FUNCTIONAL CHECKS AND RCD SOCKETS

DOES IT WORK, AND DOES IT SWITCH OFF?

After the electrical tests comes the obvious one that people forget: **does it work, and does it switch off?**

- Operate the **appliance's own switch or dial** — on and off
- Check the **socket outlet** it's plugged into works too
- A kettle gets filled with water before this — don't run an element dry

RCD-PROTECTED SOCKETS AND LEADS

Where an extension lead, socket-outlet or mobile distribution unit has its own RCD, it must be rated **30 mA or less** (protecting socket-outlets of 32 A or less). Section 10.11 gives two checks:

- **User check** (formal inspection, or combined inspection and test): plug it in, switch it on, then with **no load connected** press the **test button**. It should operate and disconnect the supply.
- **Performance test** (combined inspection and test), as a minimum: **150 mA**, and it should disconnect within **40 ms**.

If the RCD is suspected of operating outside its specification, the other tests in Table 10.5 can be done as well:

TABLE 10.5 TEST	MUST TRIP WITHIN
One times rated (30 mA on a 30 mA device)	200 ms for BS 7288 / BS 7071 devices · 300 ms for BS EN 61008 / 61009
Five times rated (**150 mA** on a 30 mA device)	40 ms

> ✋ RCD testing is a **live** test. If the socket-outlet you are testing from is itself RCD-protected, the test may trip that RCD too.

10.11 · test button, then 150 mA within 40 ms · **p.77**

Table 10.5 · RCD trip times · **p.78**

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