SLOVENSKI STANDARD
SIST EN 50367:2012/A1:2017

01-april-2017

Železniške naprave - Sistemi za odjem toka - Tehnični kriteriji za interaktivnost med odjemnikom toka in kontaktnim vodnikom (za doseganje prostega dostopa)

Railway applications - Current collection systems - Technical criteria for the interaction between pantograph and overhead line (to achieve free access)

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

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

Ta slovenski standard je istoveten z: **EN 50367:2012/A1:2016**

ICS:

29.280	Električna vlečna oprema	Electric traction equipment

SIST EN 50367:2012/A1:2017 **en**

EUROPEAN STANDARD

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EN 50367:2012/A1

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English Version

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This amendment A1 modifies the European Standard EN 50367:2012; it was approved by CENELEC on 2016-07-25. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this 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 amendment 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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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50367:2012/A1:2016) has been prepared by CLC/TC 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) 2017-07-25
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2019-07-25

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] 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.

3 Terms and definitions

Correct the editorial mistake in 3.4 to read:

3.4
contact plane
plane parallel to the base frame of the pantograph at the contact point

5.2.2 Gauges

***Add** the following text at the end of the sub-clause:*

NOTE 1 The values are calculated taking into account the pantograph movement, pantograph encroachment, track gauge and track tolerances.

For calculation of infrastructure heights according to EN 15273-1:2009, 8.1.2, the maximum encroachment can be reduced for the actual conditions. The effective encroachment shall be calculated based on the maximum encroachment according to 5.3 taking into consideration the worst lateral deviation of the contact wire at this location.

NOTE 2 E.g. for bridges with the contact wire position on the track centre line, the full encroachment of pantograph needs not to be considered.

5.2.5 Lateral deviation

Replace the sentence before last by the following:

In the case of a multi-rail track, the requirement shall be fulfilled for each pair of rails (designed to be operated as separated track) that is intended to be interoperable.

5.3.2.2 Non-continuous pantograph head profile (independent suspended collector strips)

Replace the second sentence by the following:

The transition between independent parts of the pantograph head shall be checked.

6.3 Contact strips

*After the last bullet of the first paragraph, **replace** text:*

For AC lines plain carbon shall be permitted.

For DC lines plain carbon and impregnated carbon shall be permitted.

For common operation on AC and DC lines plain carbon shall be permitted.

NOTE 1 Plain carbon collector strips consist of a mixture of amorphous and graphite carbon elements. Impregnated carbon collector strips are plain carbon strips where the cavities are filled with metal. The degree of impregnation is defined by percentage of weight.

Contact strips made from other materials shall be subject to agreement between the Infrastructure Manager and Railway Undertaking.

Operation with different contact strip materials on the same infrastructure network (see Table C.1) shall be based on an agreement between Infrastructure Manager and Railway Undertaking.

NOTE 2 If contact strips of mixed materials are used in the networks, the wear of contact strips and/or contact wire could increase. Recommendations based on ongoing investigations will be included in next revision of this standard.

by the following:

Plain carbon or impregnated carbon with additive material shall be permitted.

NOTE 1 Plain carbon collector strips consist of a mixture of amorphous and graphite carbon elements. Impregnated carbon collector strips are plain carbon strips where the cavities are filled with metal. The degree of impregnation is defined by percentage of weight.

The metallic content of the carbon contact strips shall be copper or copper alloy and shall not exceed a content of 35 % by weight where used on AC lines and of 40 % where used on DC lines.

Operation with contact strips of other designs shall be subject to agreement between the Infrastructure Manager and Railway Undertaking. Use of these materials shall not lead to increased wear on contact strips made of the permitted materials defined above.

NOTE 2 If contact strips of mixed materials are used in the networks, the wear of contact strips and/or contact wire could increase (see Table C.1).

Annex C

Replace *Table C.1 by the following*:

Table C.1 – Contact strip material normally used

Contact	**AC**					**DC**								
Strips	**AT/DE/DK/ FI/NO/SE/IT**	**CH**	**CZ**	**ES,FR,GB,NL**	**SK**	**BE**	**CZ**	**ES**	**FR**	**IT**	**NL**	**SI**	**SK**	**PL**
Plain carbon	X	X	**X**	X	X	X	**X**		X		X		X	
Copper alloy Copper steel								X	X			b		
Copper-clad carbon		X				X			X	X		a	X	
Copper or copper alloy					X			X				X	X	
Metal impregnated carbon		X	**X**	X	X	X	**X**	a	X		X	a	X	X
Sintered copper			**X**				**X**					b		

[a] Under evaluation.

[b] Depends of the result of the evaluation.

Replace the Annex ZZ of EN 50367:2012 by the following:

Annex ZZ
(informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers all relevant essential requirements as given in Annex III of the EC Directive 2008/57/EC (also named as New Approach Directive 2008/57/EC Rail Systems: Interoperability).

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard given in Table ZZ.1 for ""Locomotives and Passenger Rolling Stock", Table ZZ.2 for "Energy" confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZZ.1 - Correspondence between this European Standard, the TSI "Locomotives and Passenger Rolling Stock" (REGULATION (EU) No 1302/2014 of 18 November 2014) and Directive 2008/57/EC

Clauses of this European Standard	Chapter / § / points / of LOC & PAS TSI	Essential Requirements (ER) of Directive 2008/57/EC	Comments
The whole standard is applicable, excluded: 5.2, 6.2, A.1	4.2.8.2.9 Requirements linked to pantograph 5.3.10. Pantograph 6.1.3.7. Pantograph	1. General Requirements 1.5 Technical compatibility 2. Requirements specific to each subsystem 2.2 Energy 2.2.3. Technical compatibility 2.4. Rolling stock 2.4.3. Technical compatibility	References to the standard EN 50367:2012 in the TSI clauses and in Appendix J.1 should be updated