The new Tele Defender generation
protection for telecommunication-systems
The Tele Defender with new voltage and current limiting technology

High frequency bandwidth and high discharge durability due to new technology

The new Tele Defender, offers with its high frequency bandwidth of up to 100 MHz a wide range of applications for protection in telecommunication and measurement and control systems. With its new voltage and current limiting technology the Tele Defender allows high discharge durability for induced over voltages and for direct lightning currents.

Visual function display

One of the new features is an optical function display designed with a flashing LED. The function of the Tele Defender can therefore be reviewed at any time.

Splash-water protected and easy to assemble

The IP54 protected housing is developed for the use in cellar areas. The self-sealing plastic in combination with the push-in terminals allow a quick and easy installation of the signal lines.

Variants

The Tele Defender is available in two versions:
- TD-4/I for the classical assembly in cellars, at building entrances to handle lightning currents.
- TD-4/I-TAE-F for plug and play solution in combination with TAE-socket in living areas.
- TD-2/D-HS for hut mounting rail in cabinets or boxes to protect a single pair.
Surge protection for telecommunication systems

Tele-Defender

<table>
<thead>
<tr>
<th>Type</th>
<th>Max. continuous operating voltage Vc/AC V</th>
<th>Max. continuous operating voltage Vc/DC V</th>
<th>Number of poles</th>
<th>Connection system</th>
<th>Pack. pcs</th>
<th>Weight kg/100 pcs.</th>
<th>Item No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD-4/I</td>
<td>120</td>
<td>170</td>
<td>4</td>
<td>Terminal</td>
<td>1</td>
<td>11,000</td>
<td>5081 69 0</td>
</tr>
</tbody>
</table>

Plastic

Data cable protection devices for telecommunications equipment

- Low protection level at a high current load
- "Push-In" clamps for quick installation
- Bandwidth-optimised for secure transmission
- Surface mounting
- Optical function display

Application: DSL systems, ISDN or analogue telecommunications

Tele-Defender TAE

<table>
<thead>
<tr>
<th>Type</th>
<th>Max. continuous operating voltage Vc/AC V</th>
<th>Max. continuous operating voltage Vc/DC V</th>
<th>Number of poles</th>
<th>Connection system</th>
<th>Pack. pcs</th>
<th>Weight kg/100 pcs.</th>
<th>Item No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD-4/TAE-F</td>
<td>120</td>
<td>170</td>
<td>4</td>
<td>Terminal</td>
<td>1</td>
<td>12,300</td>
<td>5081 69 2</td>
</tr>
</tbody>
</table>

Plastic

Data cable protection devices for telecommunications equipment

- Low protection level at a high current load
- "Push-In" clamps for quick installation
- Bandwidth-optimised for secure transmission
- Pre-installed TAE-socket for Plug & Play
- Surface mounting
- Optical function display

Application: DSL systems, ISDN or analogue telecommunications

Tele-Defender HS

<table>
<thead>
<tr>
<th>Type</th>
<th>Max. continuous operating voltage Vc/AC V</th>
<th>Max. continuous operating voltage Vc/DC V</th>
<th>Number of poles</th>
<th>Connection system</th>
<th>Pack. pcs</th>
<th>Weight kg/100 pcs.</th>
<th>Item No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD-2/D-HS</td>
<td>120</td>
<td>170</td>
<td>2</td>
<td>Terminal</td>
<td>1</td>
<td>4,800</td>
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</tbody>
</table>

Plastic

Data cable protection devices for telecommunications equipment

- Available as basic, medium and fine protection
- Low protection level at high current load
- Screwless terminals
- Bandwidth-optimised for secure transmission
- Quick mounting on hat rail or wall mounting

Application: DSL systems, ISDN or analogue telecommunications

| Maximum continuous voltage Vc/AC | Maximum continuous voltage Vc/DC | Lightning protection Zone LPZ | Number of poles | Nominal load current IL AC | Nominal load current IL DC | Capacity (wire-wire) | Capacity (wire-earth) | Serial impedance per path | Total arrester peak current (8/20) | Total Impulse durability (10/350) | Protection level line-line (1a-ab/2a-2b) | Protection level line-earth (1a-ab/2a-2b-PE) | Protection level shield-earth (S-PE) | Temperature range | Installation type | Protection rating | Shielding connection available | Shield connection | Connection cross-section, flexible | Connection cross-section, multi-wire | Connection cross-section, rigid | Testing standard | Item No. |
|---------------------------------|---------------------------------|-----------------------------|-----------------|---------------------------|---------------------------|----------------------|----------------------|------------------------|-----------------------------|-----------------------------|---------------------------------|---------------------------------|------------------------|-----------------|-----------------|------------------|---------------------|----------------|----------------|----------------|----------------|----------------|---------|----------------|----------------|----------------|----------------|---------|
| V                               | V                               | A                           | Q               | 90 ± 10 %                | 90 ± 10 %                | < 50 pF              | < 50 pF              | 90 ± 10 %              | 25                           | 25                          | D1: 12,5                         | D1: 25 kA                       | 850                    | -40 to +80      | Surface-mounted | IP54               | Yes                  | Indirect           | 0,14 - 0,75            | 0,14 - 0,75            | 0,14 - 0,75            | 0,14 - 2,5         | IEC 61643-21     | 5081 69 0 |
| V                               | V                               | A                           | Q               | 90 ± 10 %                | 90 ± 10 %                | < 50 pF              | < 50 pF              | 90 ± 10 %              | 25                           | 25                          | D1: 12,5                         | D1: 25 kA                       | 850                    | -40 to +80      | Surface-mounted | IP20               | Yes                  | Indirect           | 0,14 - 0,75            | 0,14 - 0,75            | 0,14 - 0,75            | 0,14 - 2,5         | IEC 61643-21     | 5081 69 2 |
| V                               | V                               | A                           | Q               | 90 ± 10 %                | 90 ± 10 %                | < 50 pF              | < 50 pF              | 90 ± 10 %              | 25                           | 25                          | D1: 12,5                         | D1: 25 kA                       | 850                    | -40 to +80      | DIN rail         | IP20               | No                   | Direct            | 0,14 - 0,75            | 0,14 - 0,75            | 0,14 - 0,75            | 0,14 - 2,5         | IEC 61643-21     | 5081 69 4 |