



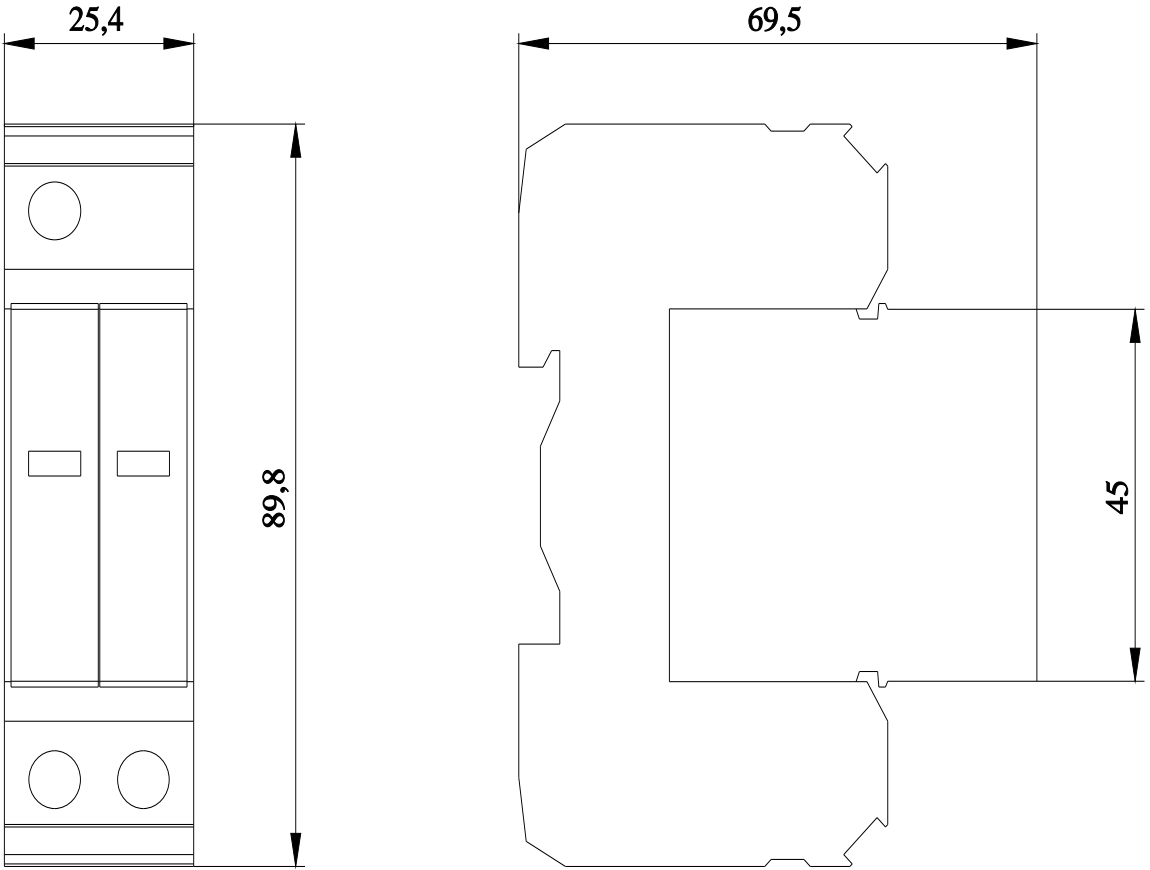
Surge arrester Type 2 Requirement class C, UC 350V Pluggable protective modules 2-pole, 1+1 circuit for TN-S and TT systems Narrow design

| General data  |                                       |
|---|---------------------------------------|
| standard  | IEC 61643-11: 2011, EN 61643-11: 2012 |
| product designation   | Surge protection device               |
| <b>SPD classification / according to EN 61643-11</b>                        |                                       |
| • 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  | 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 / 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   | 25.4 mm                               |
| height  | 90 mm                                 |
| depth   | 71.5 mm                               |
| net weight  | 200 g                                 |
| Electrical data   |                                       |
| type of distribution system   | TT, TN-S                              |
| <b>operating voltage</b>  |                                       |
| • at AC   | 230 V                                 |
| value range / of the operating frequency                                    | 50 / 60 Hz                            |
| <b>continuous operating voltage</b>   |                                       |
| • 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                                 |
| <b>follow current extinguishing capability</b>                              |                                       |
| • between N and PE  | 100 A (264 V a.c.)                    |

|   |  |
|---|--|
| short-circuit rating (SCCR) / at 264 V                                | 25 kA  |
| <b>protection level</b>   |  |
| • maximum   | 1.5 kV   |
| • between N and L   | 1.4 kV   |
| • between PE and N and/or L   | 1.5 kV   |
| <b>residual voltage</b>   |  |
| • 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   |
| <b>response value of the surge voltage / at 6 kV / at (1.2/50) µs</b> |  |
| • 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)  |
| <b>Connections/ Terminals</b>   |  |
| type of electrical connection   | Screw terminal   |
| stripped length   | 16 mm  |
| tightening torque   | 4.3 ... 4.7 N·m  |
| <b>connectable conductor cross-section</b>                            |  |
| • for finely stranded conductor                                       | 2.5 ... 16 mm <sup>2</sup>   |
| • for rigid conductor   | 2.5 ... 25 mm <sup>2</sup>   |
| • finely stranded   | 2.5 ... 16 mm <sup>2</sup>   |
| AWG number / as coded connectable conductor cross section             | 12 ... 4   |
| design of the thread / of the connection screw                        | M5   |
| signal design   | optical  |
| <b>Indicator/remote signaling</b>                                     |  |
| product component / remote signaling contact                          | No   |
| <b>NEMA/UL - Data</b>   |  |
| 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  |
| <b>TOV behavior</b>   |  |
| • 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)   |
| <b>Measured Limiting Voltage (MLV)</b>                                |  |
| • between L and Ground (GND)  | 2.08 kV  |
| • between L and N   | 2 kV   |
| • between N and Ground (GND)  | 0.95 kV  |
| <b>Maximum Continuous Operating Voltage (MCOV)</b>                    |  |
| • between L and Ground (GND)  | 350 V  |
| • between L and N   | 350 V  |
| • between N and Ground (GND)  | 264 V  |
| <b>leakage current</b>  |  |
| • 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 value          | 20 kA  |

|  |                   |
|--|-------------------|
| <b>AWG number / as coded connectable conductor cross section</b> |                   |
| • according to UL  | 14 ... 2          |
| <b>ambient temperature</b>                                       |                   |
| • 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                              | 0.49 lb           |
| net weight [lb] / according to UL                                | 0.44 lb           |
| combustibility class according to UL 94                          | V0                |
| standards / according to UL                                      | UL 1449 edition 4 |
| <b>Further information</b>                                       |                   |

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=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](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SD7422-0)  
 CAx-Online-Generator  
<http://www.siemens.com/cax>



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