



combination arrester type 1+2 requirement class B+C, U_c 300 V, $I_{imp}=12.5$ kA 3-pole, 3+0 circuit for TNC 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/NPE
designation of the protective paths	L-PEN
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	777 g
Electrical data	
type of distribution system	TN-C
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	
• between L and (PE)N at (8/20) μ s	20 kA
• between L and N at (8/20) μ s	50 kA
• between L and PE at (8/20) μ s	50 kA

<ul style="list-style-type: none"> • between L and PE at (8/20) μs 	20 kA
lightning current peak value at (10/350) μs	12.5 kA
<ul style="list-style-type: none"> • lightning current peak value between L and PE 	12.5 kA
charge of the flash at (10/350) μs	12.5 A·s
<ul style="list-style-type: none"> • charge of the flash between L and PE 	6.25 A·s
specific energy of the flash at (10/350) μs	
<ul style="list-style-type: none"> • between L and PE 	39 kJ/?
short-circuit rating (SCCR) at 264 V	25 kA
protection level	1.5 kV
<ul style="list-style-type: none"> • maximum 	1.5 kV
<ul style="list-style-type: none"> • between L and PE maximum 	1.5 kV
residual voltage	
<ul style="list-style-type: none"> • at rated value of discharge current maximum 	1.5 kV
<ul style="list-style-type: none"> • at 5 kA maximum 	1.1 kV
<ul style="list-style-type: none"> • between L and (PE)N <ul style="list-style-type: none"> — at rated value of discharge current maximum — at 5 kA maximum 	1.5 kV 1.1 kV
<ul style="list-style-type: none"> • between L 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
<ul style="list-style-type: none"> • 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
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 PE 	1.5 kV
<ul style="list-style-type: none"> • Response time 	100 ns
<ul style="list-style-type: none"> • response time between L and (PE)N 	100 ns
fuse protection type at V-shaped connection	315 A AC (gG)
fuse protection type for T-conductor	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 	10 ... 25 mm ²
<ul style="list-style-type: none"> • for rigid conductor 	10 ... 35 mm ²
<ul style="list-style-type: none"> • finely stranded 	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	TN-C
TOV behavior	
<ul style="list-style-type: none"> • at TOV test voltage 	442 V AC (120 min / 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	
• during operation	-40 ... +85 °C
• during storage	-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=5SD7443-8KK22>

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

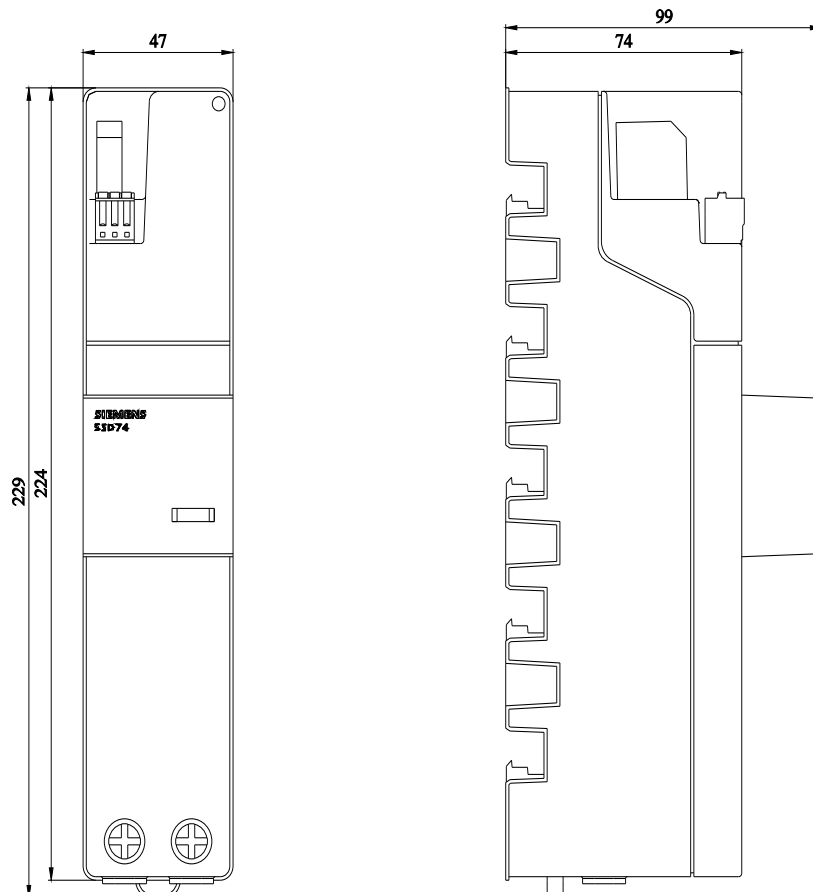
<https://support.industry.siemens.com/cs/ww/en/ps/5SD7443-8KK22>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7443-8KK22

CAX-Online-Generator

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



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