RAUDTEEALASED RAKENDUSED. PÜSIPAIGALDISED JA VEEREM. KRITEERIUMID PANTOGRAAFIDE JA KONTAKTÕHULIINI VAHELISE TEHNILISE ÜHILDUVUSE SAAVUTAMISEKS

Railway applications - Fixed installations and rolling stock - Criteria to achieve technical compatibility between pantographs and overhead contact line



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

See Eesti standard EVS-EN 50367:2020+A1:2022 sisaldab Euroopa standardi EN 50367:2020 ja selle muudatuse A1:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 50367:2020+A1:2022 consists of the English text of the European standard EN 50367:2020 and its amendment A1:2022.
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 28.08.2020, muudatus A1 07.10.2022.	Date of Availability of the European standard is 28.08.2020, for A1 07.10.2022.
Muudatusega A1 lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega 🗥 🛝	The start and finish of text introduced or altered by amendment A1 is indicated in the text by tags  [A1] (A1].
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

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ICS 29.280

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 50367 + A1

August 2020, October 2022

ICS 29.280

Supersedes EN 50367:2012 and all of its amendments and corrigenda (if any)

### **English Version**

# Railway applications - Fixed installations and rolling stock - Criteria to achieve technical compatibility between pantographs and overhead contact line

Applications ferroviaires - Systèmes de captage de courant - Critères techniques d'interaction entre le pantographe et la ligne aérienne de contact (réalisation du libre accès)

Bahnanwendungen - Zusammenwirken der Systeme -Technische Kriterien für das Zusammenwirken zwischen Stromabnehmer und Oberleitung für einen freien Zugang

This European Standard was approved by CENELEC on 2020-07-27. Amendment A1 was approved by CENELEC on 2022-08-15. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard and its amendment 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 CENELEC member.

This European Standard and its Amendment A1 exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC 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 Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

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

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### **European foreword**

This document (EN 50367:2020) has been prepared by CLC/SC 9XC "Electric supply and earthing systems for public transport equipment and ancillary apparatus (Fixed installations)".

The following dates are fixed:

- latest date by which this document has (dop) 2021-07-27 to be implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national (dow) 2023-07-27 standards conflicting with this document have to be withdrawn

This document supersedes EN 50367:2012 and all of its amendments and corrigenda (if any).

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

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

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

Annex B gives some parameters for existing lines (informative).

Compared with the previous version, the most significant changes in this version are:

- Update of definitions:
- Changes to 5.2.5 concerning the lateral deviation on the basis of RfS 51 from the European Union , A.3; Agency for Railways;
- Changes in 5.2.7;
- Revision of 5.3.2, including update of figures;
- Improvement of testing method for DC contact strips: 6.3, A.3;
- Addition of tunnel requirements in Clause 7;
- Revision of Table 9;
- Assessment requirements in Clause 9;
- Addition of an introduction for Annex B;
- Addition of Annex C:
- Addition of Annex D.

## Amendment A1 European foreword

This document (EN 50367:2020/A1:2022) was prepared by SC 9XC, "Electric supply and earthing systems for public transport equipment and ancillary apparatus (fixed installations)", of CLC/TC 9X, "Electrical and electronic applications for railways".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with this document have to be withdrawn
   (dow) 2025-08-15

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

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

### 1 Scope

This document specifies requirements for the technical compatibility between pantographs and overhead contact lines, to achieve free access to the lines of the European railway network.

These requirements are defined for a limited number of pantograph types conforming to the requirements in 5.3, together with the geometry and characteristics of compatible overhead contact lines.

#### Normative references 2

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 15273-1:2013+A1:2016, Railway applications - Gauges - Part 1: General - Common rules for infrastructure and rolling stock

EN 15273-2:2013+A1:2016, Railway applications - Gauges - Part 2: Rolling stock gauge

EN 15273-3:2013+A1:2016, Railway applications - Gauges - Part 3: Structure gauges

EN 50119:2020, Railway applications - Fixed installations - Electric traction overhead contact lines

EN 50125-2:2002, Railway applications - Environmental conditions for equipment - Part 2: Fixed electrical installations

EN 50149:2012, Railway applications - Fixed installations - Electric traction - Copper and copper alloy grooved contact wires

EN 50206-1:2010, Railway applications - Rolling stock - Pantographs: Characteristics and tests - Part 1: Pantographs for main line vehicles

EN 50317:2012, Railway applications - Current collection systems - Requirements for and validation of measurements of the dynamic interaction between pantograph and overhead contact line

EN 50318:2018, Railway applications - Current collection systems - Validation of simulation of the dynamic interaction between pantograph and overhead contact line

EN 50388:2012, Railway Applications - Power supply and rolling stock - Technical criteria for the coordination between power supply (substation) and rolling stock to achieve interoperability

EN 50405:2015, Railway applications - Current collection systems - Pantographs, testing methods for contact strips<sup>1)</sup> 

A<sub>1</sub> deleted text (A<sub>1</sub>

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<sup>1)</sup> This standard is impacted by EN 50405:2015/A1:2016.