

# PVF BKIT 1

## 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 50 ohm and a 1,000 ohm load at the 50ohm coaxial HV output as well into 50 ohm load at the output of the coupling network where the DUT is connected when testing mains supply lines.

The PVF BKIT 1 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
- > 50 ohm load resistor included
- > 1,000 ohm 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**

**PVF 50**

**MEASURING EXAMPLE USING THE PVF 50**

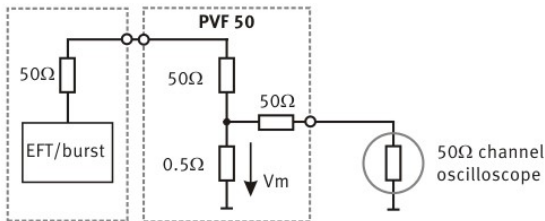
Open circuit voltage setting at the EFT/burst generator (50 ohm output): 2,000 V

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

Measuring voltage  $V_m$ : 10 V

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

Resulting attenuation (theoretical): 400:1



**PVF 1000**

**MEASURING EXAMPLE USING THE PVF 1000**

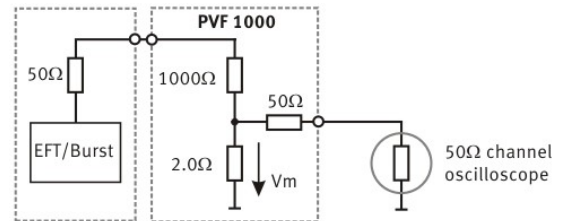
Open circuit voltage setting at the EFT generator (50ohm output): 2,000 V

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

Measuring voltage  $V_m$ : 4 V

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

Resulting attenuation (theoretical): 1,000:1



## TECHNICAL DETAILS

## PVF 50, 50 OHM LOAD RESISTOR

## TECHNICAL DATA FOR PVF 50

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

## PVF 1000, 1 KOHM LOAD RESISTOR

## TECHNICAL DATA FOR PVF 1000

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

## PVF AD 1 ADAPTER

## TECHNICAL DATA FOR PVF AD 1

|                  |                                                                                                  |
|------------------|--------------------------------------------------------------------------------------------------|
| Function         | Adapter 4 mm/6 mm to coaxial SHV connector, (to match the coupling network to the load resistor) |
| CDN connection   | exchangeable banana plug, for 4 mm or 6 mm plug                                                  |
| Earth connection | 4 mm banana, connection to earth plug on front panel                                             |
| Dimension        | 78 mm x 45 mm x 26 mm                                                                            |
| weight           | approx. 65 g                                                                                     |

## GENERAL DATA

## ENVIRONMENT

|                      |                                           |
|----------------------|-------------------------------------------|
| Temperature          | 10° C to 40° C                            |
| Rel. humidity        | Max. 85 %, non condensing                 |
| Atmospheric pressure | 86 kPa (860 mbar) to 106 kPa (1,060 mbar) |

## OPTIONS

## CAPACITIVE COUPLING CLAMP

|     |                                                                                             |
|-----|---------------------------------------------------------------------------------------------|
| CCI | Capacitive coupling clamp, testing for signal- and datalines, IEC 61000-4-4, IEC 61000-4-18 |
|-----|---------------------------------------------------------------------------------------------|

## CCI PVKIT 1 (KIT FOR CCI CALIBRATION)

|                      |                                                                                                                |
|----------------------|----------------------------------------------------------------------------------------------------------------|
| Transducer plate     | Insulated copper poil with 4 mm connection plug, Insulation: 1,100 mm x 130 mm, Copper foil: 1,050 mm x 120 mm |
| Acrylblock (support) | Support for measuring adapter PVF 50 on 100 mm level for capacitive coupling clamp verification                |
| PVF AD3              | Adapter 4 mm to coaxial SHF connector, (connection Load resistor to transducer plate)                          |

# COMPETENCE WHEREVER YOU ARE



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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.