



combination surge arrester with integrated arrester back-up fuse, requirement class B+C, Uc 255 V, 1-pole for TN-S and TT systems

General data	
standard	IEC 61643-11: 2011
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	Arrester combination
design of pole	1
designation of the protective paths	L-PEN
fastening method	TH35 DIN rail
size of surge arrester	2 TE
degree of pollution	2
overvoltage category according to IEC 61010-1	II
protection class IP at connection all terminals	IP20
relative humidity during operation	5 ... 95 %
installation altitude at height above sea level maximum	2 000 m
width	36 mm
height	150 mm
depth	73 mm
net weight	540 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	255 V
• between L and PE at AC maximum	255 V
• between L and (PE)N at AC maximum	255 V
discharge current at (8/20) μ s	25 kA
discharge current 1 phase at (8/20) μ s maximum	25 kA
discharge current	
• between L and (PE)N at (8/20) μ s	25 kA
• between L and N at (8/20) μ s	25 kA
• between L and PE at (8/20) μ s	25 kA
• between L and PE at (8/20) μ s	25 kA
total lightning impulse current at (10/350) μ s	25 kA
lightning current peak value at (10/350) μs	25 kA

<ul style="list-style-type: none"> lightning current peak value between L and PE 	25 kA
<ul style="list-style-type: none"> lightning current peak value between L and N 	25 kA
charge of the flash at (10/350) μs	25 A-s
<ul style="list-style-type: none"> charge of the flash between L and N 	25 A-s
<ul style="list-style-type: none"> charge of the flash between L and PE 	25 A-s
specific energy of the flash at (10/350) μs	25 kJ/?
<ul style="list-style-type: none"> between L and N 	156.25 kJ/?
<ul style="list-style-type: none"> between L and PE 	156.25 kJ/?
follow current extinguishing capability	50 kA
<ul style="list-style-type: none"> between L and N 	50 kA
short-circuit rating (SCCR) at 264 V	50 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 N maximum 	1.5 kV
<ul style="list-style-type: none"> between L and PE maximum 	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

Connections/ Terminals

type of electrical connection	Screw terminal
stripped length	17 mm
tightening torque	7 ... 7 N-m
connectable conductor cross-section	
<ul style="list-style-type: none"> for finely stranded conductor 	10 ... 35 mm ²
<ul style="list-style-type: none"> for rigid conductor 	10 ... 50 mm ²
<ul style="list-style-type: none"> finely stranded 	10 ... 35 mm ²
signal design	optical

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	250 V
operational current of the remote signaling contacts at AC	0.1 mA ... 0.5 A
connection type of remote signaling contact	M2
connectable conductor cross-section for remote signaling contacts for rigid conductor	0.5 ... 1.5 mm ²
connectable conductor cross-section for remote signaling contacts for finely stranded conductor	0.5 ... 1.5 mm ²
tightening torque for remote signaling contacts	0.2 N-m
stripped length of the cable for remote signaling contacts	6 mm

NEMA/UL - Data

type of distribution system	TT, TN-S
TOV behavior	
<ul style="list-style-type: none"> at TOV test voltage 	440 V AC (120 min / withstand mode)
<ul style="list-style-type: none"> at TOV test voltage (L-N) 	440 V AC (120 min / withstand mode)
ambient temperature	
<ul style="list-style-type: none"> during operation 	-40 ... +80 °C
<ul style="list-style-type: none"> during storage 	-40 ... +80 °C
combustibility class according to UL 94	V0

Approvals Certificates

General Product Approval	other	Environment
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[Confirmation](#)

[Environmental Confirmations](#)

[Environmental Confirmations](#)

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=5SD7441-1KF00>

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

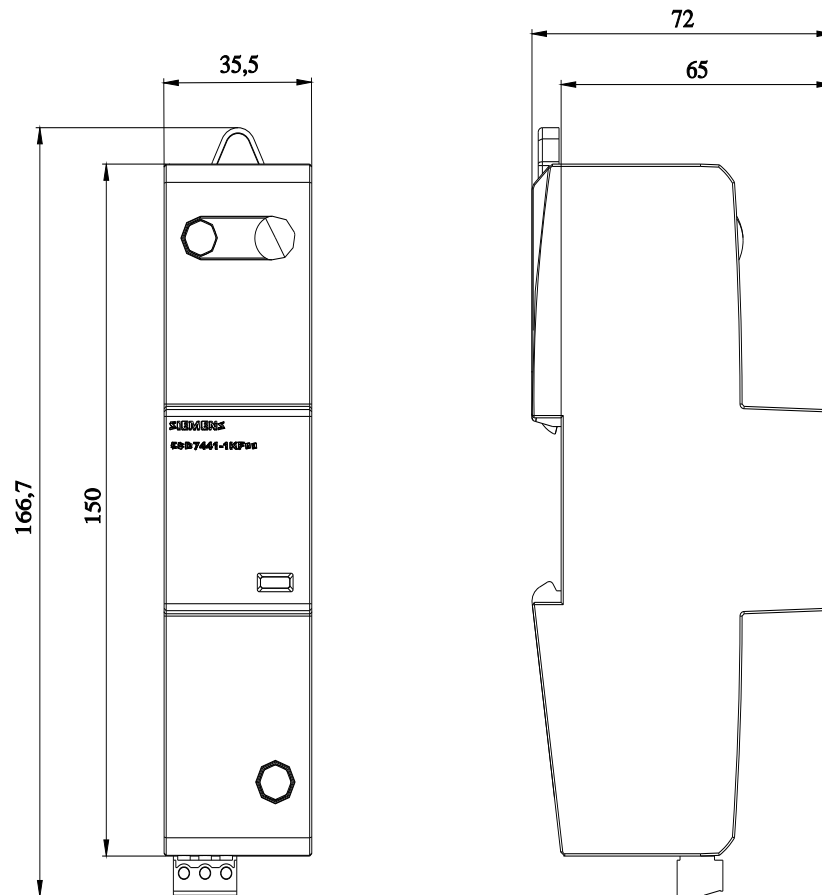
<https://support.industry.siemens.com/cs/ww/en/ps/5SD7441-1KF00>

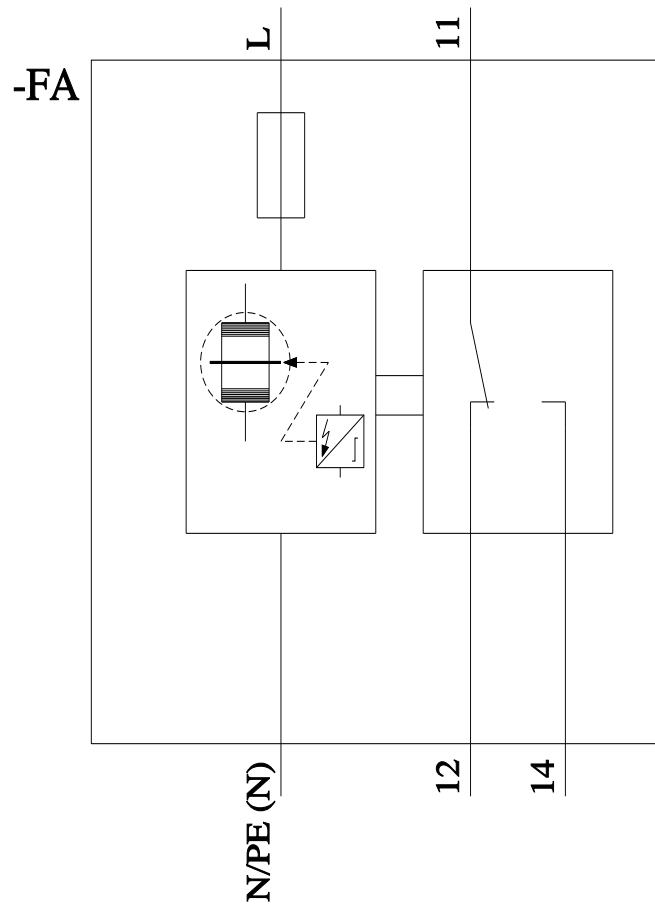
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7441-1KF00

CAX-Online-Generator

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





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