

# SLOVENSKI STANDARD

## SIST EN 60695-11-2:2004

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Fire hazard testing -- Part 11-2: Test flames - 1 kW nominal pre-mixed flame -  
Apparatus, confirmatory test arrangement and guidance

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Prüfungen zur Beurteilung der Brandgefahr -- Teil 11-2: Prüfflammen - 1-kW-Flamme  
(Nennwert) mit Gas/Luft-Gemisch - Prüfaufbau, Vorkehrungen zur Bestätigungsprüfung  
und Leitfaden

Essais relatifs aux risques du feu -- Partie 11-2: Flamme d'essai - Flamme à  
prémélange de 1 kW nominal - Appareillage, disposition d'essai de vérification et  
indications

**Ta slovenski standard je istoveten z: EN 60695-11-2:2003**

### **ICS:**

13.220.40	Sposobnost vžiga in obnašanje materialov in proizvodov pri gorenju	Ignitability and burning behaviour of materials and products
29.020	Elektrotehnika na splošno	Electrical engineering in general

**SIST EN 60695-11-2:2004**

**en**

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EUROPEAN STANDARD

**EN 60695-11-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2003

ICS 13.220.40

Supersedes EN 60695-2-4/1:1993 + A1:1996

English version

**Fire hazard testing**  
**Part 11-2: Test flames –**  
**1 kW nominal pre-mixed flame –**  
**Apparatus, confirmatory test arrangement and guidance**  
**(IEC 60695-11-2:2003)**

Essais relatifs aux risques du feu  
Partie 11-2: Flammes d'essai –  
Flamme à prémélange de 1 kW nominal –  
Appareillage, disposition d'essai  
de vérification et indications  
(CEI 60695-11-2:2003)

Prüfungen zur Beurteilung der  
Brandgefahr  
Teil 11-2: Prüfflammen –  
1-kW-Flamme (Nennwert) mit  
Gas/Luft-Gemisch –  
Prüfaufbau, Vorkehrungen zur  
Bestätigungsprüfung und Leitfaden  
(IEC 60695-11-2:2003)

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This European Standard was approved by CENELEC on 2003-10-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and 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 89/595/FDIS, future edition 1 of IEC 60695-11-2, prepared by IEC TC 89, Fire hazard testing, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60695-11-2 on 2003-10-01.

This European Standard replaces EN 60695-2-4/1:1993 + A1:1996.

The structure of the standard remains essentially the same. Changes include:

- a new updated layout conforming to the latest IEC Directives;
- a new introduction;
- a new reference for the copper block material and the method of its attachment to the thermocouple;
- a recommended preference for the use of mass flowmeters;
- important modifications to Annex B;
- dimensional corrections to Figure A.8.

This standard is to be used in conjunction with EN 60695-2-4/0:1993.

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 <https://standards.iteh.ai/catalog/standards/sist/528cf7de-1113-4065-0000-000000000000/60695-11-2-2004> (dop) 2004-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-10-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A and ZA are normative and annexes B and C are informative.

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60695-11-2:2003 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 60695-1-1      NOTE      Harmonized as EN 60695-1-1:2000 (not modified).

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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 (including amendments).

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 60584-1	1995	Thermocouples Part 1: Reference tables	EN 60584-1	1995
IEC 60584-2	1982	Part 2: Tolerances	EN 60584-2 <sup>1)</sup>	1993
IEC 60695-2-4/0	1991	Fire hazard testing Part 2: Test methods Section 4/sheet 0: Diffusion type and premixed type flame test methods	EN 60695-2-4/0	1993
IEC Guide 104	1997	The preparation of safety publications and the use of basic safety publications and group safety publications	-	-
ISO/IEC 13943	2000	Fire safety - Vocabulary	-	-

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<sup>1)</sup> EN 60584-2 includes A1:1989 to IEC 60584-2.

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
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**60695-11-2**

Première édition  
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2003-07

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PUBLICATION FONDAMENTALE DE SÉCURITÉ  
BASIC SAFETY PUBLICATION

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**Essais relatifs aux risques du feu –**

**Partie 11-2:**

**Flammes d'essai –**

**Flamme à prémélange de 1 kW nominal –**

**Appareillage, disposition d'essai  
de vérification et indications  
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**Part 11-2:**

**Test flames –**

**1 kW nominal pre-mixed flame –**

**Apparatus, confirmatory test arrangement  
and guidance**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

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For price, see current catalogue

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## FIRE HAZARD TESTING –

**Part 11-2: Test flames –  
1 kW nominal pre-mixed flame –  
Apparatus, confirmatory test arrangement and guidance**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60695-11-2 has been prepared by IEC technical committee 89: Fire hazard testing.

This first edition of IEC 60695-11-2 cancels and replaces the first edition of IEC 60695-2-4/1 published in 1991 and incorporates its amendment 1 (1994). It constitutes a technical revision.

The structure of this standard remains essentially the same. Changes include:

- a new updated layout conforming to the latest IEC Directives;
- a new introduction;
- a new reference for the copper block material and the method of its attachment to the thermocouple;

- a recommended preference for the use of mass flowmeters;
- important modifications to Annex B;
- dimensional corrections to Figure A.8.

It has the status of a basic safety publication in accordance with IEC Guide 104.

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

FDIS	Report on voting
89/595/FDIS	89/622/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This standard is to be used in conjunction with IEC 60695-2-4/0.

The committee has decided that the contents of this publication will remain unchanged until 2009. At this date, the publication will be

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

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The contents of the corrigendum of February 2006 have been included in this copy.

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## INTRODUCTION

The best method for testing electrotechnical products with regard to fire hazard is to duplicate exactly the conditions occurring in practice. In most instances this is not possible. Accordingly, for practical reasons, the testing of electrotechnical products with regard to fire hazard is best conducted by simulating as closely as possible the actual effects occurring in practice.

IEC 60695-11-2 provides a general description of the apparatus required to produce the test flame and a general description of the principle of a calibration procedure to check that the flame produced meets the requirements. Detailed information for the confirmation of a test flame can be found in IEC 60695-11-40 [1] <sup>a</sup>.

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<sup>a</sup> Numbers in square brackets refer to the bibliography.