

## **Railway applications - Air conditioning for urban and suburban rolling stock - Part 1: Comfort parameters**

Railway applications - Air conditioning for urban and  
suburban rolling stock - Part 1: Comfort parameters

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14750-1:2006 sisaldab Euroopa standardi EN 14750-1:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 31.07.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14750-1:2006 consists of the English text of the European standard EN 14750-1:2006.</p> <p>This document is endorsed on 31.07.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This European Standard is applicable to suburban and/or regional vehicles and also metro and tramway vehicles equipped with cooling and/or heating/ventilation systems. This European Standard excludes main line vehicles and driving cabs which are considered in separate European Standards.</p>	<p><b>Scope:</b></p> <p>This European Standard is applicable to suburban and/or regional vehicles and also metro and tramway vehicles equipped with cooling and/or heating/ventilation systems. This European Standard excludes main line vehicles and driving cabs which are considered in separate European Standards.</p>
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Võtmesõnad:

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English Version

**Railway applications - Air conditioning for urban and suburban  
rolling stock - Part 1: Comfort parameters**

Applications ferroviaires - Conditionnement de l'air pour  
matériel roulant urbain et banlieue - Partie 1: Paramètres  
de bien-être

Bahnanwendungen - Luftbehandlung in  
Schienenfahrzeugen des innerstädtischen und regionalen  
Nahverkehrs - Teil 1: Behaglichkeitsparameter

This European Standard was approved by CEN on 27 April 2006.

CEN 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 CEN 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 CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

This document (EN 14750-1:2006) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2006, and conflicting national standards shall be withdrawn at the latest by December 2006.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services<sup>1)</sup>.

This series of European Standards includes the following parts:

- EN 14750-1, *Railway applications — Air conditioning for urban and suburban rolling stock — Part 1: Comfort parameters*;
- EN 14750-2, *Railway applications — Air conditioning for urban and suburban rolling stock — Part 2: Type tests*.

In the context of this series, there are two further series on air conditioning in rolling stock:

- EN 13129-1, *Railway applications — Air conditioning for main line rolling stock — Part 1: Comfort parameters*;
- EN 13129-2, *Railway applications — Air conditioning for main line rolling stock — Part 2: Type tests*;
- EN 14813-1, *Railway applications — Air conditioning for driving cabs — Part 1: Comfort parameters*;
- EN 14813-2, *Railway applications — Air conditioning for driving cabs — Part 2: Type tests*.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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1) Official Journal No L 134 of 30.4.2004.

## Introduction

The object of this European Standard is to establish common comfort parameters for the European railways. It also specifies the performance of the air-conditioning installations.

If necessary, the revised requirements due to the operating constraints of the vehicle will be detailed in the contractual specification. This European Standard applies if there is no particular clause in the contractual specification.

## 1 Scope

This European Standard is applicable to suburban and/or regional vehicles and also metro and tramway vehicles equipped with cooling and/or heating/ventilation systems. This European Standard excludes main line vehicles and driving cabs which are considered in separate European Standards.

This European Standard specifies comfort parameters for compartment or saloon (single level or double-decker).

These comfort parameters apply in a similar way to the areas reserved for train staff, with the exception of the catering service areas.

The conditions under which the physical parameters mentioned in this European Standard shall be measured are defined in EN 14750-2.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 779:2002, *Particulate air filters for general ventilation — Determination of the filtration performance*

EN 14750-2, *Railway applications — Air conditioning for urban and suburban rolling stock — Part 2: Type tests*

EN 50126, *Railway applications — The specification and demonstration of reliability, availability, maintainability and safety (RAMS)*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **comfort**

agreeable sensation perceived by a person concerning his climatic environment

### 3.2

#### **air conditioning installations**

equipment intended for ventilation and/or heating and/or cooling and/or filtration

### 3.3

#### **forced air ventilation**

air circulation generated by a mechanical action

### 3.4

#### **natural ventilation**

air circulation generated without mechanical action

### 3.5

#### **preheating**

process which enables the interior temperature to be raised without the presence of passengers