SIEMENS

Data sheet

5SD7422-0



Surge arrester Type 2 Requirement class C, UC 350V Pluggable protective modules 2-pole, 1+1 circuit for TN-S and TT systems Narrow design

| General data | |
|---|---------------------------------------|
| standard | IEC 61643-11: 2011, EN 61643-11: 2012 |
| product designation | Surge protection device |
| SPD classification / acc. to EN 61643-11 | |
| Test Class I, Type 1 | No |
| Test Class II, Type 2 | Yes |
| Test Class III, Type 3 | No |
| number of SPD ports | 1 |
| Product version | Surge arrester |
| design of pole | 1+N/PE |
| designation of the protective paths | L-N, N-PE |
| Accessories | 1 x 5SD7428-1 + 1 x 5SD7428-0 |
| fastening method | DIN rail NS 35 |
| material / of the enclosure | PBT |
| size of surge arrester | 1,4 MW |
| Degree of pollution | 2 |
| overvoltage category / acc. to IEC 61010-1 | |
| 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 / minimum permissible ambient temperature / during operation / maximum permissible | -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 | 25.4 mm |
| Height | 90 mm |
| depth | 71.5 mm |
| net weight | 200 g |
| Electrical data | |
| type of distribution system | TT, TN-S |
| operating voltage | 240 V AC |
| operating voltage | 230 V |
| operating frequency | 50/60 Hz |
| continuous operating voltage | |
| • maximum | 350 V |

| - between N and DE | 264.14 |
|---|--|
| • between N and PE | 264 V |
| • between L and (PE)N | 350 V |
| load current | 40 A |
| protective conductor current | 1 μA (255 V AC) |
| discharge current | 2014 |
| • at (8/20) µs | 20 kA |
| • 1 phase / 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 | 4 5 1 1 4 |
| • maximum | 1.5 kV |
| • between N and L | 1.4 kV |
| between PE and N and/or L | 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 |
| — at 2 kA / maximum | 1 kV |
| between N and PE | |
| — at rated value of discharge current / maximum | 0.5 kV |
| — at 10 kA / maximum | 0.5 kV |
| — at 5 kA / maximum | 0.5 kV |
| — at 4 kA / maximum | 0.5 kV |
| — at 2 kA / maximum | 0.5 kV |
| response value of the surge voltage / at 6 kV / at (1.2/50) | |
| μs | |
| between N and PE | 1.5 kV |
| response time / between L and (PE)N | 25 ns |
| response time / between N and PE | 100 ns |
| adjustable response factor / of tripping current | 1.6 |
| fuse protection type / at V-shaped connection | 63 A AC (gG) |
| fuse protection type / for T-connector | 315 A AC (gG) |
| Connections/ Terminals | |
| type of electrical connection | Screw terminal |
| stripped length | 16 mm |
| tightening torque | 4.3 4.7 |
| stripped length | 16 mm |
| connectable conductor cross-section | |
| for finely stranded conductor | 2.5 16 |
| for rigid conductor | 2.5 25 |
| • finely stranded | 2.5 16 |
| AWG number / as coded connectable conductor cross | 12 4 |
| section | |
| design of the thread / of the connection screw | M5 |
| signal design | optical |
| NEMA/UL - Data | |
| type of surge protective device (SPD) / according to UL | 4CA |
| type of distribution system / according to UL | 1 |
| type of distribution system | TT, TN-S |
| designation of the protective paths / according to UL | L-N, L-G, N-G |
| TOV behavior | |
| at TOV test voltage (L-N) | 415 V AC (5 s / withstand mode) / 440 V AC (120 min / safe failure |
| | mode) |
| at TOV test voltage (N-PE) | 1200 V (200 ms / withstand mode) |
| Measured Limiting Voltage (MLV) / between L and Ground | 2.08 kV |
| (GND) | |

| Measured Limiting Voltage (MLV) / between L and N | 2 kV |
|---|-------------------|
| Measured Limiting Voltage (MLV) / between N and Ground (GND) | 0.95 kV |
| Maximum Continuous Operating Voltage (MCOV) / between L and Ground (GND) | 350 V |
| Maximum Continuous Operating Voltage (MCOV) / between L and N | 350 V |
| Maximum Continuous Operating Voltage (MCOV) / between N and Ground (GND) | 264 V |
| leakage current / according to UL | 20 kA |
| leakage current / according to UL | 20 kA |
| leakage current / according to UL | 20 kA |
| sequential current | |
| between N and Ground (GND) / according to UL | 200 A (264 V AC) |
| installation altitude above sea level / according to UL | 6 562 ft |
| gross weight [lb] / according to UL | 0.49 lb |
| net weight [lb] / according to UL | 0.44 lb |
| combustibility class acc. to UL 94 | VO |
| standards / according to UL | UL 1449 edition 4 |
| AWG number / as coded connectable conductor cross section / according to UL / minimum | 14 |
| AWG number / as coded connectable conductor cross section / according to UL / maximum | 2 |
| Further information | |

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/lowvoltage/catalogs

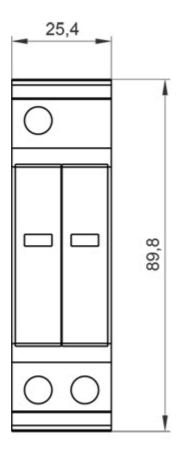
Industry Mall (Online ordering system)

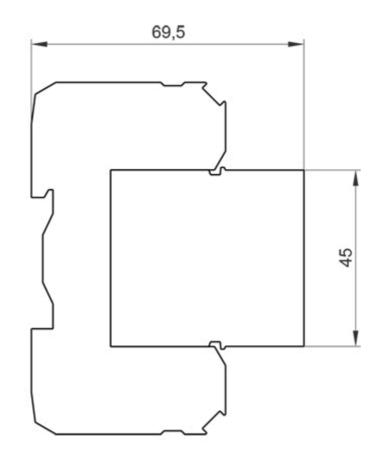
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=5SD7422-0

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

https://support.industry.siemens.com/cs/ww/en/ps/5SD7422-0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7422-0





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