

RAUDTEEALASED RAKENDUSED. PIDURINÄIDIKUD

Railway applications - Brake indicators

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15220:2016 sisaldab Euroopa standardi EN 15220:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 15220:2016 consists of the English text of the European standard EN 15220:2016.
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ICS 45.060.01

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English Version

Railway applications - Brake indicators

Applications ferroviaires - Indicateurs de freins

Bahnanwendungen - Bremsanzeigevorrichtungen

This European Standard was approved by CEN on 12 June 2016.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 15220:2016) 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of an identical text or by endorsement, at the latest by February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.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 15220-1:2008+A1:2011.

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 2008/57/EC.

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

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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 specifies the requirements for the design, dimensions, performance and testing of single double and multiple brake indicators. It applies to pneumatically and electrically operating brake indicators visible from the outside of the vehicle.

NOTE Brake indicators are for giving 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.).

This document does not apply to brake indicator for magnetic track brake or eddy current brake.

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 edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14478, *Railway applications - Braking - Generic vocabulary*

EN 45545-2, *Railway applications — Fire protection on railway vehicles — Part 2: Requirements for fire behaviour of materials and components*

EN 50121-3-2, *Railway applications - Electromagnetic compatibility - Part 3-2: Rolling stock – Apparatus*

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

EN 50155, *Railway applications - Electronic equipment used on rolling stock*

EN 60529:1991 + A1:2000 + A2:2013 *Degrees of protection provided by enclosures (IP Code)* (IEC 60529:1989 + A1:1999 + A2:2013)

EN 60721-3-5:1997, *Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 5: Ground vehicle installations* (IEC 60721-3-5:1997)

EN 61373:2010, *Railway applications - Rolling stock equipment - Shock and vibration tests* (IEC 61373:2010)

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)

EN ISO 9227, *Corrosion tests in artificial atmospheres - Salt spray tests* (ISO 9227)

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

ISO 8573-1:2010, *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 and the following apply.