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Preskušanje požarne ogroženosti - 11-2. del: Preskusni plameni - Predmešani plamen z nazivno močjo 1 kW: Aparat, način potrditvenega preskušanja in navodilo (IEC 60695-11-2:2013)

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, Vorkenrungen zur Bestätigungsprüfung und Leitfaden

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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 60695-11-2:2014

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 60695-11-2:2014**en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60695-11-2

March 2014

ICS 13.220.40

Supersedes EN 60695-11-2:2003

English version

**Fire hazard testing -
Part 11-2: Test flames -
1 kW nominal pre-mixed flame: Apparatus, confirmatory test arrangement
and guidance
(IEC 60695-11-2:2013)**

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 60695-11-2:2013)

Prüfungen zur Beurteilung der
Brandgefahr -
Teil 11-2: Prüfflammen -
1-kW-Flamme mit Gas-Luft-Gemisch:
Prüfeinrichtung und Leitfaden
(IEC 60695-11-2:2013)

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SIST EN 60695-11-2:2014

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This European Standard was approved by CENELEC on 2014-01-14. 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 CEN-CENELEC Management Centre or to any CENELEC member.

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CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 89/1193/FDIS, future edition 2 of IEC 60695-11-2, prepared by IEC/TC 89 "Fire hazard testing" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60695-11-2:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2014-10-14
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-01-14

This document supersedes EN 60695-11-2:2003.

EN 60695-11-2:2014 includes the following significant technical changes with respect to EN 60695-11-2:2003:

- editorial changes to align with other TC 89 test flame publications;
- editorially updated throughout;
- technical changes to the burner set up requirements – see 4.1, 4.2.2, 5 and Fig. A.6;
- technical changes to the test flame confirmation procedure – see 6.2 and 6.3.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

Endorsement notice

The text of the International Standard IEC 60695-11-2:2013 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

- | | | |
|----------------|------|------------------------------|
| IEC 60695-1-10 | NOTE | Harmonised as EN 60695-1-10. |
| IEC 60695-1-11 | NOTE | Harmonised as EN 60695-1-11. |

Annex ZA
(normative)
Normative references to international publications
with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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 ¹⁾	1995
IEC 60584-2 + A1	1982 1989	Thermocouples - Part 2: Tolerances	EN 60584-2 - ^{2) 3)}	1993 -
ISO 13943	2008	Fire safety - Vocabulary	-	-

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¹⁾ EN 60584-1 is superseded by EN 60584-1:2013, which is based on IEC 60584-1:2013.

²⁾ EN 60584-2 includes A1 to IEC 60584-2.

³⁾ EN 60584-2 is superseded by EN 60584-1:2013, which is based on IEC 60584-1:2013.

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Edition 2.0 2013-12

INTERNATIONAL STANDARD

NORME INTERNATIONALE



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

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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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIRE HAZARD TESTING –

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

FOREWORD

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International Standard IEC 60695-11-2 has been prepared by IEC technical committee 89: Fire hazard testing.

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

FDIS	Report on voting
89/1193/FDIS	89/1204/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 second edition of IEC 60695-11-2 cancels and replaces the first edition published in 2003. It constitutes a technical revision.

It has the status of a basic safety publication in accordance with IEC Guide 104 and ISO/IEC Guide 51.

This edition includes the following significant technical changes with respect to the previous edition:

- editorial changes to align with other TC 89 test flame publications;
- editorially updated throughout;
- technical changes to the burner set up requirements – see 4.1, 4.2.2, 5 and Fig. A.6;
- technical changes to the test flame confirmation procedure – see 6.2 and 6.3.

A list of all the parts in the IEC 60695 series, under the general title *Fire hazard testing*, can be found on the IEC web site.

Part 11 consists of the following parts:

- Part 11-2: *Test flames – 1 kW nominal pre-mixed flame – Apparatus, confirmatory test arrangement and guidance*
- Part 11-3: *Test flames – 500 W flames – Apparatus and confirmational test methods*
- Part 11-4: *Test flames – 50 W flame – Apparatus and confirmational test method*
- Part 11-5: *Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*
- Part 11-10: *Test flames – 50 W horizontal and vertical flame test methods*
- Part 11-11: *Test flames – Determination of the characteristic heat flux for ignition from a non-contacting flame source*
- Part 11-20: *Test flames – 500 W flame test methods*
- Part 11-30: *Test flames – History and development from 1979 to 1999*
- Part 11-40: *Test flames – Confirmatory tests – Guidance*

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

In the design of any electrotechnical product, the risk of fire and the potential hazards associated with fire need to be considered. In this respect the objective of component, circuit, and product design, as well as the choice of materials, is to reduce to acceptable levels the potential risks of fire during normal operating conditions, reasonable foreseeable abnormal use, malfunction, and/or failure. IEC Technical Committee 89 has developed IEC 60695-1-10, together with its companion, IEC 60695-1-11, to provide guidance on how this is to be accomplished.

The primary aims of IEC 60695-1-10 and IEC 60695-1-11 are to provide guidance on how:

- a) to prevent ignition caused by an electrically energized component part, and
- b) to confine any resulting fire within the bounds of the enclosure of the electrotechnical product in the event of ignition.

Secondary aims of these documents include the minimization of any flame spread beyond the product's enclosure and the minimization of harmful effects of fire effluents such as heat, smoke, toxicity and/or corrosivity.

Fires involving electrotechnical products can also be initiated from external non-electrical sources. Considerations of this nature should be dealt with in the overall fire risk assessment.

IEC 60695-11-2 provides a description of the apparatus required to produce a 1 kW test flame, and provides a description of the principle of a confirmation procedure to check that the effective power output of the flame is as intended. Guidance on confirmatory tests for test flames is given in IEC/TS 60695-11-40.

This international standard may involve hazardous materials, operations, and equipment. It does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this international standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.