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Data sheet 5SD7422-0



surge arrester type, 2, requirement class C, Uc 350 V, protective modules, plug-in, 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
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	1+N/PE
designation of the protective paths	L-N, N-PE
accessories	1 x 5SD7428-1 + 1 x 5SD7428-0
fastening method	TH35 DIN rail
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
Electrical data	
type of distribution system	TN-S, TT
operating voltage	
● at AC	230 V
value range of the operating frequency	50 / 60 Hz
continuous operating voltage	
● 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) µs	20 kA
discharge current 1 phase at (8/20) µs maximum	40 kA
follow current extinguishing capability	
● between N and PE	100 A (264 V a.c.)

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short-circuit rating (SCCR) at 264 V	25 kA
protection level	
● maximum	1.5 kV
● between N and L	1.4 kV
● between PE and N and/or L	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	
— 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
response value of the surge voltage at 6 kV at (1.2/50) µs	
● between N and PE	1.5 kV
● response time between L and (PE)N	25 ns
● response time between N and PE	100 ns
adjustable response factor of tripping current	1.6
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	
● for finely stranded conductor	2.5 ... 16 mm²
● for rigid conductor	2.5 ... 25 mm²
● finely stranded	2.5 ... 16 mm²
AWG number as coded connectable conductor cross section	12 ... 4
design of the thread of the connection screw	M5
signal design	Optical, remote signaling contact
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	1
type of distribution system	TN-S, TT
designation of the protective paths according to UL	L-N, L-G, N-G
Measured Limiting Voltage (MLV)	
● 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)	
● between L and Ground (GND)	350 V
● between L and N	350 V
● between N and Ground (GND)	264 V
discharge current	
● 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	

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● 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
combustibility class according to UL 94	V0
standards according to UL	UL 1449 edition 4

Approvals Certificates

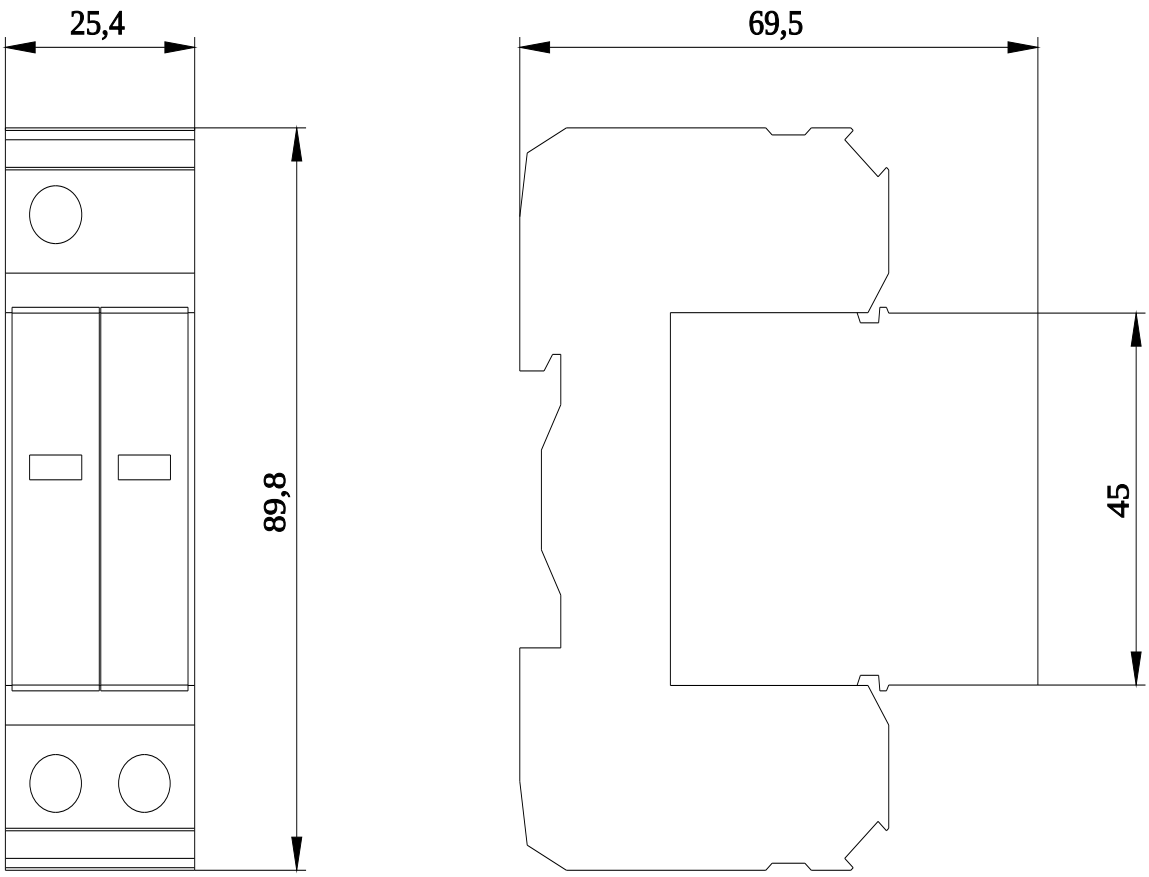
General Product Approval				other
KEMA	cURus		Confirmation	Miscellaneous

other		Environment	
Confirmation		Environmental Confirmations	Environmental Confirmations

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
Information- and Downloadcenter (Catalogs, Brochures,…)
https://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, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7422-0
CAx-Online-Generator
https://www.siemens.com/cax

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