

# **Calibration - Set**

# **SFT 415 - CS**

- For capacitive coupling clamp
   Burst
- IEC 61000-4-4, 2012
- Transducer plate with connection adapter
- optionally 50 ohm attenuator



#### Introduction

The capacitive coupling clamp is specified in the standard IEC / EN 61000-4-4, chapter 6.4. It provides the ability of coupling the fast transients / bursts to the circuit under test without any galvanic connection to the terminals of the EUT's ports, shielding of the cables or any other part of the EUT.

With the release of the standard IEC 61000-4-4, 2012 the capacitive coupling clamp is also to verify at their characteristics and to calibrate.

### Calibration of the capacitive coupling clamp

Required accessories:

- Calibration-Set (SFT 415-CS)
   Transducer plate with connection adapter
   Support for the measurement attenuator
- Measurement attenuator 50 Ohm (SFT 450-1)

Measurement equipment that is specified as suitable to perform the calibrations defined in IEC 61000-4-4, chapter 6.2.3 (Burst generator verification) shall also be used for the calibration of the characteristics of the capacitive coupling clamp.





Type: SFT 415-CS Type: SFT 415-CS-BNC

Transducer plate with connection adapter and measurement attenuator - optional also with BNC connector available.

#### **Technical data**

### Transducer plate with connection adapter:

Material: stainless steel plate, conducting

Dimension: 120 mm x 1050 mm

Material thickness: 0,5 mm

Isolation: dielectric foil with thickness of 0,5 mm, all around

Insulation voltage: min. 2,5 kV – on all sides

Connection for 50 ohm: Fischer HV-female connector

Other connectors (BNC HV) on request

Total length Set: 1085 mm (with adapter)

Weight: 720 g

Working temperature: 0 - 40° Celsius

Relative humidity: 0 - 60%

#### Performing the calibration:

Place the calibration set into the capacitive coupling clamp. Connect the 50 ohm measurement attenuator with the transducer plate and the other end with the oscilloscope. On the opposite site of the coupling clamp must connected the burst generator.

The calibration is performed with the generator output voltage set to 2000 V.

The (Burst) waveform characteristics shall meet the following requirements:

Rise time: 5 ns +/- 1,5 ns

Pulse duration: 50 ns +/- 15 ns

Peak voltage: 1000 V +/- 200 V



#### Optionally accessory: SFT 450-1

50  $\Omega$  attenuator, 54 dB (conform divider 500:1 at 50 Ohm)