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Winding wires – Test methods – Part 1: General

INTERNATIONAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

WINDING WIRES – TEST METHODS –

Part 1: General

FOREWORD

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 60851-1 edition 3.1 contains the third edition (2021-06) [documents 55/1913/FDIS and 55/1916/RVD] and its amendment 1 (2025-01) [documents 55/2057/FDIS and 55/2059/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

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) revision to Annex A to update the contents list of IEC 60851 series of tests.~~

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.

~~Annex A is for information only.~~

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 and its amendment 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

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- revised.

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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).

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). ~~A survey of the contents of IEC 60851-2 to IEC 60851-6 is given in Annex A.~~

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*

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.

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