SIEMENS

Data sheet 5SD7414-2



Lightning conductor T1/T2, UN 240/400 V, UC 335/264 V A.C., pluggable protective modules, 3+1 circuit (TN-S, TT), Width 72 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 	Yes
 Test Class II, Type 2 	Yes
 Test Class III, Type 3 	No
number of SPD ports	1
design of the product	Combination surge arresters
design of pole	3+N/PE
designation of the protective paths	L-N, L-PE, N-PE
accessories	3 x 5SD7418-3 + 1 x 5SD7418-2
fastening method	DIN rail NS 35
material of the enclosure	PA 6.6 / PBT
size of surge arrester	4 TE
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	7.5 gn
relative humidity during operation	5 95 %
installation altitude at height above sea level maximum	2 000 m
width	71.2 mm
height	89.9 mm
depth	77.5 mm
net weight	669 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	335 V
 between N and PE at AC maximum 	264 V
 between L and (PE)N at AC maximum 	335 V
apparent power consumption maximum	810 mVA
total discharge current at (8/20) µs	50 kA
discharge current	
 between L and (PE)N at (8/20) μs 	12.5 kA

● between L and N at (8/20) μs	50 kA
 between L and PE at (8/20) μs 	50 kA
 between L and PE at (8/20) μs 	12.5 kA
 between N and PE at (8/20) μs 	50 kA
 between N and PE at (8/20) μs 	50 kA
total lightning impulse current at (10/350) µs	50 kA
lightning current peak value at (10/350) µs	
 lightning current peak value between L and PE 	12.5 kA
 lightning current peak value between N and PE 	50 kA
 lightning current peak value between L and N 	12.5 kA
charge of the flash at (10/350) μs	
 charge of the flash between L and N 	6.25 A·s
 charge of the flash between L and PE 	6.25 A·s
charge of the flash between N and PE	25 A·s
specific energy of the flash at (10/350) µs	
 between L and N 	39
 between L and PE 	39
between N and PE	625
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 	1.2 kV
 between L and PE maximum 	2 kV
 between N and L 	1.2 kV
 between N and PE maximum 	1.7 kV
● between PE and N and/or L	1.7 kV
residual voltage	
between L and (PE)N	
 at rated value of discharge current maximum 	1.2 kV
— at 10 kA maximum	1.1 kV
— at 5 kA maximum	1 kV
— at 3 kA maximum	0.9 kV
 between L and PE 	
 at rated value of discharge current maximum 	2 kV
— at 10 kA maximum	1.5 kV
— at 5 kA maximum	1.2 kV
— at 3 kA maximum	1.1 kV
 between N and PE 	
 at rated value of discharge current maximum 	0.6 kV
— at 10 kA maximum	0.5 kV
— at 5 kA maximum	0.5 kV
— at 3 kA maximum	0.4 kV
response value of the surge voltage at 6 kV at (1.2/50) µs	
• between N and PE	1.7 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	80 A AC (gG)
fuse protection type for T-connector	160 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	1.5 25 mm²
for rigid conductor	1.5 35 mm²
finely stranded	1.5 25 mm²
AWG number as coded connectable conductor cross section	15 2
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	
 at TOV test voltage (L-N) 	415 V AC (5 s / withstand 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	

Approvals Certificates

General Product Approval other

Confirmation

EAC



Miscellaneous

Confirmation

Environment other

Miscellaneous

Environmental Confirmations

Environmental Con**firmations**

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=5SD7414-2

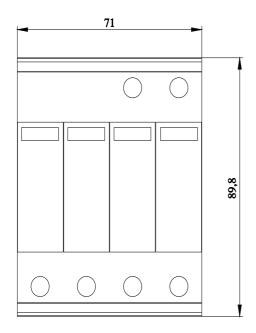
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

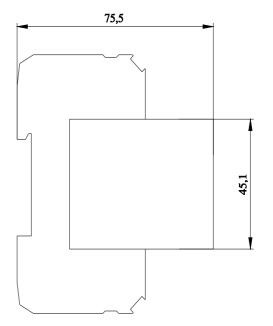
https://support.industry.siemens.com/cs/ww/en/ps/5SD7414-2

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7414-2

CAx-Online-Generator

http://www.siemens.com/cax





last modified: 7/3/2024 🖸