IEC 63190

Edition 1.0 2023-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Railway applications – Fixed installations – Electric traction – Copper and copper alloy catenary wires for overhead contact line systems

Applications ferroviaires – Installations fixes – Traction électrique – Câbles porteurs longitudinaux en cuivre et en alliage de cuivre destinés aux réseaux de lignes aériennes de contact

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RAILWAY APPLICATIONS – FIXED INSTALLATIONS – ELECTRIC TRACTION – COPPER AND COPPER ALLOY CATENARY WIRES FOR OVERHEAD CONTACT LINE SYSTEMS

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IEC 63190 has been prepared by IEC technical committee 9: Electrical equipment and systems for railways. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
9/2973/FDIS	9/2994/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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- replaced by a revised edition, or
- amended.

RAILWAY APPLICATIONS – FIXED INSTALLATIONS – ELECTRIC TRACTION – COPPER AND COPPER ALLOY CATENARY WIRES FOR OVERHEAD CONTACT LINE SYSTEMS

1 Scope

This document specifies the characteristics of copper and copper alloy catenary wires for use on overhead contact lines.

This document also covers auxiliary catenary wires. It establishes the product characteristics, the test methods, checking procedures to be used with the catenary wires, together with packing, ordering and delivery conditions.

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.

IEC 60468, *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, *Metallic materials – Wire – Reverse bend test*

ISO 7802, *Metallic materials – Wire – Winding test*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
stranded conductor
conductor consisting of a number of individual uninsulated wires laid up together in left- and right-hand alternating helical layers

[SOURCE: IEC 60050-466:1990, 466-10-03]