INTERNATIONAL STANDARD

IEC 60216-4-1

Fourth edition
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Electrical insulating materials – Thermal endurance properties –

Part 4-1: Ageing ovens – Single-chamber ovens

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL INSULATING MATERIALS – THERMAL ENDURANCE PROPERTIES –

Part 4-1: Ageing ovens – Single-chamber ovens

FOREWORD

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International Standard IEC 60216-4-1 was prepared by subcommittee 15E: Methods of test, of IEC technical committee 15: Insulating materials, which has now been merged with IEC technical committee 98: Electrical insulation systems into IEC technical committee 112: Evaluation and qualification of electrical insulating materials and systems (provisional title).

This fourth edition of IEC 60216-4-1 cancels and replaces the third edition, published in 1990, and constitutes a technical revision.

The main changes with regard to the previous edition is that this edition adapts IEC 60216-4-1 to the technical content and the editorial form of IEC 60216-4-2 and IEC 60216-4-3. In addition, errors and omissions in the third edition have been corrected.

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

FDIS	Report on voting
112/16/FDIS	112/23/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

IEC 60216, under the general title *Electrical insulating materials – Thermal endurance properties*, is composed of several parts:

Part 1: Ageing procedures and evaluation of test results

Part 2: Determination of thermal endurance properties of electrical insulating materials – Choice of test criteria[1]

Part 3: Instructions for calculating thermal endurance characteristics

Part 4-1: Ageing ovens – Single-chamber ovens

Part 4-2: Ageing ovens – Precision ovens for use up to 300 °C

Part 4-3: Ageing ovens – Multi-chamber ovens

Part 5: Determination of relative thermal endurance index (RTE) of an insulating material

Part 6: Determination of thermal endurance indices (TI and RTE) of an insulating material using the fixed time frame method

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

A bilingual version of this publication may be issued at a later date.

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1 For revisions and new parts, see the current catalogue of IEC publications for an up-to-date list.

ELECTRICAL INSULATING MATERIALS – THERMAL ENDURANCE PROPERTIES –

Part 4-1: Ageing ovens – Single-chamber ovens

1 Scope

This part of IEC 60216 covers minimum requirements for ventilated and electrically heated single-chamber ovens, with or without forced gas circulation, for thermal endurance evaluation of electrical insulation. It covers ovens designed to operate over all or part of the temperature range from 20 °C above ambient to 500 °C. It gives acceptance tests and in-service monitoring tests for these ageing ovens.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*

IEC 60335 (all parts), *Household and similar electrical appliances – Safety*