

Scope of the Product

The instrument is designed for safe and accurate measurement of leakage, differential, and imbalance currents without disconnecting the circuit. It is suitable for use in electrical maintenance, troubleshooting, and safety inspections in residential, commercial, and industrial installations.

Technical Locking Specification for Leakage Current Clamp Meter

1. The instrument should have True RMS capability for accurate leakage current measurements, including a built-in low-pass filter to suppress high-frequency interference.
2. The Instrument should have a measurement range from **1 μ A to 100.0 A AC**, with a resolution of 1 μ A and an accuracy of $\pm(1.0\%$ of reading + 5 digits).
3. The instrument should have a 4-digit segment-based LCD display with a maximum count of 6000, and an integrated flashlight or backlight for better visibility in dark environments.
4. The instrument should have functionality for measuring leakage current, differential current, and load imbalance current, along with features like peak hold, data hold, and manual range selection.
5. The instrument should have a clamp jaw with a minimum opening of **32 mm**, suitable for measurements on a wide range of conductor sizes in tight or confined locations.
6. The instrument should have a rugged construction with rubber overmolding to withstand tough working environments and reduce the risk of mechanical damage.
7. The instrument should have an auto power-off feature and low battery indication for power efficiency and uninterrupted operation.
8. The instrument should have battery operation using 3 \times 1.5 V LR03 (AAA) batteries.
9. The instrument should have ingress protection of at least IP30 to ensure protection against solid particles and limited access to internal components.
10. The instrument should have safety compliance in accordance with EN 61010 standards for: CAT III 300 V(II 600 V)
11. The instrument should have an operating temperature range from 5°C to 40°C and a storage temperature range from -20°C to +60°C.
12. The instrument should have compact physical dimensions approximately 234 mm \times 82 mm \times 46 mm for ease of use and portability.
13. The instrument should have standard accessories including a basic carrying case and batteries, and should offer optional accessories such as an AC line splitter and calibration certificate with accreditation.
14. The instrument should have compliance with the following international standards:

EN 61326-1, EN 61326-2 IEC 61010-1, EN 61010-02-032 RoHS Directive 2011/65/EU, as amended by (EU) 2015/863
15. Bidder will have to submit the documentary evidence of having established mechanism for prompt services as & when required.