective paths / according to UL	L-G
TOV behavior	
• at TOV test voltage	1500 V AC (5 s / withstand mode)
• at TOV test voltage (N-PE)	1960 V (200 ms / withstand mode)
Measured Limiting Voltage (MLV) / between L and Ground (GND)	4.37 kV
Maximum Continuous Operating Voltage (MCOV) / between L and Ground (GND)	800 V
leakage current / according to UL	20 kA
AWG number / as coded connectable conductor cross section / for remote signaling contacts / according to UL / minimum	24
AWG number / as coded connectable conductor cross section / for remote signaling contacts / according to UL / maximum	12
installation altitude above sea level / according to UL	13 123 ft
net weight [lb] / according to UL	6.94 lb
combustibility class acc. to UL 94	V2
AWG number / as coded connectable conductor cross section / according to UL / minimum	6
AWG number / as coded connectable conductor cross section / according to UL / maximum	1

## Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/lowvoltage/catalogs>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SD7411-2>

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/5SD7411-2>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SD7411-2](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7411-2)

