

SLOVENSKI STANDARD

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Preskušanje požarne ogroženosti - 11-20. del: Preskusni plameni - Preskusne metode s 500-vatnim plamenom

Fire hazard testing - Part 11-20: Test flames - 500 W flame test methods

Essais relatifs aux risques du feu - Partie 11-20: Flammes d'essai - Méthodes d'essai à la flamme de 500 W

Essais relatifs aux risques du feu - Partie 11-20: Flammes d'essai - Méthodes d'essai à la flamme de 500 W

Ta slovenski standard je istoveten z: EN 60695-11-20:2015

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29.020	Elektrotehnika na splošno	Electrical engineering in general

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EUROPEAN STANDARD
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EN 60695-11-20

July 2015

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English Version

**Fire hazard testing - Part 11-20: Test flames - 500 W flame test
methods
(IEC 60695-11-20:2015)**

Essais relatifs aux risques du feu - Partie 11-20: Flammes
d'essai - Méthodes d'essai à la flamme de 500 W
(IEC 60695-11-20:2015)

Prüfungen zur Beurteilung der Brandgefahr - Teil 11-20:
Prüfflammen - Prüfverfahren mit einer 500-W-Prüfflamme
(IEC 60695-11-20:2015)

This European Standard was approved by CENELEC on 2015-05-27. 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.

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 CEN-CENELEC Management Centre has the same status as the official versions.

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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

European foreword

The text of document 89/1241/FDIS, future edition 2 of IEC 60695-11-20, prepared by IEC/TC 89 "Fire hazard testing" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60695-11-20:2015.

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) 2016-02-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-05-27

This document supersedes EN 60695-11-20:1999.

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).

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Endorsement notice

The text of the International Standard IEC 60695-11-20:2015 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 60695-1-10:2009	NOTE	Harmonized as 60695-1-10:2010 (not modified).
IEC 60695-1-11:2010	NOTE	Harmonized as EN 60695-1-11:2010 (not modified).
IEC 60695-1-30:2008	NOTE	Harmonized as EN 60695-1-30:2008 (not modified).
IEC 60695-11-5:2004	NOTE	Harmonized as EN 60695-11-5:2005 (not modified).
ISO 1043-1:2011	NOTE	Harmonized as EN ISO 1043-1:2011 (not modified).

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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60695-4	2012	Fire hazard testing - Part 4: Terminology concerning fire tests for electrotechnical products	EN 60695-4	2012
IEC 60695-11-3	-	Fire hazard testing - Part 11-3: Test flames - 500 W flames - Apparatus and confirmational test methods	EN 60695-11-3	-
IEC 60695-11-10	-	Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	-
IEC Guide 104	-	The preparation of safety publications and the use of basic safety publications and group safety publications	-	-
ISO/IEC Guide 51	-	Safety aspects - Guidelines for their inclusion in standards	-	-
ISO 291	-	Plastics - Standard atmospheres for conditioning and testing	EN ISO 291	-
ISO 293	-	Plastics - Compression moulding of test specimens of thermoplastic materials	EN ISO 293	-
ISO 294-1	1996	Plastics - Injection moulding of test specimens of thermoplastic materials Part 1: General principles, and moulding of multipurpose and bar test specimens	EN ISO 294-1	1998
ISO 294-2	1996	Plastics - Injection moulding of test specimens of thermoplastic materials Part 2: Small tensile bars	EN ISO 294-2	1998

EN 60695-11-20:2015

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 294-3	1996 ¹⁾	Plastics - Injection moulding of test specimens of thermoplastic materials Part 3: Small plates	EN ISO 294-3	1998 ²⁾
ISO 295	-	Plastics - Compression moulding of test specimens of thermosetting materials	EN ISO 295	-
ISO 845	-	Cellular plastics and rubbers - Determination of apparent density	EN ISO 845	-
ISO 13943	2008	Fire safety - Vocabulary	EN ISO 13943	2010
ISO 16012	-	Plastics - Determination of linear dimensions of test specimens	-	-

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1) Superseded by ISO 294-3:2002.

2) Superseded by EN ISO 294-3:2003.



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Edition 2.0 2015-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE



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Part 11-20: Test flames – 500 W flame test method

Essais relatifs aux risques du feu –

Partie 11-20: Flammes d'essai – Méthode d'essai à la flamme de 500 W

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIRE HAZARD TESTING –

**Part 11-20: Test flames –
500 W flame test method**

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, Publicly Available Specifications (PAS) 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 60695-11-20 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
89/1241/FDIS	89/1250/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 cancels and replaces the first edition of IEC 60695-11-20 published in 1999. This edition constitutes a technical revision.

The main changes with respect to the first edition are listed below:

- The Part title has been modified to the singular – 500 W flame test method.
- Editorial changes have been made throughout the document for the purpose of aligning IEC 60695-11-10 with IEC 60695-11-20.
- The Introduction has been modified to clarify the description of the test method.
- The Scope has been modified for clarification.
- All occurrences of the term “fixture” have been deleted from the document.
- Preferred thickness values have been added to 7.2 and 7.3.
- 7.4.4: ‘Thickness measurement’ is now numbered 7.5 to which a new Table 1 – Thickness tolerances has been added.
- New Subclause 8.1.4 ‘Conditioning of the cotton pad’ has been added.
- 8.2.3 clarifies the application of the test flame to distorted specimens
- Explanatory notes have been added to Figures 5 and 6.
- The Bibliography has been updated and references added.

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

This International Standard is to be used in conjunction with IEC 60695-11-3.

<https://standards.iteh.ai/catalog/standards/sist/a5bf6cf7-b869-4000-9e27-31600941e004/iec-60695-11-20-2015>

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

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 website 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.

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