



# ALC-110-EUR Leakage Current Clamp

**Designed according IEC/EN61557-13, VDE 0413-13**

The ALC-110-EUR true-rms leakage current clamp meter helps users detect, document and compare leakage current readings over time as a means of preventing unplanned downtime, and identifying intermittent RCD/RCCB trips, all without downtime or switching equipment off.

The ALC-110-EUR is designed for industrial applications for leakage current testing in installations as well as for appliance testing.

## Features

- **Following the standard** for leakage current clamps IEC/EN 61557-13
- **Low influence of external low frequency magnetic fields:**  $\leq 30 \text{ A/m}$ , operating class 2 @ In: 3.500 mA – 600.0 mA
- **True-rms measurements** for accuracy when measuring complex, non-sinusoidal waveforms
- **Mechanical lock of the jaw;** jaw opening 30 mm (1.2 in)
- **Highest resolution of 0.001 mA,** measure up to 60 A
- **Selectable filter function** removes unwanted noise
- **Selectable filters:**
  - Low Pass Filter Function for appliance measuring (acc. IEC/EN 61557-16 amendment A)
  - 50/60 Hz filter
  - no filter
- **Broad frequency range 15 Hz to 1 kHz** which makes this clamp ideal for a wide range of applications including industrial and railway application
- **Selectable limits:** 0.25 mA, 0.5 mA, 3.5 mA, 10 mA, 12 mA
- **Max readings and hold function**
- **High safety rating:** CAT III 600 V
- **Auto power-off** to save battery life
- **Backlight display;** auto backlight off and auto power off for extended battery life

## Applications

- **Measurement of earth leakage current**
- **Measurement of differential leakage currents**
- **Measurement of leakage current** through the earth (PE) conductor
- **Tracing the source** of earth leakage current
- **Measurement of current consumption** of appliances in service or customer service sector without interruption to the circuit



Mechanical lock; tight clamp for higher accuracy, avoiding disturbance from measured wires and magnetic fields

Finger guard for safe usage

Push button to unlock the jaw

Robust, strong rubber housing for easy grip

Large digital display with bar graph and filter function



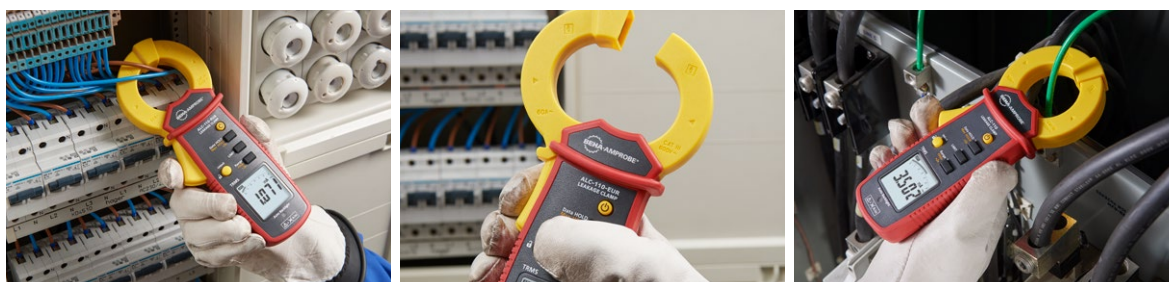
**ALC-110-EUR**  
Leakage Current Clamp



### Safety Certification



All Beha-Amprobe tools, including the Beha-Amprobe ALC-110-EUR, are rigorously tested for safety, accuracy, reliability, and ruggedness in our state-of-the-art test lab. In addition, Beha-Amprobe products that measure electricity are listed by a 3rd party safety lab, either UL or CSA. This system assures that Beha-Amprobe products meet or exceed safety regulations and will perform in a tough, professional environment for many years to come.



## Specifications

Features	ALC-110-EUR
Complies with IEC/EN 61557-13	•
Built according IEC/EN 61010-2-032	•
Low frequency magnetic fields	≤ 30 A/m, operating class 2 @ I <sub>n</sub> : 3.500 mA to 600.0 mA / 40 Hz to 1 kHz
Safety, measurement category	CAT III 600 V
True-rms	•
AC frequency	15 Hz to 1 kHz
Low pass filter	50 – 60 Hz, for appliance measuring acc. EN61557-16 amendment A, no filter
Limit judgement	0.25 mA, 0.5 mA, 3.5 mA, 10 mA, 12 mA
Jaw opening	30 mm (1.2 in) max.
Jaw locking	•
Backlight function	•
Overload Protection	60 A
Auto power off	Idle 20 minutes
Auto ranging	•
Max hold	•
Data hold	•

AC current <sup>[1] [2] [3]</sup>		Accuracy			
Range	Resolution	15 to 40 Hz	40 to 50 Hz	50 to 60 Hz	60 to 1 kHz
6.000mA	0.001mA	±(5.0%+5D)	±(2.0%+5D)	±(1.0%+5D)	±(2.0%+5D)
60.00mA	0.01mA	±(5.0%+5D)	±(2.0%+5D)	±(1.0%+5D)	±(2.0%+5D)
600.0mA	0.1mA	±(5.0%+5D)	±(2.0%+5D)	±(1.0%+5D)	±(2.0%+5D)
6.000A	0.001A	Unspecified	±(2.0%+5D)	±(1.0%+5D)	±(2.0%+5D)
60.00A	0.01A	Unspecified	±(2.0%+5D)	±(1.0%+5D)	±(2.0%+5D)

<sup>[1]</sup> Crest Factor (C.F) may be up to 3.0 as 3000 counts. For non-sinusoidal waveforms: Add 1.0% for C.F. 1.0 to 2.0 / Add 2.5% for C.F. 2.0 to 2.5 / Add 4.0% for C.F. 2.5 to 3.0. Position error of clamp: +/- 1% of LCD reading

<sup>[2]</sup> Minimum reading is 0.010 mA.

<sup>[3]</sup> When operating in magnetic fields up to 30 A/m, add ±0.3 mA error to accuracy.

General Specifications	
Display	Digital: 6000 counts, updates 5/sec
Range	Auto ranging
Over range indication	OL or -OL
Operating temperature	0 °C to 30 °C (32 °F to 86 °F), ≤ 80% RH 30 °C to 40 °C (86 °F to 104 °F), ≤ 75% RH 40 °C to 50 °C (104 °F to 122 °F), ≤ 45% RH
Operating altitude	≤ 2000 m
Storage temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Pollution degree	2
Temperature coefficient	0.1 x (specified accuracy) / °C (<21 °C, >25 °C)
Vibration requirement	acc. IEC 61557-1 clause 4.10
Drop proof	1.2 m (4 ft)
Battery	2x batteries 1.5 V IEC LR03 AAA
Battery life	60 hours typical
Low battery indication	
Safety compliance	IEC/EN 61010-1, IEC/EN 61010-2-030, IEC/EN 61010-2-032, IEC/EN 61557-13
EMC compliance	IEC/EN 61326-1, IEC/EN 61326-2-2
Agency approvals	
Dimensions (H x W x L)	221 x 89 x 48 mm (8.7 x 3.5 x 1.8 in)
Weight	410 g (0.9 lb) with batteries installed

Included: Battery (2x, IEC LR03, Alkaline (AAA)), soft carrying case and user manual