SIEMENS

Data sheet 5SD7414-2



lightning arrester type 1/type 2, Un 240/400 V, Uc 335/264 V AC, protective modules, plug-in, 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	TH35 DIN rail
material of the enclosure	PA 6.6 / PBT
size of surge arrester	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	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
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	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

Subject to change without notice
© Copyright Siemens

● 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 kJ/?
● between L and PE	39 kJ/?
● between N and PE	625 kJ/?
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

Subject to change without notice
© Copyright Siemens

AWG number as coded connectable conductor cross section	15 ... 2
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 distribution system	TN-S, TT
ambient temperature	
● during operation	-40 ... +80 °C
● during storage	-40 ... +80 °C
combustibility class according to UL 94	V0

Approvals Certificates

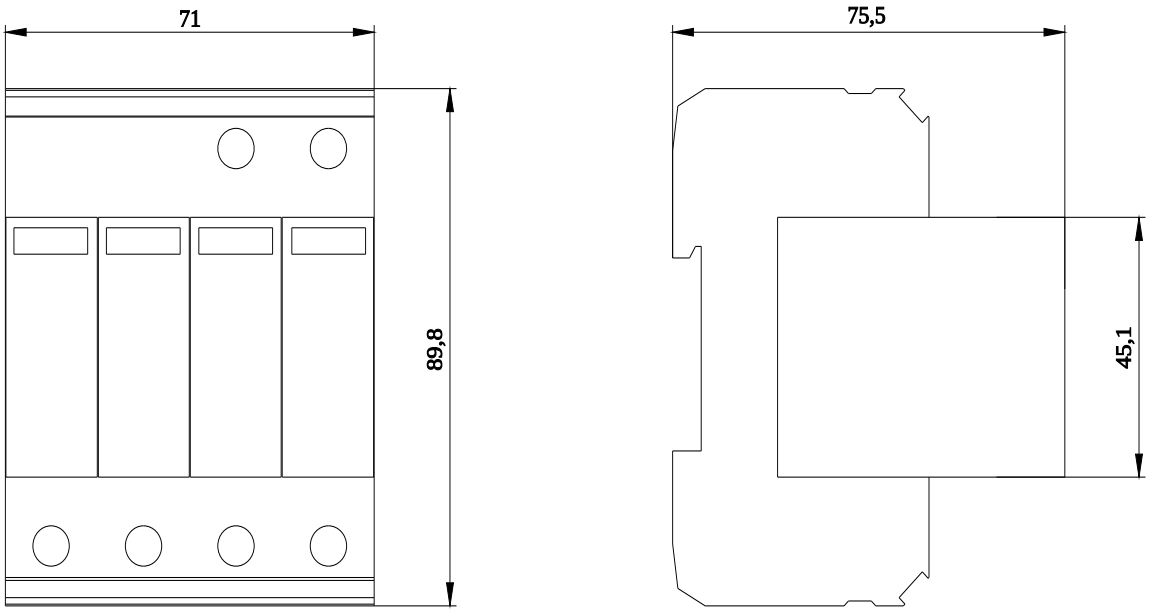
General Product Approval					other
EAC	KEMA KEUR KEMA	Confirmation	UK CA	CE EG-Konf.	Miscellaneous

other		Environment	
Confirmation	产品合格 QC PASS	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=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, ...)
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7414-2
CAx-Online-Generator
https://www.siemens.com/cax

© Copyright Siemens



last modified: 9/4/2026

Subject to change without notice
© Copyright Siemens

Subject to change without notice
© Copyright Siemens