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Elektriska hushållsapparater och liknande bruksföremål – Provningsmetod för bestämning av luftburet buller – Del 2-13: Särskilda fordringar på spisfläktar och spiskåpor

*Household and similar electrical appliances –
Test code for the determination of airborne acoustical noise –
Part 2-13: Particular requirements for range hoods*

Som svensk standard gäller europastandarden EN 60704-2-13:2011. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60704-2-13:2011.

Nationellt förord

Europastandarden EN 60704-2-13:2011

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60704-2-13, Second edition, 2011 - Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-13: Particular requirements for range hoods**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 60704-1, utgåva 3, 2010.

Tidigare fastställd svensk standard SS-EN 60704-2-13, utgåva 1, 2000, SS-EN 60740-2-13/A1, utgåva 1, 2007 och SS-EN 60704-2-13/A2, utgåva 1, 2009, gäller ej fr o m 2014-03-03.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

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Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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**Household and similar electrical appliances -
Test code for the determination of airborne acoustical noise -
Part 2-13: Particular requirements for range hoods
(IEC 60704-2-13:2011)**

Appareils électrodomestiques et
analogues -
Code d'essai pour la détermination du
bruit aérien -
Partie 2-13: Règles particulières pour les
hottes de cuisine
(CEI 60704-2-13:2011)

Elektrische Geräte für den Hausgebrauch
und ähnliche Zwecke -
Prüfvorschrift für die Bestimmung der
Luftschallemission -
Teil 2-13: Besondere Anforderungen für
Dunstabzugshauben
(IEC 60704-2-13:2011)

This European Standard was approved by CENELEC on 2011-03-03. 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, 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

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Foreword

The text of document 59K/219/FDIS, future edition 2 of IEC 60704-2-13, prepared by SC 59K, Ovens and microwave ovens, cooking ranges and similar appliances, of IEC TC 59, Performance of household electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60704-2-13 on 2011-03-03.

This European Standard supersedes EN 60704-2-13:2000 + A1:2006 + A2:2008.

EN 60704-2-13:2011 cancels and replaces EN 60704-2-13:2000 + A1:2006 + A2:2008 and constitutes an adaptation to the third edition of EN 60704-1 (2010).

This Part 2-13 is intended to be used in conjunction with EN 60704-1:2010 (3rd edition) *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 1: General requirements*.

NOTE When "Part 1" is mentioned in this standard, it refers to EN 60704-1.

This Part 2-13 supplements or modifies the corresponding clauses in EN 60704-1, so as to establish the test code for range hoods. When a particular subclause of Part 1 is not mentioned in this Part 2-13, that subclause is applicable as far as reasonable. Where this standard states "addition", "modification" or "replacement", the relevant requirements, test specifications or explanatory matter in Part 1 is to be adapted accordingly.

Subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1.

Unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause.

Additional annexes are lettered AA, BB, etc.

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

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 | (dop) | 2011-12-03 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2014-03-03 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60704-2-13:2011 was approved by CENELEC as a European Standard without any modification.

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.

Addition:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61591	1997	Household range hoods - Methods for measuring performance	EN 61591	1997
+ A1	2005		+ A1	2006
+ A2	2010		+ A2	2011
ISO 7235	2003	Acoustics - Laboratory measurement procedures for ducted silencers and air-terminal units - Insertion loss, flow noise and total pressure loss	EN ISO 7235	2009

INTRODUCTION

The measuring conditions specified in this Part 2-13 provide for sufficient accuracy in determining the noise emitted and comparing the results of measurements taken by different laboratories, whilst simulating as far as possible the practical use of household range hoods.

It is recommended to consider the determination of noise levels as part of a comprehensive testing procedure covering many aspects of the properties and performance of household range hoods.

Compared to the first edition (2000) of this Part 2-13, the second edition doesn't contain the description of an appropriate test enclosure which has now been incorporated in Part 1. The scope of this Part 2-13 has been extended to range hoods with an external fan. Furthermore the values of standard deviations of sound power levels determined according to this part are given.

In case of unavailability of an acoustical environment which is specified in Clause 4 of ISO 3743-1, ISO 3743-2 and ISO 3744 alternatively the sound power of range hoods can be determined according to Annex AA using the sound intensity method specified in ISO 9614-1 and ISO 9614-2. This method is not suitable if the source under test has significant noise over 4,0 kHz for octave band frequencies or 6,3 kHz for one-third octave band frequencies. Sound intensity method for the determination of sound power levels shall not be used for the purpose of verification.

NOTE As stated in the introduction to IEC 60704-1, this test code is concerned with airborne noise only.

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – TEST CODE FOR THE DETERMINATION OF AIRBORNE ACOUSTICAL NOISE –

Part 2-13: Particular requirements for range hoods

1 Scope and object

This clause of Part 1 is applicable except as follows:

1.1 Scope

1.1.1 General

Addition:

These particular requirements apply to electrical range hoods for household and similar use intended for filtering the air of a room or for exhausting the air out of a room, including their accessories and their component parts. It also applies to range hoods with an external fan which may be mounted inside or outside of the room where the range hood is located.

1.1.2 Types of noise

Replacement:

The methods specified in ISO 3743-1, ISO 3743-2 and ISO 3744 can be used for measuring noise emitted by range hoods.

1.1.3 Size of source

Replacement:

The method specified in ISO 3744 is applicable to noise sources of any size. When applying ISO 3743-1 and ISO 3743-2, care should be taken that the maximum size of the range hood under test fulfils the requirements specified in 1.3 of ISO 3743-1 and ISO 3743-2.

1.2 Object

Addition:

This standard describes the determination of the noise emission of household range hoods under normal operating conditions and at the highest fan speed setting for normal use.

NOTE 101 If a boost position is incorporated, this is not taken into account (see 6.5 of IEC 61591).

NOTE 102 A boost position is a setting of a control for occasional use, which results in a higher temporary fan speed (see 6.5 of IEC 61591).

Requirements for the declaration of noise emission values are not within the scope of this standard.

NOTE 103 For determining and verifying noise emission values declared in product specifications, see IEC 60704-3.

1.3 Measurement uncertainty

Replacement:

The estimated values of standard deviations of sound power levels, determined according to this standard, are as follows:

Table 101 – Standard deviations of sound power levels

Standard deviation (dB)	
σ_r (repeatability)	σ_R (reproducibility)
0,4	1,0

1.101 Standard deviation for declaration and verification

For the purpose of determining and verifying declared noise emission values according to IEC 60704-3, the following values apply:

Table 102 – Standard deviations for declaration and verification

Standard deviation (dB)		
σ_P (production)	σ_t (total)	σ_M (reference)
1,5 – 1,7	1,8 – 2,0	2,0

2 Normative references

This clause of Part 1 is applicable with the following addition:

Addition:

IEC 61591:1997, *Household range hoods – Methods for measuring performance*
 Amendment 1 (2005)¹
 Amendment 2 (2010)

ISO 7235:2003, *Acoustics - Laboratory measurement procedures for ducted silencers and air-terminal units - Insertion loss, flow noise and total pressure loss*

¹ There exists a consolidated edition 1.1 of IEC 61591 (2005), that includes IEC 61591 (1997) and its amendment 1 (2005).