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**SVENSK STANDARD SS-EN 50125-1**

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| **Svenska Elektriska Kommissionen, SEK** | 1999-10-29 | 1



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**Reg 481 01 50**

# Järnvägsanläggningar – Miljöförhållanden – Del 1: Utrustning i fordon

*Railway applications – Environmental conditions for equipment – Part 1: Equipment on board rolling stock*

Som svensk standard gäller europastandarden EN 50125-1:1999. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50125-1:1999.

ICS 29.260.00: 29.280; 45.020

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN 50125-1

September 1999

ICS 29.260.00; 29.280; 45.020

English version

# Railway applications - Environmental conditions for equipment Part 1: Equipment on board rolling stock

Applications ferroviaires - Conditions d'environnement pour le matériel Partie 1: Equipement embarqué du matériel roulant

Bahnanwendungen Umweltbedingungen für Betriebsmittel Teil 1: Betriebsmittel auf Bahnfahrzeugen



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**



Ref. No. EN 50125-1:1999 E

## Foreword

This European Standard was prepared by SC 9XB, Electromechanical material on board rolling stock, of Technical Committee CENELEC TC9X, Electrical and electronic applications for railways.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50125-1 on 1999-08-01.

The following dates were fixed:

| | | |
|---|---|---|
| - latest date by which the European Standard has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2000-05-01 |
| - latest date by which the national standards conflicting with the European Standard have to be withdrawn | (dow) | 2002-05-01 |

Annexes designated "informative" are given for information only.
In this standard, annexes A and B are informative.

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## Content

## 1 Scope

This standard intends to define environmental conditions within Europe.

NOTE: It can also be applied elsewhere by agreement.

The scope of this standard covers the use of on board electrical, electromechanical and electronic equipment for rolling stock, for the following parameters: Altitude, Temperature, Humidity, Air movement, Rain, Snow and hail, Ice, Solar radiation, Lightning, Pollution, Vibrations and shocks, Electromagnetic interference environment, Acoustic noise environment, Supply system characteristics.

In particular the standard defines:

- interface conditions between the vehicle and its environment;
- general environmental rules for the equipment of rolling stock, especially for the main sub-systems (level 3 - defined by R009-003 of a vehicle (cubicles, cabling, large components, etc.).

In this respect it gives general guidance in order to allow the fairness of bid assessments in the process of European Projects.

The defined environmental conditions are considered as normal in service; occasionally more severe conditions may be specified.

Microclimates surrounding components may be defined by relevant product standards or by special requirements.

This standard is not intended to apply to cranes, mining vehicles, cable cars.

Passenger effects on the equipment and equipment effect on the passengers are not considered in this standard.

## 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.

| | | |
|---|---|---|
| ENV 50121 | series | Railway applications - Electromagnetic compatibility |
| EN 50124-2 | 1999 | Railway applications - Insulation coordination<br>Part 2: Overvoltages and related protection |
| EN 50163 | 1995 | Railway applications - Supply voltages of traction systems |
| EN 60529 | 1991 | Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989) |
| EN 60721-1 | 1995 | Classification of environmental conditions - Part 1: Environmental parameters and their severities (IEC 60721-1:1990 + A1:1992) |
| EN 60721-3-0 | 1993 | Part 3: Classification of groups of environmental parameters and their severities - Introduction (IEC 60721-3-0:1984 + A1:1987) |
| EN 60721-3-5 | 1997 | Section 5: Ground vehicle installations (IEC 60721-3-5:1997) |
| EN 61373 | 1999 | Railway applications - Rolling stock equipment - Shock and vibration tests (IEC 61373:1999) |
| HD 478.2.1 S1 | 1989 | Classification of environmental conditions - Part 2: Environmental conditions appearing in nature - Section 1: Temperature and humidity (IEC 60721-2-1:1982 + A1:1987) |
| HD 478.2.2 S1 | 1990 | Section 2: Precipitation and wind (IEC 60721-2-2:1988) |