

Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 3: Procedure for determining and verifying declared noise emission values

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 60704-3:2019 sisaldab Euroopa standardi EN 60704-3:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 60704-3:2019 consists of the English text of the European standard EN 60704-3:2019.
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 09.08.2019.	Date of Availability of the European standard is 09.08.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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English Version

Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 3: Procedure for determining and verifying declared noise emission values  
(IEC 60704-3:2019)

Appareils électrodomestiques et analogues - Code d'essai pour la détermination du bruit aérien - Partie 3: Méthode de détermination et de vérification des valeurs déclarées d'émission sonore  
(IEC 60704-3:2019)

Elektrische Geräte für den Hausgebrauch und ähnliche Zwecke - Prüfvorschrift für die Bestimmung der Luftschallemission - Teil 3: Verfahren zur Bestimmung und Nachprüfung angegebener Geräuschemissionswerte  
(IEC 60704-3:2019)

This European Standard was approved by CENELEC on 2019-07-02. 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.

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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: Rue de la Science 23, B-1040 Brussels

## European foreword

The text of document 59/675/CDV, future edition 3 of IEC 60704-3, prepared by IEC/TC 59 "Performance of household electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60704-3:2019.

A draft amendment, which covers common modifications to IEC 60704-3 (59/675/CDV), was prepared by CLC/TC 59X "Performance of household and similar electrical appliances" and approved by CENELEC.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-07-02
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2022-07-02

EN 60704-3:2019 supersedes EN 60704-3:2006 and all of its amendments and corrigenda (if any).

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

### Endorsement notice

The text of the International Standard IEC 60704-3:2019 was approved by CENELEC as a European Standard with agreed common modifications.

## COMMON MODIFICATIONS

### Introduction

*Add the following paragraph:*

Requirements on noise are requested in European delegated regulations supplementing Regulation (EU) 2017/1369 and regulations implementing EU Directive on ecodesign (2009/125/EC). Verification of noise is set out in these regulations also. Commission delegated regulation (EU) 2017/254 and Commission regulation (EU) 2016/2282 set out requirements on the use of tolerances in verification procedures. These requirements are different from the statistical approach laid down in standard IEC 60704-3:2019. Therefore, there is an addition to Clause 5.1. For determination purpose Clause 6 provides an option. Caution is to be taken as the statistical approach is not aligned with requirements set out in the EU regulations on verification.

## 5 Verification of declared noise emission values

### 5.1 Basis of the procedure

*Add a paragraph at top of this clause as follows:*

For verification of declared noise emission values related to EU regulations on energy labelling and ecodesign this clause is not applicable. The criteria for pass and fail are laid down in these regulations.

NOTE Applicable EU regulations are available at Official Journal of the European Union.

Example *"The determined value shall not exceed the declared value of LWA."*, see Commission Delegated Regulation (EU) No 65/2014 on range hoods, Annex VIII.

## 6 Determination of noise emission values for declaration

### 6.1 Determination procedure

*Add the following paragraph:*

Caution shall be taken when applying the method described in 6.2 and 6.3 for the purpose of declaration of sound power values for EU energy labelling and proofing compliance with EU requirements on ecodesign. Paragraphs 6.2 and 6.3 are describing a statistical procedure for the determination of noise which is aligned with the statistical verification procedure detailed in EN 60704-3:2019, Clause 5. However, this approach does not fit with the requirements set out in said EU regulations.

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60704-1	2010	Household and similar electrical appliances Test code for the determination of airborne noise - Part 1: General requirements	-EN 60704-1	2010
			+A11	2012
IEC 60704-2	series	Household and similar electrical appliances Test code for the determination of airborne acoustical noise	-EN 60704-2	series
ISO 3534-1	2006	Statistics - Vocabulary and symbols - Part 1: - General statistical terms and terms used in probability		-
ISO 7574-1	1985	Acoustics - Statistical methods for determining and verifying stated noise emission values of machinery and equipment - Part 1: General considerations and definitions	EN 27574-1	1988
ISO 7574-4	1985	Acoustics - Statistical methods for determining and verifying stated noise emission values of machinery and equipment - Part 4: Methods for stated values for batches of machines	EN 27574-4	1988

## Bibliography

*Add the following publications*

DIRECTIVE 2009/125/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products

REGULATION (EU) 2017/1369 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU

COMMISSION DELEGATED REGULATION (EU) No 65/2014 of 1 October 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of domestic ovens and range hoods

COMMISSION REGULATION (EU) 2016/2282 of 30 November 2016 amending Regulations (...) with regard to the use of tolerances in verification procedures

COMMISSION DELEGATED REGULATION (EU) 2017/254 of 30 November 2016 amending Delegated Regulations (...) with regard to the use of tolerances in verification procedures

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –  
TEST CODE FOR THE DETERMINATION OF AIRBORNE  
ACOUSTICAL NOISE –****Part 3: Procedure for determining and verifying  
declared noise emission values**

## FOREWORD

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International Standard IEC 60704-3 has been prepared by IEC technical committee 59: Performance of household electrical appliances.

IEC 60704-1:2010 has served as a basis for the elaboration of this standard.

This third edition cancels and replaces the second edition published in 2006. This edition constitutes a technical revision. It includes the following significant technical changes with respect to the previous edition:

- a) in Annex A, standard deviations that are now specified for various appliance categories in the parts of IEC 60704-2 have been excluded from Table A.1;
- b) furthermore, this edition makes reference to new standards and is implementing ISO/IEC Directives, Part 2 in a more accurate manner.

Standard deviations specified in part 2 documents of the IEC 60704 series supersede the values given in Table A.1.

The text of this International Standard is based on the following documents:

CDV	Report on voting
59/675/CDV	59/680A/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This International Standard is to be used in conjunction with IEC 60704-1:2010 and the latest edition of IEC 60704-2 (all parts).

A list of all parts in the IEC 60704 series, published under the general title *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise*, can be found on the IEC website.

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

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

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## INTRODUCTION

A comprehensive and correct declaration of noise emission is very helpful to enable the potential buyer to make a good choice between appliances of the same category (serving for the same purpose) of different makes or for different models.

In order to ensure a correct declaration of noise emission values, this part of IEC 60704 describes a simple method for verifying declared values and provides information for determining the noise emission values.

Different countries are implementing different market surveillance strategies. This document is not implementing a mandatory market surveillance strategy.

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