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:** ≤ 30 A/m, operating class 2 @ I_N: 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



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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

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.

Beha-Amprobe®
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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_N : 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 [1] [2] [3]

Range	Resolution	Accuracy			
		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)

[1] 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
[2] Minimum reading is 0.010 mA.
[3] 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

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