Tuleohukatsetused. Osa 11-4: Katseleegid. 50 W leegid. Aparatuur ja kontrollkatsemeetodid

Fire hazard testing - Part 11-4: Test flames - 50 W flames - Apparatus and confirmational test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60695-11-4:2011 sisaldab Euroopa standardi EN 60695-11-4:2011 ingliskeelset teksti.	This Estonian standard EVS-EN 60695-11-4:2011 consists of the English text of the European standard EN 60695-11-4:2011.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 04.11.2011.	Date of Availability of the European standard is 04.11.2011.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 13.220.40, 29.020

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60695-11-4

November 2011

ICS 13.220.40; 29.020

English version

Fire hazard testing - Part 11-4: Test flames - 50 W flame - Apparatus and confirmational test method

(IEC 60695-11-4:2011)

Essais relatifs aux risques du feu - Partie 11-4: Flammes d'essai - Flamme de 50 W - Appareillage et méthodes d'essai de vérification
(CEI 60695-11-4:2011)

Prüfungen zur Beurteilung der Brandgefahr - Teil 11-4: Prüfflammen - 50 W Prüfflamme - Prüfeinrichtungen und Prüfverfahren zur Bestätigung
(IEC 60695-11-4:2011)

This European Standard was approved by CENELEC on 2011-11-01. 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 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.

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

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60695-11-4:2011 E

Foreword

The text of document 89/1060/FDIS, future edition 1 of IEC 60695-11-4, prepared by IEC/TC 89 "Fire hazard testing" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60695-11-4:2011.

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)	2012-08-01
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2014-11-01

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.

Endorsement notice

The text of the International Standard IEC 60695-11-4:2011 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 60695-11-2:2003 NOTE Harmonized as EN 60695-11-2:2003 (not modified).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. 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.

Publication	Year	Title	EN/HD	Year
IEC 60584-1	1995	Thermocouples - Part 1: Reference tables	EN 60584-1	1995
IEC 60584-2 + A1	1982 1989	Thermocouples - Part 2: Tolerances	EN 60584-2	1993
IEC Guide 104	1997	The preparation of safety publications and the use of basic safety publications and group safety publications	-	-
ISO/IEC Guide 51	1999	Safety aspects - Guidelines for their inclusion in standards	-	-
ISO 13943	2008	Fire safety - Vocabulary	EN ISO 13943	2010
ASTM B187	-	Standard Specification for Copper, Bus Bar, Rod, and Shapes and General Purpose Rod, Bar, and Shapes	-	-

CONTENTS

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.

Work initiated by ACOS resulted in a series of standards that make available standardized test flames covering a range of powers for the use of all product committees needing such test flames. A needle flame is described in IEC 60695-11-5, two 500 W flames are described in IEC 60695-11-4, and a 1 kW flame is described in IEC 60695-11-2.

This international standard provides a description of the apparatus required to produce a 50 W test flame and a description of a calibration procedure to check that the test flame produced meets given requirements. Guidance on confirmatory tests for test flames is given in IEC 60695-11-40.

Three 50 W test flame methods (A, B and C) were originally specified in IEC/TS 60695-11-4:2000, with the intention that users would determine a ranking preference. This process has resulted in two of these flame methods being withdrawn, as shown below:

50 W test flame method	**Flame type**	**Gas**	**Approximate flame height / mm**
A	Pre-mixed	Methane	20
B	Withdrawn		
C	Withdrawn		

The method described in Clause 4 of this standard is the method that was originally designated as Method A. It produces a 50 W nominal test flame using a single gas supply tube, a needle valve to adjust the gas back pressure, a flowmeter to adjust the gas flow rate, and adjustable air ports on the burner tube.

The flame is produced by burning methane, and the method makes use of a more tightly specified version of a burner that was used in some countries for many years.

The method has been developed as a technical enhancement of previous technology.

FIRE HAZARD TESTING –

Part 11-4: Test flames – 50 W flame – Apparatus and confirmational test method

1 Scope

This part of IEC 60695 provides detailed requirements for the production of a 50 W nominal, pre-mixed type test flame. The approximate overall height of the flame is 20 mm. Details are given for confirmation of the 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 referenced documents are indispensable for the application of this document. 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 60584-2:1989, *Thermocouples – Part 2: Tolerances*
Amendment 1

IEC Guide 104:1997, *The preparation of safety publications and the use of basic safety publications and group safety publications*

ISO/IEC Guide 51:1999, *Safety aspects – Guidelines for their inclusion in standards*

ISO/IEC 13943:2008, *Fire safety – Vocabulary*

ASTM-B187/B187M-06, *Standard Specification for Copper, Bus Bar, Rod, and Shapes and General Purpose Rod, Bar, and Shapes*

3 Terms and definitions

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

3.1
burn, intransitive verb
undergo combustion

[ISO/IEC 13943, definition 4.28]