

**Raudteelased rakendused. Pidurinäidikud. Osa 1:
Suruõhkpiduri näidik**

Railway applications - Brake indicators - Part 1:
Pneumatically operated brake indicators

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15220-1:2008+A1:2011 sisaldab Euroopa standardi EN 15220-1:2008+A1:2011 ingliskeelset teksti.

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English Version

Railway applications - Brake indicators - Part 1: Pneumatically operated brake indicators

Applications ferroviaires - Indicateurs de frein - Partie 1:
Indicateurs de frein pneumatiques

Bahnanwendungen - Bremsanzeigevorrichtungen - Teil 1:
Pneumatische Bremsanzeiger

This European Standard was approved by CEN on 13 September 2008 and includes Amendment 1 approved by CEN on 3 April 2011.

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Foreword

This document (EN 15220-1:2008+A1:2011) 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of an identical text or by endorsement, at the latest by November 2011, and conflicting national standards shall be withdrawn at the latest by November 2011.

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

This document includes Amendment 1, approved by CEN on 2011-04-03.

This document supersedes EN 15220-1:2008.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

A1 This document has been prepared under a mandate given to CEN/CENELEC/ETSI 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. **A1**

This series of European Standards *Railway applications — Brake indicators* consists of:

- *Part 1: Pneumatically operated brake indicators*
- *Part 2: Electrically operated brake indicators*

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This European Standard specifies the requirements for the design, dimensions, performance and testing of single/double brake indicators with or without electrical contacts. It applies to pneumatically operated brake indicators visible from the outside of the vehicle.

NOTE Brake indicators are for giving precise and accurate information about release and application of the brake.

This European Standard applies to brake indicators on railway vehicles used on the main national networks, urban networks, underground railways, trams and private networks (regional railways, company railways etc.).

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 14478:2005, *Railway applications — Braking — Generic vocabulary*

EN 50125-1, *Railway applications — Environmental conditions for equipment — Part 1: Equipment on board rolling stock*

EN 50155:2007, *Railway applications — Electronic equipment used on rolling stock*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

EN 61373:1999, *Railways applications — Rolling stock equipment — Shock and vibration tests (IEC 61373:1999)*

EN ISO 228-2, *Pipe threads where pressure-tight joints are not made on the threads — Part 2: Verification by means of limit gauges (ISO 228-2:1987)*

EN ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227:2006)*

ISO 5208, *Industrial valves — Pressure testing of metallic valves*

ISO 8573-1:2001, *Compressed air — Part 1: Contaminants and purity classes*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14478:2005 and the following apply.

3.1 General

3.1.1

brake indicator

apparatus for visual indication of the brake applied status of a vehicle by means of a red indication, with black line or black dot, and the release status by means of a green indication

NOTE 1 Brake indicators can be equipped with electrical contacts.

NOTE 2 An optional visual state, for parking brake indicators only, of a white flag with black cross would indicate an "uncertain braking status". This status refers to the condition of parking brake applied but released by the manual release lever.