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**Winding wires - Test methods - Part 1: General
(IEC 60851-1:2021 + IEC 60851-1:2021/AMD1:2025)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 60851-1:2021+A1:2025 sisaldab Euroopa standardi EN IEC 60851-1:2021 ja selle muudatuse A1:2025 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60851-1:2021+A1:2025 consists of the English text of the European standard EN IEC 60851-1:2021 and its amendment A1:2025.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.08.2021, muudatus A1 21.02.2025.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 06.08.2021, for A1 21.02.2025.
Muudatusega A1 lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega $\boxed{A_1}$ $\langle A_1 \rangle$. Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	The start and finish of text introduced or altered by amendment A1 is indicated in the text by tags $\boxed{A_1}$ $\langle A_1 \rangle$. The standard is available from the Estonian Centre for Standardisation and Accreditation.

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ICS 29.060.10

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English Version

**Winding wires - Test methods - Part 1: General
(IEC 60851-1:2021 + IEC 60851-1:2021/AMD1:2025)**

Fils de bobinage - Méthodes d'essai - Partie 1: Généralités
(IEC 60851-1:2021 + IEC 60851-1:2021/AMD1:2025)

Wickeldrähte - Prüfverfahren - Teil 1: Allgemeines
(IEC 60851-1:2021 + IEC 60851-1:2021/AMD1:2025)

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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

European foreword

The text of document 55/1913/FDIS, future edition 3 of IEC 60851-1, prepared by IEC/TC 55 “Winding wires” was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60851-1:2021.

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) 2022-04-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-07-21

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60264 (series) NOTE Harmonized as EN 60264 (series)

IEC 60851 (series) NOTE Harmonized as EN 60851 (series)

A1 Amendment A1 European foreword

The text of document 55/2057/FDIS, future edition 3 of IEC 60851-1/AMD1, prepared by TC 55 "Winding wires" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60851-1:2021/A1:2025.

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2026-02-28
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Edition 3.1 2025-01
CONSOLIDATED VERSION

INTERNATIONAL STANDARD



**Winding wires – Test methods –
Part 1: General**



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IEC 60851-1

Edition 3.1 2025-01
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INTERNATIONAL STANDARD



**Winding wires – Test methods –
Part 1: General**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

WINDING WIRES – TEST METHODS –

Part 1: General

FOREWORD

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IEC 60851-1 has been prepared by IEC technical committee 55: Winding wires. It is an International Standard.

This third edition cancels and replaces the second edition published in 1996, and its amendment 1:2003 and amendment 2:2009. This edition constitutes a technical revision.

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

- a) revision to Clause 2 to update the list of normative references;
- b) revision to 3.2 atmospheric conditions for testing;
- c) addition to 3.2 with remarks concerning frequency and management of tests;
- d) A1 *deleted text* A1

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

FDIS	Report on voting
55/1913/FDIS	55/1916/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.

A1 *deleted text* **A1**

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A1 Amendment A1 FOREWORD

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Amendment 1 to IEC 60851-1:2021 has been prepared by IEC technical committee 55: Winding wires.

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

Draft	Report on voting
55/2057/FDIS	55/2059/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 Amendment 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/publications/.

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INTRODUCTION

This Part of IEC 60851 forms an element of a series of standards which deals with insulated wires used for windings in electrical equipment. It is composed of the following series:

- 1) *Winding wires – Test methods* (IEC 60851 series);
- 2) *Specifications for particular types of winding wires* (IEC 60317 series);
- 3) *Packaging of winding wires* (IEC 60264 series).

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WINDING WIRES – TEST METHODS –

Part 1: General

1 Scope

This part of IEC 60851 specifies the general notes on methods of test for winding wires. It also gives the definitions for terms used in IEC 60851 (all parts). ~~deleted text~~

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 60317 (all parts), *Specifications for particular types of winding wires*

IEC 60851-2:2009¹, *Winding wires – Test methods – Part 2: Determination of dimensions*
IEC 60851-2:2009/AMD1:2015
IEC 60851-2:2009/AMD2:2019

IEC 60851-3:2009², *Winding wires – Test methods – Part 3: Mechanical properties*
IEC 60851-3:2009/AMD1:2013
IEC 60851-3:2009/AMD2:2019

IEC 60851-4:2016, *Winding wires – Test methods – Part 4: Chemical properties*

IEC 60851-5:2008³, *Winding wires – Test methods – Part 5: Electrical properties*
IEC 60851-5:2008/AMD1:2011
IEC 60851-5:2008/AMD2:2019

IEC 60851-6:2012, *Winding wires – Test methods – Part 6: Thermal properties*

3 Terms, definitions and general notes on methods of test

3.1 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>

¹ A consolidated version of IEC 60851-2:2009 and its amendments exists.

² A consolidated version of IEC 60851-3:2009 and its amendments exists.

³ A consolidated version of IEC 60851-5:2008 and its amendments exists.