RCMS, AFDDS AND FUSE STANDARDS

WHAT'S THE DIFFERENCE BETWEEN AN RCD AND AN RCM?

532 — DEVICES FOR PROTECTION AGAINST FIRE

§ Where required by Chapter 42, an **RCD with a rating not exceeding 300 mA** shall be installed at the origin of the circuit to be protected.

RESIDUAL CURRENT MONITORS

An **RCM** monitors residual current and **warns**, rather than disconnecting. That matters where cutting the supply would be worse than the fault itself.

Where you'd actually use one:
data centres, where dropping the network is unacceptable, and life-safety systems. Also associated with **IT systems** — a high-impedance earthing arrangement you're unlikely to meet in domestic work.

Testing: BS 7671 requires an RCD to be tested at **one times** its rated residual current, and Guidance Note 3 recommends a **half** times test as well, where it should not trip — so 15 mA and 30 mA for a standard 30 mA device (**Guidance Note 3** · Table 2.18(a) · p.96).

AFDDS, AGAIN

Arc fault detection devices appear here as fire-protection devices, having already appeared in **421.1.7** earlier. They **shall** be installed at the **origin of the final circuit** to be protected, on single-phase AC final circuits supplying socket-outlets not exceeding 32 A, in higher-risk residential buildings, HMOs, purpose-built student accommodation and care homes.

What an arc actually is:
a plug not pushed fully home can arc between the live contacts. AFDDs are designed to catch exactly these small domestic arcs, not just dramatic ones.

FUSE STANDARDS WORTH RECOGNISING

STANDARD	WHAT IT IS
BS 88	Cartridge fuse — including the supplier's cut-out fuse
BS 1362	The **plug-top fuse**
BS 3036	Semi-enclosed rewireable fuse — the 0.725 factor
BS 646	Small ceramic cartridge fuse, similar in appearance to a plug-top fuse

532 · devices for protection against fire · RCD ≤ 300 mA

532.3 · p.168 · residual current monitors

421.1.7 · AFDDs (Part 4)

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