



combination arrester type 1+2 requirement class B+C, U_c 300 V, $I_{imp}=7.5$ kA 4-pole, 3+1 circuit for TN-S and TT systems, for 40 mm busbar system with remote display and phase tap

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	811 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	300 V
• between L and (PE)N at AC maximum	300 V
apparent power consumption maximum	1.5 mVA
discharge current at (8/20) μ s	20 kA
discharge current 1 phase at (8/20) μ s maximum	50 kA
discharge current	
• between L and (PE)N at (8/20) μ s	20 kA
• between N and PE at (8/20) μ s	100 kA

<ul style="list-style-type: none"> • between N and PE at (8/20) μs 	80 kA
lightning current peak value at (10/350) μs	7.5 kA
<ul style="list-style-type: none"> • lightning current peak value between N and PE • lightning current peak value between L and N 	30 kA 7.5 kA
charge of the flash at (10/350) μs	
<ul style="list-style-type: none"> • charge of the flash between L and N • charge of the flash between N and PE 	3.75 A·s 15 A·s
specific energy of the flash at (10/350) μs	
<ul style="list-style-type: none"> • between L and N • between N and PE 	14 kJ/? 225 kJ/?
follow current extinguishing capability	
<ul style="list-style-type: none"> • between N and PE 	100 A
short-circuit rating (SCCR) at 264 V	25 kA
protection level	1.5 kV
<ul style="list-style-type: none"> • maximum • between L and N maximum • between N and L • between N and PE maximum • between PE and N and/or L 	1.5 kV 1.5 kV 1.5 kV 1.5 kV 1.5 kV
residual voltage	
<ul style="list-style-type: none"> • at rated value of discharge current maximum • at 5 kA maximum • between L and (PE)N <ul style="list-style-type: none"> — at rated value of discharge current maximum — at 5 kA maximum • between N and PE <ul style="list-style-type: none"> — at rated value of discharge current maximum — at 5 kA maximum 	1.5 kV 1.1 kV 1.5 kV 1.1 kV 1.5 kV 1.1 kV
response value of the surge voltage at 6 kV at (1.2/50) μs	1.5 kV
<ul style="list-style-type: none"> • between L and N • between N and PE 	1.5 kV 1.5 kV
<ul style="list-style-type: none"> • Response time • response time between L and (PE)N • response time between N and PE 	100 ns 100 ns 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 N·m
connectable conductor cross-section	
<ul style="list-style-type: none"> • for finely stranded conductor • for rigid conductor • finely stranded 	10 ... 25 mm ² 10 ... 35 mm ² 10 ... 25 mm ²
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	
product component remote signaling contact	Yes
switching function of the remote signaling contacts	NO / NC
operating voltage of the remote signaling contacts at AC	125 ... 250 V
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 mm ²
connectable conductor cross-section for remote signaling contacts for finely stranded conductor	0.25 ... 1.5 mm ²
AWG number as coded connectable conductor cross section for remote signaling contacts	24 ... 16
stripped length of the cable for remote signaling contacts	12 mm

NEMA/UL - Data

type of distribution system	TT, TN-S
TOV behavior <ul style="list-style-type: none">• at TOV test voltage• at TOV test voltage (L-N)• at TOV test voltage (N-PE)	442 V AC (120 min / withstand mode) 442 V AC (120 min / withstand mode) 1200 V (200 ms / withstand mode)
AWG number as coded connectable conductor cross section <ul style="list-style-type: none">• for remote signaling contacts according to UL	24 ... 16
ambient temperature <ul style="list-style-type: none">• during operation• during storage	-40 ... +85 °C -40 ... +80 °C
combustibility class according to UL 94	V0

Approvals Certificates

General Product Approval	other
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Environment

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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=5SD7444-8KK12>

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

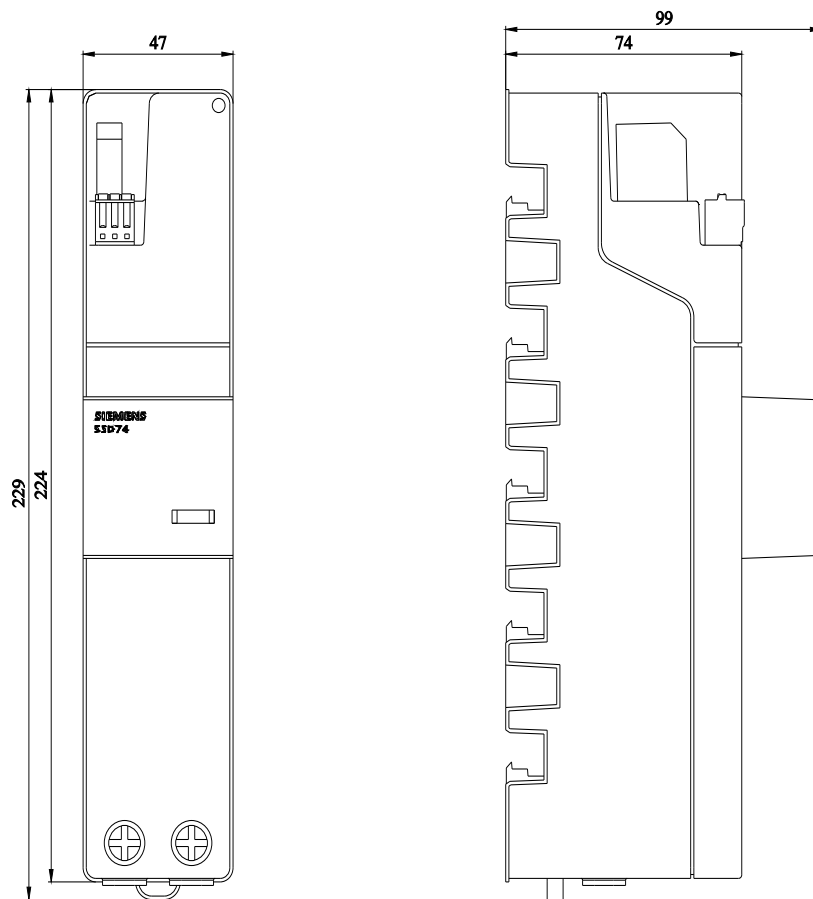
<https://support.industry.siemens.com/cs/ww/en/ps/5SD7444-8KK12>

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

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

CAx-Online-Generator

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



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