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

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EUROPEAN STANDARD
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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

Bahnwendungen - Luftbehandlung in
Schienenfahrzeugen des Fernverkehrs -
Behaglichkeitsparameter und Typprüfung

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

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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of an identical text or by endorsement, at the latest by February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.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.

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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