

Tuleohukatsetused. Osa 11-2: Katseleegid. Eelsegatud kütteseguga leek nimivõimsusega 1 kW. Seadmed, kontrollkatsetuse läbiviimine ja juhised

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

EESTI STANDARDI EESSÕNA	NATIONAL FOREWORD
<p>See Eesti standard EVS-EN 60695-11-2:2014 sisaldab Euroopa standardi EN 60695-11-2:2014 ingliskeelset teksti.</p>	<p>This Estonian standard EVS-EN 60695-11-2:2014 consists of the English text of the European standard EN 60695-11-2:2014.</p>
<p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p>	<p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.</p>
<p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.03.2014.</p>	<p>Date of Availability of the European standard is 21.03.2014.</p>
<p>Standard on kättesaadav Eesti Standardikeskusest.</p>	<p>The standard is available from the Estonian Centre for Standardisation.</p>

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ICS 13.220.40

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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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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	-	-

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.

CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 Burner/supply arrangement.....	7
4.1 Requirements	7
4.2 Apparatus and fuel.....	7
4.2.1 Burner	7
4.2.2 Flow control.....	7
4.2.3 Copper block	8
4.2.4 Thermocouple.....	8
4.2.5 Temperature/time indicating/recording devices	8
4.2.6 Laboratory fumehood/chamber	8
5 Production of the test flame	8
6 Confirmation of the test flame.....	9
6.1 Principle	9
6.2 Frequency of confirmatory tests	9
6.3 Procedure	9
7 Recommended arrangements for use of the test flame	10
Annex A (normative) Burner construction.....	12
Annex B (informative) Examples of test arrangements	19
Bibliography.....	20
Figure 1 – Flame dimensions	11
Figure A.1 – General assembly.....	12
Figure A.2 – Pre-mixed burner details.....	13
Figure A.3 – Pre-mixed burner details.....	14
Figure A.4 – Pre-mixed burner details.....	15
Figure A.5 – Pre-mixed burner details.....	16
Figure A.6 – Example of supply arrangement for burner.....	17
Figure A.7 – Copper block	17
Figure A.8 – Confirmatory test arrangement.....	18
Figure B.1 – Examples of test arrangements.....	19

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.

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FIRE HAZARD TESTING –

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

1 Scope

This part of IEC 60695 gives the requirements for the production and confirmation of a nominal 1 kW, propane/air pre-mixed test flame.

This basic safety publication is intended for use by technical committees in the preparation of standards in accordance with the principles laid down in IEC Guide 104 and ISO/IEC Guide 51.

One of the responsibilities of a technical committee is, wherever applicable, to make use of basic safety publications in the preparation of its publications.

The requirements, test methods or test conditions of this basic safety publication will not apply unless specifically referred to or included in the relevant publications.

2 Normative references

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.

IEC 60584-1:1995, *Thermocouples – Part 1: Reference tables*

IEC 60584-2:1982, *Thermocouples – Part 2: Tolerances*
Amendment 1:1989

ISO 13943:2008, *Fire safety – Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 13943:2008, some of which are reproduced below for the user's convenience, as well as the following apply.

3.1 combustion

exothermic reaction of a substance with an oxidizing agent

Note 1 to entry: Combustion generally emits fire effluent accompanied by flames and/or glowing.

[SOURCE: ISO/IEC 13943:2008, definition 4.46]

3.2 draught-free environment

space in which the results of experiments are not significantly affected by the local air speed