Making sure power makes its way

Consistent, safe and intelligent low-voltage power distribution and electrical installation technology

Whether industries, infrastructures or buildings: Each environment depends on a reliable power supply.

Which is why products and systems featuring maximum safety and optimum efficiency are in demand. This comprehensive portfolio for low-voltage power distribution and electrical installation technology covers every requirement – from the switchboard to the socket outlet.

We are there when you need us
Your personal contact can be found at www.siemens.com/lowvoltage/contact

Catalog LV 10 · 04/2020
You will find the latest edition and all future editions in the Siemens Industry Online Support at www.siemens.com/lowvoltage/catalogs
Refer to the Industry Mall for current prices www.siemens.com/industrymall

The products and systems listed in this catalog are developed and manufactured using a certified quality management system in accordance with DIN EN ISO 9001:2008.

Technical data
The technical specifications are for general information purposes only. Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.
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Low-Voltage Power Distribution and Electrical Installation Technology

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Overvoltage protection devices

The more than one million lightning strikes in Germany every year pose a considerable risk for buildings and systems that can be damaged due to the unhindered effect of lightning currents, overvoltage and power surges. In many cases however, it is not apparent that such damage has been caused by lightning currents, overvoltage and power surges.

Overvoltage results in considerable damage to electrical and electronic equipment. Even brief transients in power supply lines or between electrical lines and other conductive parts (e.g. grounded metallic parts, ground) are sufficient to cause such damage. The damage patterns of destroyed lines, circuit boards or switchgear demonstrate this. Such damage can be prevented employing suitable overvoltage protection means.

Reliably protected by Siemens lightning and surge arresters!
Overvoltage Protection Devices

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Information + ordering

Information to get you started
For information about overvoltage protection devices, please visit our website
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Your product in detail
The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support
  - Technology primer – Overvoltage protection devices
    (109756965)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications
Use our conversion tool for quick and easy conversion to Siemens products
www.siemens.com/conversion-tool

Refer to the Industry Mall for an overview of your products
- Overvoltage protection devices sie.ag/2kTfyTv

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support
• Operating instructions
• Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
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You can find further information on services at
www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals
• Configuration manual – Overvoltage protection devices
  (45315289)

Training and tutorials

Our training courses can be found at
www.siemens.com/sitrain-lowvoltage
• Protection concept (WT-LVBPC)

Technical overview – Overvoltage protection devices

The fast way to get you to our online services

This page provides you with comprehensive information and links on overvoltage protection devices
www.siemens.com/lowvoltage/product-support (109769084)
System overview

Basic units

5SD74 lightning arresters type 1

5SD74 combination surge arresters type 1 + type 2

5SD74 combination surge arresters type 1 / type 2

5SD74 surge arresters type 2 (standard design)

5SD74 surge arresters type 3

Replacement plugs

N-PE

L-N, L-PEN (type 1)

L-PEN

Note:
You will find a detailed range of accessories with the basic units.
Installation locations for surge protection devices (SPDs)

- Installation location 1:
  - type 1 and/or type 2

- Installation location 2:
  - type 2 or type 3

- Installation location 3:
  - type 2 or type 3

HAK: Main terminal box
Z/HV: In or close to the central meter system / main distribution board
UV: Subdistribution board

Installation location 1 must be as close as possible to the supply point for the electrical system, so that the downstream installations are protected. The SPDs at installation locations 2 and 3 shall not be used without SPDs at installation location 1, and they must be coordinated with these SPDs (i.e. SPDs all from the same manufacturer).
### 5SD74 lightning arresters, type 1

#### Protection paths

<table>
<thead>
<tr>
<th>Protection paths</th>
<th>For TN-C and IT systems</th>
<th>For TN-C systems</th>
<th>For TN-S and TT systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-PE</td>
<td>L-PE</td>
<td>L-N, L-PE and N-PE</td>
<td>L-N, L-PE and N-PE</td>
</tr>
<tr>
<td>690 V AC</td>
<td>240/415 V AC</td>
<td>240 V AC</td>
<td>240/415 V AC</td>
</tr>
<tr>
<td>L-PEN</td>
<td>350 V AC</td>
<td>350 V AC</td>
<td>350 V AC</td>
</tr>
<tr>
<td>800 V AC</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Rated voltage $U_r$ and Maximum continuous voltage $U_c$

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Mounting width</th>
<th>5SD7411-2</th>
<th>5SD7412-1</th>
<th>5SD7413-1</th>
<th>5SD7414-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 + 0</td>
<td>–</td>
<td>5SD7411-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 + 1</td>
<td>4 MW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 + 0</td>
<td>6 MW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 + 1</td>
<td>8 MW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) No modular installation device.

#### Further technical specifications

**Standards**
- Standards: IEC 61643-11, EN 61643-11
- Approvals: KEMA, UL/cUL

**Voltage**
- Protection level $U_p$:
  - L-N and L-PEN: $\leq 4.50$ kV
  - L-PE: $\leq 1.50$ kV
  - N-PE: $\leq 2.50$ kV

**Current**
- Lightning impulse current $I_{imp}$ (10/350 μs):
  - L-N and L-PEN, 1P/3P: 35 kA
  - N-PE: 100 kA
- Rated discharge surge current $I_{n}$ (8/20 μs):
  - L-N and L-PEN, 1P/3P: 35 kA
  - N-PE: 100 kA

**Follow current discharge capacity $I_{fi}$ (AC):**
- L-N and L-PEN for 264/350 V: 50/25 kA
- N-PE: 100 A

**Function**
- Response time $t_A$:
  - L-N and L-PEN: $\leq 100$ ns
  - L-N and N-PE: $\leq 100$ ns

**Connections**
- Conductor cross-section:
  - Finely stranded: 16 ... 50 mm², 2.5 ... 25 mm²
  - Solid: 16 ... 50 mm², 2.5 ... 35 mm²

**Protection devices**
- Max. back-up fuse acc. to IEC 61643-1:
  - For stub wiring (gL/gG): 400 A
  - For V wiring (gL/gG): 125 A
- Short-circuit withstand current:
  - With max. back-up fuse: 50 kA

**Environmental conditions**
- Degree of protection: IP20, with connected conductors
- Temperature range: $-40 \ldots +80 \, ^\circ C$
## Accessories

### Replacement plugs

<table>
<thead>
<tr>
<th>Protection paths</th>
<th>Basic units</th>
<th>Article No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-PE</td>
<td>5SD7412-1 and 5SD7414-1</td>
<td>5SD7418-0</td>
</tr>
<tr>
<td>L-N and L-PEN</td>
<td>For 5SD7412-1, 5SD7413-1 and 5SD7414-1</td>
<td>5SD7418-1</td>
</tr>
</tbody>
</table>
# 5SD74 combination surge arresters, type 1 + type 2

### Protection paths and Rated voltages

<table>
<thead>
<tr>
<th>Protection paths</th>
<th>For TN-C systems</th>
<th>For TN-S and TT systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>L-PEN</td>
<td>240/415 V AC</td>
<td>L-N, L-PE and N-PE</td>
</tr>
<tr>
<td>Maximum continuous voltage Uₚ</td>
<td>350 V AC</td>
<td>240 V AC</td>
</tr>
</tbody>
</table>

### Further technical specifications

#### Standards
- IEC 61643-11; EN 61643-11

#### Approvals
- KEMA, UL/cUL

#### Voltage
- **Protection level Uₚ**
  - L-N and L-PEN: ≤1.50 kV
  - L-PE: ≤2.20 kV
  - N-PE: ≤1.50 kV

#### Current
- **Lightning impulse current Iₘₚ** (10/350 µs)
  - L-N and L-PEN: 25 kA
  - N-PE: 100 kA
- **Rated discharge surge current Iₙ** (8/20 µs)
  - L-N and L-PEN: 25 kA
  - N-PE: 100 kA
- **Follow current discharge capacity Iᵦ** (AC)
  - L-N and L-PEN: 25 kA
  - N-PE: 100 A

#### Function
- **Response time tₐ**
  - L-N and L-PEN: ≤25 ns
  - L-N and N-PE: ≤100 ns

#### Connections
- **Conductor cross-section**
  - Finely stranded: 2.5 ... 25 mm²
  - Solid: 2.5 ... 35 mm²

#### Protection devices
- **Max. back-up fuse acc. to IEC 61643-1**
  - For stub wiring (gL/gG): 315 A
  - For V wiring (gL/gG): 125 A
- **Short-circuit withstand current**
  - With max. back-up fuse: 25 kA

#### Environmental conditions
- **Degree of protection**: IP20, with connected conductors
- **Temperature range**: –40 ... +80 °C

#### Display
- **Visual function/fault indication**: Yes
## Accessories

### Replacement plugs

<table>
<thead>
<tr>
<th>Protection paths</th>
<th>Type</th>
<th>Basic units</th>
<th>Article No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-PE</td>
<td>–</td>
<td>SSD7442-1 and SSD7444-1</td>
<td>SSD7418-0</td>
</tr>
<tr>
<td>L-N and L-PEN</td>
<td>1</td>
<td>SSD7442-1, SSD7443-1 and SSD7444-1</td>
<td>SSD7448-1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>SSD7442-1, SSD7443-1 and SSD7444-1</td>
<td>SSD7428-1</td>
</tr>
</tbody>
</table>
5SD74 combination surge arresters, type 1 / type 2

<table>
<thead>
<tr>
<th>Protection paths</th>
<th>For TN-C and IT systems</th>
<th>For TN-C systems</th>
<th>For TN-S and TT systems</th>
<th>For photovoltaic systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated voltage $U_e$</td>
<td>L-PE 690 V AC</td>
<td>L-PEN 240 V AC</td>
<td>L-N, L-PE and N-PE 240 V AC</td>
<td>L-N, L-PE and N-PE 240/415 V AC</td>
</tr>
<tr>
<td>Maximum continuous voltage $U_{c}$</td>
<td>L-N, L-PE and N-PE 335 V AC</td>
<td>L-N, L-PE and N-PE 335 V AC</td>
<td>L-N, L-PE and N-PE 335 V AC</td>
<td>1000 V DC</td>
</tr>
</tbody>
</table>

**Circuit Mounting**

<table>
<thead>
<tr>
<th>With remote signaling</th>
<th>Mounting width</th>
<th>Plug-in</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 + 0</td>
<td>3 MW</td>
<td>5SD7411-2</td>
</tr>
<tr>
<td>3 + 0</td>
<td>4 MW</td>
<td>5SD7413-3</td>
</tr>
<tr>
<td>3 + 1</td>
<td>4 MW</td>
<td>5SD7414-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Without remote signaling</th>
<th>Mounting width</th>
<th>Plug-in</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 + 1</td>
<td>2 MW</td>
<td>5SD7412-2</td>
</tr>
<tr>
<td>3 + 0</td>
<td>3 MW</td>
<td>5SD7413-2</td>
</tr>
<tr>
<td>3 + 1</td>
<td>4 MW</td>
<td>5SD7414-2</td>
</tr>
</tbody>
</table>

1) No modular installation device.

**Further technical specifications**

<table>
<thead>
<tr>
<th>Standards</th>
<th>5SD7411-2</th>
<th>5SD7412-2</th>
<th>5SD7413-2</th>
<th>5SD7414-2</th>
<th>5SD7483-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards</td>
<td>IEC 61643-11</td>
<td>–</td>
<td>EN 50539</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Approvals</td>
<td>KEMA</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Protection level $U_p$</td>
<td>L-N and L-PEN</td>
<td>≤4.50 kV</td>
<td>≤1.20 kV</td>
<td>≤3.50 kV</td>
<td>–</td>
</tr>
<tr>
<td>L-PE</td>
<td>–</td>
<td>≤2.0 kV</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>N-PE</td>
<td>–</td>
<td>≤1.70 kV</td>
<td>–</td>
<td>≤1.70 kV</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current</th>
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<th>5SD7412-2</th>
<th>5SD7413-2</th>
<th>5SD7414-2</th>
<th>5SD7483-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting impulse current $I_{imp}$ (10/350 µs)</td>
<td>L-N and L-PEN</td>
<td>35 kA</td>
<td>12.5 kA</td>
<td>≤5 kA</td>
<td>–</td>
</tr>
<tr>
<td>N-PE</td>
<td>–</td>
<td>50 kA</td>
<td>–</td>
<td>50 kA</td>
<td>–</td>
</tr>
<tr>
<td>Rated discharge surge current $I_n$ (8/20 µs)</td>
<td>L-N and L-PEN</td>
<td>35 kA</td>
<td>12.5 kA</td>
<td>15 kA</td>
<td>–</td>
</tr>
<tr>
<td>N-PE</td>
<td>–</td>
<td>50 kA</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Max. discharge surge current $I_{max}$ (8/20 µs)</td>
<td>L-N</td>
<td>100 kA</td>
<td>12.5 kA</td>
<td>50 kA</td>
<td>40 kA</td>
</tr>
<tr>
<td>N-PE</td>
<td>–</td>
<td>50 kA</td>
<td>–</td>
<td>50 kA</td>
<td>–</td>
</tr>
<tr>
<td>Response time $t_A$</td>
<td>L-N and L-PEN</td>
<td>&lt;100 ns</td>
<td>≤25 ns</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>L-N and N-PE</td>
<td>–</td>
<td>≤100 ns</td>
<td>–</td>
<td>≤100 ns</td>
<td>≤25 ns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connections</th>
<th>5SD7411-2</th>
<th>5SD7412-2</th>
<th>5SD7413-2</th>
<th>5SD7414-2</th>
<th>5SD7483-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductor cross-section</td>
<td>Finely stranded</td>
<td>16 ... 50 mm²</td>
<td>1.5 ... 25 mm²</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Solid</td>
<td>16 ... 50 mm²</td>
<td>1.5 ... 35 mm²</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protection devices</th>
<th>5SD7411-2</th>
<th>5SD7412-2</th>
<th>5SD7413-2</th>
<th>5SD7414-2</th>
<th>5SD7483-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. back-up fuse acc. to IEC 61643-1</td>
<td>For stub wiring (gL/gG)</td>
<td>400 A</td>
<td>160 A</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>For V wiring (gL/gG)</td>
<td>125 A</td>
<td>80 A</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Short-circuit withstand current</td>
<td>With max. back-up fuse</td>
<td>50 kA</td>
<td>25 kA</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental conditions</th>
<th>5SD7411-2</th>
<th>5SD7412-2</th>
<th>5SD7413-2</th>
<th>5SD7414-2</th>
<th>5SD7483-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of protection</td>
<td>IP20, with connected conductors</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Temperature range</td>
<td>–40 ... +80 °C</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
## Accessories

### Replacement plugs

<table>
<thead>
<tr>
<th>Protection paths</th>
<th>Type</th>
<th>Basic units</th>
<th>Article No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-PE</td>
<td>–</td>
<td>5SD7412-2, 5SD7412-3, 5SD7414-2 and 5SD7414-3</td>
<td>5SD7418-2</td>
</tr>
<tr>
<td>L-N and L-PEN</td>
<td>1</td>
<td>5SD7412-2, 5SD7412-3, 5SD7413-2, 5SD7413-3, 5SD7414-2 and 5SD7414-3</td>
<td>5SD7418-3</td>
</tr>
<tr>
<td>L-PE (PV)</td>
<td>2</td>
<td>5SD7483-6</td>
<td>5SD7498-3</td>
</tr>
</tbody>
</table>
## 5SD74 surge arresters, type 2

### Standard design

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<th>Maximum continuous voltage ( U_{\text{c}} )</th>
<th>For TN and TT systems</th>
<th>For TN-C and IT systems</th>
<th>For TN-C systems</th>
<th>For IT systems</th>
<th>For TN-S and TT systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-PE</td>
<td>260 V AC</td>
<td>240/415 V AC</td>
<td>240/415 V AC</td>
<td>240/415 V AC</td>
<td>240/415 V AC</td>
<td></td>
</tr>
<tr>
<td>L-PEN and L-N</td>
<td>350 V AC</td>
<td>400/690 V AC</td>
<td>400/690 V AC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L-PEN</td>
<td>800 V AC</td>
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</tr>
<tr>
<td>L-PEN and L-N</td>
<td>350 V AC</td>
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</tr>
<tr>
<td>L-PEN</td>
<td>580 V AC</td>
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<tr>
<td>L-PE</td>
<td>760 V AC</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>L-N, L-PE and N-PE</td>
<td>260 V AC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Further technical specifications

#### Standards

- **Standards**: IEC 61643-11; EN 61643-11
- **Approvals**: KEMA, UL/cUL

#### Voltage

- **Protection level \( U_p \)**:
  - L-N and L-PEN: \( \leq 1.50 \text{ kV} \)
  - L-PEN: \( \leq 1.50 \text{ kV} \)
  - N-PE: \( \leq 1.50 \text{ kV} \)
  - \( \leq 1.60 \text{ kV} \)
  - \( \leq 2.50 \text{ kV} \)
  - \( \leq 2.90 \text{ kV} \)

- **Rated discharge surge current \( I_n \)**:
  - L-N and L-PEN: 20 kA
  - N-PE: 20 kA
  - \( \leq 100 \text{ kA} \)

- **Max. discharge surge current \( I_{\text{max}} \)**:
  - L-N: 40 kA
  - N-PE: 40 kA
  - \( \leq 100 \text{ kA} \)

#### Current

- **Response time \( t_a \)**:
  - L-N and L-PEN: \( \leq 25 \text{ ns} \)
  - L-N and N-PE: \( \leq 100 \text{ ns} \)
  - \( \leq 100 \text{ ns} \)

#### Connections

- **Conductor cross-section**:
  - Finely stranded: 1.5 ... 25 mm²
  - Solid: 1.5 ... 35 mm²

### Protection devices

- **Max. back-up fuse acc. to IEC 61643-1**
  - For stub wiring (gL/gG): 125 A, 100 A, 125 A, 100 A
  - For V wiring (gL/gG): 80 A

- **Short-circuit withstand current**
  - With max. back-up fuse: 25 kA

### Environmental conditions

- **Degree of protection**: IP20, with connected conductors
- **Temperature range**: \(-40 \ldots +80^\circ\text{C}\)
### Accessories

#### Replacement plugs

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<thead>
<tr>
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<th>Basic units</th>
<th>Article No.</th>
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<td>L-PEN</td>
<td>SSD7481-1 and SSD7483-5</td>
<td>SSD7488-2</td>
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<td></td>
<td>SSD7481-1</td>
<td>SSD7488-4</td>
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5SD74 surge arresters, type 2

Narrow design

Protection paths
N-N and N-PE
L-N and L-(PE)N
Rated voltage $U_p$
240 V AC
240/415 V AC
350 V AC
350 V AC
Rated arrester voltage $U_{A}$:
L-N, N-PE, L-(PE)N
264 V AC
264 V AC

Further technical specifications

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<td></td>
<td>L-N or L-(PE)N</td>
<td>N-PE</td>
<td></td>
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<tr>
<td>With remote signaling</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 + 1</td>
<td>24 mm (1 1/3 MW)</td>
<td>20 kA</td>
<td>20 kA</td>
<td>5SD7422-1</td>
</tr>
<tr>
<td>3 + 1</td>
<td>48 mm (2 2/3 MW)</td>
<td>20 kA</td>
<td>20 kA</td>
<td>–</td>
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<tr>
<td></td>
<td></td>
<td>20 kA</td>
<td>40 kA</td>
<td>–</td>
</tr>
<tr>
<td>Without remote signaling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 + 1</td>
<td>24 mm (1 1/3 MW)</td>
<td>20 kA</td>
<td>20 kA</td>
<td>5SD7422-0</td>
</tr>
<tr>
<td>3 + 1</td>
<td>48 mm (2 2/3 MW)</td>
<td>20 kA</td>
<td>20 kA</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20 kA</td>
<td>40 kA</td>
<td>–</td>
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</tbody>
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Standards
Standards
IEC 61643-11, EN 61643-11
Approvals
KEMA/UL/cUL

Voltage
Protection level $U_p$
L-N and L-PEN ≤1.50 kV
L-PEN ≤1.90 kV
N-PE ≤1.50 kV

Current
Rated discharge surge current $I_n$ (8/20 µs)
L-N and L-PEN 20 kA
N-PE 20 kA
Max. discharge surge current $I_{max}$ (8/20 µs)
L-N 40 kA
N-PE 40 kA

Function
Response time $t_A$
L-N and L-PEN ≤25 ns
L-N and N-PE ≤100 ns

Connections
Conductor cross-section
Finely stranded 2.5 ... 16 mm²
Solid 2.5 ... 25 mm²

Protection devices
Max. back-up fuse acc. to IEC 61643-1
For stub wiring (gL/gG) 315 A
For V wiring (gL/gG) 63 A
Short-circuit withstand current
With max. back-up fuse 25 kA

Environmental conditions
Degree of protection
IP20, with connected conductors
Temperature range
-40 ... +80 °C
## Accessories

### Replacement plugs

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<tr>
<td>L-N and L-PEN</td>
<td>5SD7422-0, 5SD7422-1, 5SD7424-0 and 5SD7424-1</td>
<td>5SD7428-1</td>
</tr>
</tbody>
</table>
## 5SD74 surge arresters, type 3

### Protection paths
- L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE

### Rated voltage $U_{ph}$
- 24 V AC
- 34 V AC

### Rated arrester voltage $U_C$
- 20 V AC
- 34 V AC
- 264 V AC

<table>
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<th>Mounting width</th>
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</thead>
<tbody>
<tr>
<td>With remote signaling</td>
<td>1 MW</td>
<td>26 A</td>
<td>1 kA</td>
<td>2 kV</td>
</tr>
<tr>
<td>1 + 0</td>
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### Further technical specifications

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<td>KEMA/UL/cUL</td>
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<tr>
<th>Voltage</th>
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<td>Protection level $U_p$</td>
<td>≤200/≤600 V</td>
<td>≤750/≤850 V</td>
<td>≤1250/≤1400 V</td>
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<tr>
<td>Rated load current $I_p$ (at 30 °C)</td>
<td>26 A</td>
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<td>1 kA</td>
<td>5 kA</td>
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<td>Combined surge $U_{open collector}$</td>
<td>2 kV</td>
<td>6 kV</td>
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<td>≤100 ns</td>
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<tr>
<td>Conductor cross-section</td>
<td>Finely stranded</td>
<td>0.2 ... 2.5 mm²</td>
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<tr>
<td></td>
<td>Solid</td>
<td>0.2 ... 4 mm²</td>
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</table>

<table>
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<td>Required back-up fuse, max.</td>
<td>(gG/B/C)</td>
<td>25 A</td>
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<td>IP20, with connected conductors</td>
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<tr>
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<td>Yes</td>
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## Catalog LV 10

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Catalogs and further information

LV 10
Low-Voltage Power Distribution and Electrical Installation Technology
SENTRON • SIVACON • ALPHA
Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems
PDF (E86060-K8280-A101-B1-7600)
Print (E86060-K8280-A101-A6-7600)

LV 14
Power Monitoring Made Simple
SENTRON
PDF/Print (E86060-K1814-A101-A6-7600)

LV 18
Air Circuit Breakers and Molded Case Circuit Breakers with UL Certification
SENTRON
PDF (E86060-K8280-E347-A4-7600)

IC 10
Industrial Controls
SIRIUS
PDF/Print (E86060-K1010-A101-B1-7600)

ET D1
Switches and Socket Outlets
DELTA
PDF

Industry Mall
Information and Ordering Platform on the Internet:
www.siemens.com/industrymall

Siemens TIA Selection Tool
for the selection, configuration and ordering of TIA products and devices
www.siemens.com/tst

Training for Industry
SITRAIN
www.siemens.com/sitrain

The catalogs listed above and additional catalogs are available in PDF format at Siemens Industry Online Support
www.siemens.com/lowvoltage/catalogs

Further information on low-voltage power distribution and electrical installation technology is available on the Internet at
www.siemens.com/lowvoltage
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For additional information on industrial security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity

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