



Combination arrester type 1+2 Requirement class B+C, UC 300V $I_{imp}=7.5\text{kA}$ 4-pole, 3+1 circuit for TN-S+TT mounting on 40mm busbar with remote and load contact

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	Yes
number of SPD ports	1
design of the product	Arrester combination
design of pole	3+N/PE
designation of the protective paths	L-N, N-PE
fastening method	busbar mounting 40 mm
material / of the enclosure	Durethan
degree of pollution	2
overvoltage category / according to IEC 61010-1	II
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	4.96 gn
relative humidity / during operation	5 % ... 95 %
installation altitude / at height above sea level / maximum	4 000 m
width	47 mm
height	224 mm
depth	74 mm
net weight	760 g
Electrical data	
type of distribution system	TT, TN-S
operating voltage	230 V
continuous operating voltage	
• maximum	300 V
• between L and (PE)N	300 V
apparent power consumption / maximum	1.5 mVA
discharge current	
• at (8/20) μs	20 kA
• 1 phase / at (8/20) μs	50 kA
• between L and (PE)N / at (8/20) μs	20 kA
• between N and PE / at (8/20) μs	100 kA
• between N and PE / at (8/20) μs	80 kA
lightning current peak value / at (10/350) μs	7.5 kA
• lightning current peak value / between N and PE	30 kA

• lightning current peak value / between L and N	7.5 kA
charge of the flash / at (10/350) µs	
• charge of the flash / between L and N	3.75 A·s
• charge of the flash / between N and PE	15 A·s
specific energy of the flash / at (10/350) µs	
• between L and N	14
• between N and PE	225
follow current extinguishing capability	
• between N and PE	100 A
short-circuit rating (SCCR) / at 264 V	25 kA
protection level	1.5 kV
• maximum	1.5 kV
• between L and N	1.5 kV
• between N and L	1.5 kV
• between N and PE	1.5 kV
• between PE and N and/or L	1.5 kV
residual voltage	
• at rated value of discharge current / maximum	1.5 kV
• at 5 kA / maximum	1.1 kV
• between L and (PE)N	
— at rated value of discharge current / maximum	1.5 kV
— at 5 kA / maximum	1.1 kV
• between N and PE	
— at rated value of discharge current / maximum	1.5 kV
— at 5 kA / maximum	1.1 kV
response value of the surge voltage / at 6 kV / at (1.2/50) µs	1.5 kV
• between L and N	1.5 kV
• between N and PE	1.5 kV
• Response time	100 ns
• response time / between L and (PE)N	100 ns
• response time / between N and PE	100 ns
fuse protection type / at V-shaped connection	315 A AC (gG)
fuse protection type / for T-connector	315 A AC (gG)
Connections/ Terminals	
type of electrical connection	plug-in technology for busbar 40 mm
tightening torque	4.5
connectable conductor cross-section	
• for finely stranded conductor	10 ... 25
• for rigid conductor	10 ... 35
• finely stranded	10 ... 25
AWG number / as coded connectable conductor cross section	12 ... 2
design of the thread / of the connection screw	M6
signal design	Optical, remote signaling contact
Indicator/remote signaling	
switching function / of the remote signaling contacts	NO / NC
operating voltage / of the remote signaling contacts / at AC	125 ... 250
operational current / of the remote signaling contacts / at AC	1 mA ... 1 A
connection type of remote signaling contact	screwless /push in
connectable conductor cross-section	
• for remote signaling contacts / for rigid conductor	0.25 ... 1.5
• for finely stranded conductor / for remote signaling contacts	0.25 ... 1.5
AWG number / as coded connectable conductor cross section / for remote signaling contacts / minimum	24
AWG number / as coded connectable conductor cross section / for remote signaling contacts / maximum	16
stripped length / of the cable / for remote signaling contacts	12 mm
NEMA/UL - Data	
type of distribution system	TT, TN-S
TOV behavior	

• at TOV test voltage	442 V AC (120 min / withstand mode)
• at TOV test voltage (L-N)	442 V AC (120 min / withstand mode)
• at TOV test voltage (N-PE)	1200 V (200 ms / withstand mode)
AWG number / as coded connectable conductor cross section / for remote signaling contacts / according to UL / minimum	24
AWG number / as coded connectable conductor cross section / for remote signaling contacts / according to UL / maximum	16
combustibility class according to UL 94	V0

Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=5SD7444-8KK12>

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

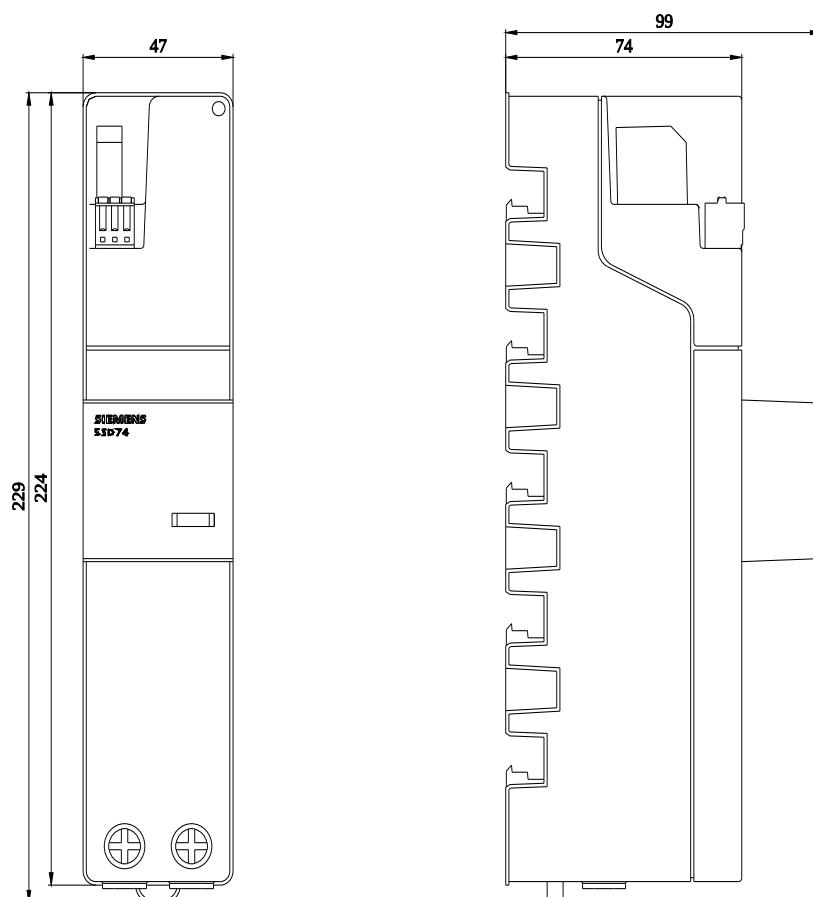
<https://support.industry.siemens.com/cs/ww/en/ps/5SD7444-8KK12>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7444-8KK12

CAX-Online-Generator

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



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