## SIEMENS

## Data sheet

## 5SD7424-0



Surge arrester Type 2 Requirement class C, UC 350V Pluggable protective modules 4-pole, 3+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	
SPD classification / according to EN 61643-11		
• 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	3+N/PE	
designation of the protective paths	L-N, N-PE	
accessories	3 x 5SD7428-1 + 1 x 5SD7428-0	
fastening method	DIN rail NS 35	
material / of the enclosure	PBT	
size of surge arrester	2,7 MW	
degree of pollution	2	
overvoltage category / according to IEC 61010-1	Ш	
protection class IP / at connection all terminals	IP20	
shock acceleration	30 gn	
vibrational acceleration / at 5 Hz $\dots$ 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	49.2 mm	
height	90 mm	
depth	71.5 mm	
net weight	382 g	
Electrical data		
type of distribution system	TT, TN-S	
operating voltage		
• at AC	230 V	
value range / of the operating frequency	50 / 60 Hz	
continuous operating voltage		
• at AC / maximum	350 V	
<ul> <li>between N and PE / at AC / maximum</li> </ul>	264 V	
<ul> <li>between L and (PE)N / at AC / maximum</li> </ul>	350 V	
discharge current / at (8/20) µs	20 kA	
discharge current / 1 phase / at (8/20) µs / maximum	40 kA	
follow current extinguishing capability		
<ul> <li>between N and PE</li> </ul>	100 A (264 V a.c.)	

short-circuit rating (SCCR) / at 264 V	25 kA
protection level	
• maximum	1.5 kV
between N and L	1.4 kV
<ul> <li>between PE and N and/or L</li> </ul>	1.5 kV
residual voltage	
• 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	
<ul> <li>— at rated value of discharge current / maximum</li> </ul>	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
response value of the surge voltage / at 6 kV / at (1.2/50) µs	
<ul> <li>between N and PE</li> </ul>	1.5 kV
<ul> <li>response time / between L and (PE)N</li> </ul>	25 ns
	25 IIS 100 ns
response time / between N and PE	1.6
adjustable response factor / of tripping current	
fuse protection type / at V-shaped connection	63 A AC (gG)
fuse protection type / for T-connector	315 A AC (gG)
Connections/ Terminals	
type of electrical connection	Screw terminal
stripped length	16 mm
tightening torque	4.3 4.7 N·m
connectable conductor cross-section	
<ul> <li>for finely stranded conductor</li> </ul>	2.5 16 mm²
<ul> <li>for rigid conductor</li> </ul>	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
Indicator/remote signaling	
product component / remote signaling contact	No
NEMA/UL - Data	
type of surge protective device (SPD) / according to UL	4CA
type of distribution system / according to UL	ЗY
type of distribution system	TT, TN-S
designation of the protective paths / according to UL	L-L, L-N, L-G, N-G
TOV behavior	
<ul> <li>at TOV test voltage (L-N)</li> </ul>	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)
Measured Limiting Voltage (MLV)	
between L and L	3.28 kV
between L and Ground (GND)	2.08 kV
between L and N	2 kV
between N and Ground (GND)	0.95 kV
Maximum Continuous Operating Voltage (MCOV)	
	700 \/
between L and L     between L and Crowned (CND)	700 V
between L and Ground (GND)	350 V
between L and N	350 V
between N and Ground (GND)	264 V
<ul> <li>leakage current</li> <li>between N and Ground (GND) / according to UL / rated value</li> </ul>	20 kA
<ul> <li>between L and N / according to UL / rated value</li> </ul>	20 kA
- Detween L and N / according to OL / Tated Value	

<ul> <li>between L and Ground (GND) / according to UL / rated value</li> </ul>	20 kA
<ul> <li>between L and L / according to UL / rated value</li> </ul>	20 kA
AWG number / as coded connectable conductor cross section	
according to UL	14 2
ambient temperature	
<ul> <li>during operation</li> </ul>	-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	0.9 lb
net weight [lb] / according to UL	0.84 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=5SD7424-0

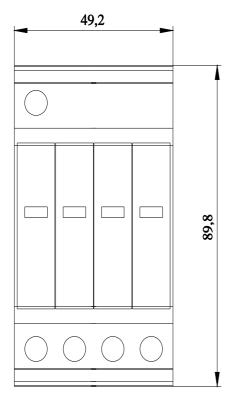
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

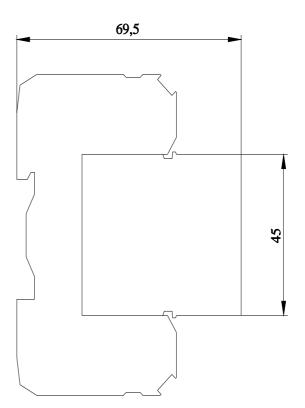
https://support.industry.siemens.com/cs/ww/en/ps/5SD7424-0

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

http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SD7424-0

CAx-Online-Generator http://www.siemens.com/cax





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