CHAPTER 41: AUTOMATIC DISCONNECTION, FINAL AND DISTRIBUTION CIRCUITS

0.4 SECONDS OR 5 SECONDS. WHICH APPLIES?

CHAPTER 41 AND AUTOMATIC DISCONNECTION

Part 4 is where the exam weight is, and **Chapter 41 is the biggest chapter in it** — big enough to have its own contents page. Open Part 4 and you get an intro, a scope, then Chapter 41: **protection against electric shock**.

> § **Section 410** — protective measures shall consist of **independent provision**.

The main sections of Chapter 41, in book order:

SECTION	COVERS
411	**Automatic disconnection of supply (ADS)** — the big one
412	Double or reinforced insulation
413	Electrical separation
414	Extra-low voltage (SELV and PELV)
416	Provisions for **basic protection**

Inside 411 sits the regulation this whole part revolves around:

> § **411.3.2** — automatic disconnection in case of a fault. A protective device **shall automatically interrupt the supply to the line conductor** of a circuit or equipment in the event of a fault.

> ✋ That's the **device providing automatic disconnection** for that circuit. Normally it is the circuit's **overcurrent protective device** (a circuit breaker, a fuse or an RCBO), or an **RCD** where it gives the fault protection, as on a **TT system**.

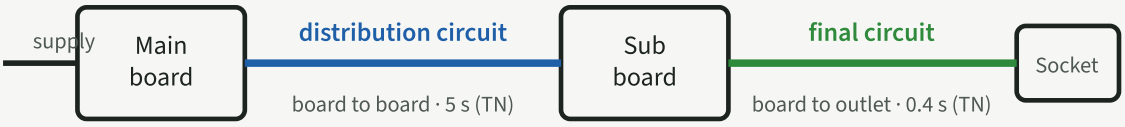
Chapter 41 · protection against electric shock (own contents page)

Section 410 · independent provision

411.3.2 · automatic disconnection in case of fault

FINAL CIRCUITS VS DISTRIBUTION CIRCUITS

Before the tables make sense you need this distinction, because the whole of Table 41.1 hangs on it — and it's **not** about rings versus radials.



The cable between two boards is a **distribution circuit**. The cable from a board to the thing the user plugs into is a **final circuit**. Every circuit you install is one or the other.

F

Final circuit

Consumer unit → outlet. The circuits the person you hand the installation to actually uses. Sockets, lights, cooker, shower.

D

Distribution circuit

Board to board. Main board to a garage sub-board; the supply from the transformer into the main board.

Quick identification in an exam question.
0.4 s → a final circuit within 411.3.2.2 (≤ 63 A with sockets, ≤ 32 A fixed equipment). **5 s** → a distribution circuit, or a final circuit over 63 A with sockets or over 32 A fixed equipment (411.3.2.3).

Part 2 · definitions of final circuit and distribution circuit

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