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STN	**Prevádzka elektrických inštalácií Časť 1: Všeobecné požiadavky**	**STN EN 50110-1** 33 2100

Operation of electrical installations - Part 1: General requirements

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/23

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EUROPEAN STANDARD
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English Version

Operation of electrical installations - Part 1: General requirements

Exploitation des installations électriques - Partie 1: Exigences générales

Betrieb von elektrischen Anlagen - Teil 1: Allgemeine Anforderungen

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50110-1:2023) has been prepared by CLC/BTTF 62-3 “Operation of electrical installations”.

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2024-05-29
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2026-05-29

This document supersedes EN 50110-1:2013 and all of its amendments and corrigenda (if any).

EN 50110-1:2023 includes the following significant technical and editorial changes with respect to EN 50110-1:2013:

— simplification of the terms concerning the definitions of persons responsible and level of responsibility;

— improvement of terms and definitions of Clause 3;

— introduction and clarification of supervision;

— improvement of structure of Clause 5 “Operational procedures” ;

— improvement of 6.1.1 – general requirement for working procedures;

— improvement of 6.2 – dead working;

— improvement of 6.3 – live working;

— improvement of 6.4 – Working within the vicinity zone;

— improvement of 6.5 – Working outside the vicinity zone;

— Transfer of Table A.1 from informative Annex A into normative subclause 4.11.2 as Table 1;

— adjunction of Clause A.4 Ergonomic considerations;

— introduction of alphabetic list of defined terms;

— update of the normative references and of the Bibliography.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users’ national committee. A complete listing of these bodies can be found on the CENELEC website.

Introduction

There are many national laws, standards and internal rules dealing with the matters coming within the scope of EN 50110 and these practices have been taken as a basis for this work.

EN 50110 consists of two parts:

— Part 1 of EN 50110 contains minimum requirements valid for all CENELEC countries and some additional informative annexes dealing with safe working on, with, or near electrical installations;

— Part 2 of EN 50110 consists of a set of normative annexes (one per country) which either specify the present safety requirements or give the national supplements to these minimum requirements.

This concept, following Directive 89/391/EEC, promotes the alignment of the safety levels associated with the operation of, work activity on, with, or near electrical installations in Europe. This document acknowledges the present different national requirements for safety. The intention is, over the course of time, to promote a gradual alignment in Europe of the safety levels against the electrical risk.

Even the best rules and procedures are of no value unless all persons working on, with, or near electrical installations are thoroughly conversant with them and with all legal requirements and comply strictly with them.

1 Scope

This document is applicable to all operation of and work activity on, with, or near electrical installations. These are electrical installations operating at voltage levels from and including extra-low voltage up to and including high voltage.

This latter term includes those levels commonly referred to as medium and extra-high voltage.

These electrical installations are designed for the generation, transmission, conversion, distribution and use of electrical power. Some of these electrical installations are permanent and fixed, such as a distribution installation in a factory or office complex, others are temporary, such as on construction sites and others are mobile or capable of being moved either whilst energised or whilst not energised nor charged. Examples are electrically driven excavating machines in quarries or open-cast coal sites.

This document sets out the requirements for the safe operation of and work activity on, with, or near these electrical installations. The requirements apply to all operational, working and maintenance procedures. They apply to all non-electrical work such as building work near to overhead lines or underground cables as well as electrical work, when there is a risk of electrical danger.

This document does not apply to ordinary persons when using installations and equipment, provided that the installations and equipment comply with relevant standards and are designed and installed for use by ordinary persons.

This document has not been developed specifically to apply to the electrical installations listed below. However, if there are no other rules or procedures, the principles of this document could be applied to them:

— on any aircraft and hovercraft moving under its own power, (these are subject to International Aviation laws which take precedence over national laws in these situations);

— on any sea going ship moving under its own power, or under the direction of the master, (these are subject to International Marine laws which take precedence over national laws in these situations);

— electronic telecommunications and information systems;

— electronic instrumentation, control and automation systems;

— at coal or other mines;

— on off-shore installations subject to International Marine laws;

— on vehicles;

— on electric traction systems;

— on experimental electrical research work.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50191, *Erection and operation of electrical test equipment*

EN 61219, *Live working - Earthing or earthing and short-circuiting equipment using lances as short-circuiting device - Lance earthing (IEC 61219)*

EN 61230, *Live working - Portable equipment for earthing or earthing and short-circuiting (IEC 61230)*

EN 61243 (all parts), *Live working – Voltage detectors (IEC 61243, all parts)*

EN 62271-1, *High-voltage switchgear and controlgear - Part 1: Common specifications for alternating current switchgear and controlgear (IEC 62271-1)*

EN IEC 62271-102, *High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches (IEC 62271-102)*

EN IEC 62271-213, *High-voltage switchgear and controlgear - Part 213: Voltage detecting and indicating system (IEC 62271-213)*