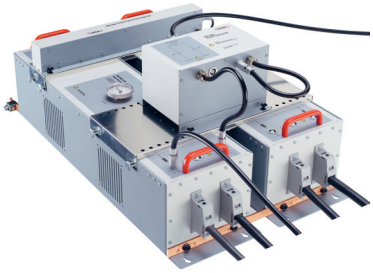
CDN 3083-S100M

MANUAL SURGE COUPLING/DECOUPLING NETWORK



- **For EUT power supplies up to 620 V**
- **100 A per phase with generous overload capacity**
- **Complies with IEC/EN 61000-4-5 and ANSI C62.45**
- **Easily upgradeable from IEC/EN to ANSI coupling**

The CDN 3083 manual coupling/decoupling network fulfills the requirements specified in the surge standard IEC/EN 61000-4-5: 2005, including the reduced filter inductances for EUT currents > 25 A per phase.

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

Teseq's auto-adaptive choke technology eliminates the need to invest in multiple couplers. The IEC has defined three classes of filter inductance - up to 25 A, 25 – 60 A, and 60 - 100 A - in order to keep voltage losses within reasonable limits as current levels increase. As a result, the IEC high current couplers for specific current ranges should not be used for lower current level testing as their filtering effect is insufficient. By using an auto-adaptive back filter, the CDN 3083 fulfills the requirements for both filtering and voltage drop over the entire current range up to 100 A.

Currents over 100 A per phase 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 temperature. For single phase applications, even 200 A per phase is possible by paralleling two decoupling network paths and adding decoupling units.

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

Surge levels up to 8 kV/4 kA with 1.2/50 µs combination wave can be coupled by the CDN 3083.

EUT supply voltages of up to 620 V rms or 620 VDC at 100 A are supported. The CDN 3083 is designed for simple and safe manual operation.

All symmetrical and asymmetrical coupling modes of IEC/EN 61000-4-5 and ANSI C62.41 2002 are supported by the CDN 3083.

TESEQ

Advanced Test Solutions for EMC

CDN 3083-S100M
MANUAL SURGE COUPLING/DECOUPLING NETWORK

The CDN 3083-S100 set:

- 1 x Surge decoupling network CDN 3083-S100 N – L1
- 1 x Surge decoupling network CDN 3083-S100 L2 – L3
- 2 x Earth rail
- 1 x Allen key isolated
- 1 x User manual CDN 3083 E
- 1 x Test certificate
- 1 x Wheel set
- 2 x Connection tables, laminated

IEC coupling set

- 1 x INA 3080 Surge coupling unit

ANSI coupling set/optional IEC coupling

- 2 x INA 3080 Surge coupling unit
- 1 x Connection cable

Depending on generator used, following complementary items are in the set:

NSG 2050 generator system

- 1 x INA 3085 Synchronisation unit for NSG 2050 system
- 2 x Cable 1 m, with Fischer/Lemo connectors
- 1 x Dummy plug for NSG 2050 generator

NSG 3040 and Modula

- 1 x INA 3084 Synchronisation unit for NSG 3040 family
- 2 x Cable 1 m, with each a Fischer/Fischer connectors

Pulse voltages/current:	8 kV/4 kA max.
EUT power supply:	Line-to-line or line-to-PE 620 Vrms; (max.440 Vrms for NSG 3040 and Modula) per phase 100 A nom. continuous current; 0 – 60 Hz (max. 400 Hz with power loses)
EUT connectors:	Screw-terminals, 230 A, up to 110 mm^2, AWG 4-4/0
Max. Temperature:	70°C
Decoupling conditions:	As per IEC/EN 61000-4-5 and ANSI C62.45
Coupling modes:	Surge differential, lines to PE, common to PE (with ANSI coupling set or with optional INA 3080 for IEC)
Dimensions:	850 x 520 x 345 mm (L x D x H)
Weight:	80 kg approx.
Optional accessories:	INA 3080 Surge coupling unit MD 300 Current measuring probe MD 200/200A Voltage measuring probe

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