



SLOVENSKI STANDARD
SIST EN 50163:2005/oprA3:2021
01-julij-2021

Železniške naprave - Napajalne napetosti sistemov električne vleke - Dopolnilo A3

Railway applications - Supply voltages of traction systems

Bahnanwendungen - Speisespannungen von Bahnnetzen

Applications ferroviaires - Tensions d'alimentation des réseaux de traction

Ta slovenski standard je istoveten z: **EN 50163:2004/prA3:2021**

[SIST EN 50163:2005/oprA3:2021](https://standards.iteh.ai/catalog/standards/sist/2612e453-c5af-48c6-9f83-97873ff0aa2d/sist-en-50163-2005-opra3-2021)

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ICS:

29.280 Električna vlečna oprema Electric traction equipment

SIST EN 50163:2005/oprA3:2021 en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN 50163:2004

prA3

May 2021

ICS 29.280

English Version

Railway applications - Supply voltages of traction systems

Applications ferroviaires - Tensions d'alimentation des réseaux de traction

Bahnanwendungen - Speisespannungen von Bahnnetzen

This draft amendment prA3, if approved, will modify the European Standard EN 50163:2004; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2021-08-13.

It has been drawn up by CLC/SC 9XC.

If this draft becomes an amendment, 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.

This draft amendment was established by CENELEC 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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 50163:2004/prA3:2021) has been prepared by SC 9XC, Electric supply and earthing systems for public transport equipment and ancillary apparatus (fixed installations), of Technical Committee CENELEC TC 9X, Electrical and electronic applications for railways.

This document is currently submitted to the Enquiry.

The following dates are proposed:

- latest date by which the existence of this document has to be announced at national level (doa) dor + 6 months
- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dor + 12 months
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) dor + 36 months (to be confirmed or modified when voting)

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.

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EN 50163:2004/prA3:2021 (E)

1 Modification to subclause 4.2, Frequency

In 4.2, replace the following NOTE 2:

“NOTE 2 In practice, the variation of frequency is more closely controlled in Europe than stated above. Vehicles will operate only within the frequency tolerances for 15 kV 16,7 Hz from 16,17 Hz to 17 Hz and for 25 kV/50 Hz range from 49 Hz to 51 Hz. If the frequency is out of this range, the vehicles performance may be reduced or the vehicle drives shall be disconnected.

The effects of the frequency variations may be examined by the railway operators to ensure the absence of harmful consequences on the train signalling.”

with the following NOTE 2 and normative text:

“NOTE 2 In practice, the variation of frequency is more closely controlled in Europe than stated above. Vehicles will operate only within the frequency tolerances for 15 kV 16,7 Hz from 16,17 Hz to 17 Hz and for 25 kV/50 Hz range from 49 Hz to 51 Hz. If the frequency is out of this range, the vehicles performance can be reduced or the vehicle drives can be disconnected.

The effects of the frequency variations may be examined by the railway operators to ensure the absence of harmful consequences on the train signalling.”

2 Modification to Annex ZZ, Relationship between this European standard and the essential requirements of EU Directive 2016/797/EU [2016 OJ L138] aimed to be covered

Replace the Annex ZZ by the following:

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Annex ZZ (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive (EU) 2016/797 aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/483 Mandate to CEN and CENELEC for Standardisation in the field of interoperability of the rail system" to provide one voluntary means of conforming to (parts of) Essential Requirements of Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on interoperability of the rail system (recast) as specified in the relevant technical specifications for interoperability (TSI).

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 for "Locomotives and Passenger Rolling Stock", and 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 as specified in the technical specifications for interoperability (TSI), and associated EFTA regulations.

Table ZZ.1 — Correspondence between this European Standard, Commission Regulation (EU) N° 1302/2014 concerning the technical specification for interoperability relating to the 'rolling stock — locomotives and passenger rolling stock' subsystem of the rail system in the European Union* and Directive (EU) 2016/797

NOTE: The Technical Specification for Interoperability (TSI) can refer to other clauses of this standard making the application of those clauses mandatory. Possible references to such clauses are found in the Appendix J to the TSI.

Essential Requirements of Directive (EU) 2016/797	Clauses of the Annex to the Technical Specification for Interoperability (TSI)	Clause/ subclauses of this European Standard	Comments
Section 3 of the Annex to the TSI indicates the correspondence between the TSI clauses and the Essential Requirements of Directive (EU) 2016/797	4.2.8.2.2 Operation within range of voltages and frequencies	Clause 4	TSI Clause 4.2.8.2 is part of the interface to the Energy Subsystem
	5.3.10 Pantograph	Clause 4	
	7.3.2.11. Operation within range of voltages and frequencies	Clause 5 Clause 6.1.2 Clause 6.2 Annex A	

* As amended by Commission Regulation (EU) 2016/919, Commission Implementing Regulation (EU) 2018/868, Commission Implementing Regulation (EU) 2019/776 and Commission Implementing Regulation (EU) 2020/387