LIVE-LIVE, LIVE-EARTH, AND THE GLOBAL METHOD

TWO INSULATION TESTS PER CIRCUIT, OR THREE?

The certificate gives you **two** boxes, not three. That tells you something.

BOX	WHAT IT MEANS
Live – live	**Line to neutral**
Lives – earth	**Line and neutral joined together**, tested to the CPC

> ✋ **Not line-to-earth and neutral-to-earth as two separate tests.** Note the **s** on "live conductors". You **join** the line and neutral and test the pair against the protective conductor. That's two tests per circuit, not three.

THREE WAYS TO DO IT, IN ASCENDING ORDER OF SANITY

1. **Pull the conductors out.** Disconnect line and neutral from the board and clip your leads onto them. On a ring, remember there are **two** of each — clamp both, on clean copper, not on the insulation. Slow, and every disconnection is another chance to make a mistake or drop something.
2. **Piggyback leads.** A lead with a socket in one end so a second lead can plug into it — turns one lead into two, so you can join line and neutral without pulling them out.
3. **A link lead.** A magnetic bridge that sits across the **line terminal of the breaker** and the **neutral**, linking them into one test lead. Nothing gets disconnected at all.

> **The link lead on different devices.**
> On an **RCBO** the line and neutral are both at the front, so it bridges straight across. On a plain **circuit breaker** you go from the breaker's line terminal to the **neutral bar** position serving that circuit. Brass works fine — it's a conductor.

GLOBAL INSULATION RESISTANCE

> 🌐 Clip onto the **earth bar** (or the neutral bar) and the **load (busbar) side of the main switch**, with **all breakers on** and the main switch off. You test **every circuit at once**.

Ten circuits individually means ten rounds of disconnecting, testing and reconnecting. Global does the lot in one. It's a very quick test — the only limit is your battery.

✋ **All loads must be removed first — and not by you.** This is a liability point, not a pedantic one. If you unplug a client's heater and drop it, **you** are paying for it. **Get the client to remove them.** That includes **lamps** — leave a bulb in and the test will show you a fault that isn't there.

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