

# SVENSK STANDARD

## SS-EN 13129:2016

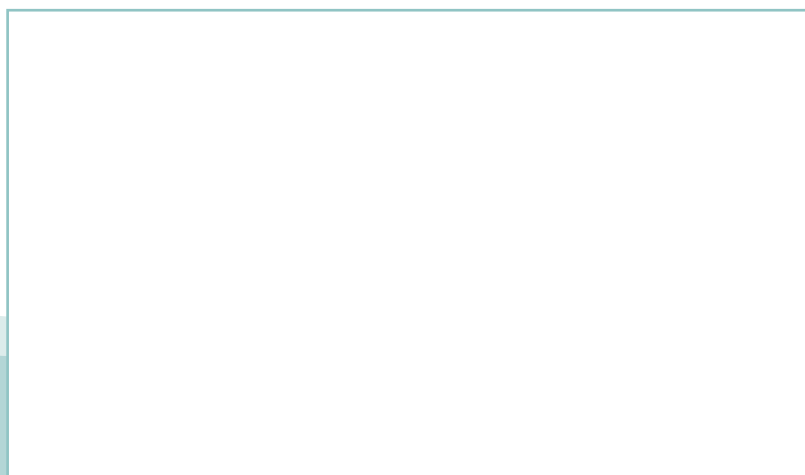


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### **Järnvägar – Luftkonditionering i rälsfordon för fjärrtrafik – Komfortparametrar och typprovning**

### **Railway applications – Air conditioning for main line rolling stock – Comfort parameters and type tests**



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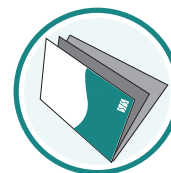
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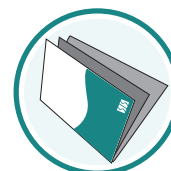
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Europastandarden EN 13129:2016 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 13129:2016.

Denna standard ersätter SS-EN 13129-1, utgåva 1 och SS-EN 13129-2:2004, utgåva 1.

The European Standard EN 13129:2016 has the status of a Swedish Standard. This document contains the official English version of EN 13129:2016.

This standard supersedes the Swedish Standard SS-EN 13129-1, edition 1 and SS-EN 13129-2:2004, edition 1.

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EUROPEAN STANDARD

EN 13129

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2016

ICS 45.060.20

Supersedes EN 13129-1:2002, EN 13129-2:2004

English Version

## Railway applications - Air conditioning for main line rolling stock - Comfort parameters and type tests

Applications ferroviaires - Conditionnement de l'air  
pour matériel roulant grandes lignes - Paramètres de  
bien-être et essais de type

Bahnanwendungen - Luftbehandlung in  
Schienenfahrzeugen des Fernverkehrs -  
Behaglichkeitsparameter und Typprüfung

This European Standard was approved by CEN on 19 May 2016.

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 CEN-CENELEC Management Centre or to any CEN member.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 13129:2016) 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 February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13129-1:2002 and EN 13129-2:2004.

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 EU Directive 2008/57/EC.

For relationship with EU Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document.

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

## 1 Scope

This European Standard establishes comfort parameters of air conditioning for passenger compartments or saloons of railway vehicles (single level or double-decker). These comfort parameters apply in a similar way to the areas reserved for train staff.

The European Standard also specifies conditions, performance values and the comfort parameter measurement methods for compartments or saloons.

This European Standard is applicable to main line rail vehicles. It does not apply to suburban vehicles, metros, tramways and driver's cabs.

## 2 Normative references

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

EN ISO 7726:2001, *Ergonomics of the thermal environment - Instruments for measuring physical quantities (ISO 7726:1998)*

## 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 or her climatic environment

### 3.2

#### **air conditioning installation**

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 temperatures to be raised without the presence of passengers

### 3.6

#### **precooling**

process which enables the interior temperatures to be lowered without the presence of passengers

### 3.7

#### **heating**

process which enables the interior temperatures to be raised or maintained

**3.8**

**cooling**

process which enables the interior temperatures to be lowered or maintained

**3.9**

**dehumidification**

process which reduces the absolute humidity of the interior air

**3.10**

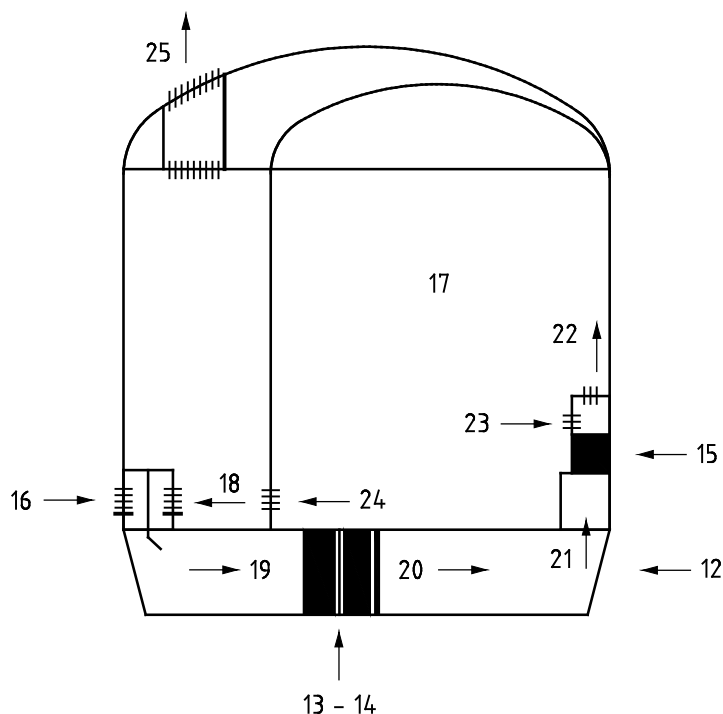
**air conditioning device**

device which includes ventilation, heating, cooling and/or dehumidification

**3.11**

**heating and ventilation device**

device which includes ventilation and heating



NOTE The numbers correspond to the following definitions.

**Figure 1 — Diagram explaining certain railway terms**

Note 1 to entry: This representation is only given as an example and does not prejudice the design of the installation.

**3.12**

**air handling unit**

group of components designed to move, filter and/or mix, heat and/or cool the air

Note 1 to entry: See Figure 1, No 12.

**3.13**

**cooling unit**

system that carries out the cooling function in a centralized and/or decentralized manner

Note 1 to entry: See Figure 1, No 13.