Occupational health and safety

Electrical Authorisation NF C 18-510 (A1:2020)

Prepare your employees for the electrical authorisation that the employer issues to them, under standard NF C 18-510 (amendment A1:2020) and according to the level of their job. Non-electricians (B0, H0, BS) attend the first day; electricians (B1, B2, BR, BC) attend all three days, with practical work on a mock-up or on your installations and a theoretical and practical assessment at the end of the course.

Duration : 1–3 days

Objectives

1. Explain the effects of electric current on the human body and the mechanisms of accidents: direct contact, indirect contact, electric arc
2. Identify electrical environment zones and the distances to keep according to the voltage range
3. Place one's own authorisation symbol and the operations it allows or excludes
4. Apply the safety rules for one's level: work in an electrical environment, basic interventions, work with power off, lockout
5. Select and check before use the collective and personal protective equipment
6. React to an accident or fire of electrical origin

Programme

Day 1 — morning (all profiles)

• Basics: voltage, current, resistance, low-voltage and high-voltage ranges

• Effects of current on the human body: electric shock, electrocution, arc burns

• Electrical environment zones, limit distances, signage, access to restricted rooms

• Principle of authorisation: symbols, document issued by the employer, limits of each level

Day 1 — afternoon (all profiles)

• B0 and H0: non-electrical work in an electrical environment, what is allowed and what is not

• BS: basic interventions such as replacing a fuse or a lamp like for like and resetting a protective device

• Protective equipment and insulated tools: selection and pre-use checks

• What to do in an accident or fire of electrical origin; assessment of non-electricians

Day 2 — morning (electricians)

• Roles of the electrical operations manager, lockout officer, work supervisor and operative

• Written documents: lockout certificate, work authorisation, safety instruction, end-of-work notice

• Work with power off: isolation, locking off, identification, verification of absence of voltage, earthing and short-circuiting

• Voltage detector: choice of instrument, method, frequent mistakes

Day 2 — afternoon (electricians)

• Work near live bare parts: risk analysis, protections, supervision

• General low-voltage interventions (BR): troubleshooting, connection, measurements, tests

• Lockout (BC) in one step or two steps: preparation and distribution of roles

• Classroom exercises on your electrical diagrams and existing procedures

Day 3 — morning (electricians)

- Practical work on a mock-up or on an installation of your site made available and made safe
- Preparing an intervention: risk analysis, choice of method, PPE and tools
- Complete lockout carried out by each participant, documents included
- Unlocking and re-energising in the planned order

Day 3 — afternoon (workshop)

- Workshop: practical scenarios according to the target symbol, B1, B2, BR or BC
- Theoretical assessment by questionnaire and individual practical assessment
- Trainer's opinion passed to the employer on the proposed symbols and limits
- Refresher training: expected content and three-year interval

Teaching methods

- Modular course: a one-day common core, then two days reserved for electricians
- Practical work on a mock-up brought by the partner trainer or on your installations with power off
- Exercises on your diagrams, your cabinets and your lockout procedures
- Theoretical questionnaire and assessed practical scenario for each participant
- Delivery in French or Darija, with technical vocabulary given in both languages

Assessment and documents

Theoretical and practical assessment according to the target symbol, plus a day+1 learner feedback survey. Each participant receives a named attestation stating the symbols prepared, to be attached to the authorisation document issued by the employer, and a numbered certificate verifiable online; the company receives the training report with the trainer's opinion.

Bilingual materials for every participant; each classroom course comes with its digital twin on OmniLearn.

Good to know

Practical sessions are run with our equipped partner trainers, listed and rated on Inspirra. Refresher training is due every 3 years. For high voltage, see "High-Voltage Authorisation (H1, H2, HC) and Live Working (TST)".

Practical information

Duration	1–3 days
Prerequisites	Non-electricians: no prerequisites. Electricians: electrical training or experience matching the tasks of the job.
Group size	Groups of 6 to 12 participants, in-company
Format	In-company, face to face on your site
Language	French, Darija or English; bilingual materials
Funding	OFPPT special training contracts (TFP), GIAC, Maroc PME: we prepare the applications with you, at no extra cost.
Programme customisation	Programme adapted to your procedures, your equipment and your audience

Frequently asked questions

Who issues the electrical authorisation?

The employer, in the form of a signed authorisation document, after making sure of the employee's training, fitness and competence. The course provides the named attestation and the trainer's opinion on which this decision is based; it does not amount to an authorisation by itself.

Which symbol for which employee?
A cleaner or a forklift driver who enters an electrical room generally falls under B0; an operator who resets a protective device or replaces a lamp, under BS; a maintenance electrician, depending on tasks, under B1, B2, BR or BC. We check the list with you before the session, from the real tasks of each job.

One day or three days?
One day for non-electricians (B0, H0, BS), three days for electricians (B1, B2, BR, BC). Both groups share the first day, which makes it possible to bring different profiles together in the same session.

Do we need to provide an installation?
It is not compulsory: the partner trainer brings a mock-up. Also working on a cabinet of your site, locked out and made safe, brings the exercise closer to the field; we organise it with your maintenance department.

When should the training be refreshed?
Refresher training is due every 3 years, and earlier in case of a change of job, a new installation or an incident revealing a gap.