



#### **CDN A401**

- Used for unscreened, unbalanced lines, carrying low current
- Designed for IEC/EN 61000-4-6
- 4 mm banana sockets
- Performance up to 230 MHz

IEC/EN 61000-4-6 specifies the design and performance of a range of coupling/decoupling networks (CDNs). Each CDN is specific to the type of cable and the intended signal carried on the cable. Teseq offers an extensive range of CDNs which fully comply with the requirements of the standard and provide a simple and reliable method of injecting RF energy into the equipment under test (EUT).

Whilst the published standard only specifies the performance of CDN from 150 kHz to 80 MHz, most of Teseq CDNs are specially designed to give the same performance to a wider frequency range. This is required by some product specific standards.

Each CDN is also useable for emission testing. Special types meet the requirements of CISPR 15 or can be used as impedance stabilization network (ISN) defined in CISPR 22.

#### Technical specifications CDN A201, A301, A401

Frequency range:	150 kHz to 230 MHz
Line parameters:	unscreened, unbalanced
Power rating (EUT- and AE port)	
AC max. voltage (line to ground):	160 V
DC max. voltage (line to ground):	250 V
Current max:	250 mA
Test voltage:	400 V DC, 2 sec
Common mode impedance (EUT port)	
150 kHz to 26 MHz:	150 Ω ±20 Ω
26 MHz to 230 MHz:	150 Ω +60 Ω / -45 Ω
Coupling path (In/Out port/EUT)	
Connection:	BNC 50 Ω
RF voltage:	<30 V
RF voltage: Voltage division factor (RF input to EUT port)	<30 V
9	<30 V 9.5 dB ±1 dB
Voltage division factor (RF input to EUT port)	
Voltage division factor (RF input to EUT port) 150 kHz to 80 MHz:	9.5 dB ±1 dB
Voltage division factor (RF input to EUT port) 150 kHz to 80 MHz: 80 MHz to 230 MHz:	9.5 dB ±1 dB 9.5 dB +3 dB / -2 dB
Voltage division factor (RF input to EUT port) 150 kHz to 80 MHz: 80 MHz to 230 MHz: Transmission bandwidth (wanted signal) EUT/AE B3 dB:	9.5 dB ±1 dB 9.5 dB +3 dB / -2 dB
Voltage division factor (RF input to EUT port) 150 kHz to 80 MHz: 80 MHz to 230 MHz: Transmission bandwidth (wanted signal) EUT/AE B3 dB: Decoupling of CM disturbance (RF port / AE)	9.5 dB ±1 dB 9.5 dB +3 dB / -2 dB > 20 kHz sin.
Voltage division factor (RF input to EUT port) 150 kHz to 80 MHz: 80 MHz to 230 MHz: Transmission bandwidth (wanted signal) EUT/AE B3 dB: Decoupling of CM disturbance (RF port / AE) 150 kHz:	9.5 dB ±1 dB 9.5 dB +3 dB / -2 dB > 20 kHz sin.
Voltage division factor (RF input to EUT port) 150 kHz to 80 MHz: 80 MHz to 230 MHz: Transmission bandwidth (wanted signal) EUT/AE B3 dB: Decoupling of CM disturbance (RF port / AE) 150 kHz: 1.5 MHz:	9.5 dB ±1 dB 9.5 dB +3 dB / -2 dB > 20 kHz sin. >30 dB >60 dB

#### Mechanical specifications

Size (W x H x D):	100 mm x 100 mm x 240 mm
Weight:	approx. 1.5 kg

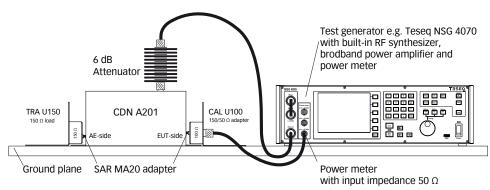


Product name	Application	Connector EUT port	Connector AE port
CDN A201	2 lines application	4 mm banana	4 mm banana
CDN A301	3 lines application	4 mm banana	4 mm banana
CDN A401	4 lines application	4 mm banana	4 mm banana

#### Test set-up calibration with CDN A201



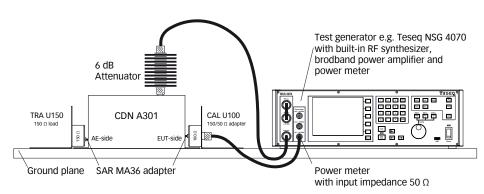
**Connectors of CDN A201** 



#### Test set-up calibration with CDN A301



**Connectors of CDN A301** 

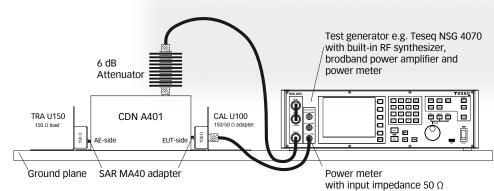




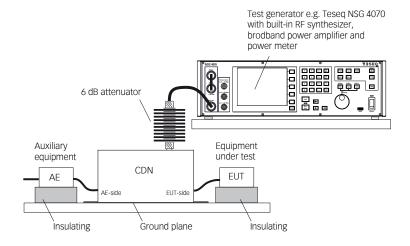
## Test set-up calibration with CDN A401



**Connectors of CDN A401** 



#### **EUT test set-up**





## **Delivery information**

Part number	Description	
231016	CDN A201	
	CDN AF2, 230 MHz (banana)	
244121	CDN A201S	
	CDN AF2, 230 MHz (banana) with calibration adapter set in suitcase	
231017	CDN A301	
	CDN AF3, 230 MHz (banana)	
244122	CDN A301S	
	CDN AF3, 230 MHz (banana) with calibration adapter set in suitcase	
231018	CDN A401	
	CDN AF4, 230 MHz (banana)	
244123	CDN A401S	
	CDN AF4, 230 MHz (banana) with calibration adapter set in	
	suitcase	
97-231024	CDN-TC	
	Traceable calibration (ISO17025) for IEC 61000-4-6 requirements,	
	order only with device CDN M, AF, S or T00x type	
239901	CAL U100	
	Universal calibration unit (150 $\Omega$ /50 $\Omega$ adapter)	
239903	TRA U150	
	Universal termination resistor 150 $\Omega$ AE side	
239916	SAR MA20*	
	Shorting adapter for CDN A201 and M216	
239918	SAR MA36*	
	Shorting adapter for CDN A301 and M416	
239919	SAR MA40*	
	Shorting adapter for CDN A401 and M416-3LN	
*) The calibration set-up required 2x this adapter		

