The CDN 3083-S200M is a manual 3-phase Surge pulse coupling/decoupling network intended for Surge testing of equipment requiring large currents, specially designed for heavy industry, smart grid and electro vehicle applications. It fulfills the requirements specified in the surge standard IEC/EN 61000-4-5: 2014.

Designed for convenient use in a wide variety of test environments, the CDN 3083-S200M can be placed on the floor or used as table-top. The CDN may even be wall-mounted in an EMC laboratory or development workshop. Since high current couplers must often be taken to remote test sites, the CDN 3083-S200M can be easily disassembled into handy modules for transportation. The unit is fitted with wheels and brakes for use on ramps or uneven surfaces.

Even though the CDN 3083-S200M has been designed for continuous 200 A/phase EUT power supply current, significantly higher currents are allowed for short test periods. The CDN 3083 is designed to withstand frequently encountered inrush currents and, in extreme cases, can be overstressed until the internal environment has reached the maximum operating temperature of 70°C. A built-in thermometer enables to monitor the internal temperature.

Rugged connection terminals, as well as a solid housing are featured to ensure safe, reliable operation. The CDN 3083-S200M is tested for safety in compliance with IEC 61010.

Surge levels up to 6 kV/3 kA with 1.2/50 μs combination wave can be coupled by the CDN 3083-S200M. Pulse voltages up to 8 kV are possible under certain conditions (refer to user manual).

EUT supply voltages of up to 620 V rms (line-to-line) or 500 VDC at 200 A are supported. The CDN 3083-S200M is designed for easy and safe manual operation.
**CDN 3083-S200M**

**MANUAL SURGE COUPLING / DECOUPLING NETWORK**

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**Technical information:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUT voltage</td>
<td>620 VAC RMS L-to-L (max. 440 V for NSG 3040 and Modula)</td>
</tr>
<tr>
<td></td>
<td>400 VAC RMS L-to-PE (max. 400 V for NSG 3040 and Modula)</td>
</tr>
<tr>
<td></td>
<td>500 VDC</td>
</tr>
<tr>
<td>EUT current</td>
<td>200 A continuous</td>
</tr>
<tr>
<td></td>
<td>The maximum permissible current is given by the heat dissipated in the coupler. As the temperature is monitored, the CDN 3083-S200M can be heavily overloaded until the temperature reaches 70° C.</td>
</tr>
<tr>
<td>Pulse voltages/current</td>
<td>Max. 6 kV/3 kA (up to 8 kV/4 kA, conditional)</td>
</tr>
<tr>
<td>Terminals</td>
<td>Screw terminals, rated for 230 A</td>
</tr>
<tr>
<td>Grounding</td>
<td>Earth terminal</td>
</tr>
<tr>
<td>Size</td>
<td>850 x 520 x 345 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>80 kg approx.</td>
</tr>
<tr>
<td>Surge connector</td>
<td>Fischer 105 series</td>
</tr>
</tbody>
</table>

**Environmental conditions**

- **Operation**: +10 to +40°C
- **Storage**: 30 to 70% RH (non condensing)
- **Air pressure**: 860 to 1060 hPa

**Set includes**

- 1 x Surge decoupling network CDN 3083-S200M N – L1 with fans (24 VDC power supply included)
- 1 x Surge decoupling network CDN 3083-S200M L2 – L3 with fans (24 VDC power supply included)
- 2 x Earth rail
- 1 x Allen key isolated
- 1 x User manual CDN 3083-S200M
- 1 x Test certificate
- 1 x Wheel set
- 2 x Connection tables, laminated

**To order separately**

- **IEC coupling set**: 1 x INA 3080 Surge coupling unit
- **Extended IEC coupling set**: 2 x INA 3080 Surge coupling unit
  - 1 x Connection cable
- **INA 3084**: Phase synchronization unit for NSG 3040, CDN 3061 or Modula; including two cables (1 m, Fischer / Fischer connectors)

**Other accessories**

- **INA 163**: Safety banana plug set (10 pcs) 6 to 4 mm
- **MD 200A**: High voltage differential probe
- **MD 300**: Current probe