SIEMENS

Data sheet 5SD7424-2



Surge arrester T2, UN 240/400 V, UC 350/264 V AC, pluggable protective module, 3+1 circuit (TN-S, TT), Width 49.2 mm

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 5SD7428-2
fastening method	DIN rail NS 35
material of the enclosure	PA 6.6 / PBT
size of surge arrester	2,7 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	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
 between N and PE at AC maximum 	264 V
 between L and PE at AC maximum 	350 V
 between L and (PE)N at AC maximum 	350 V
discharge current	
 between L and (PE)N at (8/20) μs 	20 kA
 between L and N at (8/20) μs 	40 kA

 between L and PE at (8/20) μs 	40 kA
 between L and PE at (8/20) μs 	20 kA
 between N and PE at (8/20) μs 	80 kA
• between N and PE at (8/20) µs	40 kA
follow current extinguishing capability	40 M
	400 A (004) (a a)
between N and PE	100 A (264 V a.c.)
short-circuit rating (SCCR) at 264 V	25 kA
protection level	
 between L and N maximum 	1.5 kV
 between L and PE maximum 	1.9 kV
between N and PE maximum	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 	0.7 kV
— at 10 kA maximum	0.7 kV
— at 5 kA maximum	0.7 kV
— at 4 kA maximum	0.7 kV
— at 2 kA maximum	0.7 kV
response value of the surge voltage at 6 kV at (1.2/50) µs	0.7 KV
	4.5.127
between N and PE	1.5 kV
and the between Land (DEN)	05
• 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	40 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
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	
	TT TN C
type of distribution system	TT, TN-S
TOV behavior	
 at TOV test voltage (L-N) 	415 V AC (5 s / withstand mode) / 457 V AC (120 min / safe failure mode)
at TOV test voltage (N-PE)	1200 V (200 ms / withstand mode)
ambient temperature	
 during operation 	-40 +80 °C
during storage	-40 +80 °C
combustibility class according to UL 94	V0
Approvals Certificates	
General Product Approval	other
Confirmation / C	Miscellaneous Confirmation
C E KEMA	i FMI
1112011	
EG-Konf. KEMA	LIIL

other Environment

<u>Miscellaneous</u> <u>Environmental Con-</u> <u>firmations</u> <u>Environmental Con-</u> <u>firmations</u>

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=5SD7424-2

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

https://support.industry.siemens.com/cs/ww/en/ps/5SD7424-2

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7424-2

CAx-Online-Generator

http://www.siemens.com/cax

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