

Surge arrester T2, UN 240/400 V, UC 350/264 V AC, pluggable protective module, 3+1 circuit (TN-S, TT), Width 49.2 mm



Article number

General data	
Standard	IEC 61643-11: 2011, EN 61643-11: 2012
Product designation	Surge protection device
SPD classification / acc. to EN 61643-11	
<ul style="list-style-type: none"> • Test Class I, Type 1 • Test Class II, Type 2 • Test Class III, Type 3 	<p>No</p> <p>Yes</p> <p>No</p>
Number of SPD ports	1
Design of the product	Surge arrester
Design of pole	3+N/PE
Designation of the protective paths	L-N, N-PE
accessories	3 x 5SD7428-1 + 1 x 5SD7428-2
Mounting type	DIN rail NS 35
Material / of the enclosure	PA 6.6 / PBT
Size of surge arrester	2,7 MW
Degree of pollution	2
Overvoltage category / acc. to IEC 61010-1	III
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	5 gn
Ambient temperature / during operation	-40 °C ... 80 °C
Ambient temperature / during storage and transport	-40 °C ... 80 °C
Relative humidity / during operation	5 % ... 95 %
Installation altitude / at height above sea level / maximum	2 000 m
Width	49.2 mm
Height	90 mm
Depth	71.5 mm
Net weight	382 g

Electrical data

Type of distribution system	TT, TN-S
Operating voltage	230 / 400 V AC
Continuous operating voltage	
• between N and PE	264 V
• between L and PE	350 V
• between L and (PE)N	350 V
Load current	40 A
Protective conductor current	1 µA (264 V AC)
Discharge current	
• between L and (PE)N / at (8/20) µs	20 kA
• between L and N / at (8/20) µs	40 kA
• between L and PE / at (8/20) µs	40 kA
• between L and PE / at (8/20) µs	20 kA
• between N and PE / at (8/20) µs	80 kA
• between N and PE / at (8/20) µs	40 kA
Follow current extinguishing capability	
• between N and PE	100 A (264 V a.c.)
Short-circuit rating (SCCR) / at 264 V	25 kA
Protection level	
• between L and N	1.5 kV
• between L and PE	1.9 kV
• between N and PE	1.5 kV
Residual voltage	
• between L and (PE)N	
— at rated value of discharge current / maximum	1.5 kV
— at 10 kA / maximum	1.3 kV
— at 5 kA / maximum	1.2 kV
— at 4 kA maximum	1.1 kV

<ul style="list-style-type: none"> — at 2 kA maximum • between N and PE <ul style="list-style-type: none"> — at rated value of discharge current / maximum — at 10 kA / maximum — at 5 kA / maximum — at 4 kA maximum — at 2 kA maximum 	1 kV 0.7 kV 0.7 kV 0.7 kV 0.7 kV
Response value of the surge voltage / at 6 kV / at (1.2/50) μ s	1.5 kV
Response time	
<ul style="list-style-type: none"> • between L and (PE)N • between N and PE 	25 ns 100 ns
Settable response factor / of trip current	1.6
Fuse protection type / at V-shaped connection	40 A AC (gG)
Fuse protection type / for T-connector	315 A AC (gG)

Connections/Terminals

Type of electrical connection	Screw terminal
Wire stripping length	16 mm
Tightening torque	4.3 ... 4.7
Wire stripping length	16 mm
Connectable conductor cross-section	
<ul style="list-style-type: none"> • for finely stranded conductor • for rigid conductor 	2.5 ... 16 2.5 ... 25
AWG number / as coded connectable conductor cross section	12 ... 4
Design of the thread / of the connection screw	M5
Signal design	optical

NEMA/UL - Data

Type of distribution system	TT, TN-S
TOV behavior	
<ul style="list-style-type: none"> • at TOV test voltage (L-N) • at TOV test voltage (N-PE) 	415 V AC (5 s / withstand mode) / 457 V AC (120 min / safe failure mode) 1200 V (200 ms / withstand mode)
Combustibility class acc. to UL 94	V0

Further information

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?mfb=5SD7424-2>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<https://support.industry.siemens.com/cs/ww/en/ps/5SD7424-2>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7424-2

CAX-Online-Generator

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