SIEMENS

Data sheet 5SD7443-1

Combination arrester type 1+2 Requirement class B+C, UC 350V Pluggable protective modules 3-pole, 3+0 circuit for TNC systems with remote display



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	No	
number of SPD ports	1	
design of the product	Arrester combination	
design of pole	3	
designation of the protective paths	L-PEN	
accessories	3 x 5SD7428-1 + 3 x 5SD7448-1	
fastening method	DIN rail NS 35	
material of the enclosure	PBT	
size of surge arrester	6MW	
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	106.9 mm	
height	95 mm	
depth	71.5 mm	
net weight	1 076 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	350 V	
apparent power consumption maximum	300 mVA	
discharge current at (8/20) µs	25 kA	
lightning current peak value at (10/350) µs	25 kA	
charge of the flash at (10/350) µs	12.5 A·s	
specific energy of the flash at (10/350) µs	160 kJ/?	
follow current extinguishing capability	25 kA (264 V AC), 3 kA (350 V AC)	

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short-circuit rating (SCCR) at 264 V	25 kA
protection level	
maximum	1.5 kV
residual voltage	
 at rated value of discharge current maximum 	1.5 kV
at 10 kA maximum	1.2 kV
at 5 kA maximum	1 kV
at 3 kA maximum	0.9 kV
response value of the surge voltage at 6 kV at (1.2/50) μs	1.5 kV
Response time	25 ns
adjustable response factor of tripping current	1.6
fuse protection type at V-shaped connection	125 A AC (gG)
fuse protection type for T-connector	315 A AC (gG)
Connections/ Terminals	
type of electrical connection	Screw terminal
stripped length	18 mm
tightening torque	4.3 4.7 N·m
connectable conductor cross-section	
for finely stranded conductor	2.5 25 mm²
for rigid conductor	2.5 35 mm ²
finely stranded	2.5 25 mm ²
AWG number as coded connectable conductor cross section	13 2
design of the thread of the connection screw	M5
signal design	Optical, remote signaling contact
	Optical, remote signaling contact
Indicator/remote signaling	V
product component remote signaling contact	Yes
switching function of the remote signaling contacts	PDT contact
operating voltage of the remote signaling contacts at AC	12 250 V
operational current of the remote signaling contacts at AC	10 mA 1 A
connection type of remote signaling contact	M2 screw thread
connectable conductor cross-section for remote signaling contacts for rigid conductor	0.14 1.5 mm ²
connectable conductor cross-section for remote signaling contacts for finely stranded conductor	0.14 1.5 mm²
AWG number as coded connectable conductor cross section for	28 16
remote signaling contacts	0.25 N·m
tightening torque for remote signaling contacts	
stripped length of the cable for remote signaling contacts	7 mm
NEMA/UL - Data	101
type of surge protective device (SPD) according to UL	4CA
type of distribution system according to UL	3D
type of distribution system	TN-C
designation of the protective paths according to UL	L-L, L-G
TOV behavior	
at TOV test voltage	415 V AC (5 s / withstand mode) / 457 V AC (120 min / safe failure mode)
Measured Limiting Voltage (MLV)	
between L and L	2.45 kV
between L and Ground (GND)	1.34 kV
Maximum Continuous Operating Voltage (MCOV)	
between L and L	528 V
between L and Ground (GND)	264 V
discharge current	
 between L and Ground (GND) according to UL rated value 	20 kA
 between L and L according to UL rated value 	20 kA
AWG number as coded connectable conductor cross section	
according to UL	12 2
for remote signaling contacts according to UL	30 14
operating voltage of the remote signaling contacts according to	125 V
UL	

operational current of the remote signaling contacts at AC according to UL	1 A
ambient temperature	
 during operation 	-40 +80 °C
during storage	-40 +80 °C
installation altitude above sea level according to UL	6 562 ft
gross weight [lb] according to UL	2.45 lb(av)
net weight [lb] according to UL	2.08 lb(av)
combustibility class according to UL 94	V0
standards according to UL	UL 1449 edition 4

Approvals Certificates

General Product Approval



Confirmation









other Environment

<u>Confirmation</u> <u>Miscellaneous</u> <u>Environmental Con-</u> <u>firmations</u> <u>firmations</u>

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=5SD7443-1

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

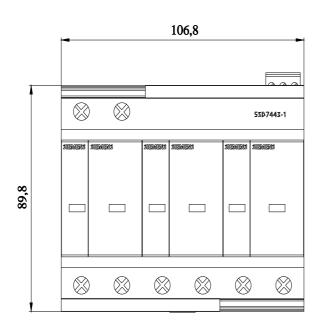
https://support.industry.siemens.com/cs/ww/en/ps/5SD7443-1

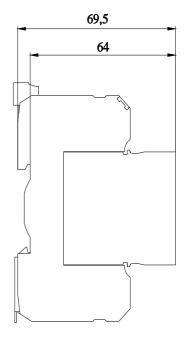
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7443-1

CAx-Online-Generator

http://www.siemens.com/cax





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