National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 50265-1:1999

ICS 13.220.40
29.060.20

National Standards
Authority of Ireland
Dublin 9
Ireland

Tel: (01) 807 3800
Tel: (01) 807 3838

COMMON TEST METHODS FOR CABLES UNDER FIRE CONDITIONS - TEST FOR RESISTANCE TO VERTICAL FLAME PROPAGATION FOR A SINGLE INSULATED CONDUCTOR OR CABLE

PART 1: APPARATUS

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EUROPEAN STANDARD

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Supersedes HD 405.1 S1:1983 + A1:1992 & HD 405.2 S1:1991

Descriptors: Electrical installation, electrical cables, insulated conductors, insulated cables, fire tests, flammability tests, flame propagation, test equipment

English version

Common test methods for cables under fire conditions - Test for resistance to vertical flame propagation for a single insulated conductor or cable Part 1: Apparatus

Méthodes d'essai communes aux câbles soumis au feu - Essai de résistance à la propagation verticale de la flamme sur un conducteur ou câble isolé
Partie 1: Appareillage d'essai

Allgemeine Prüfverfahren für das Verhalten von Kabeln und isolierten Leitungen im Brandfall - Prüfung der vertikalen Flammenausbreitung an einer Ader oder einem Kabel
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

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

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FOREWORD

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

When used in conjunction with EN 50265-2-1 and EN 50265-2-2 this European Standard supersedes HD 405.1 S1 + A1 and HD 405.2 S1 respectively.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50265-1 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

Annexes designated "informative" are given for information only.
In this standard, Annex A is informative.

CONTENTS

1 Scope

EN 50265 specifies methods of test for resistance to vertical flame propagation for a single electrical insulated conductor or cable, or optical cable, under fire conditions. This Part 1 details the apparatus. The procedures, together with informative annexes of recommended requirements for conformity, are given in Part 2.

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 60695-2-4/1 Fire hazard testing -- Part 2: Test methods -- Section 4/Sheet 1: 1 kW nominal pre-mixed test flame and guidance

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 50265-1 the following definition applies. The definition is taken from EN 60695-4.

3.1 ignition source: A source of energy that initiates combustion.

4 Test apparatus

4.1 Components

The test apparatus shall comprise the following:

a) A three-sided metallic screen (4.2)
b) An ignition source (4.3)
c) A suitable chamber (4.4)

4.2 Metallic screen

A three-sided metallic screen (1200 ± 25) mm high, (300 ± 25) mm wide and (450 ± 25) mm deep with open front and closed top and bottom, (see figure 1) , shall be assembled.

4.3 Ignition source

4.3.1 *General*

The ignition source shall be a gas burner as specified in 4.3.2 or 4.3.3. The burner shall be fed with technical grade propane of nominal 95% purity.