RAUDTEEALASED RAKENDUSED. PIDURDAMINE. RELEEKLAPID

Railway applications - Braking - Relay valves



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NATIONAL FOREWORD

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EUROPEAN STANDARD NORME EUROPÉENNE

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English Version

Railway applications - Braking - Relay valves

Applications ferroviaires - Freinage - Relais pneumatiques

Bahnanwendungen - Bremse - Relaisventile

This European Standard was approved by CEN on 13 January 2020 and includes Amendment 1 approved by CEN on 2 October 2022.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 15611:2020+A1:2022) 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of an identical text or by endorsement, at the latest by May 2023, and conflicting national standards shall be withdrawn at the latest by May 2023.

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 includes Amendment 1 approved by CEN on 2 October 2022.

This document supersedes (A) EN 15611:2020 (A).

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A] (A1).

Compared to EN 15611:2008+A1:2010, the following changes have been made:

- a) normative references have been updated;
- b) terms and definitions have been revised;
- c) requirements on design have been revised;
- d) requirements on materials have been revised;
- e) requirements on type testing have been revised;
- f) requirements on in-service assessment have been revised
- g) requirements on markings have been revised;
- h) annexes have been revised.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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1 Scope

This document is applicable to relay valves designated to control the brake cylinder pressure of compressed air brakes fitted to railway vehicles, in association with an air brake distributor valve or other control device. It covers one stage relay valves and relay valves adjusting the brake cylinder pressure in response to a change in vehicle speed or load that is either continuously variable or in two or more stages, i.e. empty – loaded.

Relay valves operating with other pressures, in particular the brake pipe pressure, are not included.

This document specifies the requirements for the design, manufacture and testing of relay valves.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 14478:2017, Railway applications — Braking — Generic vocabulary

EN 15355:2019, Railway applications — Braking — Distributor valves and distributor-isolating devices

A) EN 15625:2021 (A), Railway applications — Braking — Automatic variable load sensing devices

EN 45545-1:2013, Railway applications — Fire protection on railway vehicles — Part 1: General

EN 45545-2:2020 (A), Railway applications — Fire protection on railway vehicles — Part 2: Requirements for fire behaviour of materials and components

EN 50125-1:2014, Railway applications — Environmental conditions for equipment — Part 1: Rolling stock and on-board equipment

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 228-1:2003, Pipe threads where pressure-tight joints are not made on the threads—Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)

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 14478:2017, EN 15355:2019 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp