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Järnvägstillämpningar – Fasta installationer och rullande materiel – Kriterier för teknisk kompatibilitet mellan strömvtagare och kontaktledning

Railway applications –

Fixed installations and rolling stock –

Criteria to achieve technical compatibility between pantographs and overhead contact line

Som svensk standard gäller europastandarden EN 50367:2020. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50367:2020.

Nationellt förord

Tidigare fastställd svensk standard SS-EN 50367, utgåva 2, 2012, SS-EN 50367/AC1, utgåva 1, 2013 och SS-EN 50367/A1, utgåva 1, 2016, gäller ej fr o m 2023-07-27.

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- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2023-07-27

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 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.

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.

NOTE 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.

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 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*¹⁾

IEC 60050-811:2017, *International Electrotechnical Vocabulary (IEV) - Part 811: Electric traction*

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