

CDN16-450C

Updated: 17.07.15

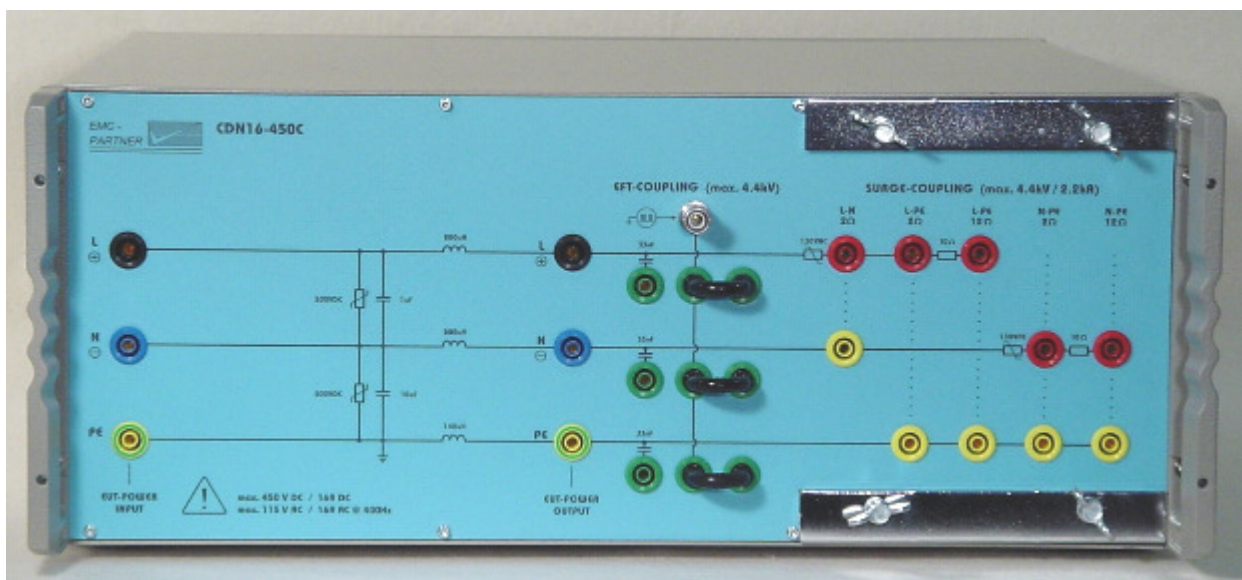
1.1	Introduction	1
1.2	Brief description of the coupling de-coupling network	2
1.3	Explanation of the terms used in CDN16-450C	2
1.4	Standards, applications	2
1.5	Technical Data	3
1.5.1	Impulse Parameters	3
1.5.2	EUT Power AC	3
1.5.3	EUT Power DC	3
1.5.4	Mechanical Parameters	3

1.1 Introduction

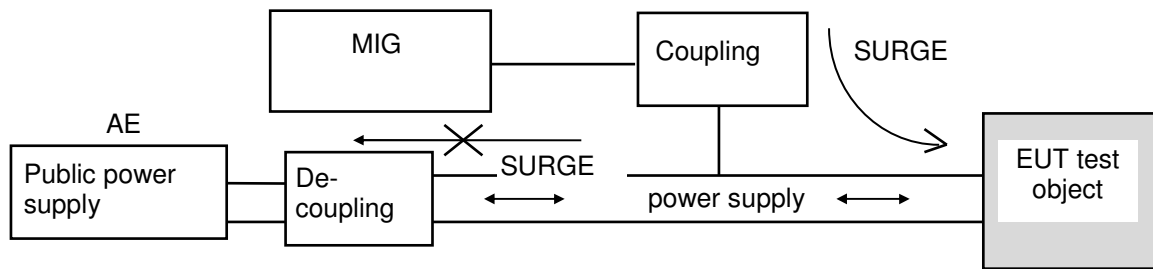
The CDN16-450C coupling network can be used together with Generators from the MIG, TRA and IMU range. The CDN allows SURGE and EFT pulses to be superimposed onto single phase power supply lines.

The CDN15-450C can be used as a coupling network with the following testers:

- MIG0603OS2 without any coupling filter
- TRA3000
- IMU3000, IMU4000



1.2 Brief description of the coupling de-coupling network



Oscillatory wave, Electric Fast Transient Ring wave and combination wave testers generate impulses with amplitudes from a few hundred to several thousand volts. The impulses should only influence the EUT and not the public power supply; therefore, they must be coupled into the EUT with very low attenuation and must have a very high attenuation to the public power supply.

The different coupling paths can be programmed and automatically selected.

1.3 Explanation of the terms used in CDN16-450C

Explanation of the term CDN16-450C

C = coupling, D = de-coupling, N = network, A = automatically operated, 06 = designed for maximum voltage 1,2/50 μ s in kV, 16 = maximum allowed ac current, 450 = 400Hz.

1.4 Standards, applications

IEC 61000-4-5, EN 61000-4-5	Electromagnetic compatibility (EMC) - Part 4 Testing and measuring techniques - Section 5: Surge immunity test.
ANSI / IEEE 62.45	Guide on surge testing for equipment connected to low voltage AC power circuit
IEC 61000-4-4, EN 61000-4-4	Electromagnetic compatibility (EMC) - Part 4 Testing and measuring techniques - Section 4: Electric Fast Transient test

1.5 Technical Data

1.5.1 Impulse Parameters

Coupling:	Connections between TRA2000 and EUT power supply	
SURGE	Manual switching	On the front panel
IEC 61000-4-5	L1-PE	10 Ohm 9µF plus 2 Ohm Generator
	L1-N	2 Ohm Generator plus 18µF
Maximum Voltage	5000 V	Impulse form 1,2/50µs
EFT:		
IEC 61000-4-4	L1 or N or PE - Ref. GND	Coupling capacitor 33 nF

De-coupling		
SURGE	According to IEC 61000-4-5	
EFT	According to IEC 61000-4-4	

1.5.2 EUT Power AC

AC supply to EUT/ ac		
Nominal voltage	Phase -Neutral, Phase - Earth	115 V 400 Hz
Synchronisation	Connection on instrument rear panel	
Nominal Current	per Phase	16 A

1.5.3 EUT Power DC

DC supply to EUT/ dc		
Nominal Voltage	Phase - Neutral	150 V
Nominal Current		16 A

1.5.4 Mechanical Parameters

Dimensions		
19" case	[mm] l x b x h	520 x 450 x 180
Weight	[kg]	maximum 25
Connections	On the front panel	