BS EN 50110-1:2013

BSI Standards Publication

Operation of electrical installations -

Part 1: General requirements

This British Standard is the UK implementation of EN 50110-1:2013. It supersedes BS EN 50110-1:2004 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PEL/99, Erection and operation of power installations.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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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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CENELEC

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

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Foreword

This document (EN 50110-1:2013) 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)	2014-02-11
– latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2016-02-11

This document supersedes EN 50110-1:2004.

EN 50110-1:2013 includes the following significant technical changes with respect to EN 50110-1:2004:

– improvement of the definitions of persons responsible and level of responsibility;

– addition of a clause on emergency arrangements;

– addition of example of level of responsibility in Annex B;

– addition of a clause on arc hazard in Annex B;

– addition of a clause on emergency arrangements in Annex B;

– 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 [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

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 is still believed to be a decisive step to the gradual alignment in Europe of the safety levels associated with the operation of, work activity on, with, or near electrical installations. This document acknowledges the present different national requirements for safety. The intention is, over the course of time, to create a common level of safety.

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 European Standard 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 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 European Standard 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 activities such as building work near to overhead lines or underground cables as well as electrical work activities, when there is a risk of electrical danger.

This European Standard 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 European Standard 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 European Standard 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, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 61472, *Live working - Minimum approach distances for a.c. systems in the voltage range 72,5 kV to 800 kV – A method of calculation (IEC 61472)*