

Guide for the determination of thermal endurance properties of electrical insulating materials

Part 2. Choice of test criteria

(Implementation of CENELEC HD 611.2 S1 : 1992)

UDC 621.315.61 : 620.193.94

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee GEL/15, Insulating material, to Subcommittee GEL/15/2, Endurance tests, upon which the following bodies were represented:

- AEA Technology
- Adhesive Tape Manufacturers' Association
- Association of Manufacturers of Domestic Electrical Appliances
- British Cable Makers Confederation
- British Plastics Federation
- ERA Technology Ltd.
- University of Manchester

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National foreword

This British Standard has been prepared by Subcommittee GEL/15/2. It implements Harmonization Document HD 611.2 S1 which was published by the European Committee for Electrotechnical Standardization (CENELEC). It is identical with IEC 216-2 : 1990 *Guide for the determination of thermal endurance properties of electrical insulating materials Part 2: Choice of test criteria*, published by the International Electrotechnical Commission (IEC).

Cross-references

Publication referred to	Corresponding British Standard
IEC 317	BS 6811 <i>Winding wires</i>
IEC 394	BS 5689 <i>Varnished fabrics for electrical purposes</i>
IEC 455-2-2 : 1984	BS 5664 <i>Solventless polymerisable resinous compounds used for electrical insulation</i> Part 2 <i>Methods of test</i> Section 2.2 : 1988 <i>Coating powders</i>
IEC 464-2 : 1974	BS 5629 <i>Insulating varnishes containing solvent</i> Part 2 : 1979 <i>Test methods</i>
IEC 554	BS 5626 <i>Cellulosic papers for electrical purposes</i>
IEC 626	BS 5785 <i>Combined flexible materials for electrical insulation</i>
IEC 641	BS 5937 <i>Pressboard and presspaper for electrical purposes</i>
IEC 667	BS 6091 <i>Vulcanized fibre for electrical purposes</i>
IEC 674	BS 7290 <i>Plastic films for electrical purposes</i>
IEC 684-2 : 1984	BS 6893 <i>Flexible insulating sleeving for electrical purposes</i> Part 2 : 1987 <i>Methods of test</i>
IEC 763	BS 5354 <i>Specification for laminated pressboard for electrical purposes</i>
IEC 795 : 1984	BS 6921 : 1988 <i>Method for evaluation of the thermal endurance of flexible sheet electrical insulating materials using the wrapped tube method</i> BS 6469 : 1988 <i>Insulating and sheathing materials of electric cables</i> Part 1 <i>Methods of test for general application</i>
HD 505.1.1 S3 : 1991 (IEC 811-1-1 : 1985)	Section 1.1 : 1992 <i>Measurement of thickness and overall dimensions. Tests for determining the mechanical properties</i>
HD 505.1.2 S2 : 1991 (IEC 811-1-2 : 1985)	Section 1.2 : 1992 <i>Thermal ageing methods</i>
HD 505.3.2 S1 : 1988 (IEC 811-3-2 : 1985)	Part 3 <i>Methods of test specific to PVC compounds</i> Section 3.2 : 1992 <i>Loss of mass test. Thermal stability test</i>

Publication referred to	Corresponding British Standard
	BS 2782 <i>Methods of testing plastics</i> Part 3 <i>Mechanical properties</i>
ISO 178 : 1993 ¹⁾	Method 335A : 1993 <i>Determination of flexural properties</i>
ISO 179 : 1993 ¹⁾	Method 359 : 1993 <i>Determination of Charpy impact strength</i>
ISO 527-1 : 1993 ¹⁾	Method 321 : 1994 <i>Determination of tensile properties. General principles</i>
ISO 527-2 : 1993 ¹⁾	Method 322 : 1994 <i>Determination of tensile properties, test conditions for moulding and extrusion plastics</i>
ISO 1520 : 1973	BS 3900 <i>Methods of test for paints</i> Part E4 : 1976 <i>Cupping test</i>
ISO 1924	BS 4415 <i>Determination of the tensile properties of paper and board</i>

Compliance with a British Standard does not of itself confer immunity from legal obligations.

¹⁾ These ISO standards have superseded the editions listed in annex ZA.

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Descriptors: Insulating material, material, list, test procedure, thermal endurance test

English version

**Guide for the determination of thermal endurance
properties of electrical insulating materials
Part 2: Choice of test criteria
(IEC 216-2 : 1990)**

Guide pour la détermination des propriétés
d'endurance thermique de matériaux isolants
électriques
Deuxième partie: Choix de critères d'essai
(CEI 216-2 : 1990)

Leitlinie zur Bestimmung der thermischen
Langzeiteigenschaften von
Elektroisolierstoffen
Teil 2: Wahl der Prüfmerkmale
(IEC 216-2 : 1990)

This Harmonization Document was approved by CENELEC on 1992-06-16. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document on a national level.

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

This Harmonization Document exists in three official versions (English, French, German).

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

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Foreword

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 216-2 : 1990 could be accepted without textual changes, has shown that no common modifications were necessary for acceptance as a Harmonization Document.

The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as HD 611.2 S1 on 16 June 1992.

The following dates were fixed:

- latest date of announcement of the HD at national level (doa) 1992-12-01
- latest date of publication of a harmonized national standard (dop) 1993-06-01
- latest date of withdrawal of conflicting national standards (dow) 1993-06-01

Annexes designated 'normative' are part of the body of the standard. In this standard, annex ZA is normative.