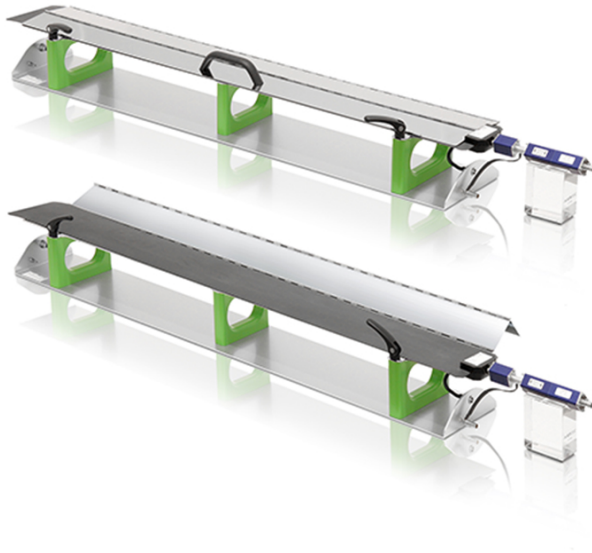


CA HFK

CALIBRATION KIT FOR CAPACITIVE COUPLING CLAMP VERIFICATION



FOR TESTS ACCORDING TO ...

- > EN 61000-4-4
- > IEC 61000-4-4

CALIBRATION SET FOR CAPACITIVE COUPLING CLAMP VERIFICATION





The IEC 61000-4-4 Ed 3.0 published 2012 recommends the calibration of the capacitive coupling clamp into a 50ohm coaxial load.

The capacitive coupling clamp (HFK) is connected to the 50 ohm output of the EFT generator. A flexible insulated plate inside the HFK is connected to a coaxial 50 ohm load resistor for verificate the EFT / Burst wave of the capacitive coupling clamp.

HIGHLIGHTS

- > Calibration kit for capacitive coupling clamp as per IEC 61000-4-4 Ed.3
- > Extension for the CA EFT Kit for capacitive coupling clamp calibration with EFT/burst
- > Flexible transducer plate 1050 x 120mm included
- > Support provided to adapt the load resistors on 100mm height level

APPLICATION AREAS

-  INDUSTRY
-  MEDICAL
-  BROADCAST
-  TELECOM
-  RESIDENTIAL

TECHNICAL DETAILS

CA HFK CALIBRATION SE-TUP

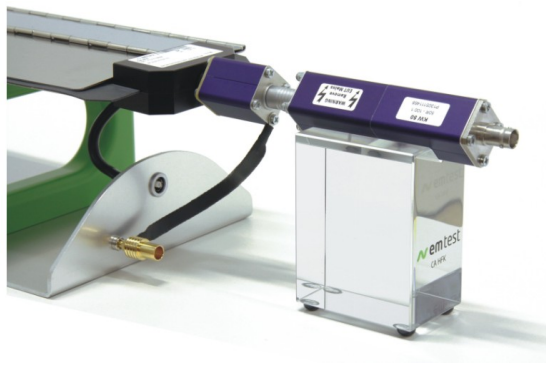
CALIBRATION OF THE CAPACITIVE COUPLING CLAMP

The standard IEC 61000-4-4 Ed 3.0 recommends a new calibration of the capacitive coupling clamp. EM test developed for the calibration, the CA HFK set.

- Components required for carry out the calibration:
- CA HFK: Consisting of transducer-plate and support
- KW 50: Load resistor 50ohm
- AD-CA EFT: Adapter 4mm/6mm for connect the transducer-plate to the coaxial F103 connector of KW 50

Calibration set-up

The transducer plate shall be placed into the capacitive coupling clamp such that the end with the connection is aligned with the end of the coupling plate. The connecting adapter AD-CA EFT is bond with a low impedance connection band to ground reference plane for grounding of the 50ohm coaxial measurement terminator/attenuator. The load resistor KW 50 is connected to the AD-CA EFT adapter. An acrylic support places the KW 50 to the same 100mm height as the coupling clamp is distant from the reference ground. The distance between the transducer plate and the KW 50 measurement terminator/attenuator shall not exceed 0,1m. A setup example is given in figures on this datasheet.



COUPLING CLAMP CALIBRATION

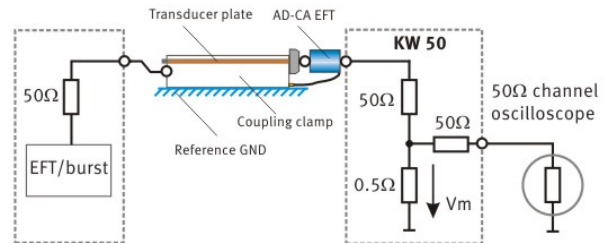
The calibration of the capacitive coupling plane is performed with the open circuit voltage setting at the EFT/burst generator (50ohm output): 2,000V

Resulting output voltage across the KW 50 (50ohm matching resistor): 1,000V.

Measuring voltage V_m : 10V

Measured voltage considering the 50ohm input impedance of the oscilloscope: 5V

Resulting attenuation (theoretical): 400:1



TECHNICAL DETAILS

TRANSDUCER PLATE

| TECHNICAL DATA FOR TRANSDUCER PLATE | |
|-------------------------------------|---|
| Description | Transducer plate with 4mm connection plug |
| Input Voltage | Max. 5,000V |
| Dimension | |
| Insulation | 1,100 +/-5mm x 130 +/-1mm |
| Copper foil | 1,050 +/-5mm x 120 +/-1mm thickness foil <0.5mm |
| Weight | 300g |

OPTIONS

| OPTIONAL ACCESSORIES | |
|----------------------|--|
| CA EFT Kit | Calibration Kit for EFT Burst calibration includes: - KW 50, 50ohm load resistor - KW 1000, 1,000ohm load resistor - AD-CA EFT, Adapter 4mm/6mm to coaxial F103 connector, (connection Load resistor to transducer plate) |
| AD-CA EFT | Adapter to match the transducer plate to the KW 50 load resistor, (connection Load resistor to transducer plate) |
| KW 50 | Coaxial 50ohm load resistor for EFT/Burst transient calibration |

SUPPORT

| TECHNICAL DATA FOR INSULATED SUPPORT | |
|--------------------------------------|---|
| Description | Support for measuring adapter KW 50 on 100mm level for capacitive coupling clamp verification |
| Hight KW 50 | 100mm +/- 1mm |
| Material | Acrylic |
| Dimension | 70mm x 49mm x 95mm |
| Weight | 400g |

COMPETENCE WHEREVER YOU ARE



CONTACT EM TEST DIRECTLY

Switzerland

AMETEK CTS GmbH › Sternenhofstraße 15 › 4153 Reinach › Switzerland
Phone +41 (0)61 204 41 11 › Fax +41 (0)61 204 41 00
Internet: www.ametek-cts.com › E-mail: sales.conducted.cts@ametek.com

Germany

AMETEK CTS Europe GmbH › Customer Care Center EMEA › Lünener Straße 211
› 59174 Kamen › Germany
Phone +49 (0) 2307 26070-0 › Fax +49 (0) 2307 17050
Internet: www.ametek-cts.com › E-mail: info.cts.de@ametek.com

Poland

AMETEK CTS Europe GmbH › Biuro w Polsce › ul. Twarda 44 › 00-831 Warsaw › Poland
Phone +48 (0) 518 643 12
Internet: www.ametek-cts.com › E-mail: Infopolska.cts@ametek.com

USA / Canada

AMETEK CTS US › 52 Mayfield Ave › Edison › NJ 08837 › USA
Phone +1 732 417 0501
Internet: www.ametek-cts.com › E-mail: usasales.cts@ametek.com

P.R. China

AMETEK Commercial Enterprise (Shanghai) Co. Ltd. › Beijing Branch › Western Section, 2nd floor › Jing Dong Fang Building (B10) › Chaoyang District › Beijing, China, 100015
Phone +86 10 8526 2111 › Fax +86 (0)10 82 67 62 38
Internet: www.ametek-cts.com › E-mail: chinasales@ametek.com

Republic of Korea

EM TEST Korea Limited › #405 › WooYeon Plaza › #986-8 › YoungDeok-dong › Giheung-gu › Yongin-si › Gyeonggi-do › Korea
Phone +82 (31) 216 8616 › Fax +82 (31) 216 8616
Internet: www.emtest.co.kr › E-mail: sales@emtest.co.kr

Singapore

AMETEK Singapore Pte. Ltd › No. 43 Changi South Avenue 2 › 04-01 Singapore 48164
Internet: www.ametek-cts.com › E-mail: singaporesales.cts@ametek.com

Great Britain

AMETEK GB › 5 Ashville Way › Molly Millars Lane › Wokingham › Berkshire RG41 2 PL › Great Britain
Phone +44 845 074 0660
Internet: www.ametek-cts.com

Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.