

# CA EFT KIT

## LOAD RESISTORS FOR EFT/BURST VERIFICATION



### FOR TESTS ACCORDING TO ...

- > EN 61000-4-4
- > IEC 61000-4-4
- > ISO 7637-1:1990
- > ISO 7637-2:1990
- > ISO 7637-2:2004
- > ISO 7637-2:2011
- > ISO 7637-3:1995
- > ISO 7637-3:2007

### CALIBRATION SET FOR EFT/BURST GENERATORS







The pulse shape of EFT/burst generators designed as per IEC 61000-4-4 have to be verified both into a 50ohm and a 1,000ohm load at the 50ohm coaxial HV output as well into 50ohm load at the output of the coupling network where the DUT is connected when testing mains supply lines.

The CA EFT kit includes the load resistors and a set of adapter to connect the coaxial matching resistors appropriately to the DUT output port.

### HIGHLIGHTS

- > Calibration kit as per IEC 61000-4-4
- > Also used as per ISO 7637, Annex D
- > 50ohm load resistor included
- > 1,000ohm load resistor included
- > Adapters provided to adapt the load resistors to the output of the coupling network for easy measurement

### APPLICATION AREAS

- |  |   |
|--|---|
|  AUTOMOTIVE |  RESIDENTIAL |
|  INDUSTRY   |   |
|  MEDICAL    |   |
|  BROADCAST  |   |
|  TELECOM    |   |

**TECHNICAL DETAILS**

**KW50**

**MEASURING EXAMPLE USING THE KW 50**

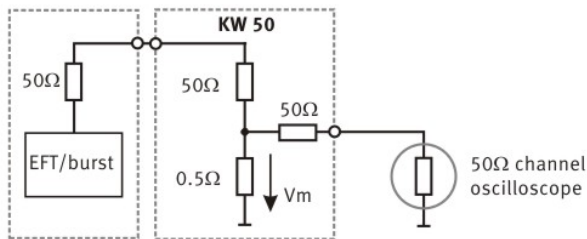
Open circuit voltage setting at the EFT/burst generator (50ohm output): 2,000V

Resulting output voltage across the 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



**KW1000**

**MEASURING EXAMPLE USING THE KW 1000**

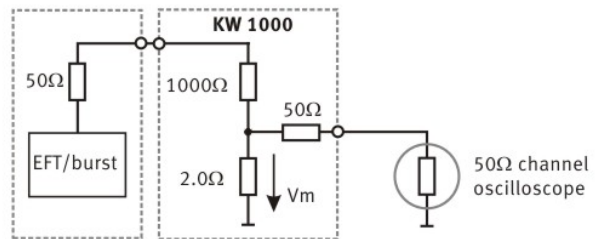
Open circuit voltage setting at the EFT generator (50ohm output): 2,000V

Resulting output voltage across the 1,000ohm matching resistor: 1,905V

Measuring voltage  $V_m$ : 4V

Measured voltage considering the 50ohm input impedance of the oscilloscope: 2V

Resulting attenuation (theoretical): 1,000:1



**TECHNICAL DETAILS**

**KW 50, 500HM LOAD RESISTOR**

| TECHNICAL DATA FOR KW 50 |   |
|--------------------------|---|
|                          | For EFT/Burst transients only                   |
| Input Voltage            | Max. 8,000V                                     |
| Input impedance          | 50ohm +/-2%                                     |
| Output impedance         | 50ohm   |
| Divider ratio            | 100:1   |
| Dimension                | 155mm x 26mm x 26mm                             |
| Weight                   | Approx. 150g                                    |
|                          | The divider ratio in a 50ohm systems is n = 400 |

**KW 1000, 1KOHM LOAD RESISTOR**

| TECHNICAL DATA FOR KW 1000 |   |
|----------------------------|---|
|                            | For EFT/Burst transients only                     |
| Input Voltage              | Max. 8,000V                                       |
| Input impedance            | 1,000ohm +/-2%, <6pF                              |
| Output impedance           | 50ohm   |
| Divider ratio              | 500:1   |
| Dimension                  | 155mm x 26mm x 26mm                               |
| Weight                     | Approx. 150g                                      |
|                            | The divider ratio in a 50ohm systems is n = 1,000 |

**AD-CA-EFT ADAPTER**

| TECHNICAL DATA FOR AD-CA-EFT |   |
|------------------------------|---|
| Function                     | Adapter 4mm/6mm to coaxial F103 connector, (to match the coupling network to the load resistor) |

**OPTIONAL ACCESSORIES**

| OPTIONS    |   |
|------------|---|
| ADA-800    | Adapter SHV-F103 to match KW 50 and KW 1000 load resistors to the coaxial HV output of the EFT 800 and EFT 500M/N8  |
| CA HFK     | Adapter set for capacitive coupling clamp calibration included:<br>- Transducer plate as per IEC 61000-4-4 Ed 3.0<br>- Support for positioning the KW 50 adapter on 100mm height as the capacitive coupling clamp |
| AD-MCF EFT | Adapter 4mm/6mm to match KW 50 load resistor to the EUT supply of 1- or 3-phase N-series coupling network with current >32 A  |

# COMPETENCE WHEREVER YOU ARE



## CONTACT EM TEST DIRECTLY

### Switzerland

EM TEST (Switzerland) GmbH > Sternenhofstraße 15 > 4153 Reinach > Switzerland  
 Phone +41 (0)61/7179191 > Fax +41 (0)61/7179199  
 Internet: www.emtest.ch > E-mail: sales.emtest@ametek.com

### Germany

AMETEK CTS Germany GmbH > Lünener Straße 211 > 59174 Kamen > Deutschland  
 Phone +49 (0)2307/26070-0 > Fax +49 (0)2307/17050  
 Internet: www.emtest.com > E-mail: info.cts@ametek.de

### France

EM TEST FRANCE > Le Trident - Parc des Collines > Immeuble B1 - Etage 3 > 36, rue Paul Cézanne > 68200 Mulhouse > France  
 Phone +33 (0)389 31 23 50 > Fax +33 (0)389 31 23 55  
 Internet: www.emtest.fr > E-mail: info@emtest.fr

### Poland

EM TEST Polska > ul. Ogrodowa 31/35, 00-893 Warszawa > Polska  
 Phone +48 (0)518 64 35 12  
 Internet: www.emtest.com/pl > E-mail: infopolska.emtest@ametek.com

### USA / Canada

AMETEK Compliance Test Solutions > 52 Mayfield Ave. > Edison > NJ 08837  
 Phone +1 (732) 417-0501  
 Internet: www.emtest.com > E-mail: sales.emtest@ametek.com

### P.R. China

E & S Test Technology Limited > Rm 913, Leftbank > No. 68 Bei Si Huan Xi Lu > Haidian District > Beijing 100080 > P.R. China  
 Phone +86 (0)10 82 67 60 27 > Fax +86 (0)10 82 67 62 38  
 Internet: www.emtest.com > E-mail: info@emtest.com.cn

### 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

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.