CDNE M210
COUPLING DECOUPLING NETWORK FOR EMISSION MEASUREMENT

- **Frequency range 30 to 300 MHz**
- **520 V, 10 Amps, M2 version**
- **Conforms with CISPR 16-1-2**
- **Enables testing to CISPR 16-2-1 and CISPR 15 CDN method**
- **Excellent performance**
- **Calibration kit available**

CISPR 16-2-1's most recent edition 3.0 specifies a new test method which allows the use of a coupling/decoupling network for emission measurement (CDNE) to measure disturbance voltages in the 30 to 300 MHz frequency range. This method enables EUTs to be connected directly to the CDNE, allowing a single conducted emission measurement to replace a lengthy radiated emission test. Product standards may use this fast, convenient and economical alternative.

CISPR 15 offers an independent method for measurement of radio disturbance characteristics of electrical lighting equipment. This method specifies the use of a coupling/decoupling network (CDN) as defined in IEC 61000-4-6 with an extended frequency range 30 to 300 MHz. Using a CDNE as described in CISPR 16-1-2 instead of CDN offers improved measurement reproducibility due to standard's requirements for more restrictive limits of asymmetrical impedance, phase angle, symmetrical impedance and internal attenuation.

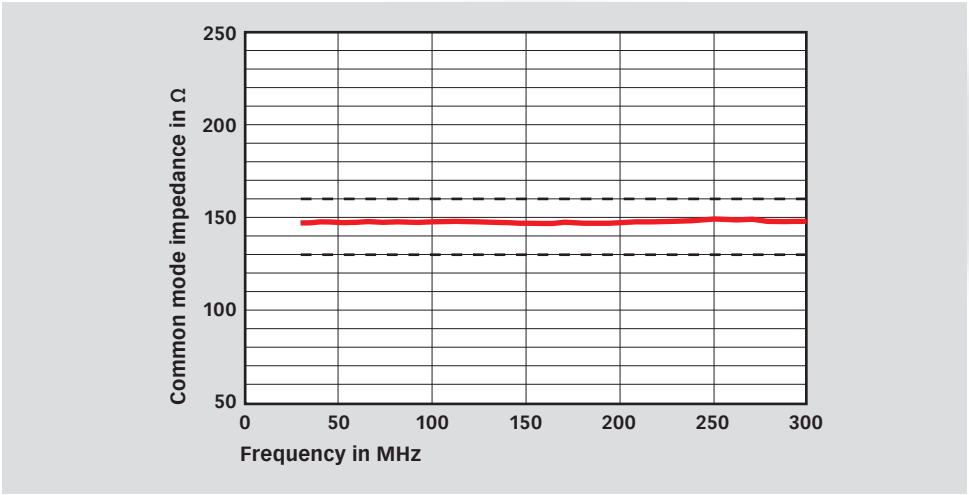
The Teseq CDNEs are compliant with the actual versions of CSIPR 16-1-2, CISPR 16-2-1 and CISPR 15's CDN method.

Technical specifications

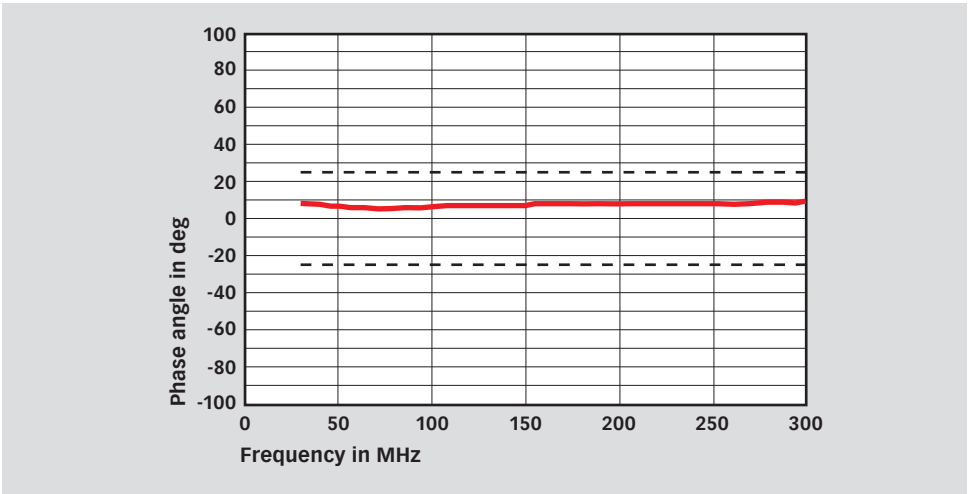
Frequency range:	30 to 300 MHz
Power rating (EUT- and AE port)	
AC max. voltage (line to line):	520 V
DC max. voltage:	300 V
Current max:	10 A
Test voltage:	2000 V AC, 2 s
Mains sockets (EUT- and AE port):	4 mm, safety
Common mode impedance (EUT port):	150 Ω +10/-20 Ω
Phase angle (EUT port):	0° ±25°
Differential mode impedance (EUT port):	100 Ω ±20 Ω
Coupling path (EUT/RF port)	
Connection (RF port):	BNC, 50 Ω
RF voltage (generated from EUT):	<10 V
Transducer factor/Voltage division factor (EUT/RF port)	
incl. internal 10 dB attenuator:	20 dB ±1.5 dB
Insertion Loss (EUT/AE port), f <400 Hz:	>0.1 dB
Decoupling of CM disturbance (RF port/AE):	>30 dB

CDNE M210
COUPLING DECOUPLING NETWORK FOR EMISSION MEASUREMENT

Typical common mode impedance (EUT)



Typical common mode phase angle (EUT)

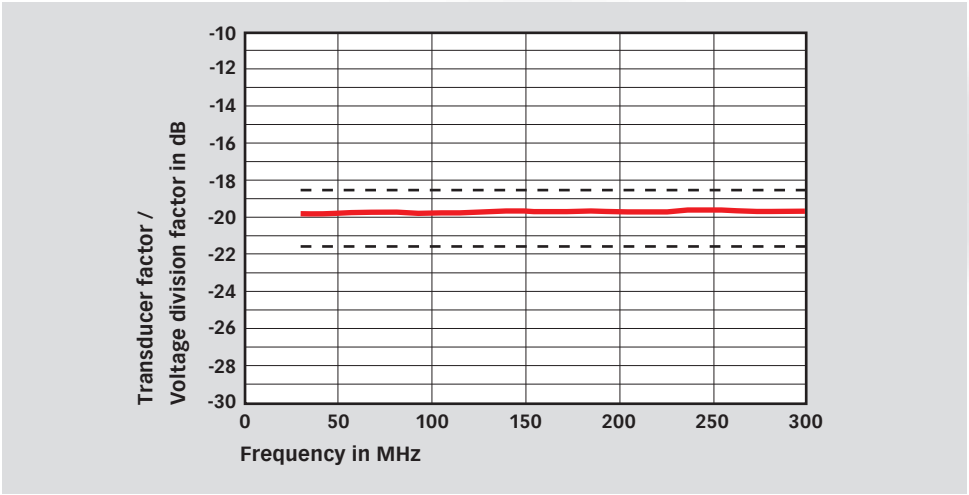


TESEQ

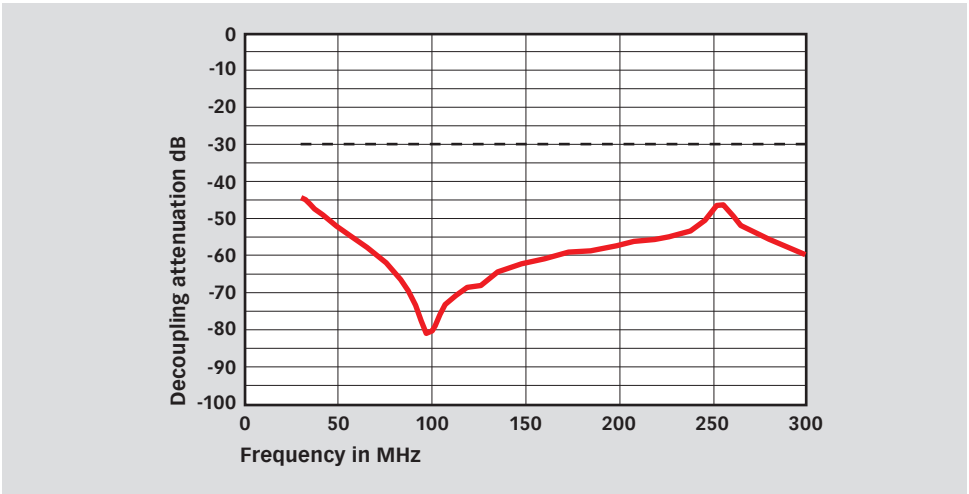
Advanced Test Solutions for EMC

CDNE M210
COUPLING DECOUPLING NETWORK FOR EMISSION MEASUREMENT

Typical transducer factor / voltage division factor (RF Out port/EUT)



Typical decoupling of CM disturbance (RF Out port/AE)



TESEQ

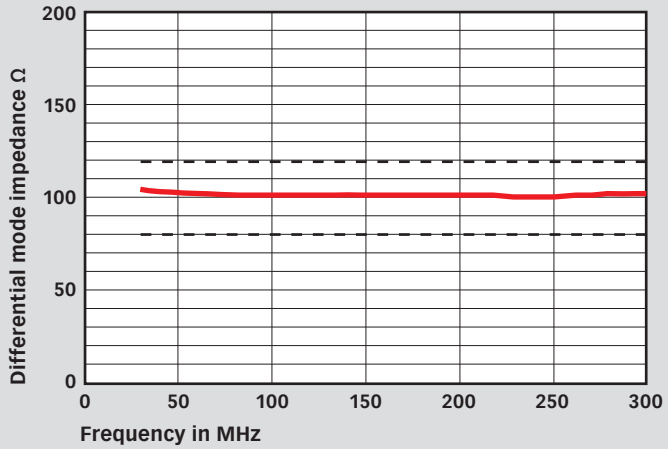
Advanced Test Solutions for EMC

CDNE M210
COUPLING DECOUPLING NETWORK FOR EMISSION MEASUREMENT

CDNE M210, view to the EUT port

CDNE M210, view to the AE port

Typical differential mode impedance



Mechanical specifications

Size (W x H x D) in mm:	105 x 75 x 125
Weight:	approx. 700 g

Model no. and options

Part number	Description
244230	CDNE M210 CDNE M2, 10 A, 30 to 300 MHz (banana), L, N, Coupling Decoupling Network for Emissions measurement, conform with CISPR 16-1-2 and CISPR 15
97-244230	CDNE-TC Traceable calibration (ISO17025), order only with the device
242322	CAS CDNE Calibration kit for CDNE, traceable calibration and certificate included

Teseq GmbH
Landsberger Str. 255 · 12623 Berlin · Germany
T +49 30 56 59 88 35 F +49 30 56 59 88 34
deinfo.teseq@ametek.com **www.teseq.com**

© February 2015 Teseq®
Specifications subject to change without notice. Teseq® is an ISO-registered company. Its products are designed and manufactured under the strict quality and environmental requirements of the ISO 9001. This document has been carefully checked. However, Teseq® does not assume any liability for errors or inaccuracies.

82-244230 E02 February 2015

AMETEK®
COMPLIANCE TEST SOLUTIONS

TESEQ
Advanced Test Solutions for EMC