

<b>STN</b>	<b>Elektrické spotrebiče pre domácnosť a na podobné účely</b> <b>Skúšobný predpis na stanovenie hluku prenášaného vzduchom</b> <b>Časť 2-8: Osobitné požiadavky na elektrické strojčeky na holenie a strihanie alebo zastrihávanie</b>	<b>STN</b> <b>EN IEC 60704-2-8</b>  36 1005
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Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-8: Particular requirements for electric shavers, hair clippers or trimmers

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/20

Obsahuje: EN IEC 60704-2-8:2020, IEC 60704-2-8:2020

Oznámením tejto normy sa od 13.04.2023 ruší  
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**EN IEC 60704-2-8**

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2020

ICS 17.140.20; 97.170

Supersedes EN 60704-2-8:1997 and all of its amendments and corrigenda (if any)

English Version

**Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-8: Particular requirements for electric shavers, hair clippers or trimmers (IEC 60704-2-8:2020)**

Appareils électrodomestiques et analogues - Code d'essai pour la détermination du bruit aérien - Partie 2-8: Exigences particulières pour les rasoirs et les tondeuses à barbe ou à cheveux électriques  
(IEC 60704-2-8:2020)

Elektrische Geräte für den Hausgebrauch und ähnliche Zwecke - Prüfvorschrift für die Bestimmung der Luftschallemission - Teil 2-8: Besondere Anforderungen an elektrische Rasierer und Haarschneidemaschinen oder Haartrimmer  
(IEC 60704-2-8:2020)

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

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**EN IEC 60704-2-8:2020 (E)****European foreword**

The text of document 59L/176/FDIS, future edition 2 of IEC 60704-2-8, prepared by SC 59L "Small household appliances" of IEC/TC 59 "Performance of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60704-2-8:2020.

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) 2021-01-13
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-04-13

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61254:1993	NOTE	Harmonized as EN 61254:1994 (not modified)
IEC 62863:2017	NOTE	Harmonized as EN 62863:2017 (not modified)

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

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*Clause 2 of IEC 60704-1:2010 is applicable except as follows:*

*Replace the following references:*

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 3743-1	2010	Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for small movable sources in reverberant fields - Part 1: Comparison method for a hard-walled test room	EN ISO 3743-1	2010
ISO 3743-2	2018	Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering methods for small, movable sources in reverberant fields - Part 2: methods for special reverberation test rooms	EN ISO 3743-2	2019
ISO 3744	2010	Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for an essentially free field over a reflecting plane	EN ISO 3744	2010



IEC 60704-2-8

Edition 2.0 2020-03

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Household and similar electrical appliances – Test code for the determination of airborne acoustical noise –**

**Part 2-8: Particular requirements for electric shavers, hair clippers or trimmers**

**Appareils électrodomestiques et analogues – Code d'essai pour la détermination du bruit aérien –**

**Partie 2-8: Exigences particulières pour les rasoirs et les tondeuses à barbe ou à cheveux électriques**



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IEC 60704-2-8

Edition 2.0 2020-03

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# NORME INTERNATIONALE



**Household and similar electrical appliances – Test code for the determination of airborne acoustical noise –  
Part 2-8: Particular requirements for electric shavers, hair clippers or trimmers**

**Appareils électrodomestiques et analogues – Code d'essai pour la détermination du bruit aérien –  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

#### **Part 2-8: Particular requirements for electric shavers, hair clippers or trimmers**

#### FOREWORD

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International Standard IEC 60704-2-8 has been prepared by subcommittee 59L: Small household appliances, of IEC technical committee 59: Performance of household and similar electrical appliances.

This second edition cancels and replaces the first edition published in 1997. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) the scope of the products has been enlarged to include hair clippers and trimmers;
- b) it includes standard deviations of sound power levels in 1.1.3;
- c) the normative references have been updated (ISO 3744:2010 and ISO 3743-1:2010);

- d) it is adjusted with respect to IEC 60704-1:2010;
- e) it has been updated to comply with the ISO/IEC Directives, Part 2.

The text of this standard is based on the following documents:

FDIS	Report on voting
59L/176/FDIS	59L/177/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 document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 2-8 is intended to be used in conjunction with third edition (2010) of IEC 60704-1, *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 1: General requirements*.

The relevant text of IEC 60704-1:2010 as amended by this standard establishes the test code for shavers, hair clippers or trimmers.

This Part 2-8 supplements or modifies the corresponding clauses in IEC 60704-1:2010, so as to establish the test code for shavers, hair clippers or trimmers. When a particular subclause of IEC 60704-1:2010 is not mentioned in this Part 2-8, 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 IEC 60704-1:2010 should be adapted accordingly.

Subclauses, tables and figures that are numbered starting from 101 are additional to those in IEC 60704-1:2010.

Unless notes are in a new subclause or involve notes in IEC 60704-1:2010, they are numbered starting from 101, including those in a replaced clause or subclause.

Additional annexes are lettered AA, BB, etc.

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

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## INTRODUCTION

The measuring conditions specified in this document provide for sufficient steadiness in the noise emitted and reproducibility in different laboratories, whilst simulating as far as possible the practical use of shavers, hair clippers or trimmers.

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 shavers, hair clippers or trimmers.

NOTE As stated in the Introduction to IEC 60704-1:2010, this test code is concerned with airborne noise only.

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

## Part 2-8: Particular requirements for electric shavers, hair clippers or trimmers

### 1 Scope and object

This clause of IEC 60704-1:2010 is applicable except as follows:

#### 1.1 Scope

##### 1.1.1 General

*Replacement:*

This document applies to electric shavers, hair clippers or trimmers for domestic and similar use, supplied from mains or secondary batteries or primary batteries.

The term "similar use" is understood to mean the use in hotels, hospitals, shops, offices, etc.

NOTE 101 This document does not apply to shavers, hair clippers or trimmers that are powered by means other than electrical, for example by a spring-device.

NOTE 102 If possible, this document can also be applied to analogous electrically operated devices, such as depilating devices.

##### 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 shavers, hair clippers or trimmers

##### 1.1.3 Size of the source

*Replacement:*

The method specified in ISO 3744:2010 is applicable to noise sources of any size. Limitations for the size of the source are given in Subclause 1.2 of ISO 3743-1:2010 and Clause 5 of ISO 3743-2:2018.

### 1.2 Object

*Addition:*

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

NOTE 101 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 in accordance with this document are given in Table 101.

**Table 101 – Standard deviations of sound power levels**

Standard deviation (dB)	
$\sigma_r$ (repeatability)	$\sigma_R$ (reproducibility)
0,4	0,8

*Addition:*

### 1.101 Standard deviation for declaration and verification

For the purpose of determining and verifying declared noise emission values in accordance with IEC 60704-3, the values in Table 102 apply.

**Table 102 – Standard deviations for declaration and verification**

Standard deviation (dB)		
$\sigma_p$ (production)	$\sigma_t$ (total)	$\sigma_M$ (reference)
0,7 to 1,3	1,1 to 1,5	1,5

## 2 Normative references

This clause of IEC 60704-1:2010 is applicable except as follows:

*Replacement:*

ISO 3743-1:2010, *Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure – Engineering methods for small movable sources in reverberant fields – Part 1: Comparison method for a hard-walled test room*

ISO 3743-2:2018, *Acoustics – Determination of sound power levels of noise sources using sound pressure – Engineering methods for small, movable sources in reverberant fields – Part 2: methods for special reverberation test rooms*

ISO 3744:2010, *Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure – Engineering methods for an essentially free field over a reflecting plane*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**