SIEMENS

## Data sheet 5SD7424-0



surge arrester type, 2, requirement class C, Uc 350 V, protective modules, plug-in, 4-pole, 3+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 according 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 |
| 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 5SD7428-0 |
| fastening method | TH35 DIN rail |
| material of the enclosure | PBT |
| size of surge arrester | 2.7 MW |
| degree of pollution | 2 |
| overvoltage category according 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 |
| 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 |
| **Electrical data** | |
| type of distribution system | TN-S, TT |
| **operating voltage** | |
| ● at AC | 230 V |
| value range of the operating frequency | 50 / 60 Hz |
| **continuous operating voltage** | |
| ● at AC maximum | 350 V |
| ● between N and PE at AC maximum | 264 V |
| ● between L and (PE)N at AC maximum | 350 V |
| discharge current at (8/20) µs | 20 kA |
| discharge current 1 phase at (8/20) µs maximum | 40 kA |
| **follow current extinguishing capability** | |
| ● between N and PE | 100 A (264 V a.c.) |


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| short-circuit rating (SCCR) at 264 V | 25 kA |
| **protection level** | |
| ● 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 N·m |
| **connectable conductor cross-section** | |
| ● for finely stranded conductor | 2.5 ... 16 mm² |
| ● for rigid conductor | 2.5 ... 25 mm² |
| ● finely stranded | 2.5 ... 16 mm² |
| AWG number as coded connectable conductor cross section | 12 ... 4 |
| design of the thread of the connection screw | M5 |
| signal design | Optical, remote signaling contact |
| **Indicator/remote signaling** | |
| product component remote signaling contact | No |
| **NEMA/UL - Data** | |
| type of surge protective device (SPD) according to UL | 4CA |
| type of distribution system according to UL | 3Y |
| type of distribution system | TN-S, TT |
| designation of the protective paths according to UL | L-L, L-N, L-G, N-G |
| **Measured Limiting Voltage (MLV)** | |
| ● between L and L | 3.28 kV |
| ● between L and Ground (GND) | 2.08 kV |
| ● between L and N | 2 kV |
| ● between N and Ground (GND) | 0.95 kV |
| **Maximum Continuous Operating Voltage (MCOV)** | |
| ● between L and L | 700 V |
| ● between L and Ground (GND) | 350 V |
| ● between L and N | 350 V |
| ● between N and Ground (GND) | 264 V |
| **discharge current** | |
| ● between N and Ground (GND) according to UL rated value | 20 kA |
| ● between L and N according to UL rated value | 20 kA |
| ● between L and Ground (GND) according to UL rated | 20 kA |


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| | |
|---|---|
| value | |
| ● between L and L according to UL rated value | 20 kA |
| **AWG number as coded connectable conductor cross section** | |
| ● according to UL | 14 ... 2 |
| **ambient temperature** | |
| ● during operation | -40 ... +80 °C |
| ● during storage | -40 ... +80 °C |
| installation altitude above sea level according to UL | 6 562 ft |
| combustibility class according to UL 94 | V0 |
| standards according to UL | UL 1449 edition 4 |

## Approvals Certificates

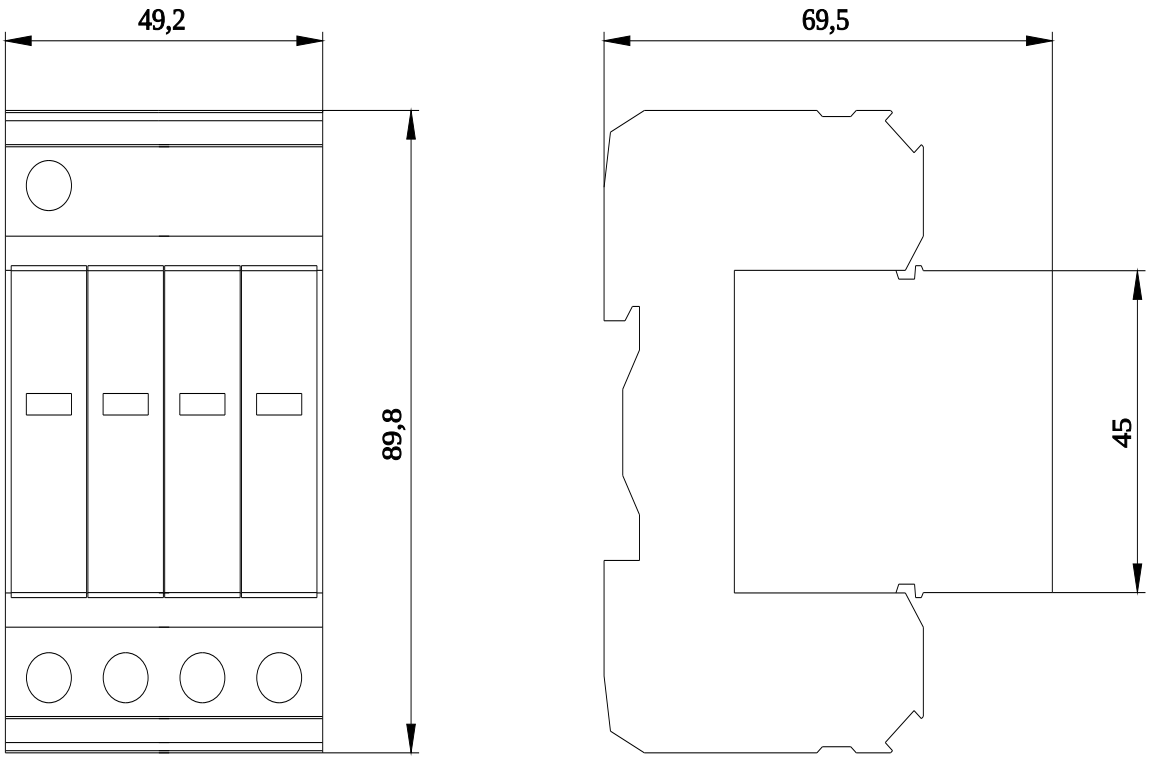
| General Product Approval | | | | | other |
|---|---|---|---|---|---|
| KEMA | cURus | EAC | Confirmation | EG-Konf. | Miscellaneous |

| other | | Environment | |
|---|---|---|---|
| Confirmation | 产品合格 QC PASS | 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=5SD7424-0
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/5SD7424-0
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7424-0
**CAx-Online-Generator**
https://www.siemens.com/cax


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