Electrical insulating materials - Thermal endurance properties -- Part 5: Determination of relative thermal endurance index (RTE) of an insulating material

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60216-5:2008 sisaldab Euroopa standardi EN 60216-5:2008 ingliskeelset teksti.	This Estonian standard EVS-EN 60216-5:2008 consists of the English text of the European standard EN 60216-5:2008.
Standard on kinnitatud Eesti Standardikeskuse 24.07.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 24.07.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 29.05.2008.	Date of Availability of the European standard text 29.05.2008.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 19.020, 29.020, 29.035.01

Võtmesõnad:

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60216-5

May 2008

ICS 19.020; 29.020; 29.035.01

Supersedes EN 60216-5:2003

English version

Electrical insulating materials - Thermal endurance properties - Part 5: Determination of relative thermal endurance index (RTE) of an insulating material

(IEC 60216-5:2008)

Matériaux isolants électriques - Propriétés d'endurance thermique - Partie 5: Détermination de l'indice d'endurance thermique relatif (RTE) d'un matériau isolant (CEI 60216-5:2008)

Elektroisolierstoffe - Eigenschaften hinsichtlich des thermischen Langzeitverhaltens - Teil 5: Bestimmung des relativen thermischen Lebensdauer-Indexes (RTE) von Elektroisolierstoffen (IEC 60216-5:2008)

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 60216-5:2008 E

Foreword

The text of document 112/89/FDIS, future edition 3 of IEC 60216-5, prepared by IEC TC 112, Evaluation and qualification of electrical insulating materials and systems, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60216-5 on 2008-05-01.

This European Standard supersedes EN 60216-5:2003.

EN 60216-5:2008 clarifies and corrects a few items and adds an Annex D which provides criteria for the selection of the reference (or reference EIM). EN 60216-5:2008 provides instructions for deriving a provisional estimate of the temperature up to which a material may give satisfactory performance in an application (by comparative thermal ageing with a material of known performance).

This standard is to be used in conjunction with EN 60216-1, EN 60216-2 and EN 60216-3.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2009-02-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2011-05-01

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 60216-5:2008 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60085 NOTE Harmonized as EN 60085:2008 (not modified).

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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60216-1	2001	Electrical insulating materials - Properties of thermal endurance - Part 1: Ageing procedures and evaluation of test results	EN 60216-1	2001
IEC 60216-2	-[1)]	Electrical insulating materials - Thermal endurance properties - Part 2: Determination of thermal endurance properties of electrical insulating materials - Choice of test criteria	EN 60216-2	2005[2)]
IEC 60216-3	2006	Electrical insulating materials - Thermal endurance properties - Part 3: Instructions for calculating thermal endurance characteristics	EN 60216-3	2006

[1)] Undated reference.

[2)] Valid edition at date of issue.

CONTENTS

ELECTRICAL INSULATING MATERIALS – THERMAL ENDURANCE PROPERTIES –

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

1 Scope

This part of IEC 60216 specifies the experimental and calculation procedures to be used for deriving the relative thermal endurance index of a material from experimental data obtained in accordance with the instructions of IEC 60216-1 and IEC 60216-2. The calculation procedures are supplementary to those of IEC 60216-3.

Guidance is also given for assessment of thermal ageing after a single fixed time and temperature, without extrapolation.

The experimental data may in principle be obtained using destructive, non-destructive or proof tests, although destructive tests have been much more extensively employed. Data obtained from non-destructive or proof tests may be “censored”, in that measurement of times taken to reach the endpoint may have been terminated at some point after the median time but before all specimens have reached end-point (see IEC 60216-1).

Guidance is given for preliminary assignment of a thermal class for an insulating material, based upon the thermal ageing performance.

The calculation procedures of this standard also apply to the determination of the thermal class of an electrical insulation system when the thermal stress is the prevailing ageing factor.

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.

IEC 60216-1:2001, *Electrical insulating materials – Properties of thermal endurance – Part 1: Ageing procedures and evaluation of test results*

IEC 60216-2, *Electrical insulating materials – Thermal endurance properties – Part 2: Determination of thermal endurance properties of electrical insulating materials – Choice of test criteria*

IEC 60216-3:2006, *Electrical insulating materials – Thermal endurance properties – Part 3: Instructions for calculating thermal endurance characteristics*

3 Terms, definitions, symbols, units and abbreviations

For the purposes of this document, the following terms, definitions, symbols, units and abbreviated terms apply.