



CDN M016, M210B, M216, M310B, M316, M316B

COUPLING / DECOUPLING NETWORK (CDN)

CDN M TYPE



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.



CDN M016

- Designed for IEC/EN 61000-4-6
- CDN M016 switchable M2 or M3
- Types with 4 mm banana sockets
- Performance up to 230 MHz

Technical specifications CDN M016, M210B, M216, M310B, B316 and M316B

Frequency range:	150 kHz to 230 MHz
Power rating (EUT- and AE port)	
AC max. voltage (line to ground):	250 V
DC max. voltage (line to ground):	400 V
Current max :	16 A (CDN M210B, CDN M310B: 10A)
Test voltage:	3 kV 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
Voltage division factor (RF input to EUT port)	
150 kHz to 80 MHz:	9.5 dB ±1 dB
80 MHz to 230 MHz:	9.5 dB +3 dB / -2 dB
Insertion loss (EUT / AE) f < 400 Hz:	<0.1 dB
Decoupling of CM disturbance (RF port / AE)	
150 kHz:	>30 dB
1.5 MHz:	>60 dB
30 MHz:	>40 dB
230 MHz:	>20 dB

Mechanical specifications

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








Advanced Test Solutions for EMC

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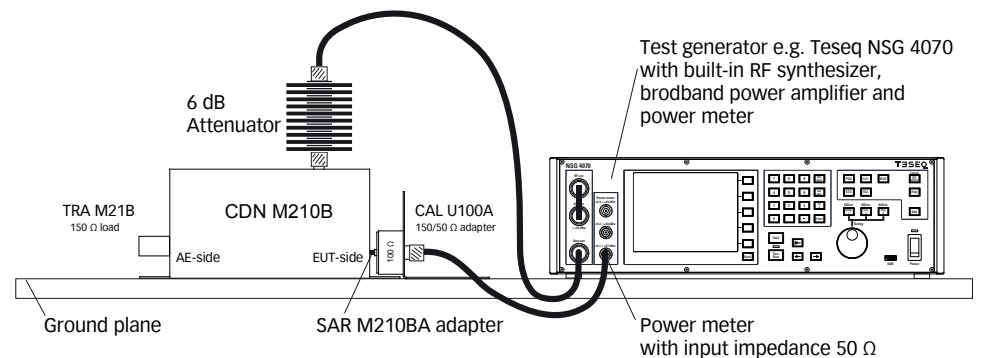
Product range

Product name	Application	Connector EUT port	Connector AE port
CDN M210B	2 power lines	CEE 7/17 	IEC 60320 C14 
CDN M216	2 power lines	4 mm banana	4 mm banana
CDN M016	switchable 2 or 3 power lines, (L+N or L+N+PE)	4 mm banana	4 mm banana
CDN M310B	3 power lines, (L+N+PE)	Schuko, CEE 7/4 	IEC 60320 C14 
CDN M316	3 power lines, (L+N+PE), (2L+PE)	4 mm banana	4 mm banana
CDN M316B	3 power lines, (L+N+PE), (2L+PE)	4 mm banana	IEC 60320 C20 

Test set-up calibration with CDN M210B



Conector CDN M210B



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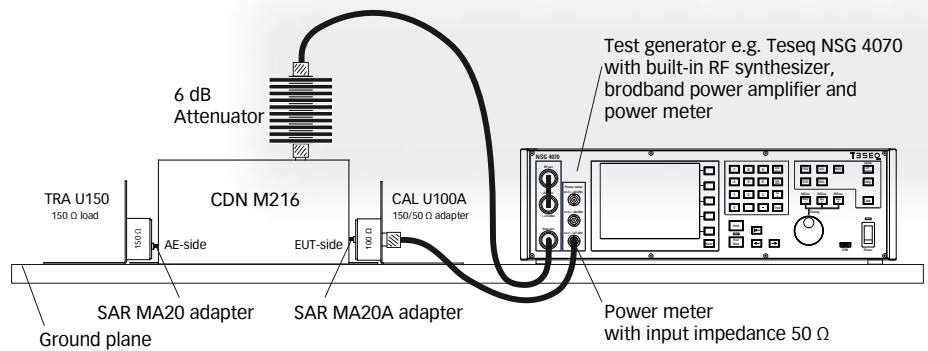
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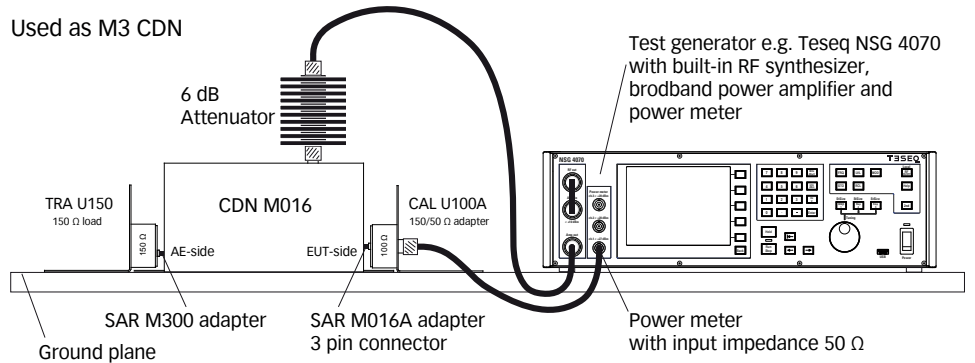
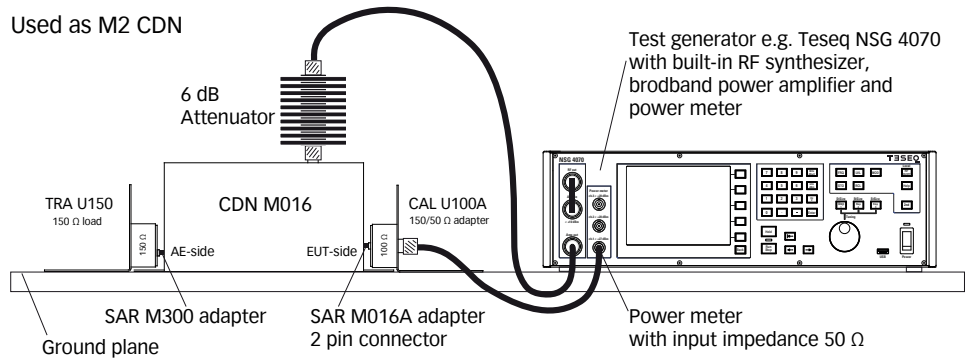
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Test set-up calibration with CDN M216



Test set-up calibration with CDN M016, switchable M2 or M3



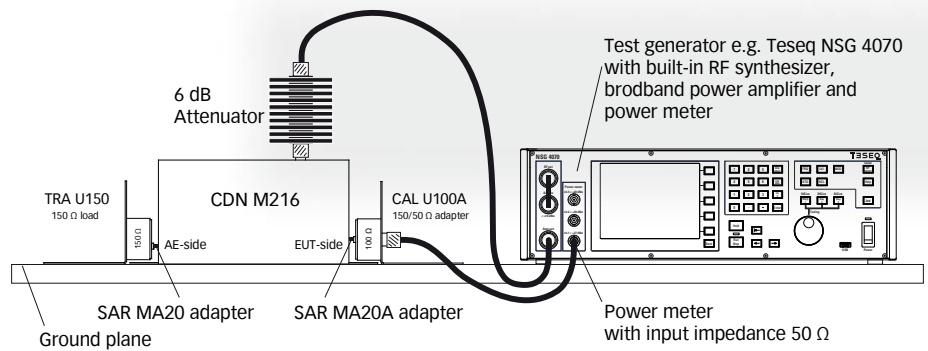
CDN M016, view to the switch and banana connectors

CDN M016, M210B, M216, M310B, M316, M316B

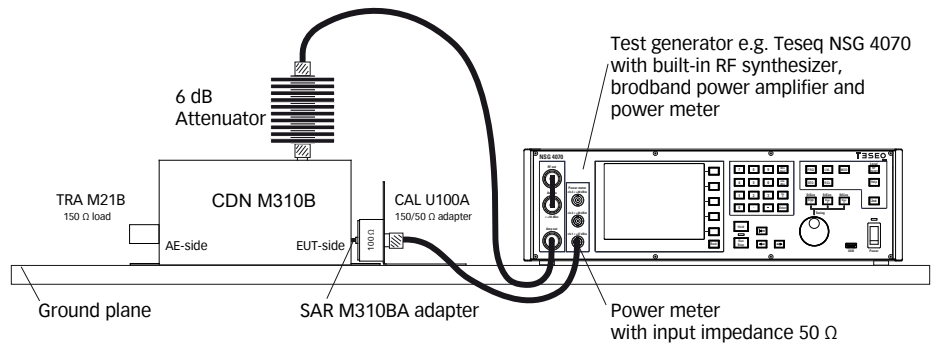
COUPLING / DECOUPLING NETWORK (CDN)

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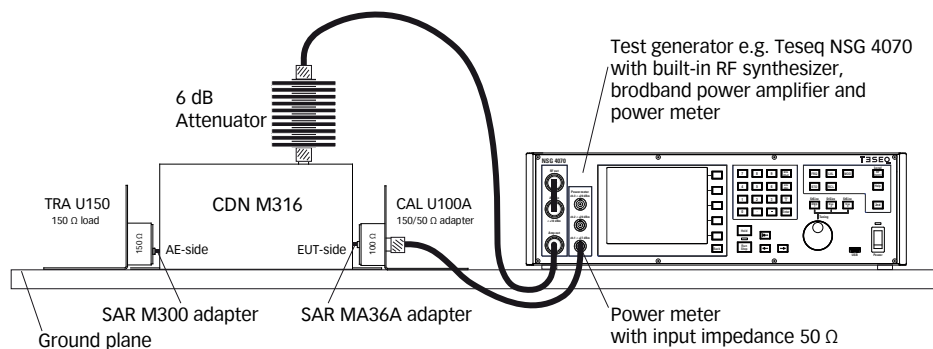
Test set-up calibration with CDN M216



Test set-up calibration with CDN M310B



Test set-up calibration with CDN M316

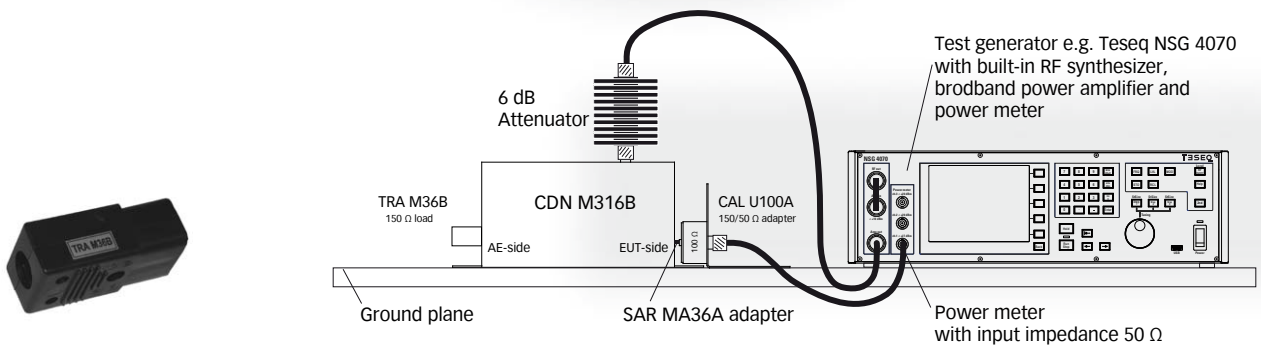


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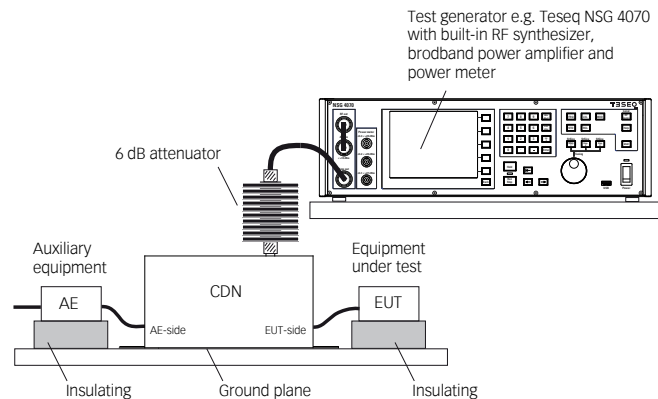
CDN M TYPE

Test set-up calibration with CDN M316B



TRA M36B

EUT test set-up



Delivery information

Part number	Description
231024	CDN M016
244117	CDN M2/3 switchable, 16 A, 230 MHz (banana), L, N,PE or L,N CDN M016S
237504	CDN M210B CDN M2, 10 A, 230 MHz (AE Euro, EUT-socket 2lines), L,N
2441313	CDN M210BS CDN M2, 10 A, 230 MHz (AE Euro, EUT-socket 2lines), L,N with calibration adapter set in suitcase



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231002	CDN M216 CDN M2, 16 A, 230 MHz (banana), L,N
244112	CDN M216S CDN M2, 16 A, 230 MHz (banana), L,N with calibration adapter set in suitcase
237505	CDN M310B CDN M3, 10 A, 230MHz (AE Euro, EUT Schuko)
244116	CDN M310BS CDN M3, 10 A, 230MHz (AE Euro, EUT Schuko) with calibration adapter set in suitcase
231003	CDN M316 CDN M3, 16 A, 230 MHz (banana), L,N,PE
244114	CDN M316S CDN M3, 16 A, 230 MHz (banana), L,N,PE with calibration adapter set in suitcase
231019	CDN M316B CDN M3, 16 A, 230 MHz (AE Euro, EUT banana), L,N,PE
244115	CDN M316BS CDN M3, 16 A, 230 MHz (AE Euro, EUT banana), L,N,PE 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
242401	CAL U100A Universal calibration unit in safety design (150 Ω /50 Ω adapter)
239903	TRA U150 Universal termination resistor 150 Ω AE side
242441	SAR M016A Shorting safety adapter for CDN M016
239916	SAR MA20 Shorting adapter for CDN A201 and M216
242432	SAR MA20A Shorting safety adapter for CDN M216
242443	SAR M210BA Shorting safety adapter for CDN M210B
242442	SAR M310BA Shorting safety adapter for CDN M310B
242451	SAR M300 Shorting adapter for CDN M016 and M316
239918	SAR MA36 Shorting adapter for CDN A301 and M416
242434	SAR MA36A Shorting safety adapter for CDN M316, M316B and M325
242457	TRA M21B Termination unit for CDN M210B and CDN M310B
242460	TRA M36B Termination unit for CDN M316B