

ICS 29.240.01;

**PN-EN 50110-2:2002/AC**

**Kwiecień 2008**

**Wprowadza**  
EN 50110-2:1996/AC:2001, IDT

**Zastępuje**

**Dotyczy**  
PN-EN 50110-2:2002 (U)

**Eksploatacja urządzeń elektrycznych (załączniki krajowe)**

Na wniosek Komitetu Technicznego nr 73  
ds. Projektowania i Eksploatacji Urządzeń Elektroenergetycznych o Napięciu Powyżej 1kV Prądu  
Przemiennego (1,5kV Prądu Stałego) oraz Ograniczników Przepięć  
**poprawka do normy europejskiej EN 50110-2:1996/AC:2001 Operation of electrical installations  
(national annexes)**  
ma status Poprawki do Polskiej Normy





## Corrigendum to EN 50110-2:1996

English version

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NOTE This corrigendum includes and replaces the corrigendum of April 1997.

Replace annexes 4, 7, 11, 15 and 18 by:

### 4 Germany (DE)

#### 4.1 Laws and Regulations

##### 4.1.1 Unfallverhütungsvorschrift "Elektrische Anlagen und Betriebsmittel"

*Unfallverhütungsvorschrift "Elektrische Anlagen und Betriebsmittel" has been published as*

- *BGV A2 by the mutual indemnity associations of industries;*
- *GUV 2.10 by the association of accident insurance;*
- *VSG 1.4 by the mutual indemnity associations of agriculture.*

##### 4.1.2 Bergverordnung für Elektrische Anlagen (Elektro-Bergverordnung — ElBergV)

*Regulations on installation and safe operation of electrical installations in underground mines, published in the Official Journals of the countries of the Federal Republic of Germany.*

##### 4.1.3 Verordnung über elektrische Anlagen in explosionsgefährdeten Bereichen (ElexV)

*Regulations for the assembly, installation and operation of electrical installations for potentially explosive atmospheres, published in the Official Journal of the countries of the Federal Republic of Germany.*

#### 4.2 Standards

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

Betrieb von elektrischen Anlagen — Nationaler Anhang zu DIN EN 50110-1:1997  
Operation of electrical installations — National Annex to DIN EN 50110-1:1997

*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.*

##### 4.2.2 DIN VDE 0105-103 (VDE 0105 Teil 103)

Betrieb von elektrischen Anlagen — Zusatzfestlegungen für Bahnen  
Operation of electrical installations — Particular requirements for railways

*This standard adds particular requirements to DIN VDE 0105-100 (VDE 0105 Part 100) which are necessary to ensure a safe operation of electrical installations for railways.*

- 4.2.3 DIN VDE 0105-4 (VDE 0105 Teil 4)  
Betrieb von Starkstromanlagen — Zusatzfestlegungen für ortsfeste elektrostatische Sprühanlagen  
Operation of power installations — Supplementary requirements for fixed electrostatic spraying equipment

*This standard covers supplementary requirements for a safe operation of fixed electrostatic spraying equipment.*

- 4.2.4 DIN VDE 0105-5 (VDE 0105 Teil 5)  
Betrieb von Starkstromanlagen — Zusatzfestlegungen für Elektrofischereianlagen  
Operation of power installations — Supplementary specifications for electro-fishing installations

*This standard covers supplementary specifications for a safe operation of electro-fishing installations.*

- 4.2.5 DIN VDE 0105-7 (VDE 0105 Teil 7)  
Betrieb von Starkstromanlagen — Zusatzfestlegungen für explosivstoffgefährdete Bereiche  
Operation of power installations — Supplementary requirements for atmospheres endangered by potentially explosive material

*This standard covers supplementary requirements for atmospheres endangered by potentially explosive material.*

- 4.2.6 DIN VDE 0105-9 (VDE 0105 Teil 9)  
Betrieb von Starkstromanlagen — Zusatzfestlegungen für explosionsgefährdete Bereiche  
Operation of power installations — Supplementary requirements for potentially explosive atmospheres

*This standard covers supplementary requirements for potentially explosive atmospheres.*

- 4.2.7 DIN VDE 0105-11 (VDE 0105 Teil 11)  
Betrieb von elektrischen Anlagen — Besondere Festlegungen für den Bergbau unter Tage  
Operation of electrical installations — Particular requirements for underground mines

*This standard covers particular requirements for a safe operation of underground mines.*

- 4.2.8 DIN VDE 0105-12 (VDE 0105 Teil 12)  
Betrieb von Starkstromanlagen — Besondere Festlegungen für das Experimentieren mit elektrischer Energie in Unterrichtsräumen  
Operation of power installations — Particular requirements for experiments with electrical energy in lecture rooms

*This standard covers particular requirements for experiments with electrical energy in lecture rooms.*

- 4.2.9 DIN VDE 0105-15 (VDE 0105 Teil 15)  
Betrieb von Starkstromanlagen — Besondere Festlegungen für landwirtschaftliche Betriebsstätten  
Operation of power installations — Particular requirements for agricultural plants

*This standard covers particular requirements for a safe operation of agricultural plants.*

## **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*

- 7.1.3 Sähköturvallisuuslaki (410/1996)  
Elsäkerhetslag (410/1996)

*Electrical safety act*

- 7.1.4 Sähköturvallisuusasetus (498/1996)  
Elsäkerhetsförordning (498/1996)

*Electrical safety decree*

- 7.1.5 Kauppa- ja Teollisuusministeriön päätös sähköalan töistä (516/1996)  
Handels- och industriministriets beslut om arbeten inom elbranschen (516/1996)

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

- 7.1.6 Kauppa- ja Teollisuusministeriön päätös sähköturvallisuusmääräyksistä (205/1974, 1397/1994, 649/1996)  
Handels- och industriministriets beslut om elsäkerhetsföreskrifter (205/1974, 1397/1994, 649/1996)

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

- 7.1.7 Kauppa- ja Teollisuusministeriön päätös sähköturvallisuuslain soveltamisesta (657/1996)  
Handels- och industriministriets beslut om tillämpning av elsäkerhetslagen (657/1996)

*Decision of the Ministry of Trade and Industry on the application of the electrical safety act*

- 7.1.8 Kauppa- ja Teollisuusministeriön päätös sähköasennusten turvallisuudesta (1396/1994, 655/1996)  
Handels- och industriministriets beslut om elinstallationers säkerhet (1396/1994, 655/1996)

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

### **7.2 Rules and guides by the Electrical Inspectorate**

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

*Electrical safety code*

- 7.2.2 Rakennusten sähköasennukset (A2)  
Elinstallationer 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)  
Förstahjälpsskolning för nödlägen (T 12)

*Emergency first aid training*

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

*Live working*

- 7.2.6 Suojavaatetus sähkötoissa (T 73)  
Skyddsklädsel i elarbeten (T 73)

*Protective clothing for electrical works*

- 7.2.7 Sähkötilojen puhdistustyöt (KY 88)  
Rengöringsarbeten i elutrymmen (KY 88)

*Cleaning of enclosed electrical operating areas*

- 7.2.8 Yli 1 000 V kytkinlaitteiden ja ensiörelaiden merkintä ja suojaus (KY 169)  
Märkning och skydd av kopplingsutrustning och primärreläer för över 1 000 V (KY 169)

*Marking and protection of switching devices and primary relays with a voltage exceeding 1 000 V*

- 7.2.9 Varokeytkimien vaihto ja käyttö sekä kytkinvarokkeiden merkintä (KY 202)  
Utbyte och användning av säkringslastbrytare samt märkning av lastbrytare (KY 202)

*Replacement and use of fuse-switches and marking of disconnecter-fuses*

## **11 Ireland (IE)**

### **11.1 Laws and Regulations**

- 11.1.1 Safety Health and Welfare at Work Act 1989

*This Act makes general provisions for the securing of safety health and welfare at all workplaces.*

- 11.1.2 Safety Health and Welfare at Work (General Application) Regulations 1993  
S.I. N<sup>o</sup>. 44 of 1993

*Regulations governing general safety & health provisions, the workplace, use of work equipment, personal protective equipment, manual handling, display screen equipment, electricity and first aid.*

- 11.1.3 Safety Health and Welfare at Work (Signs) Regulations 1995  
S.I. N<sup>o</sup>. 132 of 1995

*Regulations stipulating levels of signage to be used in workplaces.*

- 11.1.4 Safety Health and Welfare at Work (Construction) Regulations 1995  
S.I. N<sup>o</sup>. 138 of 1995

*Regulations concerning safety on construction projects and including maintenance projects.*

## **15 Netherlands (NL)**

### **15.1 Laws and Regulations**

- 15.1.1 Arbeidsomstandighedenwet 1980

*Law containing requirements which are of interest for the safety, the health and the well-being in relation with labour*

- 15.1.2 Arbeidsomstandighedenbesluit

*Regulation containing, in addition to the Arbeidsomstandighedenwet, requirements, amongst others, regarding the safety of electrical installations and regarding the safe operation of electrical installations*

- 15.1.3 Mijnwet 1810; Mijnwet 1903; Mijnwet continentaal plat

*Laws containing requirements pertinent to mining both on land and offshore*

- 15.1.4 Chapter VI of Mijnreglement 1964; Chapter XI of Mijnreglement continentaal plat

*Regulations with additional requirements*

- 15.1.5 Nadere regelen Mijnreglement 1964 en Mijnreglement continentaal plat elektrische installaties

*Regulations with additional requirements regarding electrical installations including safe works, inspection and maintenance.*

### **15.2 Standards**

- 15.2.1 NEN 3140:1998 Bedrijfsvoering van elektrische installaties - Aanvullende Nederlandse bepalingen voor laagspanningsinstallaties

*Netherlands standard: Operation of electrical installations - Additional Netherlands requirements for low-voltage installations*

- 15.2.2 NEN 3840:1998 Bedrijfsvoering van elektrische installaties - Aanvullende Nederlandse bepalingen voor hoogspanningsinstallaties

*Netherlands standard: Operation of electrical installations - Additional Netherlands requirements for high-voltage installations*

## **18 Sweden (SE)**

### **18.1 Laws and Regulations**

- 18.1.1 SFS 1997:857 Ellag  
(Electricity act)

*Law about responsibility in case of personal injury or damage to an installation and electrical equipment caused by electricity.*

- 18.1.2 SFS 1957:601 Förordning om elektriska starkströmsanläggningar  
(Ordinance concerning electrical installations)

*Ordinance with requirements for - among other things - overhead lines and underground cables near roads, railways, airports etc. and basic principles for operation.*

- 18.1.3 ELSÄK-FS 1994:7 Elsäkerhetsverkets föreskrifter om utförande och skötsel av elektriska starkströmsanläggningar.  
(Regulations for design, maintenance and operation of electrical installations)

- 18.1.3.1 ELSÄK-FS 1997:3 Ändring av ELSÄK-FS 1994:7, Varselmärking.  
(Amendments to ELSÄK-FS 1994:7, Signs for electrical installations)

- 18.1.3.2 ELSÄK-FS 1997:4 Ändring av ELSÄK-FS 1994:7, Diverse ändringar.  
(Amendments to ELSÄK-FS 1994:7, Minor amendments)

- 18.1.3.3 ELSÄK-FS 1997:9 Ändring av ELSÄK-FS 1994:7 Avdelning C, skötsel av elektriska starkströmsanläggningar  
(Amendments to ELSÄK-FS 1994:7, Part C. Operation and maintenance of electrical installations)

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February 2001





## Corrigendum à la EN 50110-2:1996

### Version française

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NOTE Le présent corrigendum comprend et remplace le corrigendum avril 1997.

Remplacer les annexes 4, 7, 11, 15 et 18 par:

#### **4 Germany ( DE)**

##### **4.1 Laws and Regulations**

###### 4.1.1 Unfallverhütungsvorschrift "Elektrische Anlagen und Betriebsmittel"

*Unfallverhütungsvorschrift "Elektrische Anlagen und Betriebsmittel" has been published as*

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###### 4.1.3 Verordnung über elektrische Anlagen in explosionsgefährdeten Bereichen (ExlexV)

*Regulations for the assembly, installation and operation of electrical installations for potentially explosive atmospheres, published in the Official Journal of the countries of the Federal Republic of Germany.*

##### **4.2 Standards**

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

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Operation of electrical installations — National Annex to DIN EN 50110-1:1997

*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.*

###### 4.2.2 DIN VDE 0105-103 (VDE 0105 Teil 103)

Betrieb von elektrischen Anlagen — Zusatzfestlegungen für Bahnen

Operation of electrical installations — Particular requirements for railways

*This standard adds particular requirements to DIN VDE 0105-100 (VDE 0105 Part 100) which are necessary to ensure a safe operation of electrical installations for railways.*

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*This standard covers particular requirements for experiments with electrical energy in lecture rooms.*

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

- 7.1.3 Sähköturvallisuuslaki (410/1996)  
Elsäkerhetslag (410/1996)

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Elsäkerhetsförordning (498/1996)

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Ellinstallationer av byggnader (A2)

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*Cleaning of enclosed electrical operating areas*

- 7.2.8 Yli 1 000 V kytkinlaitteiden ja ensiörelaiden merkintä ja suojaus (KY 169)  
Märkning och skydd av kopplingsutrustning och primärreläer för över 1 000 V (KY 169)

*Marking and protection of switching devices and primary relays with a voltage exceeding 1 000 V*

- 7.2.9 Varokeytkimien vaihto ja käyttö sekä kytkinvarokkeiden merkintä (KY 202)  
Utbyte och användning av säkringslastbrytare samt märkning av lastbrytare (KY 202)

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- 11.1.2 Safety Health and Welfare at Work (General Application) Regulations 1993  
S.I. N<sup>o</sup>. 44 of 1993

*Regulations governing general safety & health provisions, the workplace, use of work equipment, personal protective equipment, manual handling, display screen equipment, electricity and first aid.*

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*Regulations stipulating levels of signage to be used in workplaces.*

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*Regulations concerning safety on construction projects and including maintenance projects.*

## **15 Netherlands (NL)**

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*Laws containing requirements pertinent to mining both on land and offshore*

- 15.1.4 Chapter VI of Mijnreglement 1964; Chapter XI of Mijnreglement continentaal plat

*Regulations with additional requirements*

- 15.1.5 Nadere regelen Mijnreglement 1964 en Mijnreglement continentaal plat elektrische installaties

*Regulations with additional requirements regarding electrical installations including safe works, inspection and maintenance.*

### **15.2 Standards**

- 15.2.1 NEN 3140:1998 Bedrijfsvoering van elektrische installaties - Aanvullende Nederlandse bepalingen voor laagspanningsinstallaties

*Netherlands standard: Operation of electrical installations - Additional Netherlands requirements for low-voltage installations*

- 15.2.2 NEN 3840:1998 Bedrijfsvoering van elektrische installaties - Aanvullende Nederlandse bepalingen voor hoogspanningsinstallaties

*Netherlands standard: Operation of electrical installations - Additional Netherlands requirements for high-voltage installations*

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(Electricity act)

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*Ordinance with requirements for - among other things - overhead lines and underground cables near roads, railways, airports etc. and basic principles for operation.*

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(Regulations for design, maintenance and operation of electrical installations)

- 18.1.3.1 ELSÄK-FS 1997:3 Ändring av ELSÄK-FS 1994:7, Varselmärking.  
(Amendments to ELSÄK-FS 1994:7, Signs for electrical installations)

- 18.1.3.2 ELSÄK-FS 1997:4 Ändring av ELSÄK-FS 1994:7, Diverse ändringar.  
(Amendments to ELSÄK-FS 1994:7, Minor amendments)

- 18.1.3.3 ELSÄK-FS 1997:9 Ändring av ELSÄK-FS 1994:7 Avdelning C, skötsel av elektriska starkströmsanläggningar  
(Amendments to ELSÄK-FS 1994:7, Part C. Operation and maintenance of electrical installations)

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Février 2001



## Corrigendum zu EN 50110-2:1996

### Deutsche Fassung

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ANMERKUNG Dieses Corrigendum enthält und ersetzt das Corrigendum April 1997.

Die Anhänge 4, 7, 11, 15 und 18 sind wie folgt zu ersetzen:

#### **4 Deutschland (DE)**

##### **4.1 Gesetze und Verordnungen**

###### 4.1.1 Unfallverhütungsvorschrift — Elektrische Anlagen und Betriebsmittel

*Unfallverhütungsvorschrift "Elektrische Anlagen und Betriebsmittel" has been published as*

- *BGV A2 by the mutual indemnity associations of industries;*
- *GUV 2.10 by the association of accident insurance;*
- *VSG 1.4 by the mutual indemnity associations of agriculture.*

###### 4.1.2 Bergverordnung für Elektrische Anlagen (Elektro-Bergverordnung — ElBergV)

*Regulations on installation and safe operation of electrical installations in underground mines, published in the Official Journals of the countries of the Federal Republic of Germany.*

###### 4.1.3 Verordnung über elektrische Anlagen in explosionsgefährdeten Bereichen (ElexV)

*Regulations for the assembly, installation and operation of electrical installations for potentially explosive atmospheres, published in the Official Journal of the countries of the Federal Republic of Germany.*

##### **4.2 Normen**

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

Betrieb von elektrischen Anlagen — Nationaler Anhang zu DIN EN 50110-1:1997  
Operation of electrical installations — National Annex to DIN EN 50110-1:1997

*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.*

###### 4.2.2 DIN VDE 0105-103 (VDE 0105 Teil 103)

Betrieb von elektrischen Anlagen — Zusatzfestlegungen für Bahnen  
Operation of electrical installations — Particular requirements for railways

*This standard adds particular requirements to DIN VDE 0105-100 (VDE 0105 Part 100) which are necessary to ensure a safe operation of electrical installations for railways.*

- 4.2.3 DIN VDE 0105-4 (VDE 0105 Teil 4)  
Betrieb von Starkstromanlagen — Zusatzfestlegungen für ortsfeste elektrostatische Sprühanlagen  
Operation of power installations — Supplementary requirements for fixed electrostatic spraying equipment

*This standard covers supplementary requirements for a safe operation of fixed electrostatic spraying equipment.*

- 4.2.4 DIN VDE 0105-5 (VDE 0105 Teil 5)  
Betrieb von Starkstromanlagen — Zusatzfestlegungen für Elektrofischereianlagen  
Operation of power installations — Supplementary specifications for electro-fishing installations

*This standard covers supplementary specifications for a safe operation of electro-fishing installations.*

- 4.2.5 DIN VDE 0105-7 (VDE 0105 Teil 7)  
Betrieb von Starkstromanlagen — Zusatzfestlegungen für explosivstoffgefährdete Bereiche  
Operation of power installations — Supplementary requirements for atmospheres endangered by potentially explosive material

*This standard covers supplementary requirements for atmospheres endangered by potentially explosive material.*

- 4.2.6 DIN VDE 0105-9 (VDE 0105 Teil 9)  
Betrieb von Starkstromanlagen — Zusatzfestlegungen für explosionsgefährdete Bereiche  
Operation of power installations — Supplementary requirements for potentially explosive atmospheres

*This standard covers supplementary requirements for potentially explosive atmospheres.*

- 4.2.7 DIN VDE 0105-11 (VDE 0105 Teil 11)  
Betrieb von elektrischen Anlagen — Besondere Festlegungen für den Bergbau unter Tage  
Operation of electrical installations — Particular requirements for underground mines

*This standard covers particular requirements for a safe operation of underground mines.*

- 4.2.8 DIN VDE 0105-12 (VDE 0105 Teil 12)  
Betrieb von Starkstromanlagen — Besondere Festlegungen für das Experimentieren mit elektrischer Energie in Unterrichtsräumen  
Operation of power installations — Particular requirements for experiments with electrical energy in lecture rooms

*This standard covers particular requirements for experiments with electrical energy in lecture rooms.*

- 4.2.9 DIN VDE 0105-15 (VDE 0105 Teil 15)  
Betrieb von Starkstromanlagen — Besondere Festlegungen für landwirtschaftliche Betriebsstätten  
Operation of power installations — Particular requirements for agricultural plants

*This standard covers particular requirements for a safe operation of agricultural plants.*



## **7 Finland (FI)**

### **7.1 Gesetze und Verordnungen**

- 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*

- 7.1.3 Sähköturvallisuuslaki (410/1996)  
Elsäkerhetslag (410/1996)

*Electrical safety act*

- 7.1.4 Sähköturvallisuusasetus (498/1996)  
Elsäkerhetsförordning (498/1996)

*Electrical safety decree*

- 7.1.5 Kauppa- ja Teollisuusministeriön päätös sähköalan töistä (516/1996)  
Handels- och industriministriets beslut om arbeten inom elbranschen (516/1996)

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

- 7.1.6 Kauppa- ja Teollisuusministeriön päätös sähköturvallisuusmääräyksistä (205/1974, 1397/1994, 649/1996)  
Handels- och industriministriets beslut om elsäkerhetsföreskrifter (205/1974, 1397/1994, 649/1996)

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

- 7.1.7 Kauppa- ja Teollisuusministeriön päätös sähköturvallisuuslain soveltamisesta (657/1996)  
Handels- och industriministriets beslut om tillämpning av elsäkerhetslagen (657/1996)

*Decision of the Ministry of Trade and Industry on the application of the electrical safety act*

- 7.1.8 Kauppa- ja Teollisuusministeriön päätös sähköasennusten turvallisuudesta (1396/1994, 655/1996)  
Handels- och industriministriets beslut om elinstallationers säkerhet (1396/1994, 655/1996)

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

### **7.2 Grundsätze und Leitlinien der Elektrotechnische Abnahmestelle**

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

*Electrical safety code*

- 7.2.2 Rakannusten sähköasennukset (A2)  
Ellinstallationer 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)  
Förstahjälppskolning för nödlägen (T 12)

*Emergency first aid training*

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

*Live working*

- 7.2.6 Suojavaatetus sähkötöissä (T 73)  
Skyddsklädsel i elarbeten (T 73)

*Protective clothing for electrical works*

- 7.2.7 Sähkötilojen puhdistustyöt (KY 88)  
Rengöringsarbeten i elutrymmen (KY 88)

*Cleaning of enclosed electrical operating areas*

- 7.2.8 Yli 1 000 V kytkinlaitteiden ja ensiörelaiden merkintä ja suojaus (KY 169)  
Märkning och skydd av kopplingsutrustning och primärreläer för över 1 000 V (KY 169)

*Marking and protection of switching devices and primary relays with a voltage exceeding 1 000 V*

- 7.2.9 Varokeytkimien vaihto ja käyttö sekä kytkinvarokkeiden merkintä (KY 202)  
Utbyte och användning av säkringslastbrytare samt märkning av lastbrytare (KY 202)

*Replacement and use of fuse-switches and marking of disconnecter-fuses*

## **11 Irland (IE)**

### **11.1 Gesetze und Verordnungen**

- 11.1.1 Safety Health and Welfare at Work Act 1989

*This Act makes general provisions for the securing of safety health and welfare at all workplaces.*

- 11.1.2 Safety Health and Welfare at Work (General Application) Regulations 1993  
S.I. N<sup>o</sup>. 44 of 1993

*Regulations governing general safety & health provisions, the workplace, use of work equipment, personal protective equipment, manual handling, display screen equipment, electricity and first aid.*

- 11.1.3 Safety Health and Welfare at Work (Signs) Regulations 1995  
S.I. N<sup>o</sup>. 132 of 1995

*Regulations stipulating levels of signage to be used in workplaces.*

- 11.1.4 Safety Health and Welfare at Work (Construction) Regulations 1995  
S.I. N<sup>o</sup>. 138 of 1995

*Regulations concerning safety on construction projects and including maintenance projects.*

## **15 Niederlande (NL)**

### **15.1 Gesetze und Verordnungen**

- 15.1.1 Arbeidsomstandighedenwet 1980

*Law containing requirements which are of interest for the safety, the health and the well-being in relation with labour*

- 15.1.2 Arbeidsomstandighedenbesluit

*Regulation containing, in addition to the Arbeidsomstandighedenwet, requirements, amongst others, regarding the safety of electrical installations and regarding the safe operation of electrical installations*

- 15.1.3 Mijnwet 1810; Mijnwet 1903; Mijnwet continentaal plat

*Laws containing requirements pertinent to mining both on land and offshore*

- 15.1.4 Chapter VI of Mijnreglement 1964; Chapter XI of Mijnreglement continentaal plat

*Regulations with additional requirements*

- 15.1.5 Nadere regelen Mijnreglement 1964 en Mijnreglement continentaal plat elektrische installaties

*Regulations with additional requirements regarding electrical installations including safe works, inspection and maintenance.*

### **15.2 Normen**

- 15.2.1 NEN 3140:1998 Bedrijfsvoering van elektrische installaties - Aanvullende Nederlandse bepalingen voor laagspanningsinstallaties

*Netherlands standard: Operation of electrical installations - Additional Netherlands requirements for low-voltage installations*

- 15.2.2 NEN 3840:1998 Bedrijfsvoering van elektrische installaties - Aanvullende Nederlandse bepalingen voor hoogspanningsinstallaties

*Netherlands standard: Operation of electrical installations - Additional Netherlands requirements for high-voltage installations*

## **18 Schweden (SE)**

### **18.1 Gesetze und Verordnungen**

- 18.1.1 SFS 1997:857 Ellag  
(Electricity act)

*Law about responsibility in case of personal injury or damage to an installation and electrical equipment caused by electricity.*

- 18.1.2 SFS 1957:601 Förordning om elektriska starkströmsanläggningar  
(Ordinance concerning electrical installations)

*Ordinance with requirements for - among other things - overhead lines and underground cables near roads, railways, airports etc. and basic principles for operation.*

- 18.1.3 ELSÄK-FS 1994:7 Elsäkerhetsverkets föreskrifter om utförande och skötsel av elektriska starkströmsanläggningar.  
(Regulations for design, maintenance and operation of electrical installations)

- 18.1.3.1 ELSÄK-FS 1997:3 Ändring av ELSÄK-FS 1994:7, Varselmärking.  
(Amendments to ELSÄK-FS 1994:7, Signs for electrical installations)

- 18.1.3.2 ELSÄK-FS 1997:4 Ändring av ELSÄK-FS 1994:7, Diverse ändringar.  
(Amendments to ELSÄK-FS 1994:7, Minor amendments)

- 18.1.3.3 ELSÄK-FS 1997:9 Ändring av ELSÄK-FS 1994:7 Avdelning C, skötsel av elektriska starkströmsanläggningar  
(Amendments to ELSÄK-FS 1994:7, Part C. Operation and maintenance of electrical installations)

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