

# Coupling-/Decoupling Network

## CDN 5416 / 7416 / 10416 / 12416

|              |  |
|--------------|--|
| <b>Main</b>  | <b>3* 400 V / 16 A</b>                                 |
| <b>Surge</b> | <b>1.2/50 <math>\mu</math>s: 5.0 / 7.0 / 10 / 12kV</b> |
|              | <b>8/20 <math>\mu</math>s: 2.5 / 3.0 / 5.0 / 6.0kA</b> |
| <b>Burst</b> | <b>5.0 kV, 5/50 ns</b>                                 |



### According to

**IEC 61000-4-4**

**IEC 61000-4-5**

**IEEE 587**

The capacitive Coupling-/Decoupling Networks CDN 5416/ 7416/ 10416/ 12416 are used in combination with the Multi CE5 or the Surge generators PG 7-250, PG 10-504, PG 12-804 and allow superimposition of surge and burst test pulses to the 3-phase mains voltage of the device under test.

The test set-up is suitable for surge immunity testing of electronic systems and devices.

The CDN 5416/ 7416/ 10416/ 12416 contains the coupling impedances 18  $\mu$ F and 9  $\mu$ F + 10  $\Omega$  for the surge generator and 33 nF for the burst generator and the decoupling impedances for the 3-phase power supply lines.

Coupling mode can be selected from the front panel of the generator. Remote control commands are transmitted from the generator to the Coupling-/Decoupling Network by use of a control cable.

**Typical configurations:**  
Multi CE5 1 + CDN 5416: for 3-phase testing



| Technical specification:                           | CDN 5416  | CDN 7416 | CDN 10416                   | CDN 12416 |
|--|---|----------|-----------------------------|-----------|
| Nominal voltage                                    | 3 * 400 V, 50/60 Hz                                     |          |                             |           |
| Nominal current AC/DC                              | 16 A <sub>≈</sub> / 10 A <sub>=</sub>                   |          |                             |           |
| Series inductors to the mains power supply         | <1.5 mH + >100 μH                                       |          |                             |           |
| max. test voltage Surge, 1.2/50 μs:                | 5.0 kV  | 7.0 kV   | 10 kV                       | 12 kV     |
| max. test voltage Burst, 5/50 ns:                  | 5.0 kV  |          |                             |           |
| Coupling impedance for the surge generator         | 18 μF<br>9 μF + 10 Ω                                    |          |                             |           |
| Coupling impedance for the burst generator         | 33 nF   |          |                             |           |
| Coupling mode, selectable, for the surge generator | line to line via 18 μF or<br>line to ground 9 μF + 10 Ω |          |                             |           |
| Coupling mode, selectable, for the burst generator | line to ground via 33 nF                                |          |                             |           |
| Impuls Synchronisation                             | Mains, Extern   |          |                             |           |
| Burst Input  | Fischer   |          |                             |           |
| Surge Input  | 4 mm Bush   |          |                             |           |
| Mains power  | 90V - 264V , 50/60 Hz                                   |          |                             |           |
| Dimensions: desk top case W * H * D                | 450*180*500 mm <sup>3</sup>                             |          | 450*310*500 mm <sup>3</sup> |           |
| Weight   | 30 kg   |          | 58 kg                       |           |
| <b>Option:</b>                                     |   |          |                             |           |
| Nominal voltage                                    | 3 * 690 V, 50/60 Hz                                     |          |                             |           |