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BSI Standards Publication

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

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This British Standard is the UK implementation of EN 50367:2020+A2:2025. It supersedes BS EN 50367:2020+A1:2022, which will be withdrawn on 31 March 2028.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to CENELEC text carry the number of the CENELEC amendment. For example, text altered by CENELEC amendment A1 is indicated by ⟩A1⟨.

The UK participation in its preparation was entrusted to Technical Committee GEL/9/3, Railway Electrotechnical Applications - Fixed Equipment.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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EUROPÄISCHE NORM

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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

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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.

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European foreword to Amendment 1

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European foreword to Amendment 2

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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)]

〖A1〗 *Text deleted.* 〖A1〗

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