

Svenska Elektriska Kommissionen, SEK

Fastställt	Utgåva	Sida	Ingår i
2003-04-24	2	1 (1+46)	SEK Område 9

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Järnvägsanläggningar – Fasta installationer – Likspänningsapparater – Del 1: Allmänt

*Railway applications –
Fixed installations –
D.C. switchgear –
Part 1: General*

Som svensk standard gäller europastandarden EN 50123-1:2003. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50123-1:2003.

Nationellt förord

Tidigare utgiven svensk standard SS-EN 50123-1, utgåva 1, 1995, gäller ej fr o m 2005-09-01.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

Svenska Elektriska Kommissionen, SEK, svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK

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EUROPEAN STANDARD

EN 50123-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2003

ICS 29.120.60; 45.020

Supersedes EN 50123-1:1995

English version

**Railway applications –
Fixed installations – D.C. switchgear
Part 1: General**

Applications ferroviaires –
Installations fixes –
Appareillage à courant continu
Partie 1: Généralités

Bahnanwendungen –
Ortsfeste Anlagen –
Gleichstrom-Schaltanlagen
Teil 1: Allgemeines

This European Standard was approved by CENELEC on 2002-09-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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

Foreword

This European Standard was prepared by SC 9XC, Electric supply and earthing systems for public transport equipment and ancillary apparatus (fixed installations), of the Technical Committee CENELEC TC 9X, Electrical and electronic applications for railways.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50123-1 on 2002-09-01.

This European Standard supersedes EN 50123-1:1995. It has been prepared taking into account IEC document 9/578/FDIS (61992-1) in order to align technically as much as possible this EN 50123-1 and IEC 61992-1. These documents are to be considered as technically equivalent except for those references and peculiarities which are due to the European standardisation in the railway application field.

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) 2003-09-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2005-09-01

Annexes designated “normative” are part of the body of the standard.

Annexes designated “informative” are given for information only.

In this standard, Annexes A, B and C are normative and Annexes D and E are informative.

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1 Scope

The EN 50123 series specifies requirements for d.c. switchgear and controlgear and is intended to be used in fixed electrical installations with nominal voltage not exceeding 3 000 V d.c., which supply electrical power to vehicles for public guided transport, i.e. railway vehicles, tramway vehicles, underground vehicles and trolley-buses.

Part 1 specifies general requirements.

The other parts are covering

- Part 2 D.C. circuit breakers,
- Part 3 Indoor d.c. disconnectors, switch-disconnectors and earthing switches,
- Part 4 Outdoor d.c. disconnectors, switch-disconnectors and earthing switches,
- Part 5 Surge arresters and low voltage limiters for specific use in d.c. systems,
- Part 6 D.C. switchgear assemblies,
- Part 7-1 Measurement, control and protection devices for specific use in d.c. traction systems – Application guide,
- Part 7-2 Measurement, control and protection devices for specific use in d.c. traction systems – Isolating current transducers and other current measuring devices,
- Part 7-3 Measurement, control and protection devices for specific use in d.c. traction systems – Isolating voltage transducers and other voltage measuring devices

2 Normative references

This European Standard series incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard series only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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|------------|--------|--|
| EN 50119 | 2001 | <i>Railway applications – Fixed installations – Electric traction overhead contact lines</i> |
| EN 50121 | Series | <i>Railway applications – Electromagnetic compatibility</i> |
| EN 50122-1 | 1997 | <i>Railway applications – Fixed installations – Part 1: Protective provisions relating to electrical safety and earthing</i> |
| EN 50124-1 | 2001 | <i>Railway applications – Insulation coordination – Part 1: Basic requirements – Clearances and creepage distances for electrical and electronic equipment</i> |
| EN 50125-2 | 2002 | <i>Railway applications – Environmental conditions for equipment – Part 2: Fixed electrical installations</i> |
| EN 50126 | 1999 | <i>Railway applications – The specification and demonstration of Reliability, Availability, Maintainability and Safety (RAMS)</i> |
| EN 50163 | 1995 | <i>Railway applications – Supply voltage of traction systems (IEC 60850:2000)</i> |
| EN 60099-1 | 1994 | <i>Surge arresters – Part 1: Non-linear resistor type gapped surge arresters for a.c. systems (IEC 60099-1:1991)</i> |