

Surge Pulse Coupling Network

- **Coupling network for 1.2/50 - 8/20 μ s surge pulses**
- **3-phase coupling**
- **Compatible with generators type NSG 650/NSG 651**
- **Conforms to IEC 801-5, ANSI-IEEE C 62.45, etc**
- **EUT supply voltages up to 440 V_{rms}**
- **EUT current > 16 Amps per phase**

The coupling network type CDN 113 enables hybrid surge pulses to be coupled into 3-phase equipment, systems and installations.

The coupler precisely matches the surge generators type NSG 650 and NSG 651 both electrically and mechanically. Permanently mounted high voltage cables with touch-proof connectors link the coupler with either of the generators which also supply the power for the associated safety circuit.

The toughest test class of the relevant standards calls for pulse voltages of up to 6 kV with corresponding peak currents of up to 3 kA. The coupling network type CDN 113 can withstand voltages of over 7 kV and hence comfortably provides the requisite test margin.

The equipment under test is connected via safety connectors.

Three-phase power to the EUT can be switched on or off at the touch of a button.

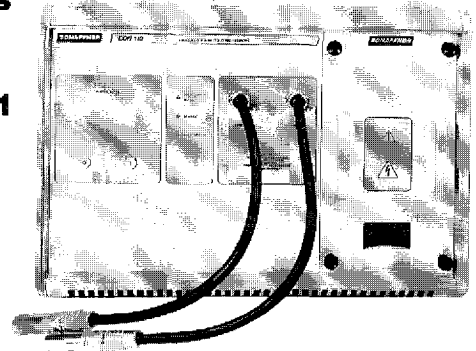
A clearly arranged plug-board enables any symmetric or asymmetric coupling mode to be selected.

The nominal current rating specified for each phase can be considerably exceeded for a certain time. By taking the necessary measures it is hence possible to test equipment with up to twice the nominal rating.

The decoupling inductors are designed to tolerate the high inrush currents commonly encountered in 3-phase systems.

Considerable constructional attention has been paid to personal safety matters. Connectors carrying the pulse voltage are shielded by a protective cover. Interlock circuits

CDN 113



prevent accidental triggering of high voltage pulses and the mains supply is also automatically isolated from the EUT supply outlet when the safety circuit is open.

The unit is built into a desk-top housing. Appropriate mounting accessories are available for installation in a 19" rack or for integration into the SCHAFFNER ProfLine System.

Certified
ISO 9001
supplier

Technical specifications

Instrument supply	from generator NSG 650/651	Coupling modes	DM	L1 ⇒ L2 L1 ⇒ L3 L2 ⇒ L3 L1 ⇒ N L2 ⇒ N L3 ⇒ N
EUT supply	3-phase, single phase			
EUT voltage	24 ... 440 V rms, 50/60 Hz (Phase - Phase)			
EUT current	3 x 16 A rms continuous 3 x 25 A rms for 90 min.		CM	L1 ⇒ E L2 ⇒ E L3 ⇒ E N ⇒ E
Decoupling attenuation:				
Remanent pulse, mains-side	10 % max.	Operating elements		EUT supply on/off
Crosstalk attenuation	15 % max.	Connections		Pulse input from generator Cable connector for EUT supply Plug-board for coupling mode Safety connectors to the EUT
Standard-conform pulse coupling	1.2/50 µs up to 6 kV 8/20 µs up to 3 kA	Dimensions (WxHxD)		449 x 310 x 500 mm (17.7 x 12.2 x 19.7")
Coupling capacitances	18 µF or 9 µF (depending on coupling mode)	Weight		36 kg (80 lbs) approx.
Mains decoupling	2.0 mH / 9 µF			

Ordering information

CDN 113 3 Phase coupling network
incl. jumpers for coupling mode selection
and safety plugs for EUT connection

Accessories

INA 161 Mounting materials for 19" rack

SCHAFFNER

Subsidiaries

Schaffner Elektronik AG
Nordstrasse 11
CH-4708 Luterbach
Phone (065) 41 11 81
Fax (065) 42 14 04

Switzerland:
Schaffner Altrac AG
Mühlehaldestr. 6
CH-8953 Dietikon
Phone (01) 741 46 44
Fax (01) 741 19 60

Germany:
Schaffner Elektronik GmbH
Schoemperlenstrasse 12B
D-76185 Karlsruhe
Phone (0721) 56 91 - 0
Fax (0721) 56 91 - 10

France:
Schaffner S.A.
5, rue Michel Carré
F-95100 Argenteuil
Phone (1) 39 47 86 36
Fax (1) 39 47 02 28

USA:
Schaffner EMC Inc.
9-B Facem Road
Springfield, N.J. 07081
Phone (201) 379 7778
Toll free: 800 367 5566
Fax (201) 379 1151

United Kingdom:
Schaffner EMC Ltd.
Ashville way
Molly Millar's Lane
Wokingham
Berkshire RG11 2PL
Phone (0734) 77 00 70
Fax (0734) 79 29 69