

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



Article number

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
Design of the product	Combination surge arresters
Design of pole	1
Designation of the protective paths	L-PE
Mounting type	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	-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 (T...90 V AC (IT))
Continuous operating voltage	
• between L and PE	800 V
Load current	150 A
Protective conductor current	20 $\mu$ A (760 V AC)
Apparent power consumption / maximum	16 mVA
Discharge current	
• 1 phase / at (8/20) $\mu$ s	100 kA
• between L and PE / at (8/20) $\mu$ s	100 kA
• between L and PE / at (8/20) $\mu$ s	35 kA
Lightning current peak value / at (10/350) $\mu$ s	
• Lightning current peak value / between L and PE	35 kA
Charge of the lightning surge / at (10/350) $\mu$ s	
• Charge of the lightning surge / between L and PE	17.5 A·s
Follow current extinguishing capability	50 kA
Short-circuit rating (SCCR) / at 264 V	50 kA
Protection level	4.5 kV
• between L and PE	4.5 kV
Residual voltage	
• between L and PE	
— at rated value of discharge current / maximum	2.7 kV
— at 10 kA / maximum	2.3 kV
— at 5 kA / maximum	2.2 kV
— at 3 kA / maximum	2.1 kV
Response value of the surge voltage / at 6 kV / at (1.2/50) $\mu$ s	
• between L and PE	4.5 kV
Response time	100 ns
Settable response factor / of trip current	1.6
Fuse protection type / at V-shaped connection	125 A AC (gG)
Fuse protection type / for T-connector	400 A AC (gG)

Connections/Terminals	
Type of electrical connection	Screw terminal
Wire stripping length	24 mm
Tightening torque	8 ... 9
Wire stripping length	24 mm
Connectable conductor cross-section	
• for finely stranded conductor	16 ... 50
• for rigid conductor	16 ... 50
• finely stranded	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

Indicator/remote signaling	
Switching function / of the remote-signaling contacts	2 x N/C contacts
Operating voltage / of the remote-signaling contacts	
• at AC	30 ... 30
• at DC	30 V
Operating current / of the remote-signaling contacts	
• at AC	1 500 mA ... 1.5 A
• at DC	1.5 A DC (30 V DC)
Connection type of remote signaling contact	M3
Connectable conductor cross-section	
• for remote signaling contacts / for rigid conductor	0.2 ... 2.5
• for finely stranded conductor / for remote signaling contacts	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
Wire stripping 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	

<ul style="list-style-type: none"> <li>• at TOV test voltage</li> </ul>	1500 V AC (5 s / withstand mode)
<ul style="list-style-type: none"> <li>• at TOV test voltage (N-PE)</li> </ul>	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)

##### CAX-Online-Generator

<http://www.siemens.com/cax>

