

## Leakage current clamp EmCheck® LSMZ I

### Function

The **leakage current clamp EMCheck LSMZ I** is specially designed to measure leakage and shield currents in the frequency ranges of 50/60 Hz and 5 Hz to 1 KHz. It is characterized by a large opening (2.8 cm) for cable to lead through, so that a comfortable measurement is also possible in unfavorable installation situations. The measuring tool features a broad measuring range from 30  $\mu$ A to 100 A with the lower range being of particular interest. Through the holding-function it is possible to perform permanent measurements, such as maximum current. Shield currents are a problem for high frequent field bus cables to originate from a frequently missing or bad potential equalisation as well as a magnetic interference by a power supply cable.

### Advantages

- Illuminated display
- Shield current measurement
- Measuring range up to 100 A
- Wide opening of shield current clamp (up to 2.8 cm)
- Holding functions allow a permanent measurement at maximum current
- Frequency changeover (50/60 Hz - 5 Hz ... 1 kHz)
- Shielded sensor

### Tool information

- Manual selection of measuring range
- Integrated data storage
- Auto power-off (Battery life indicator)

### Measuring range

- AC current: 30  $\mu$ A to 100 A  
Tolerance: 1.2 %  $\pm$  5 Digit (50 to 60 Hz)  
2.5 %  $\pm$  5 Digit (60 to 500 Hz)  
3.5 %  $\pm$  10 Digit (500 Hz to 3 kHz)
- Voltage AC: 0,1 to 600 V  
Tolerance: 1 %  $\pm$  5 Digit (50 to 60 Hz)  
1.2 %  $\pm$  1 Digit (60 to 500 Hz)  
2.5 %  $\pm$  5 Digit (500 Hz to 3 kHz)
- Input impedance: 1 MOhm
- Resistance: 0.1 Ohm to 1 kOhm  
Tolerance: 1 %  $\pm$  3 Digit
- Continuity: < 35 Ohm

### Frequency range

- Current / voltage AC: 5 Hz to 1 kHz; 50/60 Hz
- Frequency measurement: 50 Hz to 3 kHz

### Technical data

- Safety in accordance with: IEC61010-1 release 95  
IEC61010-2-032 release 93
- Isolation class: Class III
- Overvoltage category: CAT III 600 V
- Pollution degree: 2
- Display: 4 digit LCD; 9999 Digits
- Clamp opening:  $\varnothing$  28 mm
- Power supply: 2 x 1.5 V; AAA or LR3
- Strong immunity to spurious currents: 70 dB
- Dimensions (L x H x W): 218 x 64 x 30 mm
- Weight: 280 g incl batteries



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Ordering details	Art. No.
EmCheck® LSMZ I	122010005
Measuring clamp set EmCheck® (MWMZ II and LSMZ I)	122010006