SIEMENS

## Data sheet 5SD7443-8KK21

combination arrester type 1+2 requirement class B+C, Uc 300 V, Iimp=12.5 kA 3-pole, 3+0 circuit for TNC systems, for 40 mm busbar system with remote display

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| **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 | Yes |
| number of SPD ports | 1 |
| design of the product | Arrester combination |
| design of pole | 3/NPE |
| designation of the protective paths | L-PEN |
| fastening method | busbar mounting 40 mm |
| material of the enclosure | Durethan |
| degree of pollution | 2 |
| overvoltage category according to IEC 61010-1 | II |
| 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 | 4.96 gn |
| relative humidity during operation | 5 ... 95 % |
| installation altitude at height above sea level maximum | 4 000 m |
| width | 47 mm |
| height | 224 mm |
| depth | 74 mm |
| net weight | 750 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 | 300 V |
| ● between L and (PE)N at AC maximum | 300 V |
| apparent power consumption maximum | 1.5 mVA |
| discharge current at (8/20) µs | 20 kA |
| **discharge current** | |
| ● between L and (PE)N at (8/20) µs | 20 kA |
| ● between L and N at (8/20) µs | 50 kA |
| ● between L and PE at (8/20) µs | 50 kA |

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| ● between L and PE at (8/20) µs | 20 kA |
| **lightning current peak value at (10/350) µs** | 12.5 kA |
| ● lightning current peak value between L and PE | 12.5 kA |
| **charge of the flash at (10/350) µs** | 12.5 A·s |
| ● charge of the flash between L and PE | 6.25 A·s |
| **specific energy of the flash at (10/350) µs** | |
| ● between L and PE | 39 kJ/? |
| short-circuit rating (SCCR) at 264 V | 25 kA |
| **protection level** | 1.5 kV |
| ● maximum | 1.5 kV |
| ● between L and PE maximum | 1.5 kV |
| **residual voltage** | |
| ● at rated value of discharge current maximum | 1.5 kV |
| ● at 5 kA maximum | 1.1 kV |
| ● between L and (PE)N | |
| — at rated value of discharge current maximum | 1.5 kV |
| — at 5 kA maximum | 1.1 kV |
| ● between L and PE | |
| — at rated value of discharge current maximum | 1.5 kV |
| — at 5 kA maximum | 1.1 kV |
| ● between N and PE | |
| — at rated value of discharge current maximum | 1.5 kV |
| — at 5 kA maximum | 1.1 kV |
| **response value of the surge voltage at 6 kV at (1.2/50) µs** | 1.5 kV |
| ● between L and PE | 1.5 kV |
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| ● **Response time** | 100 ns |
| ● response time between L and (PE)N | 100 ns |
| fuse protection type at V-shaped connection | 315 A AC (gG) |
| fuse protection type for T-connector | 315 A AC (gG) |
| **Connections/ Terminals** | |
| type of electrical connection | plug-in technology for busbar 40 mm |
| tightening torque | 4.5 N·m |
| **connectable conductor cross-section** | |
| ● for finely stranded conductor | 10 ... 25 mm² |
| ● for rigid conductor | 10 ... 35 mm² |
| ● finely stranded | 10 ... 25 mm² |
| AWG number as coded connectable conductor cross section | 12 ... 2 |
| design of the thread of the connection screw | M6 |
| signal design | Optical, remote signaling contact |
| **Indicator/remote signaling** | |
| product component remote signaling contact | Yes |
| switching function of the remote signaling contacts | NO / NC |
| operating voltage of the remote signaling contacts at AC | 125 ... 250 V |
| operational current of the remote signaling contacts at AC | 1 mA ... 1 A |
| connection type of remote signaling contact | screwless /push in |
| connectable conductor cross-section for remote signaling contacts for rigid conductor | 0.25 ... 1.5 mm² |
| connectable conductor cross-section for remote signaling contacts for finely stranded conductor | 0.25 ... 1.5 mm² |
| AWG number as coded connectable conductor cross section for remote signaling contacts | 24 ... 16 |
| stripped length of the cable for remote signaling contacts | 12 mm |
| **NEMA/UL - Data** | |
| type of distribution system | TN-C |
| **TOV behavior** | |
| ● at TOV test voltage | 442 V AC (120 min / withstand mode) |
| **AWG number as coded connectable conductor cross section** | |
| ● for remote signaling contacts according to UL | 24 ... 16 |

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| **ambient temperature** | |
| ● during operation | -40 ... +85 °C |
| ● during storage | -40 ... +80 °C |
| combustibility class according to UL 94 | V0 |

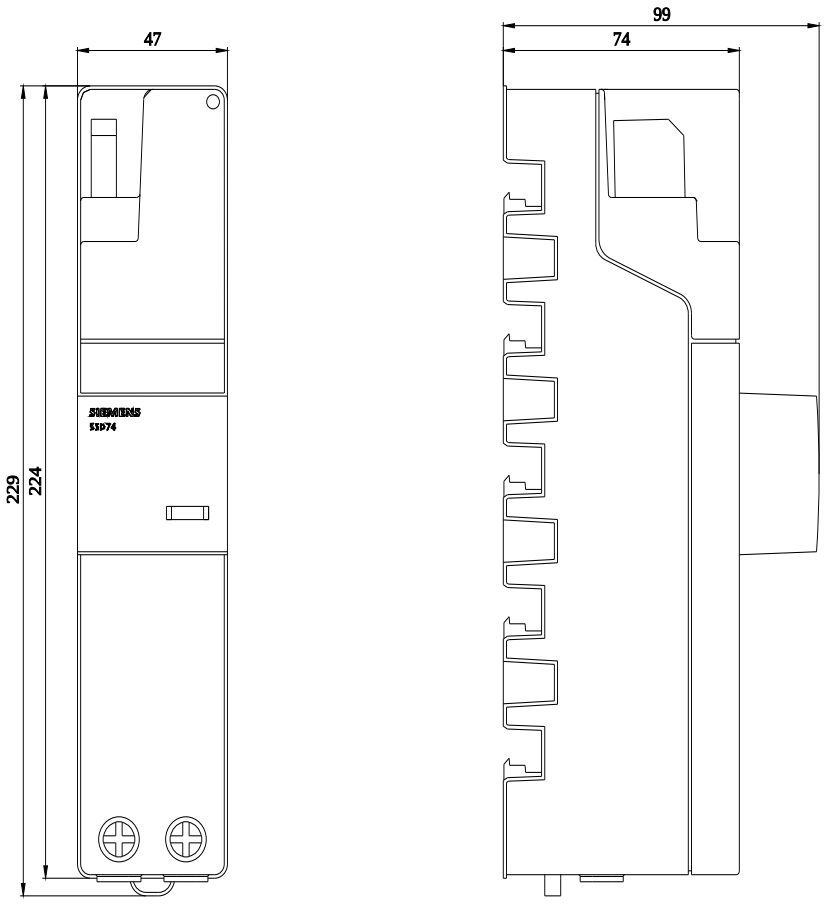
## Approvals Certificates

| General Product Approval | | | | | other |
|---|---|---|---|---|---|
| Confirmation | UKCA | CE EG-Konf. | DVE VDE | EAC | 产品合格 QC PASS |

| other | Environment | |
|---|---|---|
| Confirmation | 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=5SD7443-8KK21
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/5SD7443-8KK21
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7443-8KK21
**CAx-Online-Generator**
https://www.siemens.com/cax



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