



SLOVENSKI STANDARD

SIST EN 50110-2:1999

01-julij-1999

Operation of electrical installations (national annexes)

Operation of electrical installations (national annexes)

Betrieb von elektrischen Anlagen (nationale Anhänge)

Exploitation des installations électriques (annexes nationales)

Ta slovenski standard je istoveten z: **EN 50110-2:1996**

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ICS:

29.240.01	Omrežja za prenos in distribucijo električne energije na splošno	Power transmission and distribution networks in general
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50110-2

December 1996

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Descriptors: Work safety, safety measure, accident prevention, operating requirements, personnel, organizations, maintenance

English version

Operation of electrical installations (national annexes)

Exploitation des installations électriques
(annexes nationales)

Betrieb von elektrischen Anlagen
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This European Standard was approved by CENELEC on 1996-07-02. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

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Foreword

This European Standard was prepared by the CENELEC BT Task Force 62-3 "Operation of electrical installation". The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50110-2 on 1996-07-02.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1997-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1997-06-01

Introduction

The standard consists of two parts. The first part EN 50110-1 contains Minimum Requirements valid for all CENELEC countries and some additional informative annexes dealing with safe working. The second part EN 50110-2 consists of a set of normative annexes (one per country) which specify either the present safety requirements or give the national supplements to these Minimum Requirements at the time when this standard was prepared.

The national annexes (if any) are summarized by the respective member country.

National Committees shall notify CENELEC of any changes needed to their national annex.

National annexes

1 Austria (AT)

1.1 Laws and Regulations

- 1.1.1 10. Verordnung des Bundesministers für soziale Verwaltung vom 29. Oktober 1981 über den Nachweis der Fachkenntnisse für die Vorbereitung und Organisation von bestimmten Arbeiten unter elektrischer Spannung über 1 kV (BGBl. 10/1982).

This regulation gives a guidance for the skills of personnel who have to prepare and organize specified live working with voltages exceeding 1 kV (BGBl. 10/1982)

1.2 Standards

1.2.1 ÖVE-E5 Teil 1

"Betrieb von Starkstromanlagen", grundsätzliche Bestimmungen

The ÖVE-E5 part 1 is a national standard which is dealing with the operation of electrical installation. In some parts it is more detailed than the EN 50110-1.

With the Electrotechnic-Law the ÖVE-E5 part 1 is made compulsory for the work in Austria.

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2 Belgium (BE)

2.1 Laws and Regulations

- 2.1.1 A.R.E.I. = Algemeen Reglement op de Electriche Installaties
R.G.I.E. = Règlement Général sur les Installations Electriques

General reglementation on electrical installations, published in the Official Journal of Belgium of 29th April 1981, modified and supplemented by various Royal and Ministerial Decrees (Ministry of Economic Affairs).

- 2.1.2 A.R.A.B. = Algemeen Reglement voor de Arbeidsbescherming
R.G.P.T. = Règlement Général pour la Protection du Travail

General reglementation for safety on the work, based on the National Law concerning the health and safety of the employees, also the salubrity of the work and the workplace, published in the Official Journal of Belgium of 19th June 1952, modified and supplemented by various Royal and Ministerial Decrees (Ministry for Social Affairs and Employment).

2.1.3 Regels van Goed Vakmanschap en Technische Voorschriften Règles de l'Art et Prescriptions Techniques

Rules of good professional skill and technical prescriptions edited by CETS - Comité voor Technische Studie der Productie en Distributie van Electriciteit in België/Comité d'Etudes Techniques de la Production et de la Distribution d'Electricité en Belgique (now BFE - FPE = Belgian Association of Producers and Distributors of Electricity)

3 Switzerland (CH)

3.1 Laws and Regulations

- 3.1.1 Bundesgesetz betreffend die elektrischen Schwach- und Starkstromanlagen (SR 734.0)
Loi fédérale concernant les installations électriques à faible et à fort courant (SR 734.0)

Federal law concerning electrical installations (high and low voltage) (SR 734.0)

- 3.1.2 Starkstromverordnung (SR 734.2)
Ordonance à courant fort (SR 734.2)

Regulation for electrical power installations (SR 734.2)

- 3.1.3 Verordnung über elektrische Niederspannungsinstallationen NIV (SR 734.27)
Ordonance sur les installations électriques à basse tension OIBT (SR 734.27)

Regulations concerning electrical low-voltage installations (SR 734.27)

- 3.1.4 Verordnung über elektrische Leitungen LEV (SR 734.31)
Ordonance sur les lignes électriques (SR 734.31)

Regulations concerning electrical lines (SR 734.31)

- 3.1.5 Bundesgesetz über die Unfallverhütung UVG (SR 832.20)
La loi fédérale sur les assurances contre les accidents (SR 832.20)

Federal law concerning accident prevention (SR 832.20)

3.2 Standards

- 3.2.1 Niederspannungsinstallations-Normen NIN SEV 1000-1 bis -3
Norme pour les installations basse tension NIBT ASE 1000-1 à -3

Standards for low-voltage installations NIN SEV 1000-1 to -3

4 Germany (DE)

4.1 Laws and Regulations

4.1.1 UVV "Elektrische Anlagen und Betriebsmittel" VBG4

UVV "Elektrische Anlagen und Betriebsmittel" has been published by the industrial accident insurance bodies. BGZ-list VBG 4.

4.2 Standards

4.2.1 DIN VDE 0105-100 (VDE 0105 Teil 100)

Betrieb von Starkstromanlagen; Nationaler Anhang zum Entwurf DIN EN 50110-1:1995.
Operation of electrical installations - National Annex to prEN 50110-1:1995.

The German standard DIN VDE 0105-100 (VDE 0105 Part 100) describes the rules of behaviour which are necessary to ensure a safe operation of electrical installations.

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5 Denmark (DK)

5.1 Laws and Regulations

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5.1.1 Stærkstrømsloven 1993.

The Heavy Current Act 1993

5.1.2 Stærkstrømsbekendtgørelsen, Elektriske installationer 1993, kapitel 62 og 63.

Regulations for low-voltage installations containing requirements for operation and maintenance of electrical installations as well as requirements for work on or near electrical installations.

5.1.3 Stærkstrømsbekendtgørelsen, Afsnit 5: Drift af elforsyningsanlæg.

Regulations for low-voltage and high-voltage installations for generation, transmission and distribution of electricity. These regulations contain requirements for inspection, operation, maintenance and work on or near such electrical installations.

6 Spain (ES)

6.1 Laws and Regulations

6.1.1 Decree Law 2413/1973 "Reglamento electrotécnico de baja tensión"

General relementation on electrical installations, published in the National Official Journal of 20th September 1973. MIBT 040, MIBT 042 Skilled level for make installations and inspections.

6.1.2 Ministerial Order of 9th March 1971 "Ordenanza general de seguridad e higiene".

General relementation for safety on the work, published in the National Official Journal of 17th March 1971.

6.1.3 Royal Decree 3275/1982 "Reglamento de condiciones técnicas y garantías de seguridad en Centrales Eléctricas y centros de transformación"

Reglementation on technical and safety conditions on power stations and transformer station, published in the National Official Journal of 1st December 1982, amended by Technical Instruction MIERAT-13, survellance of installations, published in the Boletín oficial del Estado of 1st August 1984.

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6.1.4 Royal Decree 863/1985 "Reglamento de Seguridad del Ministerio de Industria y Energía-Normas básicas"

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Reglementation on maintenance and inspection, responsibilities of electrical maintenance, published in the National Official Journal of 12th June 1986.

6.1.5 Decree 31-15/1968 "Reglamento técnico de líneas eléctricas aéreas de Alta Tensión"

Technical relementation on overhead electric high voltage transmission line, published in the National Official Journal of 27th December 1968.

6.1.6 "Reglamento de Verificaciones Eléctricas y regularidad en el suministro de energía"
Decreto 12/3/54 del B.O.E. 15-4-54 y Modificaciones a los Artículos 2 y 92 del
Reglamento de Verificaciones Eléctricas y Regularidad en el suministro de energía"
Decreto 724/79 del 2 de Febrero.

6.1.7 Ley de Prevención de Riesgos Laborales

General relementation for safety on the work, published in the National Official Journal of1995

6.2 Safety prescription for electrical utilities

"General Instruction for High Voltage Operations". AMYS.

"General Instruction for Low Voltage Operations". AMYS.

7 Finland (FI)

7.1 Laws and Regulations

- 7.1.1 Työturvallisuuslaki (299/58)
Lag om skydd i arbete (299/58)

Occupational safety act

- 7.1.2 Valtioneuvoston päätös rakennustyön turvallisuudesta (629/94)
Statsrådets beslut om säkerheten vid byggnadsarbete (629/94)

Decision of the Council of State on the safety at construction works

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- 7.1.3 Sähkölaki (319/79, 59/89, 814/90, 1067/90, 142/93)

Ellag (319/79, 59/89, 814/90, 1067/90, 142/93)

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Electricity act

- 7.1.4 Sähköasetus (925/79, 281/89, 1178/90, 339/93)
Elförordning (925/79, 281/89, 1178/90, 339/93)

Electricity decree

- 7.1.5 Kauppa- ja teollisuusministeriön päätös sähköturvallisuusmääräyksistä (205/74)
Handels- och industriministeriets beslut om elsäkerhetsföreskrifter (205/74)

Decision of the Ministry of Trade and Industry on the electrical safety code

- 7.1.6 Kauppa- ja teollisuusministeriön päätös sähköturvallisuusmääräyksistä annetun kauppa- ja teollisuusministeriön päätöksen muuttamisesta (1397/94)
Handels- och industriministeriets beslut om ändring av handels- och industriministeriets beslut om elsäkerhetsföreskrifter (1397/94)

Decision of the Ministry of Trade and Industry on amendment of the decision of the Ministry of Trade and Industry on the electrical safety code

- 7.1.7 Kauppa- ja teollisuusministeriön päätös sähköasennusten turvallisuudesta (1396/94)
Handels- och industriministeriets beslut om ellninstallationers säkerhet (1396/94)

Decision of the Ministry of Trade and Industry on the safety of electrical installations

- 7.1.8 Kauppa- ja teollisuusministeriön päätös sähkötöiden johtamisesta (1098/88, 1189/91, 536/93)
Handels- och industriministeriets beslut om ledningen av elarbeten (1098/88, 1189/91, 536/93)

Decision of the Ministry of Trade and Industry on the supervision of electrical works

- 7.1.9 Kauppa- ja teollisuusministeriön päätös sähkölaitteiston käytön johtamisesta (1188/91)
Handels- och industriministeriets beslut om driftsledningen för elanläggningar (1188/91)

Decision of the Ministry of Trade and Industry on the operation supervision of electrical installations

7.2 Rules and guides by the Electrical Inspectorate

- 7.2.1 Sähköturvallisuusmääräykset (A 1)
Elsäkerhetsföreskrifter (A 1)

Electrical safety code

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- 7.2.2 Rakennusten sähköasennukset (A2)
Ellninstallationer av byggnader (A2)

Code of electrical installations of buildings

- 7.2.3 Sähkötyöturvallisuusmääräykset (A 5)
Föreskrifter om skyddet i elarbeten (A 5)

Occupational safety code for electrical works

- 7.2.4 Hätäensiapukoulutus (T 12)
Förstahjälppsskolning för nödlägen (T 12)

Emergency first aid training

- 7.2.5 Jännitetyöt (T 67)
AUS-arbeten (T 67)

Live working