

# CDN 3083-S100 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-S100 manual coupling/decoupling network** 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-S100 can be placed on the 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-S100 can be easily disassembled into handy modules for moving. The unit is fitted with wheels and brakes for use on ramps or uneven surfaces.

**Currents over 100 A per phase** are allowed for short test periods. The CDN 3083-S100 is designed to withstand frequently encountered inrush currents and, in extreme cases, can be overstressed until the internal environment has reached the maximum temperature.

**Rugged connection terminals**, as well as a solid housing are featured to ensure safe, reliable operation. The CDN 3083-S100 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-S100.

**EUT supply voltages of up to 620 V rms or 620 VDC at 100 A** are supported. The CDN 3083-S100 is designed for simple and safe manual operation.

**All symmetrical and asymmetrical coupling modes** of IEC/EN 61000-4-5 and ANSI C62.41 are supported by the CDN 3083-S100.





# **CDN 3083-S100 MANUAL SURGE COUPLING / DECOUPLING NETWORK**

## chnical information



INA 163



MD 200A



MD 300

### Teseq AG

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### 691-157B July 2014



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Parameter	Value
EUT voltage	620 VAC RMS L-to-L (max. 440 V for NSG 3040 and Modula) 620 VAC RMS L-to-PE (max. 440 V for NSG 3040 and Modula) 620 VDC
EUT current	100 A continous The maximum permissible current is given by the heat dissipated in the coupler. As the temperature is monitored, the CDN 3083-S100 can be heavily overloaded until the temperature reaches 70° C
Pulse voltages/current	Max. 8 kV/4 kA
Terminals	Screw terminals, rated for 230 A
Grounding	Earth terminal
Size	850 x 520 x 345 mm
Weight	80 kg approx.
Surge connector	Fischer 105 series
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-S100 N – L1
1 x Surge decoupling network (	
2 x Earth rail	
1 x Allen key isolated	
1 x User manual CDN 3083-S10	0
1 x Test certificate	
1 x Wheel set	
2 x Connection tables, laminate	ed
To order seperately	
IEC coupling set	1 x INA 3080 Surge coupling unit
ANSI/Ext. 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;

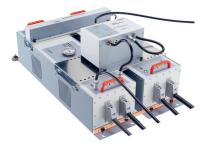
## Other accessories

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





# CDN 3083-S200M MANUAL SURGE COUPLING / DECOUPLING NETWORK



- For EUT power supplies up to 620 VAC, 500 VDC
- 200 A per phase with generous overload capacity
- Complies with IEC/EN 61000-4-5
- Easy handling and integration in test setup

**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

### **Technical information:**



INA 163



MD 200A



MD 300

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#### 691-382A July 2014



Parameter	Value
EUT voltage	620 VAC RMS L-to-L (max. 440 V for NSG 3040 and Modula) 400 VAC RMS L-to-PE (max. 400 V for NSG 3040 and Modula) 500 VDC
EUT current	200 A continous 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
Pulse voltages/current	Max. 6 kV/3 kA (up to 8 kV/4 kA, conditional)
Terminals	Screw terminals, rated for 230 A
Grounding	Earth terminal
Size	850 x 520 x 345 mm
Weight	80 kg approx.
Surge connector	Fischer 105 series

### **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 seperately

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

