ICS 29.060.10 SLOVENSKÁ TECHNICKÁ NORMA December 2023

STN	**Vodiče na vinutia Skúšobné metódy Časť 3: Mechanické vlastnosti**	**STN EN IEC 60851-3 34 7010**

Winding wires - Test methods - Part 3: Mechanical properties

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/23

Obsahuje: EN IEC 60851-3:2023, IEC 60851-3:2023

Oznámením tejto normy sa od 26.09.2026 ruší
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60851-3

September 2023

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Supersedes EN 60851-3:2009;
EN 60851-3:2009/A1:2013; EN 60851-3:2009/A2:2019

English Version

Winding wires - Test methods - Part 3: Mechanical properties (IEC 60851-3:2023)

Fils de bobinage - Méthodes d'essai - Partie 3: Propriétés mécaniques
(IEC 60851-3:2023)

Wickeldrähte - Prüfverfahren - Teil 3: Mechanische Eigenschaften
(IEC 60851-3:2023)

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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 60851-3:2023 E

European foreword

The text of document 55/1938/CDV, future edition 4 of IEC 60851-3, prepared by IEC/TC 55 "Winding wires" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60851-3:2023.

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)	2024-06-26
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2026-09-26

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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.

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Endorsement notice

The text of the International Standard IEC 60851-3:2023 was approved by CENELEC as a European Standard without any modification.

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

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

IEC 60317 (series) NOTE Approved as EN 60317 (series)

IEC 60851-1 NOTE Approved as EN IEC 60851-1

IEC 60851-5:2008 NOTE Approved as EN 60851-5:2008 (not modified)

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.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60851-2	2009	Winding wires - Test methods - Part 2: Determination of dimensions	EN 60851-2	2009
+ A1	2015		+ A1	2015
+ A2	2019		+ A2	2019
ISO 178	2019	Plastics - Determination of flexural properties	EN ISO 178	2019

IEC 60851-3

Edition 4.0 2023-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Winding wires – Test methods – Part 3: Mechanical properties

Fils de bobinage – Méthodes d'essai – Partie 3: Propriétés mécaniques

IEC 60851-3:2023-08(en-fr)

IEC 60851-3

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CONTENTS

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WINDING WIRES – TEST METHODS –

Part 3: Mechanical properties

FOREWORD

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IEC 60851-3 has been prepared by IEC technical committee 55: Winding wires. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2009, Amendment 1:2013 and Amendment 2:2019. This edition constitutes a technical revision.

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

a) Clarification of the distance measurement for determining loss of adhesion in 6.6.3, 6.6.4 for fibre-covered wires and 6.6.5 for tape-wrapped wires.

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

Draft	Report on voting
55/1938/CDV	55/1974/RVC

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/publications.

A list of all parts in the IEC 60851 series, published under the general title *Winding wires – Test methods*, can be found on the IEC website.

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, or
- revised.

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

This part of IEC 60851 forms an element of a series of standards, which deals with insulated wires used for windings in electrical equipment. The series has three groups describing:

a) winding wires – Test methods (IEC 60851);

b) specifications for particular types of winding wires (IEC 60317);

c) packaging of winding wires (IEC 60264).

WINDING WIRES – TEST METHODS –

Part 3: Mechanical properties

1 Scope

This part of IEC 60851 specifies the following test methods for winding wires:

– Test 6: Elongation;
– Test 7: Springiness;
– Test 8: Flexibility and adherence;
– Test 11: Resistance to abrasion;
– Test 18: Heat bonding.

For definitions, general notes on test methods and the complete series of test methods for winding wires, IEC 60851-1 applies. This document also provides recommended friction test methods in Annex B.

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

ISO 178:2019, *Plastics – Determination of flexural properties*