



Surge arrester Type 2 Requirement class C, UC 350V Pluggable protective modules 2-pole, 1+1 circuit for TN-S and TT systems Narrow design

General data	
standard	IEC 61643-11: 2011, EN 61643-11: 2012
product designation	Surge protection device
<b>SPD classification / according to EN 61643-11</b>	
• Test Class I, Type 1	No
• Test Class II, Type 2	Yes
• Test Class III, Type 3	No
number of SPD ports	1
design of the product	Surge arrester
design of pole	1+N/PE
designation of the protective paths	L-N, N-PE
accessories	1 x 5SD7428-1 + 1 x 5SD7428-0
fastening method	DIN rail NS 35
material / of the enclosure	PBT
size of surge arrester	1,4 MW
degree of pollution	2
overvoltage category / according to IEC 61010-1	III
protection class IP / at connection all terminals	IP20
shock acceleration	30 gn
vibrational acceleration / at 5 Hz ... 500 Hz / limited to 2,5 h / per axis	5 gn
relative humidity / during operation	5 ... 95 %
installation altitude / at height above sea level / maximum	2 000 m
width	25.4 mm
height	90 mm
depth	71.5 mm
net weight	200 g
Electrical data	
type of distribution system	TT, TN-S
<b>operating voltage</b>	
• at AC	230 V
value range / of the operating frequency	50 / 60 Hz
<b>continuous operating voltage</b>	
• at AC / maximum	350 V
• between N and PE / at AC / maximum	264 V
• between L and (PE)N / at AC / maximum	350 V
discharge current / at (8/20) $\mu$ s	20 kA
discharge current / 1 phase / at (8/20) $\mu$ s / maximum	40 kA
<b>follow current extinguishing capability</b>	
• between N and PE	100 A (264 V a.c.)

short-circuit rating (SCCR) / at 264 V	25 kA
<b>protection level</b>	
• maximum	1.5 kV
• between N and L	1.4 kV
• between PE and N and/or L	1.5 kV
<b>residual voltage</b>	
• between L and (PE)N	
— at rated value of discharge current / maximum	1.5 kV
— at 10 kA / maximum	1.3 kV
— at 5 kA / maximum	1.2 kV
— at 4 kA / maximum	1.1 kV
— at 2 kA / maximum	1 kV
• between N and PE	
— at rated value of discharge current / maximum	0.5 kV
— at 10 kA / maximum	0.5 kV
— at 5 kA / maximum	0.5 kV
— at 4 kA / maximum	0.5 kV
— at 2 kA / maximum	0.5 kV
<b>response value of the surge voltage / at 6 kV / at (1.2/50) µs</b>	
• between N and PE	1.5 kV
• response time / between L and (PE)N	25 ns
• response time / between N and PE	100 ns
<b>adjustable response factor / of tripping current</b>	1.6
<b>fuse protection type / at V-shaped connection</b>	63 A AC (gG)
<b>fuse protection type / for T-connector</b>	315 A AC (gG)
<b>Connections/ Terminals</b>	
type of electrical connection	Screw terminal
stripped length	16 mm
tightening torque	4.3 ... 4.7 N·m
<b>connectable conductor cross-section</b>	
• for finely stranded conductor	2.5 ... 16 mm <sup>2</sup>
• for rigid conductor	2.5 ... 25 mm <sup>2</sup>
• finely stranded	2.5 ... 16 mm <sup>2</sup>
AWG number / as coded connectable conductor cross section	12 ... 4
design of the thread / of the connection screw	M5
signal design	optical
<b>Indicator/remote signaling</b>	
product component / remote signaling contact	No
<b>NEMA/UL - Data</b>	
type of surge protective device (SPD) / according to UL	4CA
type of distribution system / according to UL	1
type of distribution system	TT, TN-S
designation of the protective paths / according to UL	L-N, L-G, N-G
<b>TOV behavior</b>	
• at TOV test voltage (L-N)	415 V AC (5 s / withstand mode) / 440 V AC (120 min / safe failure mode)
• at TOV test voltage (N-PE)	1200 V (200 ms / withstand mode)
<b>Measured Limiting Voltage (MLV)</b>	
• between L and Ground (GND)	2.08 kV
• between L and N	2 kV
• between N and Ground (GND)	0.95 kV
<b>Maximum Continuous Operating Voltage (MCOV)</b>	
• between L and Ground (GND)	350 V
• between L and N	350 V
• between N and Ground (GND)	264 V
<b>leakage current</b>	
• between N and Ground (GND) / according to UL / rated value	20 kA
• between L and N / according to UL / rated value	20 kA
• between L and Ground (GND) / according to UL / rated value	20 kA

AWG number / as coded connectable conductor cross section	
• according to UL	14 ... 2
ambient temperature	
• during operation	-40 ... +80 °C
• during storage	-40 ... +80 °C
installation altitude above sea level / according to UL	6 562 ft
gross weight [lb] / according to UL	0.49 lb
net weight [lb] / according to UL	0.44 lb
combustibility class according to UL 94	V0
standards / according to UL	UL 1449 edition 4

#### Further information

##### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

##### 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=5SD7422-0>

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

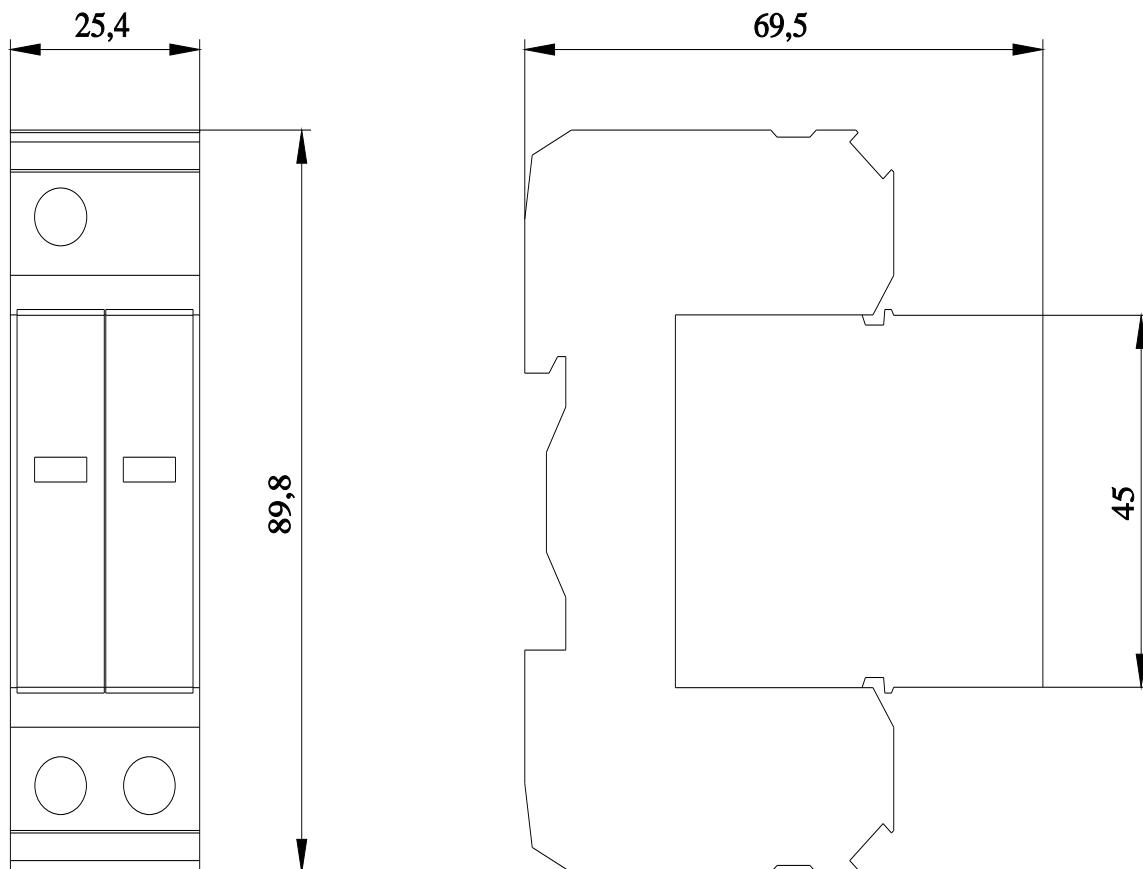
<https://support.industry.siemens.com/cs/ww/en/ps/5SD7422-0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SD7422-0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7422-0)

##### CAx-Online-Generator

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



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