SVENSK STANDARD

SS-EN IEC 63248, utg 1:2022

Fastställd	Sida	Ansvarig kommitté
2022-09-21	1 (1+47)	SEK TK 11

Ledare för luftledningar – Belagda eller klädda ledare för ledning med koncentrisk uppbyggnad

Conductors for overhead lines –
Coated or cladded metallic wire for concentric lay stranded conductors

Som svensk standard gäller europastandarden EN IEC 63248:2022. Den svenska standarden innehåller de officiella engelska språkversionerna av EN IEC 63248:2022 och EN IEC 63248:2022/A11:2022.

Nationellt förord

Europastandarden EN IEC 63248:2022

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC
– **IEC 63248, First edition, 2022 - Conductors for overhead lines - Coated or cladded metallic wire for concentric lay stranded conductors**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 61232, utgåva 1, 1996 med ändring SS-EN 61232, utg 1:1996/A11:2001 och SS-EN 50189, utgåva 1, 2000, gäller ej fr o m 2025-04-11.

ICS 29.060.01; 29.240.20

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Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 63248

May 2022

ICS 29.060.01; 29.240.20

Supersedes EN 61232:1995/corrigendum Feb. 1996,
EN 50189:2000, EN 61232:1995 + A11:2000

English Version

Conductors for overhead lines - Coated or cladded metallic wire for concentric lay stranded conductors (IEC 63248:2022)

Conducteurs pour lignes aériennes - Fil métallique revêtu ou recouvert pour conducteurs toronnés à couches concentriques
(IEC 63248:2022)

Leiter für Freileitungen - Beschichtete oder ummantelte Metalldrähte für Leiter aus konzentrisch verseilten Drähten
(IEC 63248:2022)

This European Standard was approved by CENELEC on 2022-04-08. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 63248:2022 E

SEK Svensk Elstandard SS-EN IEC 63248, utg 1:2022

European foreword

The text of document 7/715/FDIS, future edition 1 of IEC 63248, prepared by IEC/TC 7 "Overhead electrical conductors" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63248:2022.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2023-04-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-04-11

This document supersedes EN 61232:1995 and EN 50189:2000, and all of their amendments and corrigenda (if any).

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.

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.

Endorsement notice

The text of the International Standard IEC 63248:2022 was approved by CENELEC as a European Standard without any modification.

IEC 63248

Edition 1.0 2022-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Conductors for overhead lines – Coated or cladded metallic wire for concentric lay stranded conductors

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONDUCTORS FOR OVERHEAD LINES – COATED OR CLADDED METALLIC WIRE FOR CONCENTRIC LAY STRANDED CONDUCTORS

FOREWORD

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IEC 63248 has been prepared by IEC technical committee 7: Overhead electrical conductors. It is an International Standard.

This first edition cancels and replaces the first edition of IEC 61232 published in 1993 and the first edition of IEC 60888 published in 1997. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous editions of IEC 61232 and IEC 60888:

a) wire designations have been modified and grouped;
b) wires with zinc coating class 2 were removed;
c) new wire designations have been added;
d) aluminium-clad FeNi36 wires have been added;
e) advanced zinc-aluminium alloy coated steel wires have been added.

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

Draft	Report on voting
7/715/FDIS	7/720/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.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

IMPORTANT – The "colour inside" logo on the cover page of this document indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

The purpose of this document is to group together similar wire materials that share the same general characteristics and therefore the same test procedures and requirements. Included in this document are existing wire types from IEC 60888 and IEC 61232 as well as new wire materials that are already in use around the world in new types of conductors.

Zinc coating class 2 according to IEC 60888 has not been included in this document, as the demand for this class of zinc coating is extremely rare. Extra corrosion protection can be provided by other means, including the use of zinc-aluminium alloy coatings.

CONDUCTORS FOR OVERHEAD LINES – COATED OR CLADDED METALLIC WIRE FOR CONCENTRIC LAY STRANDED CONDUCTORS

1 Scope

This document specifies the properties of wires in the diameter range of, but not limited to, 1,25 mm to 5,50 mm. This document is applicable to coated or cladded metallic wires before stranding used either as concentric lay overhead stranded conductors, or in the manufacture of cores for concentric lay overhead stranded conductors, for power transmission purposes.

The various wire types and their designations are listed in Table A.1. For calculation purposes the values listed in Annex B are used.

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 60050 (all parts), *International Electro-technical Vocabulary (IEV)* (available at www.electropedia.org)

IEC 60468, *Method of measurement of resistivity of metallic materials*

ISO 752, *Zinc ingots*

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

ISO 7500-1, *Metallic materials – Calibration and verification of static uniaxial testing machines – Part 1: Tension/compression testing machines – Calibration and verification of the force-measuring system*

ISO 7800, *Metallic materials – Wire – Simple torsion test*

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

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

ISO 7989-2, *Steel wire and wire products – Non-ferrous metallic coatings on steel wire – Part 2: Zinc or zinc-alloy coating*