**Advanced Test Solutions for EMC**

**TELECOM LINE COUPLING/DECOUPLING NETWORK**

**CDN 118**

Teseq’s CDN 118 coupling-decoupling network is designed for convenient surge testing of telecommunications equipment to IEC/EN 61000-4-5, which specifies a 1.2/50 μs or a 10/700 μs pulse. The CDN 118 includes the special decoupling network and coupling elements that are required for these tests.

**The CDN 118 can be easily interfaced with the EUT** and is designed as a bench top unit. It can be used with Teseq’s NSG series or any industry standard surge generator with the appropriate connector adapter.

**The compact CDN 118 is a complete set of coupling elements** consisting of:

- The decoupling network itself
- Interface cables to the surge generator
- Four coupling adapters with a spark gap device
- Four coupling adapters with a spark gap device and a 0.1 μF capacitor
- Matching resistor network 4 x 100 Ω
- Matching resistor network 4 x 160 Ω

**The user can manually select coupling modes** by connecting the generator’s output to the appropriate input. All coupling methods described in the standard can be configured with the CDN 118.
CDN 118
TELECOM LINE COUPLING/DECOUPLING NETWORK

Technical specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. operating voltage:</td>
<td>AC 250 V, DC 250 V</td>
</tr>
<tr>
<td>Max. operating current:</td>
<td>0.5 A</td>
</tr>
<tr>
<td>Ohmic resistance per path:</td>
<td>3 Ω</td>
</tr>
<tr>
<td>Decoupling chokes 1kHz:</td>
<td>20 mH nominal</td>
</tr>
<tr>
<td>Pulse:</td>
<td>1.2/50 μs and 10/700 μs pulse</td>
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<tr>
<td>Max. pulse voltage:</td>
<td>6.6 kV line to ground, 3 kV line to line</td>
</tr>
</tbody>
</table>

Accessories:

- Resistor networks:
  - INA 172: 4 X 100 Ω, 6 W
  - INA 175: 4 X 160 Ω, 6 W

- Coupling adapters:
  - INA 170: Spark gap device, 90 V trip voltage
  - INA 171: Capacity 0.1 μF/spark gap device, 90 V trip voltage
  - INA 173: Short circuit connector