IEC

IEC 62917

Edition 1.0 2016-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Railway applications – Fixed installations – Electric traction – Copper and copper alloy grooved contact wires

Applications ferroviaires – Installations fixes – Traction électrique – Fils de contact rainurés en cuivre et en cuivre allié

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FOREWORD

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International Standard IEC 62917 has been prepared by IEC technical committee 9: Electrical equipment and systems for railways.

This first edition is based on European standard EN 50149:2012.

The main technical changes with regard to EN 50149:2012 are as follows:

- extended range of cross-sections,
- changed terms and definitions,
- additional electrical and mechanical properties,
- additional special national conditions,
- for grooved contact wires.

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

FDIS	Report on voting
9/2191/FDIS	9/2202/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 website 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- withdrawn,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.

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RAILWAY APPLICATIONS – FIXED INSTALLATIONS – ELECTRIC TRACTION – COPPER AND COPPER ALLOY GROOVED CONTACT WIRES

1 Scope

This International Standard specifies the characteristics of copper and copper alloy grooved contact wires of cross-sections from 70 mm^2 to 170 mm^2 for use on overhead contact lines.

It establishes the product characteristics, the test methods, checking procedures to be used with the contact wires, together with the ordering and delivery condition.

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 60468:1974, *Method of measurement of resistivity of metallic materials*

ISO 6892-1, *Metallic materials – Tensile testing – Part 1: Method of test at room temperature*

ISO 7801:1984, *Metallic materials – Wire – Reverse bend test*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
feed stock
wire of a shape, whose cross-section is generally larger than the grooved wire cross-section, from which the contact wire is then drawn and/or rolled

3.2
sideways-coiled contact wire
contact wire coiled with vertical axis parallel or in an angle to the axis of the drum

3.3
perpendicularly coiled contact wire
contact wire coiled with the vertical axis perpendicular to the axis of the drum facing the drum with the bottom arc

3.4
joint
connection between feed stock wires before cold drawing

3.5
joint area
area of the contact wire influenced by a joint