



surge arrester type, 2, Un 240/400 V, Uc 350/264 V AC, protective modules, plug-in, 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	TH35 DIN rail
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	420 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) μ s	20 kA

<ul style="list-style-type: none"> • between L and N at (8/20) μs • between L and PE at (8/20) μs • between L and PE at (8/20) μs • between N and PE at (8/20) μs • between N and PE at (8/20) μs 	40 kA 40 kA 20 kA 80 kA 40 kA
follow current extinguishing capability	
<ul style="list-style-type: none"> • between N and PE 	100 A (264 V a.c.)
short-circuit rating (SCCR) at 264 V	25 kA
protection level	
<ul style="list-style-type: none"> • between L and N maximum • between L and PE maximum • between N and PE maximum 	1.5 kV 1.9 kV 1.5 kV
residual voltage	
<ul style="list-style-type: none"> • between L and (PE)N <ul style="list-style-type: none"> — at rated value of discharge current maximum — at 10 kA maximum — at 5 kA maximum — at 4 kA maximum — at 2 kA maximum • between N and PE <ul style="list-style-type: none"> — at rated value of discharge current maximum — at 10 kA maximum — at 5 kA maximum — at 4 kA maximum — at 2 kA maximum 	1.5 kV 1.3 kV 1.2 kV 1.1 kV 1 kV 0.7 kV 0.7 kV 0.7 kV 0.7 kV 0.7 kV
response value of the surge voltage at 6 kV at (1.2/50) μs	
<ul style="list-style-type: none"> • between N and PE 	1.5 kV
<ul style="list-style-type: none"> • response time between L and (PE)N • response time between N and PE 	25 ns 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	
<ul style="list-style-type: none"> • for finely stranded conductor • for rigid conductor 	2.5 ... 16 mm ² 2.5 ... 25 mm ²
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 distribution system	TT, TN-S
TOV behavior	
<ul style="list-style-type: none"> • at TOV test voltage (L-N) • at TOV test voltage (N-PE) 	415 V AC (5 s / withstand mode) / 457 V AC (120 min / safe failure mode) 1200 V (200 ms / withstand mode)
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage 	-40 ... +80 °C -40 ... +80 °C
combustibility class according to UL 94	V0
Approvals Certificates	
General Product Approval	other



[Confirmation](#)

[Miscellaneous](#)

Environment

[Environmental Con-
firmations](#)

[Environmental Con-
firmations](#)

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=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, ...)

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

CAX-Online-Generator

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

last modified:

8/7/2025

