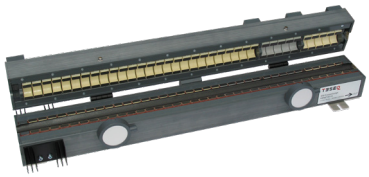
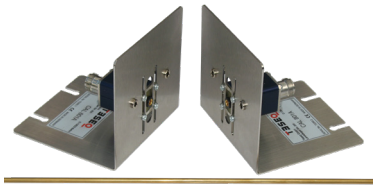
KEMZ 801A
EM CLAMP FOR IEC / EN 61000-4-6



- **As specified in IEC 61000-4-6 (incl. edition 4 and EN 61000-4-6:2014)**
- **Very efficient coupling**
- **Can be used on almost any cable**
- **Ruggedly designed**
- **Improved locking system**

IEC 61000-4-6 (EN 61000-4-6) defines three basic types of transducers used for the injection of test signals into the equipment under test (EUT). The basic requirement is to inject a known level of RF signal into the cable of the EUT at each test frequency and to determine a possible susceptibility of the EUT. The EM clamp injects the disturbance signal by a combination of inductive and capacitive coupling.

The normative Annex A of IEC / EN 61000-4-6 specifies the EM clamp and provides additional information regarding the clamp characterization. The KEMZ 801A complies to the standard.
The adapter kit CAL 801A, which allows test level setting and correction factor measurement, is offered optionally. The calibration fixture CAL KEMZ is made for the S-parameter measurements as defined in Annex A of IEC / EN 61000-4-6 edition 4.



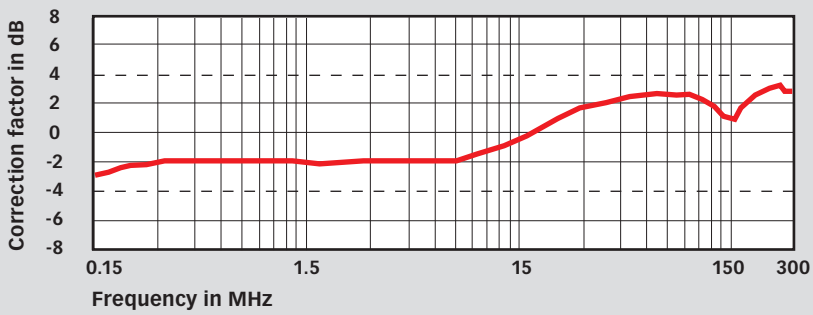
CAL 801A adapter unit for KEMZ 801A (required for stress level setting)

Technical specifications

Frequency range:	10 kHz to 1000 MHz
Nominal impedance:	50 Ω
Connector:	N-type female
Maximum input level	
0.01 to 100 MHz:	100 W for 15 min
100 to 230 MHz:	100 W for 3 min
230 to 1000 MHz:	50 W for 3 min
Correction factor 0.15 to 300 MHz:	≥ -4 dB / ≤ 4 dB (see graph)
Clamp opening diameter:	approx. 21 mm
Maximum cable diameter:	20 mm
Dimension (LxWxH):	647 mm x 130 mm x 105 mm
Height of ferrite center above ground:	50 mm
Distance to the reference point (first ferrite):	approx. 22 mm
Weight:	approx. 7 kg

CAL KEMZ calibration fixture for KEMZ / KEMA impedance and decoupling measurements

Typical correction factor (– – Teseq limit)



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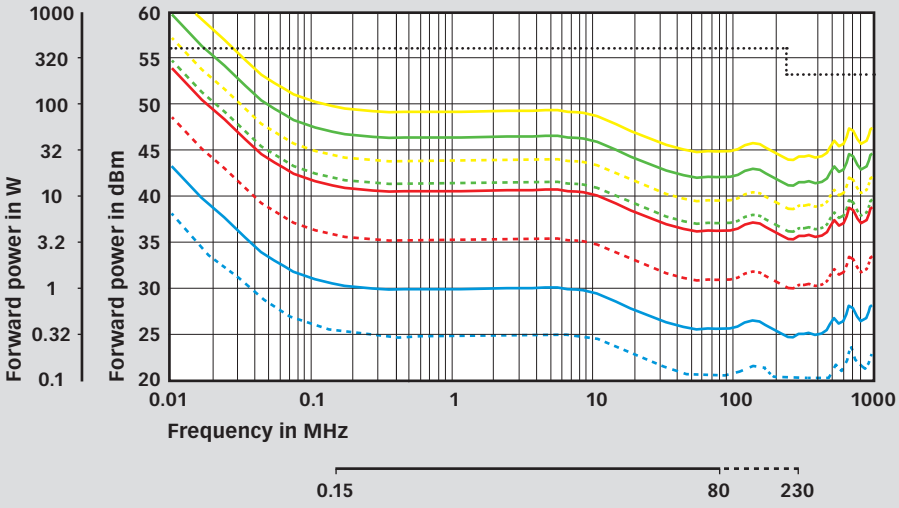
KEMZ 801A
EM CLAMP FOR IEC / EN 61000-4-6

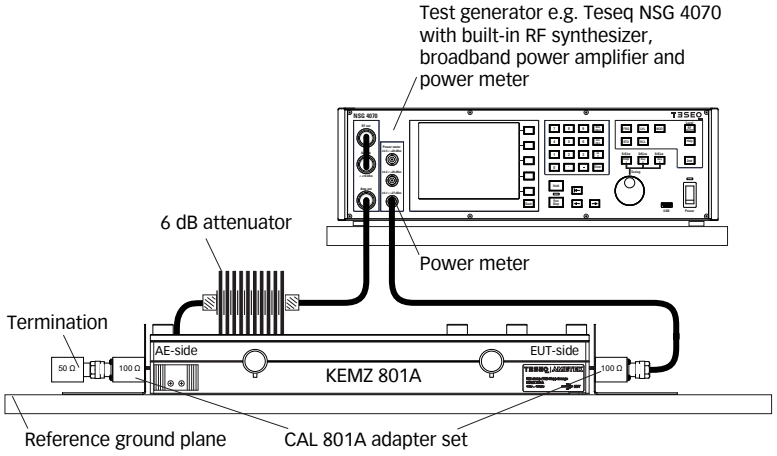
KEMZ 801A, view to the ferrite cores

Power requirements in accordance with IEC / EN 61000-4-6
(6 dB attenuator, 0.5 dB cable loss, typical insertion loss of KEMZ 801A)

- 3 V EMF without modulation (stress level setting), 3 V EMF with AM 80%,
- 10 V EMF without modulation (stress level setting), 10 V EMF with AM 80%,
- 20 V EMF without modulation (stress level setting), 20 V EMF with AM 80%
- 30 V EMF without modulation (stress level setting), 30 V EMF with AM 80%
- Max. forward power on the 6 dB attenuator input



Test set-up calibration according IEC / EN 61000-4-6 with EM clamp



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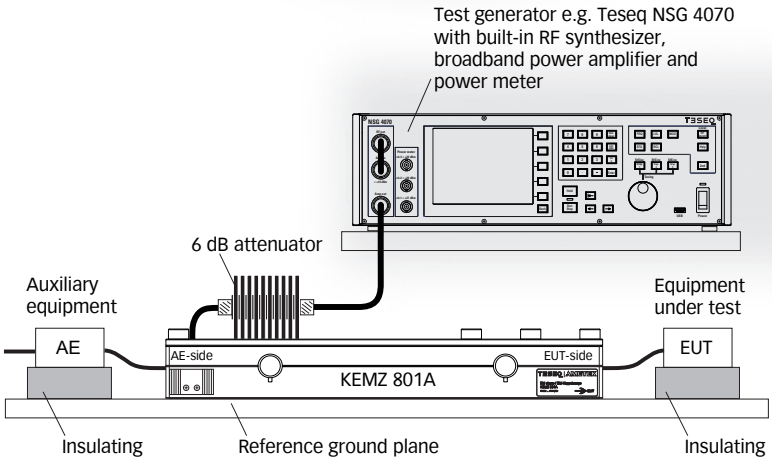
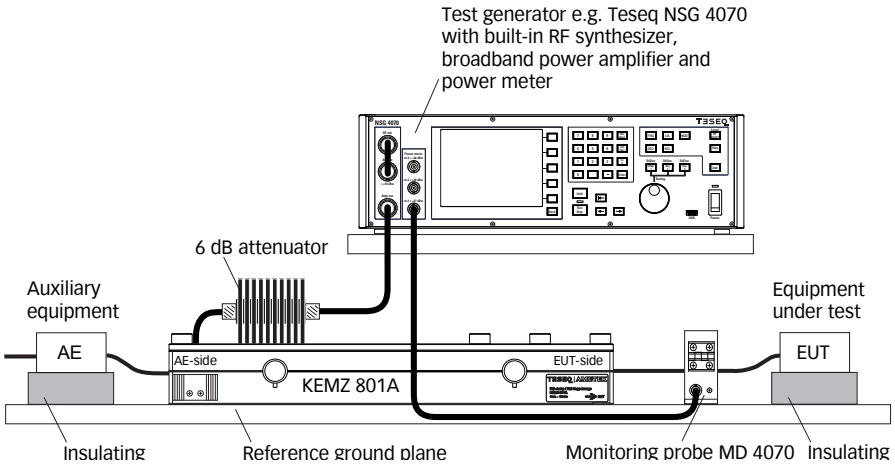
Test set-up with EUT according IEC / EN 61000-4-6 with EM clamp



Test set-up with EUT according IEC / EN 61000-4-6 with EM clamp and monitoring probe



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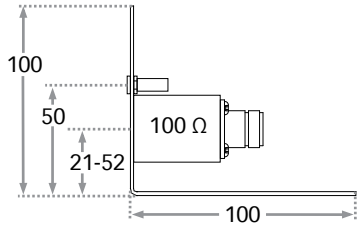
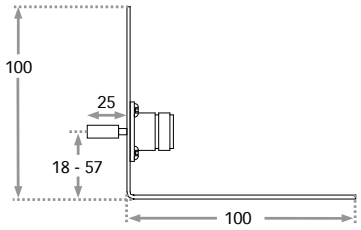


all dimensions in mm

Dimensions of the 150 Ω to 50 Ω adapter (part of CAL 801A), side view



all dimensions in mm

Dimensions of the impedance measuring adapter (part of CAL KEMZ), side view

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Technical specifications of CAL 801A

Dimensions:	see drawing
Built-in resistor:	100 Ω
Maximum length of the clamp:	670 mm
Connectors on the clamp side:	4 mm banana
RF connector:	N-type female
Weight:	approx. 640 g

Technical specification of CAL KEMZ

Dimensions:	see drawing
Connectors on the clamp side:	4 mm banana
Metal rod diameter:	4 mm
RF connector:	N-type female
Weight:	approx. 680 g

Model no. and options

Part number	Description
255100	KEMZ 801A EM Clamp, conform with IEC 61000-4-6 (incl. edition 4 and EN 61000-4-6:2014)
255102	KEMZ 801AS EM Clamp, conform with IEC 61000-4-6 (incl. edition 4 and EN 61000-4-6:2014), supplied with adapter set CAL 801A
255103	KEMZ 801AS50 EM Clamp, conform with IEC 61000-4-6 (incl. edition 4 and EN 61000-4-6:2014), supplied with adapter set CAL 801A and 50 Ω termination 1 W
97-235501	KEMZ 801-TC Traceable calibration (ISO17025), according IEC 61000-4-6 edition 4 and EN 61000-4-6:2014, coupling factor 10 kHz - 1 GHz, impedance and decoupling factor calculated with ABCD transformation for 150 kHz - 100 MHz, order only with KEMZ 801A
255101	CAL 801A Adapter unit for KEMZ 801A, level setting and correction factor
255104	CAL KEMZ Calibration fixture for KEMZ/KEMA, impedance and decoupling

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