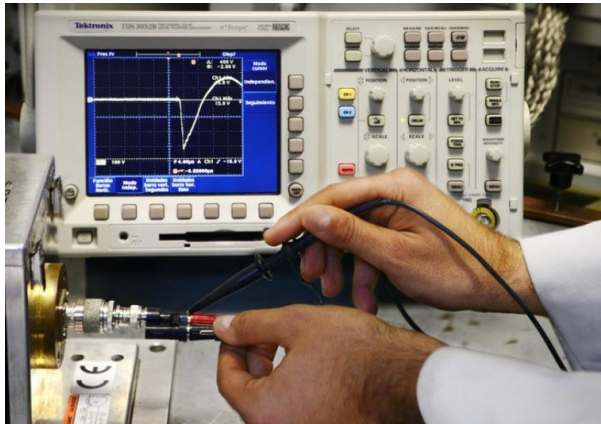


# Electrical safety and functionality testing

Ensuring that electrical and electronic products comply with the regulation requirements or with the specific requirements defined by the client.



Electrical and electronic equipment manufacturers should ensure that the products they put on the market comply with the regulation requirements for electrical safety, as well as any electrical requirements as defined by their clients. Additionally, manufacturers may require specific electrical testing in order to improve their product and analyze any failures they might have.

## Accredited Electrical Safety Testing Laboratories

Applus+ Laboratories have accredited ISO/IEC 17025 laboratories to conduct electrical safety and [EMC tests](#), recognized by [IECEE \(CB Scheme\)](#) and [LOVAG](#). We carry out electrical and electrical safety testing for a wide variety of products, such as:

- Distribution boards and electrical material: Switches, transformers, multi-way switching, enclosures, power supply.
- Industrial products and machinery
- Appliances and smaller electrical household appliances
- Kitchen appliances and heating devices
- Consumer electronics
- Toys
- [Lighting](#)
- [Wireless Equipment](#)
- Audio/Video, IT and Communication equipment
- [Fire alarms](#) and [intrusion security systems](#) and equipment
- Laboratory equipment
- Medical equipment

- Printers, scanners and photocopiers

## Electrical Testing Capabilities

- Accessibility to live parts
- Construction.
- Abnormal operation.
- Fire testing on materials.
- Grounding system.
- Aging due to alternating current cycles
- Life-span testing
- Testing for industrial frequency and direct current heating
- Thermography analysis
- Short circuit and power outage testing
- Resistance to the flow of current and electrodynamic forces
- Monitoring of voltage dips at joints and mountings
- Levels of protection against penetration of solids and liquids (IP ratings)
- Resistance to heat, abnormal heat and fire
- Dielectric testing for resistance and insulation

## Benefits

- Validate the product's electrical safety and functionality features
- Guarantee the product's quality, ensuring that its design complies with operational requirements
- Reduce costs caused by poor quality products
- Speed up the product's time-to-market