










**INSTRUCTION MANUAL**  
**MT310**  
**SOCKET ELCB TESTER**



## Introduction

The MT310 Earth Leakage Tester is a compact, lightweight, and easy to use socket polarity and earth leakage tester that tests 3-wire 230V AC circuits and earth leakage circuit breakers. A unique feature in this tester is the AC Voltage indication on the LCD display. It also features an adjustable milli-amp (mA) trip setting with a separate test button. The unit can be set from 10mA, used for testing saturation and to eliminate nuisance tripping, to 35mA. The meter is supplied in a durable double injection moulded rubber housing, which protects it from the knocks and bangs of everyday use. The bright neon indication assists the user in confirming the wiring status of the circuit under test. Simply plug the MT310 into a wall socket and the results are clearly displayed. For additional user safety, the MT310 is rated CAT IV 300V and CAT III 600V.

**Table 1. Symbols**

	<b>Risk of electric shock</b>		<b>Earth</b>
	<b>Risk of Danger . Important information See manual</b>		<b>AC or DC</b>
	<b>Hazardous Voltage.</b>		<b>Conforms to EU directives.</b>
	<b>Equipment protected by double or reinforced Insulation</b>	<b>CAT III</b>	<b>OVERVOLTAGE(Installation) CATEGORY III,Pollution Degree 2 per IEC 1010-1 refers to the level of Impulse withstand Voltage protection provided.Equipment of OVERVOLTAGE CATEGORY III is equipment in fixed installations (e.g.,electricity meter and primary over-current protection equipment.)</b>

## Socket Polarity Test

1. Plug tester into a 16A socket outlet.
2. Check neon lamps and use the quick reference to determine if there is a fault.
3. If there are any faults - rectify before continuing with the next test.

## Voltage Indication

1. Plug tester into a 16A socket outlet.
2. The LCD will indicate the AC voltage measurement.
3. Voltage range is from 150V AC to 245V AC

## ELCB Test

1. Turn the rotary switch anti-clockwise to 10mA position.
2. Push and hold down the TEST button.
3. Turn the rotary switch slowly until trip occurs.
4. Make note of trip current rating.
5. Neutral/Earth reversed not detected.

## Safety Information



**Caution identifies conditions and actions that may damage the MT310**



**Warning identifies conditions and actions that pose hazard to the user.**

To avoid possible electric shock or fire, read the following safety information carefully before using or servicing the instrument:

- Adhere to local and national safety codes.
- Individual protective equipment must be used to prevent shock and injury.
- Use of instrument in a manner not specified by the manufacturer may impair safety features/protection provided by the equipment.
- Avoid working alone.
- Inspect the test leads for damaged insulation or exposed metal. Check test lead continuity. Damage leads must be replaced. Do not use the Socket polarity and earth leakage tester if it looks damaged.
- Be careful when working above 30V AC RMS, 42V AC peak and 60V DC. Such voltages pose a shock hazard.
- Verify operation prior to measuring hazardous voltages (voltages above 30V AC RMS, 42V AC peak and 60V DC).
- Do not use the Socket polarity and earth leakage tester with any of the parts removed.
- Do not use the Socket polarity and earth leakage tester around explosive gas, vapor, or dust.
- Do not use the Socket polarity and earth leakage tester in a wet environment.

## Specifications

ELCB Trip Rating	10mA, 15mA, 20mA, 25mA, 30mA, 35mA
Operating Voltage	216V to 264V/30V AC - 50/60Hz
Voltage Indication	From 150V AC to 245V AC
Power Supply	From Circuit under test
Operating Temperature	0°C to 40°C
Protection Level	CAT III 600V
Type of protection	IP40
Pollution Level	2x
Size	130 x 69 x 32mm
Weight	130g
Electrical Safety	IEC 61010/EN61010, IEC 61557-7/EN 61557 -7

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