

Svenska Elektriska Kommissionen, SEK

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Järnvägsanläggningar – Skydd mot elchock i rälsfordon

Railway applications –

Rolling stock –

Protective provisions relating to electrical hazards

Som svensk standard gäller europastandarden EN 50153:2002. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50153:2002.

Nationellt förord

Tidigare utgiven svensk standard SS-EN 50153, utg 1, 1996, gäller ej fr o m 2005-05-01.

ICS 45.060.00

Denna standard är fastställd av Svenska Elektriska Kommissionen, SEK, som också kan lämna upplysningar om **sakinnehållet** i standarden.
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EUROPEAN STANDARD

EN 50153

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2002

ICS 45.060.00

Supersedes EN 50153:1996

English version

**Railway applications -
Rolling stock -
Protective provisions relating to electrical hazards**

Applications ferroviaires -
Matériel roulant -
Mesures de protection vis-à-vis
des dangers d'origine électrique

Bahnanwendungen -
Fahrzeuge -
Schutzmaßnahmen in Bezug auf
elektrische Gefahren

This European Standard was approved by CENELEC on 2002-05-01. 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 9XB, Electromechanical material on board of rolling stock, of Technical Committee CENELEC TC 9X, Electrical and electronic applications for railways.

This European Standard represents the second edition of the standard and is technically based on the International Standard IEC 61991 which is the adaptation of EN 50153:1996 into IEC format. IEC 61991 was submitted successfully to a parallel vote in 1999. The European references, special national conditions and A-deviations have been restored in this European Standard.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50153 on 2002-05-01.

This European Standard supersedes EN 50153:1996.

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) 2003-05-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2005-05-01

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

Annexes designated “informative” are given for information only.

In this standard, annexes A and B are normative and annex C is informative.

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Introduction

It is generally accepted that safety depends on human factors, based on the normal behaviour of the operators involved, as well as upon technical factors.

For these reasons, this European Standard, in several instances, leaves a choice to the contracting parties between two alternatives. These alternatives consist either in the provision of operating rules, regulations and procedures, or in the application of technical measures such as mechanical or electrical *interlocking devices*.

A list of the cases for which the contracting parties (e.g. user and manufacturer) should reach agreement before signing the contract is included in annex B.

1 Scope

This European Standard offers a set of rules that are applied in the design and manufacture of electrical installations and equipment to be used on rolling stock so as to protect the persons from *electric shocks*.

The methods used to satisfy the rules may differ, in accordance with the procedures and practices of the operating organization.

This European Standard is applicable to vehicles of rail transport systems, road vehicles powered by an external supply (e.g. trolley buses), magnetic levitated vehicles and to the electrical equipment installed in these vehicles.

This European Standard does not apply to

- mine railways in underground mines,
- crane installations, moving platforms and similar transport systems on rails,
- funicular railways,
- temporary constructions.

Testing of vehicles against the requirements of this European Standard is not included. For this, refer to EN 50215.

2 Normative references

This European Standard incorporates, by dated or undated references, provisions from other publications. These normative references are cited at the appropriate place 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 only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 50122-1	1997	Railway applications - Fixed installations Part 1: Protective provisions relating to electrical safety and earthing
EN 50124-1	2001	Railway applications - Insulation coordination Part 1: Basic requirements - Clearances and creepage distances for all electrical and electronic equipment
EN 50126	1999	Railway applications - The specification and demonstration of Reliability, Availability, Maintainability and Safety (RAMS)