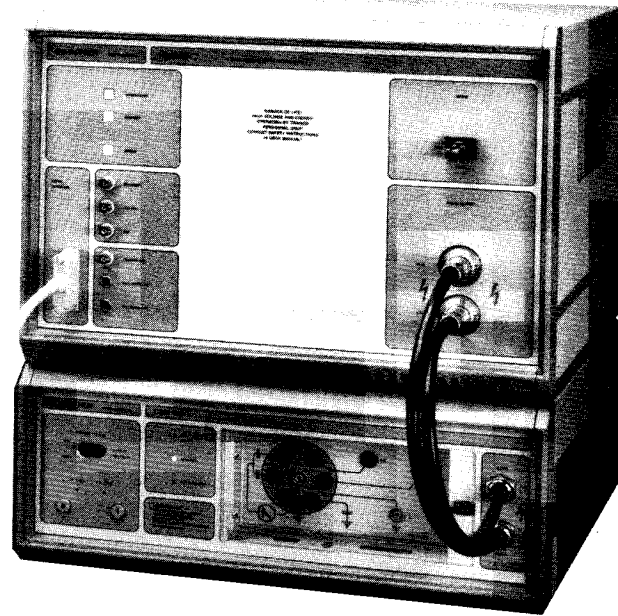


Pulse Coupling Network CDN 110

- *Coupling network for the High Energy Pulse Generator NSG 650*
- *For instrument and system tests*
- *Conforms to IEC 801-5, ANSI-IEEE C62.41, etc.*
- *EUT voltage up to 420 Vac, rms.*
- *EUT current up to 16 A*



The CDN 110 Coupling Network is an add-on for the High Energy Pulse Generator, Type NSG 650 to enable instrument and system tests to be carried out. The pulses generated can thus be coupled into the mains supplies to the instruments, systems and installations under test.

These types of test are described in the test recommendations by the IEC 801-5, ANSI-IEEE C62.41, IEEE 587, VDE 0109 and in many national standards. Surge and ring wave pulses of up to 4 kV are required depending on the class of the test performed.

The CDN 110 permits test pulses of up to 7 kV.

The permissible EUT supply voltage of up to 420 Vac covers all the requirements from the mains feed point of view.

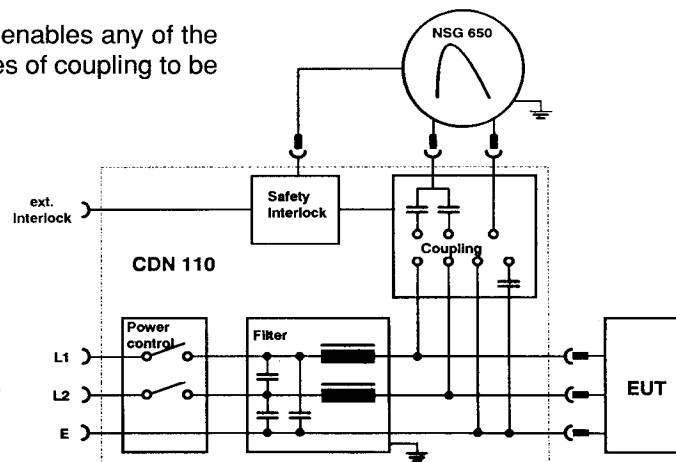
A clearly labeled connector field enables any of the symmetric and asymmetric modes of coupling to be selected.

Sealed coupling modules are available as accessories with which the required mode of coupling can be obtained by simply plugging them in.

Considerable attention has been paid to the matter of personnel protection. The connections carrying the surge voltages are covered by an acrylic hatch with interlocking switches to prevent any danger through incorrect operation.

Accessoire such as the coupling modules, test enclosures, warning lamps, etc. make it easy for the user to build a safe test set-up.

The CDN 110 Coupling Network is built into a table-top housing. Suitable mounting brackets are available for incorporating the unit into a 19" rack.



Technical specifications

EUT supply	Single-phase
Voltage, 50/60Hz	24 ... 420 Vac
Current	16 A max. continuous
Overload capability	150 % for 20 s 200 % for 8 s 500 % for 0.9 s 1000 % for 0.1 s (at 23 °C)
Voltage drop at 16A	5 %
Decoupling attenuation EUT to mains	Residual pulse on the mains: 10 % or max. 2 x Vpk of the EUT supply
Crosstalk attenuation	Residual pulse on non- disturbed line: 15 % or max. 300 V
Standard-conforming pulse coupling	1.2/50 µs up to 6 kV 8/20 µs up to 3 kA
Coupling: Coupling capacitors	18 µF or 9 µF (depend- ing on coupling mode)
Decoupling capacitors	9 µF
Decoupling inductors	1.5 mH (without mag- netic coupling)
Coupling modes:	symmetric L1 > L2 asymmetric L1+L2 > E L1 > E L2 > E Non-disturbed line can be set for high or low HF impedance to earth.
Supply source	Supplied from the Gen- erator NSG 650

Mechanical specifications:

Dimensions	Width: 449 mm (17.7")
	Height: 183 mm (7.2")
	Depth: 461 mm (18.2")

Weight 17 kg (37.5 lbs) approx.

Operating and display
elements:

Connectors and LED dis-
plays completed by safety
components

Ordering information

CDN 110 Surge Pulse Coupling Network
The unit is supplied complete with a cable
for the EUT supply, 4 cables for coupling
mode selection, safety banana plugs for
connecting the EUT and the operating
instructions.

Optional accessories

Coupling modules

INA 201	L1 + L2 > E
INA 202	L1 > E (L2 open)
INA 203	L1 > E (L2 capacitively to earth)
INA 204	L2 > E (L1 open)
INA 205	L2 > E (L1 capacitively to earth)
INA 206	L1 > L2
INA 120	Test enclosure with acrylic hood, high voltage cable and safety circuit
INA 140	Warning lamp unit. External warning device with red and green lamps as per VDE 0104
INA 160	Mounting brackets for assembly of the unit in a 19" rack

Subject to change without notice

SCHAFFNER

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