



**NSAI**  
Standards

Irish Standard  
I.S. EN 62863:2017

# Methods of measuring performances of electric hair clippers or trimmers for household use

**I.S. EN 62863:2017**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN 62863:2017

*Published:*

2017-11-10

*This document was published  
under the authority of the NSAI  
and comes into effect on:*

2017-11-28

ICS number:

97.170

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

## National Foreword

I.S. EN 62863:2017 is the adopted Irish version of the European Document EN 62863:2017, Methods of measuring performances of electric hair clippers or trimmers for household use

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

**Compliance with this document does not of itself confer immunity from legal obligations.**

*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

This page is intentionally left blank

EUROPEAN STANDARD

**EN 62863**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2017

ICS 97.170

English Version

**Methods of measuring performances of electric hair clippers or  
trimmers for household use  
(IEC 62863:2017)**

Méthodes de mesure de l'aptitude à la fonction des  
tondeuses pour usage domestique  
(IEC 62863:2017)

Verfahren zur Messung der Leistung von elektrischen  
Haarschneidern und Haartrimmern für den Hausgebrauch  
(IEC 62863:2017)

This European Standard was approved by CENELEC on 2017-09-20. 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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**

**EN 62863:2017**

**European foreword**

The text of document 59L/144/FDIS, future edition 1 of IEC 62863, 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 62863:2017.

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) 2018-06-20
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-09-20

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 62863:2017 was approved by CENELEC as a European Standard without any modification.

IEC 60335-2-8

NOTE Harmonized as EN 60335-2-8.

IEC 61254

NOTE Harmonized as EN 61254.

**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 60704-2-8	-	Household and similar electrical appliances - Test code for the determination of airborne acoustical noise -- Part 2: Particular requirements for electric shavers	EN 60704-2-8	-

This page is intentionally left blank





**IEC 62863**

Edition 1.0 2017-08

# INTERNATIONAL STANDARD

**Method of measuring performances of electric hair clippers or trimmers for household use**



**THIS PUBLICATION IS COPYRIGHT PROTECTED**

**Copyright © 2017 IEC, Geneva, Switzerland**

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
Fax: +41 22 919 03 00  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

**About the IEC**

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

**About IEC publications**

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

**IEC Catalogue - [webstore.iec.ch/catalogue](http://webstore.iec.ch/catalogue)**

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

**IEC publications search - [www.iec.ch/searchpub](http://www.iec.ch/searchpub)**

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

**IEC Just Published - [webstore.iec.ch/justpublished](http://webstore.iec.ch/justpublished)**

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

**Electropedia - [www.electropedia.org](http://www.electropedia.org)**

The world's leading online dictionary of electronic and electrical terms containing 20 000 terms and definitions in English and French, with equivalent terms in 16 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

**IEC Glossary - [std.iec.ch/glossary](http://std.iec.ch/glossary)**

65 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

**IEC Customer Service Centre - [webstore.iec.ch/csc](http://webstore.iec.ch/csc)**

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: [csc@iec.ch](mailto:csc@iec.ch).



**IEC 62863**

Edition 1.0 2017-08

# INTERNATIONAL STANDARD

---

**Method of measuring performances of electric hair clippers or trimmers for household use**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

ICS 97.170

ISBN 978-2-8322-4682-5

**Warning! Make sure that you obtained this publication from an authorized distributor.**

## CONTENTS

FOREWORD.....	3
1 Scope .....	5
2 Normative references .....	5
3 Terms and definitions .....	5
4 General conditions for the tests .....	6
4.1 General.....	6
4.2 Pre-conditioning.....	7
4.3 Battery condition .....	7
4.4 Test environment .....	7
4.5 Limits of voltage variation .....	7
4.6 Test voltage .....	7
4.7 Test frequency .....	7
4.8 Test electrical supply system .....	7
5 Testing procedures .....	7
5.1 General.....	7
5.2 Preconditioning run .....	7
5.3 Test condition for no-load operation .....	8
5.4 Measurement of supply cord length.....	8
5.5 Starting ability test .....	8
5.6 Ability-to-cut test.....	8
5.7 Test of airborne acoustical noise.....	10
5.8 Test of reliability of the mechanical /electrical connection between the adapter and the cord/cordless rechargeable hair clipper or trimmer .....	10
5.9 Determination of the working minutes of a rechargeable hair clipper or trimmer after full charging .....	11
5.10 Determination of energy consumption of battery-operated hair clipper or trimmer .....	11
5.11 Endurance test.....	11
6 Records of test information and test result.....	12
6.1 Product details .....	12
6.2 Test parameters.....	12
6.3 Measured data .....	12
6.4 Test and laboratory details.....	13
Annex A (informative) Supplier information of hair strip.....	14
Annex B (informative) Positioning of the hair clipper or trimmer under test.....	15
Bibliography.....	16
Figure 1 – Sketch for the stationary blade tooth plane.....	6
Figure 2 – Measurement of supply cord length.....	8
Figure 3 – Stationary blade tooth plane parallel to the hair strip surface .....	9
Figure 4 – Hair strip width .....	9
Figure 5 – Distribution of hairs on the hair strip.....	10
Figure 6 – Orientation and length of hair .....	10
Figure 7 – Electrical connection diagram.....	11
Figure B.1 – Positioning of the hair clipper or trimmer under test .....	15

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**METHOD OF MEASURING PERFORMANCES OF ELECTRIC  
HAIR CLIPPERS OR TRIMMERS FOR HOUSEHOLD USE**

## 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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62863 has been prepared by subcommittee 59L: Small household appliances, of IEC technical committee 59: Performance of household and similar electrical appliances.

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

FDIS	Report on voting
59L/144/FDIS	59L/146/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.

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.

A bilingual version of this publication may be issued at a later date.

## METHOD OF MEASURING PERFORMANCES OF ELECTRIC HAIR CLIPPERS OR TRIMMERS FOR HOUSEHOLD USE

### 1 Scope

This document applies to reciprocating electric hair clippers or trimmers for household use.

This document deals with the methods of measuring performances of electric hair clippers or trimmers for household use with a rated voltage not greater than 250V.

This document does not specify safety or performance requirements.

This document does not apply to professional hair clippers or trimmers, animal shearers and animal clippers, or shavers. For shavers, refer to IEC 61254.

NOTE This document does not cover safety requirements (see IEC 60335-2-8).

### 2 Normative references

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.

IEC 60704-2-8, *Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 2: Particular requirements for electric shavers*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardisation at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

#### 3.1

##### **clipper** **trimmer**

appliance that is designed to cut hair that consists of a motor, drive system, fixed blade containing teeth and a moving blade containing teeth moving in a reciprocating motion intended for clipping/trimming, not shaving

Note 1 to entry: Depending on the specific function, clippers are also called trimmers.

#### 3.2

##### **battery-operated hair clipper** **battery-operated hair trimmer**

hair clipper or trimmer deriving its energy solely from primary batteries or secondary batteries and not designed for connection to the mains supply or a charger, or from the battery packs that are supplied by manufacturers together with the hair clipper or trimmer

Note 1 to entry: If the manufacturer supplies a specific charger and rechargeable batteries with the clipper or trimmer, the combined device is considered as a rechargeable hair clipper or trimmer when performance is measured.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-