



## MAIN FEATURES

- Coupling networks designed for IEC/EN 61000-4-6
- CDN M series for mains applications
- Start frequency is from 10 kHz as NAMUR NE 21 specifies
- For 1 PE application
- Models with 4 mm safety banana sockets

## CDN M1 From 10 kHz Series CDN IEC 61000-4-6

IEC/EN 61000-4-6 specifies the design and performance of a range of coupling/de-coupling networks (CDNs). Each CDN is specific to the type of cable and the intended signal carried on the cable. AMETEK CTS with its brand 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). In this datasheet, CDN used with unscreened supply (mains) with one line (PE) application starting from 10 kHz as required by NAMUR NE21 is presented.

The CDN M1-10 is used to Inject common mode disturbance signal to PE of EUT alone without influencing the Main supply voltage in the frequency range from 10 kHz to 80 MHz

Verification results is supplied with each unit. Traceable and accredited calibration according to ISO17025 is available upon request. The CDN can be ordered alone or as a kit, which includes the necessary adapters for verification. please refer to the set order information for more details.

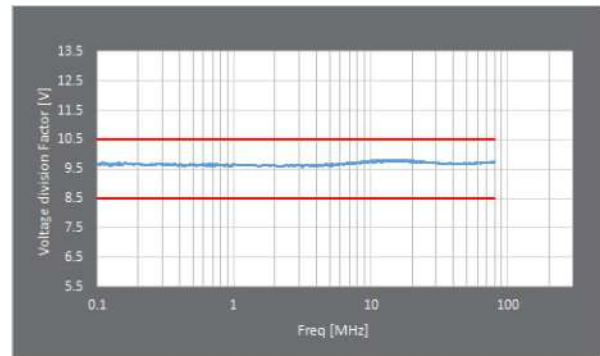
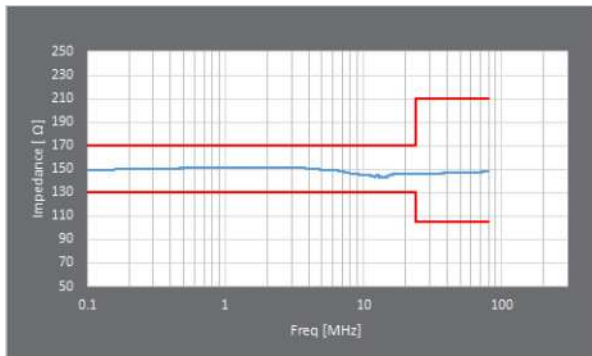
For safety, AMETEK provides a protective earth bolt attached to the bottom plate of all CDN series which can be used to connect it with ground. Furthermore, CDN series comes with a safety banana socket to avoid accidental contact with the metal socket.

Typical performance with limit lines for common mode impedance and voltage division factor can be found in this datasheet.

## Electrical Specifications

	CDN M1-10
Frequency Range	10 kHz to 80 MHz
Connector EUT Port	4 mm safety banana
Connector AE Port	
Line Parameters	1 Line
Application Configuration	PE
Current Max	16 A <sup>1</sup>
Current Max w/o saturation	300 mA
Common Mode Impedance (EUT Port)	10 kHz to 24 MHz: 150 Ω ±20 Ω 24 MHz to 80 MHz: 150 Ω +60 Ω / -45 Ω
Footnote	1. Maximum: 25 A for 1 s PE line test

## Typical Performance for Common Mode Impedance and Voltage Division Factor



## RF to EUT/AE Specifications

	CDN M1-10
RF Port	BNC 50 Ω
RF Voltage	< 20 V <sup>1</sup>
Voltage division factor (RF input to EUT port)	10 dB ±1 dB
Insertion loss (EUT / AE)	f < 400 Hz: <0.1 dB
Footnote	1. refers to 33 V test level in 300 Ω

## General Specifications

	CDN M1-10
Operating Time	25 A for 1 s PE line test
Dimensions (WxHxD)	100 x 100 x 240 mm <sup>3</sup>
Net Weight	approx. 1.5 kg
Operating Environment	Indoor use only
Operating Temperature	+5° C to +40° C
Humidity	up to 80%

## Set Information

Set Name	CAL U100B	SAR M116
Order Nr.	247825	239915
CDN M1-10S	1	1
242482		