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Electrical insulating materials - Thermal endurance properties - Part 3: Instructions for calculating thermal endurance characteristics

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. 07/21

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EN IEC 60216-3

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Supersedes EN 60216-3:2006 and all of its amendments
and corrigenda (if any)

English Version

**Electrical insulating materials - Thermal endurance properties -
Part 3: Instructions for calculating thermal endurance
characteristics
(IEC 60216-3:2021)**

Matiériaux isolants électriques - Propriétés d'endurance
thermique - Partie 3: Instructions pour le calcul des
caractéristiques d'endurance thermique
(IEC 60216-3:2021)

Elektroisolierstoffe - Eigenschaften hinsichtlich des
thermischen Langzeitverhaltens - Teil 3: Anweisungen zur
Berechnung thermischer Langzeitkennwerte
(IEC 60216-3:2021)

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EN IEC 60216-3:2021 (E)**European foreword**

The text of document 112/475/CDV, future edition 3 of IEC 60216-3, prepared by IEC/TC 112 "Evaluation and qualification of electrical insulating materials and systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60216-3:2021.

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IEC 60216-2 NOTE Harmonized as EN 60216-2

IEC 60216-5 NOTE Harmonized as EN 60216-5

IEC 60216-6 NOTE Harmonized as EN 60216-6

Annex ZA
(normative)**Normative references to international publications
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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60216-1	2013	Electrical insulating materials - Thermal endurance properties - Part 1: Ageing procedures and evaluation of test results	EN 60216-1	2013



IEC 60216-3

Edition 3.0 2021-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Electrical insulating materials – Thermal endurance properties –
Part 3: Instructions for calculating thermal endurance characteristics**

**Matériaux isolants électriques – Propriétés d'endurance thermique –
Partie 3: Instructions pour le calcul des caractéristiques d'endurance thermique**





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IEC 60216-3

Edition 3.0 2021-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Electrical insulating materials – Thermal endurance properties –
Part 3: Instructions for calculating thermal endurance characteristics**

**Matériaux isolants électriques – Propriétés d'endurance thermique –
Partie 3: Instructions pour le calcul des caractéristiques d'endurance thermique**

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ELECTRICAL INSULATING MATERIALS – THERMAL ENDURANCE PROPERTIES –

Part 3: Instructions for calculating thermal endurance characteristics

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IEC 60216-3 has been prepared by IEC technical committee 112: Evaluation and qualification of electrical insulating materials and systems. It is an International Standard.

This third edition cancels and replaces the second edition published in 2006. This edition constitutes a technical revision.

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

- a) a new computer program has been included;
- b) Annex E " has been completely reworked.

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

Draft	Report on voting
112/475/CDV	112/495/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/standardsdev/publications.

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ELECTRICAL INSULATING MATERIALS – THERMAL ENDURANCE PROPERTIES –

Part 3: Instructions for calculating thermal endurance characteristics

1 Scope

This part of IEC 60216 specifies the calculation procedures used for deriving thermal endurance characteristics from experimental data obtained in accordance with the instructions of IEC 60216-1 and IEC 60216-2 [1]¹, using fixed ageing temperatures and variable ageing times.

The experimental data can be obtained using non-destructive, destructive or proof tests. Data obtained from non-destructive or proof tests can be incomplete, in that it is possible that measurement of times taken to reach the end-point will have been terminated at some point after the median time but before all specimens have reached end-point.

The procedures are illustrated by worked examples, and suitable computer programs are recommended to facilitate the calculations.

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 60216-1:2013, *Electrical insulating materials – Thermal endurance properties – Part 1: Ageing procedures and evaluation of test results*

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