SIEMENS

Data sheet 5SD7424-3

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	98 mm
depth	71.5 mm
net weight	414 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	
● 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	
● 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	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, remote signaling contact
Indicator/remote signaling	
product component remote signaling contact	Yes
switching function of the remote signaling contacts	PDT contact
operating voltage of the remote signaling contacts at AC	5 ... 250 V
operational current of the remote signaling contacts at AC	5 mA ... 1 A
connection type of remote signaling contact	M2
connectable conductor cross-section for remote signaling contacts for rigid conductor	0.14 ... 1.5 mm²
connectable conductor cross-section for remote signaling contacts for finely stranded conductor	0.14 ... 1.5 mm²
AWG number as coded connectable conductor cross section for remote signaling contacts	28 ... 16
tightening torque for remote signaling contacts	0.25 N·m
NEMA/UL - Data	
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

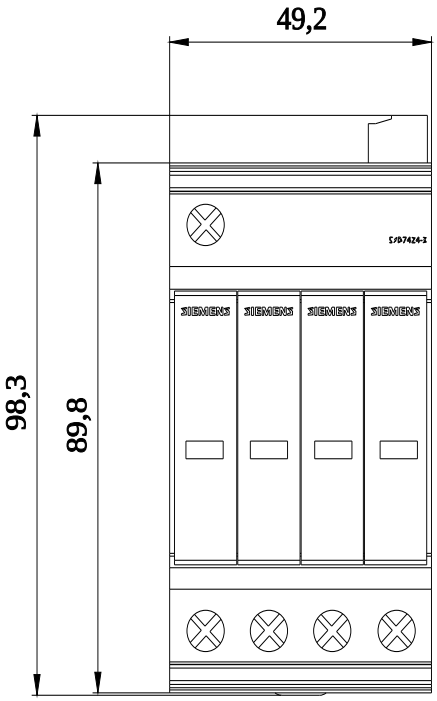
General Product Approval			other		
CE EG-Konf.	KEMA KEUR KEMA	EAC	产品合格 QC PASS	Confirmation	Miscellaneous

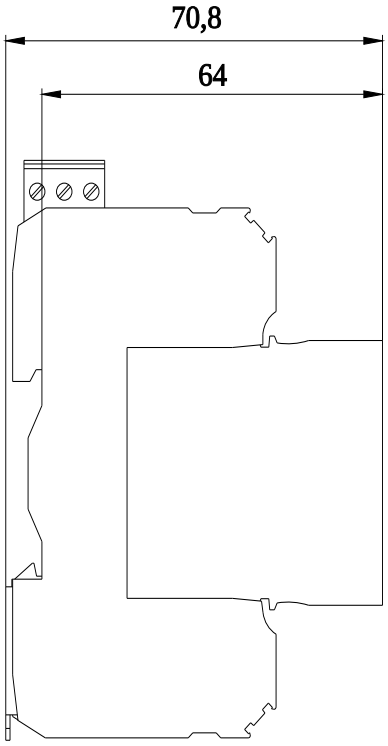
Environment

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=5SD7424-3
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/5SD7424-3
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7424-3
CAx-Online-Generator
https://www.siemens.com/cax





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