BS EN IEC 61897:2020

BSI Standards Publication

Overhead lines — Requirements and tests for Aeolian vibration dampers

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National foreword

This British Standard is the UK implementation of EN IEC 61897:2020. It is identical to IEC 61897:2020. It supersedes BS EN 61897:1999, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PEL/11, Overhead Lines.

A list of organizations represented on this committee can be obtained on request to its secretary.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61897

April 2020

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Supersedes EN 61897:1998 and all of its amendments and corrigenda (if any)

English Version

Overhead lines - Requirements and tests for Aeolian vibration dampers (IEC 61897:2020)

Lignes aériennes - Exigences et essais applicables aux amortisseurs de vibrations éoliennes (IEC 61897:2020)

Freileitungen - Anforderungen und Prüfungen für Schwingungsdämpfer (IEC 61897:2020)

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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

The text of document 11/266/FDIS, future edition 2 of IEC 61897, prepared by IEC/TC 11 "Overhead lines" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61897:2020.

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) 2021-01-07
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-04-07

This document supersedes EN 61897:1998 and all of its 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.

Endorsement notice

The text of the International Standard IEC 61897:2020 was approved by CENELEC as a European Standard without any modification.

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60050-466	1990	International Electrotechnical Vocabulary. Chapter 466: Overhead lines	-	-
IEC 60888	1987	Zinc-coated steel wires for stranded conductors	-	-
IEC 61284	1997	Overhead lines - Requirements and tests for fittings	EN 61284	1997
IEC 61854	-	Overhead lines - Requirements and tests for spacers	-	-
IEC 62567	2013	Overhead lines - Methods for testing self-damping characteristics of conductors	EN 62567	2013
ISO 1461	2009	Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods	EN ISO 1461	2009
ISO 2859-1	1999	Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection	-	-
+ A1	2011		-	-
ISO 2859-2	1985	Sampling procedures for inspection by attributes - Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection	-	-

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ISO 3951-1	2013	Sampling procedures for inspection by variables - Part 1: Specification for single sampling plans indexed by acceptance quality limit (AQL) for lot-by-lot inspection for a single quality characteristic and a single AQL	-	-
ISO 3951-2	2013	Sampling procedures for inspection by variables - Part 2: General specification for single sampling plans indexed by acceptance quality limit (AQL) for lot-by-lot inspection of independent quality characteristics	-	-
ISO 9001	2015	Quality management systems - Requirements	EN ISO 9001	2015

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OVERHEAD LINES – REQUIREMENTS AND TESTS FOR AEOLIAN VIBRATION DAMPERS

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61897 has been prepared by Technical Committee 11: Overhead lines.

This second edition cancels and replaces the first edition published in 1998. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) Consider, in addition to Stockbridge type aeolian vibration dampers, also spiral aeolian vibration dampers and elastomeric aeolian vibration dampers.
b) Consider the application of dampers on high temperature conductors, specifying additional high temperature tests in clamp slip tests.
c) Simplify the procedure of the damper effectiveness evaluation.
d) Introduce test at low temperature on fastener components such as break away bolts and conical spring washers.
e) Include figures showing the test arrangements for the main mechanical tests.

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

FDIS	Report on voting
11/266/FDIS	11/273/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 document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://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

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OVERHEAD LINES – REQUIREMENTS AND TESTS FOR AEOLIAN VIBRATION DAMPERS

1 Scope

This document applies to aeolian vibration dampers intended for single conductors or earth wires or conductor bundles where dampers are directly attached to each subconductor.

The purchaser may adopt part(s) of this document when specifying requirements for cables different from those mentioned above (e.g. optical ground wires (OPGW), all dielectric self-supporting optical cables (ADSS)).

In some cases, test procedures and test values are left to agreement between the purchaser and the supplier and are stated in the procurement contract.

Annex A lists the minimum technical details to be agreed between purchaser and supplier.

Throughout this document, the word “conductor” is used when the test applies to dampers for conductors or earth wires.

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(466):1990, *International Electrotechnical Vocabulary (IEV) – Chapter 466: Overhead lines*

IEC 60888:1987, *Zinc-coated steel wires for stranded conductors*

IEC 61284:1997, *Overhead lines – Requirements and tests for fittings*

IEC 61854, *Overhead lines – Requirements and tests for spacers*

IEC 62567:2013, *Overhead lines – Methods for testing self-damping characteristics of conductors*

ISO 1461:2009, *Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods*

ISO 2859-1:1999/AMD1:2011, *Sampling procedures for inspection by attributes – Part 1: Sampling schemes indexed by acceptable quality limit (AQL) for lot-by-lot inspection*

ISO 2859-2:1985, *Sampling procedures for inspection by attributes – Part 2: Sampling plans indexed by limiting quality level (LQ) for isolated lot inspection*

ISO 3951-1:2013, *Sampling procedures for inspection by variables – Part 1: Specification for single sampling plans indexed by acceptance quality limit (AQL) for lot-by-lot inspection for a single quality characteristic and a single AQL*

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