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IRISH STANDARD

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COMMON TEST METHODS FOR CABLES UNDER FIRE CONDITIONS TESTS ON GASES EVOLVED DURING COMBUSTION OF MATERIALS FROM CABLES

PART 1: APPARATUS

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English version

Common test methods for cables under fire conditions Tests on gases evolved during combustion of materials from cables Part 1: Apparatus

Méthodes d'essai communes aux câbles soumis au feu - Essais sur les gaz émis lors de la combustion d'un matériau prélevé sur un câble
Partie 1: Appareillage d'essai

Allgemeine Prüfverfahren für das Verhalten von Kabeln und isolierten Leitungen im Brandfall - Prüfung der bei der Verbrennung der Werkstoffe von Kabeln und isolierten Leitungen entstehenden Gase
Teil 1: Prüfgerät

This European Standard was approved by CENELEC on 1998-04-01. 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.

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CENELEC

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

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FOREWORD

This European Standard was prepared by the Technical Committee CENELEC TC20, Electric Cables.

When used in conjunction with EN 50267-2-3 this European Standard supersedes HD 602 S1:1992.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50267-1 on 1998-04-01.

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)	1999-03-01
-	latest date by which national standards conflicting with the EN have to be withdrawn	(dow)	2000-03-01

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1. Scope

EN 50267-1 specifies apparatus suitable for use with procedures for the quantitative determination of gases, especially acidic and corrosive gases, evolved when non-metallic materials taken from cables are subject to combustion.

2. Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 60695-4: Fire hazard testing. Part 4: Terminology concerning fire tests.

Note: IEC 60695 is in the course of re-numbering its Parts and Sections. This will also affect the equivalent ENs.

3. Definition

For the purposes of EN 50267-1 the following definition applies. The definition is taken from EN 60695-4.

3.1 **Combustion**: Exothermic reaction of a substance with an oxidizer with emission of effluent, generally accompanied by flames and/or glowing and/or emission of smoke.

4. Test apparatus

4.1 General

The principle diagrams of the apparatus are shown in figures 1 to 5.

The assembly of the components which constitute the test apparatus shall be leak-tight. The connecting distances between the tube and the first wash bottle and between the first and the second wash bottle shall be as short as possible. Glass or silicone rubber tubing shall be used for these connections.

NOTE: At the exit side of the tube, as close to the end as possible, it is permitted to place a plug of silica wool (typically weighing about 3 g) to aid collection of condensates.

4.2 Tube furnace

The effective length of the heating zone of the furnace shall be 500 mm to 600 mm and its inside diameter 40 mm to 60 mm. It shall be equipped with an electrically adjusted heating system.