

Electrical insulation - Thermal evaluation and designation

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EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

<p>Käesolev Eesti standard EVS-EN 60085:2008 sisaldab Euroopa standardi EN 60085:2008 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 20.02.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 11.01.2008.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 60085:2008 consists of the English text of the European standard EN 60085:2008.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 20.02.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 11.01.2008.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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Võtmesõnad:

Standardite reprodutseerimis- ja levitamisoigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
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English version

**Electrical insulation -
Thermal evaluation and designation
(IEC 60085:2007)**

Isolation électrique -
Evaluation et désignation thermiques
(CEI 60085:2007)

Elektrische Isolierung -
Thermische Bewertung und Bezeichnung
(IEC 60085:2007)

This European Standard was approved by CENELEC on 2007-12-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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

Foreword

The text of document 112/74/FDIS, future edition 4 of IEC 60085, 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 60085 on 2007-12-01.

This European Standard supersedes EN 60085:2004 and EN 62114:2001.

The major technical changes with regard to EN 60085:2004 concern the fact that EN 60085:2008 is an amalgamation of EN 60085:2004 together with EN 62114:2001.

The following dates were fixed:

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| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2008-09-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2010-12-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60085:2007 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 60216-6	NOTE Harmonized as EN 60216-6:2006 (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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60216-1	- ¹⁾	Electrical insulating materials - Properties of thermal endurance - Part 1: Ageing procedures and evaluation of test results	EN 60216-1	2001 ²⁾
IEC 60216-5	- ¹⁾	Electrical insulating materials - Thermal endurance properties - Part 5: Determination of relative thermal endurance index (RTE) of an insulating material	EN 60216-5	2003 ²⁾
IEC 60505	- ¹⁾	Evaluation and qualification of electrical insulation systems	EN 60505	2004 ²⁾
IEC 61857	Series	Electrical insulation systems - Procedures for thermal evaluation	EN 61857	Series
IEC 61858	- ¹⁾	Electrical insulation systems - Thermal evaluation of modifications to an established wire-wound EIS	EN 61858	2005 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

ELECTRICAL INSULATION – THERMAL EVALUATION AND DESIGNATION

1 Scope

This International Standard now distinguishes between thermal classes for electrical insulation systems and electrical insulating materials. It establishes the criteria for evaluating the thermal endurance of either electrical insulating materials (EIM) or electrical insulation systems (EIS). It also establishes the procedure for assigning thermal classes.

This standard is applicable where the thermal factor is the dominant ageing factor.

NOTE A thermal class is not assigned to an EIM as related to its use in an EIS

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: *Electrical insulating materials – Properties of thermal endurance – Part 1: Ageing procedures and evaluation of test results*

IEC 60216-5, *Electrical insulating materials – Thermal endurance properties – Part 5: Determination of relative thermal endurance index (RTE) of an insulating material*

IEC 60505: *Evaluation and qualification of electrical insulation systems*

IEC 61857 (all parts), *Electrical insulation systems – Procedures for thermal evaluation*

IEC 61858, *Electrical insulation systems – Thermal evaluation of modifications to an established wire-wound EIS*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60505, as well as the following, apply.

3.1

electrical insulating material (EIM)

solid or fluid with negligibly low electric conductivity, or a simple combination of such materials, used to separate conducting parts at different electrical potential in electrotechnical devices

NOTE 1 A “simple combination” may be a combination of EIM delivered in a joint state, for example, a flexible material consisting of a paper laminated on polyethylene terephthalate film.

NOTE 2 For testing purposes, electrodes may be applied on material specimens without this combination formally constituting an EIS to be tested as such.