SLOVENSKI STANDARD
SIST EN 50343:2025

01-maj-2025

Nadomešča:
SIST EN 50343:2014

Železniške naprave - Vozna sredstva - Pravila za inštaliranje kablov

Railway applications - Rolling stock - Rules for installation of cabling

Bahnanwendungen - Fahrzeuge - Regeln für die Installation von elektrischen Leitungen

Applications ferroviaires - Matériel roulant - Règles d'installation du câblage

Ta slovenski standard je istoveten z: **EN 50343:2024**

ICS:

45.060.01	Železniška vozila na splošno	Railway rolling stock in general

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English Version

Railway applications - Rolling stock - Rules for installation of cabling

Applications ferroviaires - Matériel roulant - Règles d'installation du câblage

Bahnanwendungen - Fahrzeuge - Regeln für die Installation von elektrischen Leitungen

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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

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European foreword

This document (EN 50343:2024) has been prepared by CLC/SC 9XB “Electromechanical material on board rolling stock”.

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)	2025-08-12
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2027-08-12

This document supersedes EN 50343:2014 and all of its amendments and corrigenda (if any).

EN 50343:2024 includes the following significant technical changes with respect to EN 50343:2014:

— references to EN standards updated and harmonized;

— modification based on IEC 62995;

— mechanical aspects detailed;

— cable lifetime considerations in accordance with Arrhenius.

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 standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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 installation of cabling on railway vehicles and within electrical enclosures on railway vehicles, including magnetic levitation trains and trolley buses.

NOTE With respect to trolley buses, this document applies to the whole electric traction system, including current collecting circuits, power converters and the respective control circuits. The installation of other circuits is covered by street vehicle standards for example those for combustion driven buses.

This document covers cabling for making electrical connections between items of electrical equipment, including cables, busbars, terminals and plug/socket devices. It does not cover special effect conductors like fibre optic cables or hollow conductors (waveguides).

The material selection criteria given here are applicable to cables with copper conductors.

This document is not applicable to the following:

— special purpose vehicles, such as track-laying machines, ballast cleaners and personnel carriers;

— vehicles used for entertainment on fairgrounds;

— vehicles used in mining;

— electric cars;

— funicular railways.

As the field of cabling in rolling stock is also dealt with in the cable makers' standard, references are made to EN 50264 series, EN 50306 series, EN 50382 series and EN 50355.

This document applies in conjunction with the relevant product and installation standards and describes minimum requirements.

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 45545 (all parts), *Railway applications — Fire protection on railway vehicles*

EN 45545-1, *Railway applications — Fire protection on railway vehicles — Part 1: General*

EN 45545-2, *Railway applications — Fire protection on railway vehicles — Part 2: Requirements for fire behaviour of materials and components*

EN 45545-5:2013+A1:2015, *Railway applications - Fire protection on railway vehicles — Part 5: Fire safety requirements for electrical equipment including that of trolley buses, track guided buses and magnetic levitation vehicles*

EN 50121-3-1, *Railway applications — Electromagnetic compatibility — Part 3-1: Rolling stock — Train and complete vehicle*

EN 50121-3-2, *Railway applications — Electromagnetic compatibility — Part 3-2: Rolling stock — Apparatus*

EN 50124-1, *Railway applications — Insulation coordination — Part 1: Basic requirements — Clearances and creepage distances for all electrical and electronic equipment*