

INTERNATIONAL STANDARD

IEC 60811-1-2

1985

AMENDMENT 2
2000-07

Amendment 2

Common test methods for insulating and sheathing materials of electric cables –

**Part 1-2:
Methods for general application –
Thermal ageing methods**

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*

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International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE

F

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OREWORD

This amendment has been prepared by IEC technical committee 20: Electric cables.

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

FDIS	Report on voting
20/397/FDIS	20/410/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until 2006. At this date, the publication will be

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- withdrawn;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

Cover page, title page, page 5 and page 7

Amend the main title to read:

Common test methods for insulating and sheathing materials of electric and optical cables

Page 7

1 Scope

Add, to the end of the first paragraph, the following text:

..., and in offshore applications.

Page 9

8.1.2 Equipment

Delete the text of the final paragraph and insert the following new text:

Unless otherwise specified in the relevant cable specification a rotating fan inside the oven is allowed when testing rubber compounds. For all other compounds a fan shall not be used inside the oven, and in cases of dispute rubber compounds shall also be tested in an oven which is designed to operate without a fan rotating inside it.

Page 5 (Amendment 1)

8.1.3.1 Ageing of prepared test pieces of insulating material without conductor and of sheathing material

Delete the text of the fifth paragraph and insert the following new text:

Compounds of obviously different compositions shall not be tested at the same time in the same oven.

8.1.3.2 Ageing of prepared test pieces of cores with original conductor

Replace the text of this subclause by the following new text:

- a) If, after ageing, the conductor and the separator, if any, can be removed without damaging the insulation, the procedure shall be as follows: samples of core, cut into pieces which are sufficiently long, shall be taken, preferably from positions close to that from which the samples for the tensile tests without ageing are taken in accordance with 9.1.3 of IEC 60811-1-1. They shall then be aged as described in 8.1.3.1, after which the conductor shall be removed and the cross-sectional area of the test pieces shall be determined according to 9.1.4 b) of IEC 60811-1-1. The tensile test shall then be carried out in accordance with 9.1.7 of IEC 60811-1-1.
- b) If it is not possible to remove the conductor or the separator, if any, after the ageing procedure without damaging the insulation, the appropriate preparation and test method shall be applied as given in table 1.

IEC 60811-1-2:1985/AMD2:2000

<https://standards.iteh.ai/catalog/standards/iec/a732173d-4f17-499d-b66e-34f6d4533145/iec-60811-1-2-1985-amd2-2000>

Table 1 – Summary of ageing tests for insulated conductors in case of difficulties in preparing test pieces due to conductor insulation or separator adhesion during ageing

Class of copper conductor and conductor form	Test method
Class 1: plain copper	See 8.1.3.3 a) or if this method also gives rise to adhesion problems, see 8.1.3.4. Ageing followed by the bending test is considered the acceptance procedure in case of dispute
Class 1: metal coated or with a separator around the conductor	See 8.1.3.4
Class 2: circular conductors up to and including 16 mm ² and having plain or metal coated wires and with or without separator as appropriate	See 8.1.3.4
Class 2: conductors above 16 mm ² , circular or shaped, and having plain or metal-coated wires	See 8.1.3.5
Classes 5 and 6: conductors up to and including 16 mm ² having plain or metal-coated wires and with or without separator as appropriate	See 8.1.3.3 b) or if this method also gives rise to adhesion problems see 8.1.3.4. Ageing followed by the bending test is considered the acceptance procedure in case of dispute
Classes 5 and 6: conductors above 16mm ² having plain or metal-coated wires	See 8.1.3.5
NOTE In the case of the bending test (8.1.3.4), ageing conditions may be different from those requiring the determination of tensile properties (8.1.3.2 and 8.1.3.3); see the relevant cable standard.	