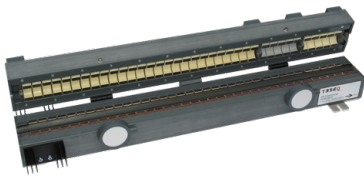




KEMZ 801B EM CLAMP FOR IEC / EN 61000-4-6

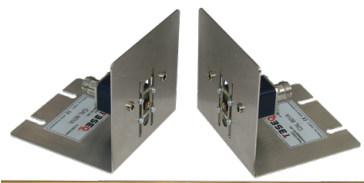


- As specified in IEC 61000-4-6 (incl. edition 4 and EN 61000-4-6:2014)
- Very efficient coupling
- Can be used on almost any cable
- Ruggedly designed
- Improved locking system

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 801B complies to the standard.

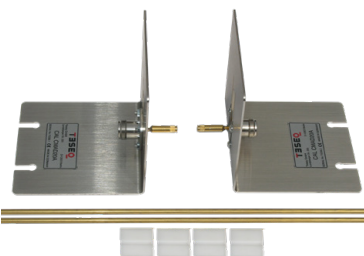
The adapter kit CAL 801A, which allows test level setting and correction factor measurement, is offered optionally. The calibration fixture CAL KEMZ is made for the S-parameter measurements as defined in Annex A of IEC / EN 61000-4-6 edition 4.



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

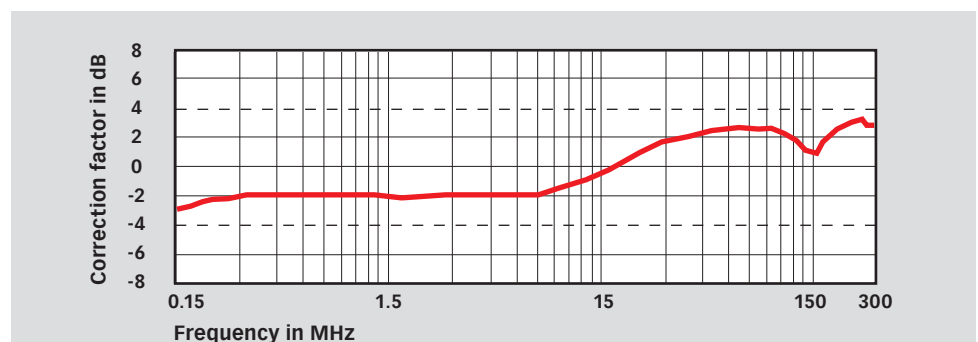
Technical specifications

| | |
|--|------------------------------|
| 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)



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

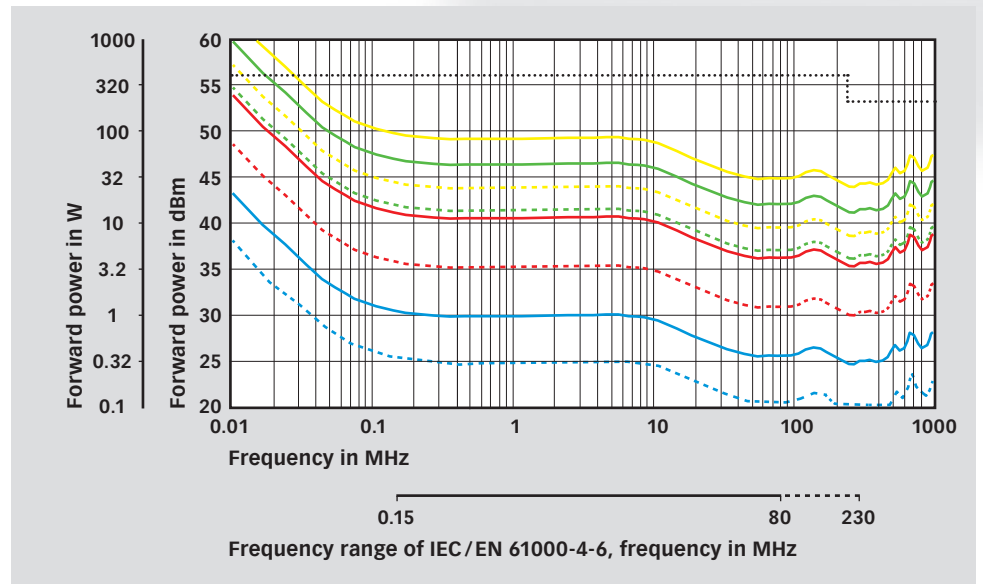
Power requirements in accordance with IEC / EN 61000-4-6

(6 dB attenuator, 0.5 dB cable loss, typical insertion loss of KEMZ 801B)

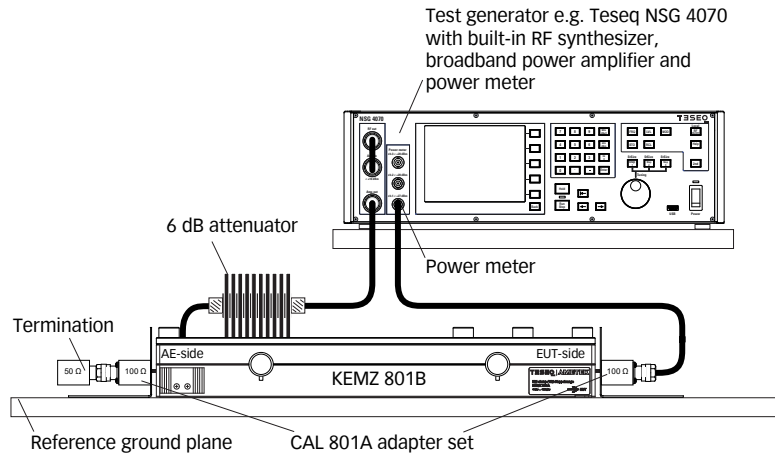
- 3 V EMF without modulation (stress level setting), — 3 V EMF with AM 80%,
- 10 V EMF without modulation (stress level setting), — 10 V EMF with AM 80%,
- 20 V EMF without modulation (stress level setting), — 20 V EMF with AM 80%
- 30 V EMF without modulation (stress level setting), — 30 V EMF with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



KEMZ 801B, view to the ferrite cores



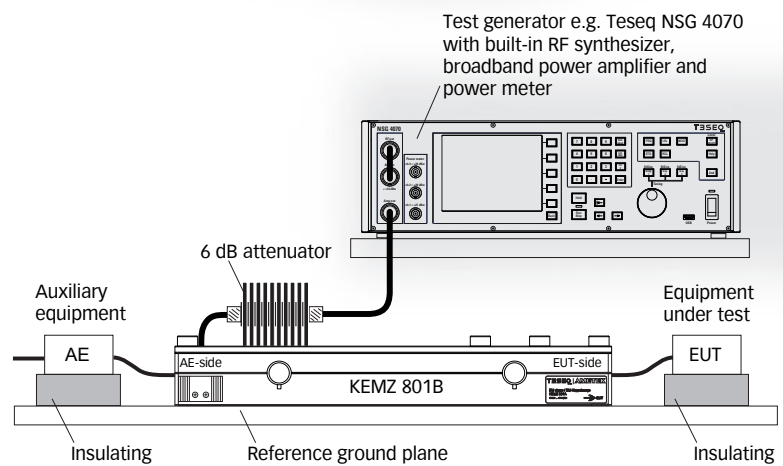
Test set-up calibration according IEC / EN 61000-4-6 with EM clamp



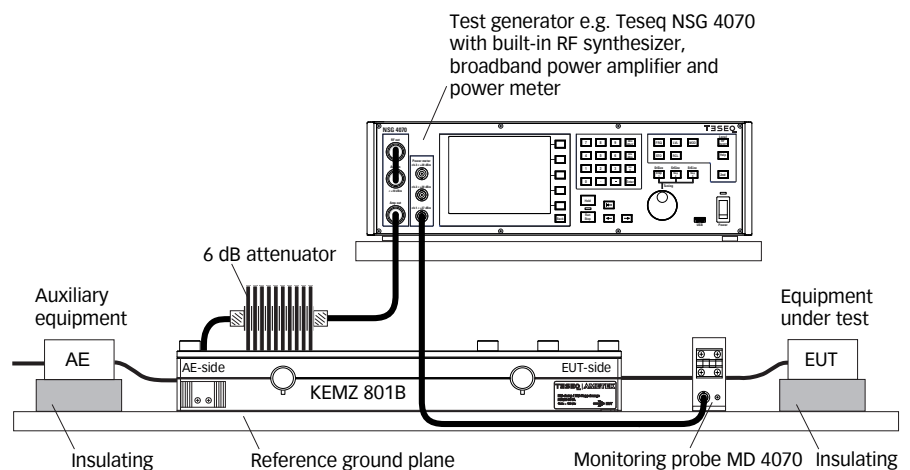
Advanced Test Solutions for EMC

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

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

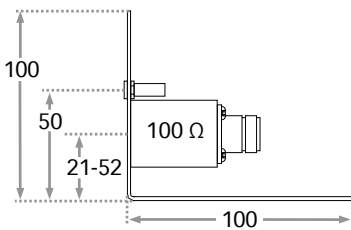


Test set-up with EUT according IEC / EN 61000-4-6 with EM clamp and monitoring probe



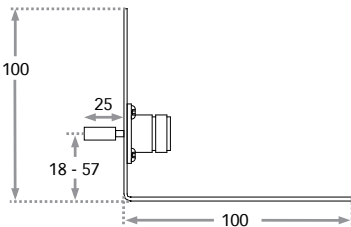
KEMZ 801B

EM CLAMP FOR IEC / EN 61000-4-6



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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82-255190 E01 January 2022

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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 |
|-------------|---|
| 255190 | KEMZ 801B EM Clamp according IEC 61000-4-6 |
| 255193 | KEMZ 801BS50 EM Clamp according IEC 61000-4-6, with calibration unit CAL 801A, 50 Ω N type 1 Watt termination and adapter BNC(f) to N(m) |
| 97-235501 | KEMZ 801-TC Traceable calibration (ISO 17025), order only with the device KEMZ 801B or KEMZ 801BS50 |
| 98-255190 | Accredited calibration (ISO 17025) KEMZ 801B |
| 98-255193 | Accredited calibration (ISO 17025) KEMZ 801BS50 (incl. CAL 801A + 50 Ohm) |
| 255101 | CAL 801A Calibration unit for KEMZ 801B, level setting and correction factor |
| 97-255101 | CAL 801A-TC Traceable calibration (ISO 17025), order only with the device |
| 98-255101 | CAL 801A-DAKKS Accredited calibration (ISO 17025), order only with the device |
| 255104 | CAL KEMZ Calibration fixture for KEMZ/KEMA, impedance and decoupling |

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