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Railway applications - Rescue coupler - Performance requirements, specific interface geometry and test methods



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN 15020:2022 sisaldab Euroopa standardi EN 15020:2022 ingliskeelset teksti.

This Estonian standard EVS-EN 15020:2022 consists of the English text of the European standard EN 15020:2022.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 31.08.2022.

Date of Availability of the European standard is 31.08.2022.

Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.

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#### ICS 45.060.01

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# EUROPEAN STANDARD

# NORME EUROPÉENNE

### **EUROPÄISCHE NORM**

August 2022

EN 15020

ICS 45.060.01

Supersedes EN 15020:2006+A1:2010

#### **English Version**

# Railway applications - Rescue coupler - Performance requirements, specific interface geometry and test methods

Applications ferroviaires - Attelage de secours -Exigences concernant la performance, la géometrie des interfaces et les methodes d'essai Bahnanwendungen - Abschleppkupplung -Leistungsanforderungen, spezifische Schnittstellengeometrie und Prüfverfahren

This European Standard was approved by CEN on 10 July 2022.

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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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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 15020:2022) 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 February 2023, and conflicting national standards shall be withdrawn at the latest by February 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 supersedes EN 15020:2006+A1:2010.

The main modifications to EN 15020:2006+A1:2010 are:

- a) Modifications on Scope;
- b) Verifying of Clause 2 "Normative references";
- c) Modification in Clause 3 "Terms and definitions", in particular 3.1 "rescue coupler";
- d) Clause 4 completely revised;
- e) Change of all Figures;
- f) Annex A "Automatic coupler" is deleted and referred to in EN 16019:2014;
- g) Annex C "Characteristics of the rescue vehicle" is deleted and reffered to in EN 16839:2022;
- h) Annex D "Air pipe coupling heads" is deleted and referred to in EN 15807:2021;
- i) Extension of the components to be dimensionally checked New Figures A.5 to A.10;
- j) Adaptation of Annex ZA to Directive 2016/797;
- k) editorially revised.

This document has been prepared under a standardization request addressed to CEN by the European Commission, and it aims to support essential or other requirements of EU Directive(s) or Regulation(s).

For relationship with EU Directive(s) or 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.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### 1 Scope

This document specifies the requirements for the rescue coupler for train sets compliant with the Technical Specification for Interoperability Locomotives and Passenger rolling stock (TSI Loc and Pas).

This document defines the rescue coupler foreseen to connect a rescue vehicle equipped with a draw hook, according to EN 15566:2022 and a headstock layout according to EN 16839:2022 together with the train to be rescued equipped with a Type 10 automatic coupler according to EN 16019:2014.

Provisions going beyond the scope of this document are defined in the Technical Specification. The Technical Specification is not a mandatory document.

This document deals with requirements and tests on rescue coupler.

The requirements on coupling interfaces of end couplers are defined in EN 16019:2014.

#### 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 10204:2004, Metallic products - Types of inspection documents

EN 12663-1:2010+A1:2014, Railway applications - Structural requirements of railway vehicle bodies - Part 1: Locomotives and passenger rolling stock (and alternative method for freight wagons)

EN 15085 (all parts):—,<sup>1</sup> Railway applications — Welding of railway vehicles and components

EN 15566:2022, Railway applications — Railway rolling stock — Draw gear and screw coupling

EN 15807:2021, Railway applications - Pneumatic half couplings

EN~16019:2014, Railway~applications-Automatic~coupler-Performance~requirements, specific~interface~geometry~and~test~method

EN 16839:2022, Railway applications — Rolling stock — Head stock layout

<sup>1</sup> Under preparation. Stage at time of publication: Consists of the following parts: prEN 15085-1:2021, Railway applications — Welding of railway vehicles and components — Part 1: General; EN 15085-2:2020, Railway applications — Welding of railway vehicles and components — Part 2: Requirements for welding manufacturer; prEN 15085-3:2021, Railway applications — Welding of railway vehicles and components — Part 3: Design requirements; prEN 15085-4:2020, Railway applications — Welding of railway vehicles and components — Part 4: Production requirements; prEN 15085-5:2020, Railway applications — Welding of railway vehicles and components — Part 5: Inspection, testing and documentation; EN 15085-6:2022, Railway applications — Welding of railway vehicles and components — Part 6: Maintenance welding requirements.(Part 6 not relevant)