

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Railway applications – Rolling stock – Testing of rolling stock on completion of construction and before entry into service**

**Applications ferroviaires – Matériel roulant – Essais de matériel roulant après achèvement et avant mise en service**



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
Fax: +41 22 919 03 00  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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ELECTROTECHNICAL  
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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

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## **RAILWAY APPLICATIONS – ROLLING STOCK – TESTING OF ROLLING STOCK ON COMPLETION OF CONSTRUCTION AND BEFORE ENTRY INTO SERVICE**

### FOREWORD

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International Standard IEC 61133 has been prepared by IEC technical committee 9: Electrical equipment and systems for railways.

This standard is derived from EN 50215.

This third edition cancels and replaces the second edition, published in 2006; it constitutes a technical revision.

The main technical changes with regard to the previous edition are as follows:

- References to standards other than international have been removed from the main text so the notes refer solely to Annex B;
- Annex B has been updated with the latest European information, and cross-references between the TSIs and ENs and the clauses of IEC 61133 have been added.

The text of this standard is based on the the second edition and the following documents:

FDIS	Report on voting
9/2096/FDIS	9/2132/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

# **RAILWAY APPLICATIONS – ROLLING STOCK – TESTING OF ROLLING STOCK ON COMPLETION OF CONSTRUCTION AND BEFORE ENTRY INTO SERVICE**

## **1 Scope**

This International Standard specifies general criteria to demonstrate by testing that newly constructed complete railway vehicles conform with standards or other normative documents.

This International Standard, as a whole or in part, applies to all railway vehicles except special purpose vehicles such as track-laying machines, ballast cleaners and personnel carriers. The extent of application of the standard for particular vehicles will be specifically mentioned in the contract, to take account, where necessary, of any legislative requirements.

NOTE 1 The parts of the standard which are applicable will depend on the type of vehicle (e.g. passenger, freight, powered trailer, etc.).

NOTE 2 The scope of this standard excludes railbound and road/rail vehicles for construction and maintenance of railway infrastructure.

NOTE 3 This standard does not deal with tests carried out on components or equipment before fitting to the vehicle.

In so far as this International Standard is applicable, it may be used for the following:

- generator sets mounted on a vehicle provided for auxiliary purposes;
- electrical transmission used on trolley buses or similar vehicles;
- control and auxiliary equipment of vehicles with non-electrical propulsion systems;
- vehicles guided, supported or electrically propelled by systems which do not use the adhesion between wheel and rail.

NOTE 4 Specific technical requirements apply to vehicles which operate on the railways in the European Union. The source of those requirements is given in Annex B. Where a European requirement applies to a given clause, a note has been inserted at the end of the clause.

## **2 Normative references**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60077 (all parts), *Railway applications – Electric equipment for rolling stock*

IEC 60310:2015, *Railway applications – Traction transformers and inductors on board rolling stock*

IEC 60322:2001, *Railway applications – Electric equipment for rolling stock – Rules for power resistors of open construction*

IEC 60349 (all parts), *Electric traction – Rotating electrical machines for rail and road*

IEC 60494-1:2013, *Railway applications – Rolling stock – Pantographs – Characteristics and tests – Part 1: Pantographs for main line vehicles*