

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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

**Part 2-6: Particular requirements for tumble dryers**

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

**Partie 2-6: Règles particulières pour les sèche-linge à tambour**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –  
TEST CODE FOR THE DETERMINATION  
OF AIRBORNE ACOUSTICAL NOISE –****Part 2-6: Particular requirements for tumble dryers**

## FOREWORD

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International Standard IEC 60704-2-6 has been prepared by subcommittee 59D: Home laundry appliances, of IEC technical committee 59: Performance of household electrical appliances.

This third edition cancels and replaces the second edition published in 2003. This edition constitutes a technical revision.

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

- a) it does not contain the description of an appropriate test enclosure which has been incorporated in Part 1;
- b) it clarifies that only appliances designed for front loading and specified by the manufacturer for building-in, under a counter or placing under a worktop between cabinets (under-counter types) shall be placed in a test enclosure.

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

FDIS	Report on voting
59D/394/FDIS	59D/397/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.

This Part 2-6 is intended to be used in conjunction with the 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*.

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

This Part 2-6 supplements or modifies the corresponding clauses in IEC 60704-1, so as to establish the test code for tumble dryers. When a particular subclause of Part 1 is not mentioned in this Part 2-6, 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 should be adapted accordingly.

Subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1. Additional annexes are lettered AA, BB, etc.

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.

A list of all the 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 publication will remain unchanged until the stability date indicated on the IEC web site 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.

## INTRODUCTION

The measuring conditions specified in this part of IEC 60704 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 tumble dryers.

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

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

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

## Part 2-6: Particular requirements for tumble dryers

### 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 single unit electric tumble dryers for household and similar use intended for placing on the floor against a wall, for building-in or placing under a counter, a kitchen worktop or under a sink, for wall-mounting or on a counter. For the purpose of this standard, washer-dryer combinations, when operated as a dryer, are considered as a tumble dryer.

NOTE 101 For washing function, see IEC 60704-2-4.

This standard is also applicable for gas-fired electric tumble dryers.

##### 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 tumble dryers.

##### 1.1.3 Size of the 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 appliance under test fulfils the requirements specified in 1.3 of ISO 3743-1 and ISO 3743-2.

### 1.2 Object

*Addition:*

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

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 according to this standard, are:

**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 according to IEC 60704-3, the values indicated 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 1,0	1,1 to 1,3	1,5

## 2 Normative references

This clause of Part 1 is applicable except as follows:

*Addition:*

IEC 61121: —<sup>1</sup>, *Tumble dryers for household use – Methods for measuring the performance*

IEC 60456:2010, *Clothes washing machines for household use – Methods for measuring the performance*

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

## 3 Terms and definitions

This clause of Part 1 is applicable except as follows.

*Addition:*

### 3.101

#### tumble dryer

appliance in which textile material is dried by tumbling in a rotating drum, through which heated air is passed

<sup>1</sup> To be published.