



SURGE ARRESTER TYPE 2 UN 240/415V, UC 335V a.c. 1+0 CIRCUIT

General data	
product designation	Surge protection device
<b>SPD classification according to EN 61643-11</b>	
• Test Class I, Type 1	No
• Test Class II, Type 2	Yes
• Test Class III, Type 3	No
number of SPD ports	1
design of the product	Surge arrester
design of pole	1
designation of the protective paths	L-PEN, L-N
fastening method	DIN rail NS 35
material of the enclosure	PA 6.6 / PBT
size of surge arrester	1WM
degree of pollution	2
overvoltage category according to IEC 61010-1	III
protection class IP at connection all terminals	IP20
shock acceleration	25 gn
vibrational acceleration at 5 Hz ... 500 Hz limited to 2,5 h per axis	5 gn
relative humidity during operation	5 ... 95 %
installation altitude at height above sea level maximum	2 000 m
width	17.8 mm
height	90 mm
depth	71.5 mm
net weight	109 g
Electrical data	
type of distribution system	TN, TT
<b>operating voltage</b>	
• at AC	230 V
value range of the operating frequency	50 / 60 Hz
<b>continuous operating voltage</b>	
• at AC maximum	350 V
apparent power consumption maximum	150 mVA
discharge current at (8/20) $\mu$ s	20 kA
discharge current 1 phase at (8/20) $\mu$ s maximum	40 kA
short-circuit rating (SCCR) at 264 V	25 kA
<b>protection level</b>	1.4 kV
• maximum	1.5 kV
<b>residual voltage</b>	
• at rated value of discharge current maximum	1.5 kV

<ul style="list-style-type: none"> <li>• at 10 kA maximum</li> <li>• at 5 kA maximum</li> <li>• at 3 kA maximum</li> </ul>	1.3 kV
	1.2 kV
	1.1 kV
<b>• Response time</b>	25 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	125 A AC (gG)

Connections/ Terminals	
type of electrical connection	Screw terminal
stripped length	16 mm
tightening torque	4.3 ... 4.7 N·m
<b>connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>• for finely stranded conductor</li> <li>• for rigid conductor</li> <li>• finely stranded</li> </ul>	1.5 ... 25 mm <sup>2</sup>
	1.5 ... 35 mm <sup>2</sup>
	0.5 ... 25 mm <sup>2</sup>
AWG number as coded connectable conductor cross section	15 ... 2
design of the thread of the connection screw	M5
signal design	optical

Indicator/remote signaling	
product component remote signaling contact	No

NEMA/UL - Data	
type of distribution system	TN, TT
<b>TOV behavior</b>	
<ul style="list-style-type: none"> <li>• at TOV test voltage</li> </ul>	415 V AC (5 s / withstand mode) / 440 V AC (120 min / safe failure mode)
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	-40 ... +80 °C
	-40 ... +80 °C
combustibility class according to UL 94	V-0

Approvals Certificates		
General Product Approval	other	Environment

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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- 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=5SD7461-0RC>

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

<https://support.industry.siemens.com/cs/ww/en/ps/5SD7461-0RC>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=5SD7461-0RC](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7461-0RC)

### CAX-Online-Generator

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

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SURGE ARRESTER TYPE 2 UN 240/415V, UC 335V a.c. 3+1 CIRCUIT

General data	
product designation	Surge protection device
<b>SPD classification according to EN 61643-11</b>	
• Test Class I, Type 1	No
• Test Class II, Type 2	Yes
• Test Class III, Type 3	No
number of SPD ports	1
design of the product	Surge arrester
design of pole	3+N/PE
designation of the protective paths	L-N, L-PE, N-PE
fastening method	DIN rail NS 35
material of the enclosure	PA 6.6 / PBT
size of surge arrester	4 TE
degree of pollution	2
overvoltage category according to IEC 61010-1	III
protection class IP at connection all terminals	IP20
shock acceleration	25 gn
vibrational acceleration at 5 Hz ... 500 Hz limited to 2,5 h per axis	5 gn
relative humidity during operation	5 ... 95 %
installation altitude at height above sea level maximum	2 000 m
width	71.5 mm
height	90 mm
depth	71.5 mm
net weight	390 g
Electrical data	
type of distribution system	TT, TN-S
<b>operating voltage</b>	
• at AC	230 V
value range of the operating frequency	50 / 60 Hz
<b>continuous operating voltage</b>	
• at AC maximum	350 V
• between N and PE at AC maximum	260 V
• between L and (PE)N at AC maximum	350 V
apparent power consumption maximum	450 mVA
discharge current at (8/20) $\mu$ s	20 kA
discharge current 1 phase at (8/20) $\mu$ s maximum	40 kA
<b>follow current extinguishing capability</b>	
• between N and PE	100 A (260 V)
short-circuit rating (SCCR) at 264 V	25 kA

<b>protection level</b>		
<ul style="list-style-type: none"> <li>• between L and N maximum</li> <li>• between L and PE maximum</li> <li>• between N and L</li> <li>• between N and PE maximum</li> <li>• between PE and N and/or L</li> </ul>	1.6 kV 1.9 kV 1.4 kV 1.5 kV 1.5 kV	
<b>residual voltage</b>		
<ul style="list-style-type: none"> <li>• between L and (PE)N               <ul style="list-style-type: none"> <li>— at rated value of discharge current maximum</li> <li>— at 10 kA maximum</li> <li>— at 5 kA maximum</li> <li>— at 3 kA maximum</li> </ul> </li> <li>• between L and PE               <ul style="list-style-type: none"> <li>— at rated value of discharge current maximum</li> <li>— at 10 kA maximum</li> <li>— at 5 kA maximum</li> <li>— at 3 kA maximum</li> </ul> </li> <li>• between N and PE               <ul style="list-style-type: none"> <li>— at rated value of discharge current maximum</li> <li>— at 10 kA maximum</li> <li>— at 5 kA maximum</li> <li>— at 3 kA maximum</li> </ul> </li> </ul>	1.6 kV 1.5 kV 1.3 kV 1.1 kV 1.9 kV 1.5 kV 1.3 kV 1.2 kV 0.4 kV 0.25 kV 0.15 kV 0.1 kV	
<b>response value of the surge voltage at 6 kV at (1.2/50) <math>\mu</math>s</b>		
<ul style="list-style-type: none"> <li>• between N and PE</li> </ul>	1.5 kV	
<ul style="list-style-type: none"> <li>• response time between L and (PE)N</li> <li>• response time between N and PE</li> </ul>	25 ns 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	125 A AC (gG)	
insulation resistance (Riso)	1 000 M $\Omega$	
<b>Connections/ Terminals</b>		
type of electrical connection	Screw terminal	
stripped length	16 mm	
tightening torque	4.3 ... 4.7 N·m	
<b>connectable conductor cross-section</b>		
<ul style="list-style-type: none"> <li>• for finely stranded conductor</li> <li>• for rigid conductor</li> <li>• finely stranded</li> </ul>	1.5 ... 25 mm <sup>2</sup> 1.5 ... 35 mm <sup>2</sup> 0.5 ... 25 mm <sup>2</sup>	
AWG number as coded connectable conductor cross section	15 ... 2	
design of the thread of the connection screw	M5	
signal design	optical	
<b>Indicator/remote signaling</b>		
product component remote signaling contact	No	
<b>NEMA/UL - Data</b>		
type of distribution system	TT, TN-S	
<b>TOV behavior</b>		
<ul style="list-style-type: none"> <li>• at TOV test voltage (L-N)</li> <li>• at TOV test voltage (N-PE)</li> </ul>	415 V AC (5 s / withstand mode) / 440 V AC (120 min / safe failure mode) 1200 V (200 ms / withstand mode)	
<b>ambient temperature</b>		
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	-40 ... +80 °C -40 ... +80 °C	
combustibility class according to UL 94	V-0	
<b>Approvals Certificates</b>		
<b>General Product Approval</b>	<b>other</b>	<b>Environment</b>



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## Environment

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