### Surge protection made easy – TBS selection aid according to current VDE 0100-443 and VDE 0100-534

#### Initial situation
- Installation in the main distributor box
- Basic protection type 1, type 2
- Primary meter area in combined distributor

#### Installation location
- Installation in the main distributor box
- Medium protection type 2

#### Installation location
- Installation before the terminal
- Fine protection type 3

#### Distance > 10 m
- Residential building, apartment buildings, hotels, casinos
- Distance between main distributor box and sub-distributor box or/and combined distributor

#### Distance < 10 m
- Office building with lightning protection system

#### Distance > 10 m
- Buildings of lightning protection classes II and IV (e.g. housing and commercial and office buildings)
- Distance between main distributor box and sub-distributor box or/and combined distributor

#### Distance < 10 m
- Medium protection type 2

#### Distance > 10 m
- Buildings of lightning protection classes I to IV e.g. industrial buildings, commercial and office buildings
- Distance between main distributor box and sub-distributor box or/and combined distributor

#### Distance < 10 m
- Fine protection type 3

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**Buildings of lightning protection classes II and IV (e.g. housing and commercial and office buildings)**

- **Open line connection (acc. to VDE 2031)**
- **Earthing antenna structures (Recommendation)**

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**Installation in the main distributor box**

- **Type 1+2**
- **Secondary meter area**
  - Item no. 5093 52 6
  - Item no. 5093 53 3

**Installation in the sub-distributor box**

- **Type 1+2**
  - Secondary meter area
  - Item no. 5093 52 6
  - Item no. 5093 53 3

**Installation before the terminal**

- **Type 2**
  - Secondary meter area
  - Item no. 5093 38 0
  - Item no. 5093 39 1
  - Item no. 5093 39 2

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**Surge protection devices, type 2+3 for rotary current systems (3 phases, N, PE)**

- For installation in sub-distributor boxes or in switch cabinets. 63 A*, 2.5 DU**

**Fine protection device 230 V with audible function display:**

- **FineController FC-SAT-D**
- Fine protection device 230 V with audible failure signalling, type 2+3, incl. adapter cables. 16 A*
  - Item no. 5093 28 10

**Fine protection device 230 V with surge protection for ESD, end devices, incl. adapter cables, 16 A**

- With visual function display
  - **ÜSS 45-O**
  - Item no. 5093 42 6

**Surge protection module 45 for installation in Rapid 45 trunking, switching trunking and junction boxes 16 A**

- With visual function display
  - **ÜSS 45-A**
  - Item no. 5092 46 0

**Surge protection device 230 V for installation in Rapid 45 trunking, switching trunking and underfloor systems 16 A**

- With visual function display
  - **ÜSS 45-A**
  - Item no. 5092 46 0

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**Fine protection device 230 V with audible function display:**

- **ÜSS 45-D**
  - Item no. 5097 45 0

**Surge protection module 45 for installation on standard trunking systems:**

- With audible failure signalling 16 A*
  - Item no. 5097 70 1

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**Surge protection module 45 for installation in Rapid 45 trunking, switching trunking and underfloor systems:**

- With audible function display
  - **ÜSS 45-D**
  - Item no. 5097 45 0

**Surge protection device for rail mounting:**

- **VF 235-AC-DC**
  - Item no. 5097 60 0

**Surge protection device for thermal separation device with audible fault signalling 16 A**

- Item no. 5092 24 1

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**Fine protection device 230 V with visual function display:**

- **V 10 Compact**
  - Item no. 5093 36 2

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**Fine protection device 230 V with remote signalling (FS) or (AS):**

- **V 10 Compact**
- Item no. 5093 36 2

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**Fine protection device 230 V with remote signalling (FS):**

- **V 10 Compact**
- Item no. 5093 36 2

---

**Fine protection device 230 V with remote signalling (FS) or (AS):**

- **V 10 Compact**
- Item no. 5093 36 2

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**Fine protection device 230 V with remote signalling (FS) or (AS):**

- **V 10 Compact**
- Item no. 5093 36 2
Surge protection made easy – TBS selection aid according to current VDE 0100-443 and VDE 0100-534

### Telecommunications

<table>
<thead>
<tr>
<th>Situation</th>
<th>Initial situation</th>
<th>Installation location</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL/VDSL + analogue telephone</td>
<td>dvb</td>
<td>before analogue terminals</td>
<td>Item no. 5081 97 7</td>
</tr>
<tr>
<td>IP telephone</td>
<td>analogue / switched telephone</td>
<td>before analogue terminals</td>
<td>Item no. 5081 98 8</td>
</tr>
<tr>
<td>DSL + ISDN</td>
<td>before DSL splitter</td>
<td>Item no. 5081 69 8</td>
<td></td>
</tr>
</tbody>
</table>

### Data technology

#### Networks

<table>
<thead>
<tr>
<th>Class</th>
<th>Network Type</th>
<th>Installation location</th>
<th>Item no.</th>
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</thead>
<tbody>
<tr>
<td>EA/CAT 6</td>
<td>High-speed networks</td>
<td>before analogue terminals</td>
<td>5081 82 2</td>
</tr>
<tr>
<td>6A</td>
<td>CAT 6A</td>
<td>before analogue terminals</td>
<td>5081 80 2</td>
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</tbody>
</table>

#### CCTV application

<table>
<thead>
<tr>
<th>Protection of coax</th>
<th>Installation location</th>
<th>Item no.</th>
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</thead>
<tbody>
<tr>
<td>CCTV power supply via PoE / RJ45</td>
<td>before analogue terminals</td>
<td>5081 80 2</td>
</tr>
</tbody>
</table>

#### Broadband (Cable TV)

<table>
<thead>
<tr>
<th>Protection of coax</th>
<th>Installation location</th>
<th>Item no.</th>
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</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>before each terminal device</td>
<td>5092 80 0</td>
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</tbody>
</table>

### TV, video, SAT and radio

#### Broadband

<table>
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<tr>
<th>Protection of coax</th>
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<th>Item no.</th>
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</thead>
<tbody>
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<td>Power supply</td>
<td>before each terminal device</td>
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#### SAT reception system

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<td>Power supply</td>
<td>Installation before each terminal device</td>
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</tbody>
</table>

#### TV 4+1

<table>
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<th>Protection of coax</th>
<th>Installation location</th>
<th>Item no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>Installation before each terminal device</td>
<td>5092 80 0</td>
</tr>
</tbody>
</table>

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Building Connections