



# SLOVENSKI STANDARD

## SIST EN 61121:2001

01-februar-2001

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### Tumble dryers for household use - Methods for measuring the performance

Tumble dryers for household use - Methods for measuring the performance

Wäschetrockner für den Hausgebrauch - Verfahren zur Messung der Gebrauchseigenschaften

Sèche-linge à tambour à usage domestique - Méthodes de mesure de l'aptitude à la fonction

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Ta slovenski standard je istoveten z: **EN 61121:1999**

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#### **ICS:**

97.060

Aparati za nego perila

Laundry appliances

**SIST EN 61121:2001**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61121**

June 1999

ICS 97.060

Supersedes EN 61121:1993 + A11:1995

English version

**Tumble dryers for household use  
Methods for measuring the performance  
(IEC 61121:1997, modified)**

Sèche-linge à tambour à usage  
domestique - Méthodes de mesure  
de l'aptitude à la fonction  
(CEI 61121:1997, modifiée)

Wäschetrockner für den Hausgebrauch  
Verfahren zur Messung der  
Gebrauchseigenschaften  
(IEC 61121:1997, modifiziert)

This European Standard was approved by CENELEC on 1999-05-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The text of the International Standard IEC61121:1997, prepared by SC 59D "Home laundry appliances" des IEC TC 59 "Performance of household electrical appliances", together with common modifications prepared by the Technical Committee CENELEC TC 59X, Consumer information related to household electrical appliances, was submitted to the formal vote and was approved by CENELEC as EN 61121 on 1999-05-01.

This European Standard supersedes EN 61121:1993 and its amendment A11:1995.

Significant technical differences are:

- a) Tolerance limits have been specified for instrumentation and base loads.
- b) For condenser tumble dryers an option of two methods for measuring the efficiency of condensation is included.
- c) An optional method for measurement and calculation of the evenness of drying has been added.
- d) The final moisture content for iron dry cotton program has been changed.

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) 1999-10-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1999-10-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A, B and ZA are normative and annex C is informative.

ZA has been added by CENELEC.

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

IEC 60704-1 NOTE: Harmonized as EN 60704-1:1994, which is superseded by EN 60704-1:1997 (not modified).

IEC 60704-2-6 NOTE: Harmonized as EN 60704-2-6:1995 (not modified).

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## Endorsement notice

The text of the International Standard IEC61121:1997 was approved by CENELEC as a European Standard with agreed common modifications as given below.

### COMMON MODIFICATIONS

#### 1 Scope

Add a fourth paragraph:

This European Standard also specifies, as far as necessary, the test methods which shall be applied in accordance with the Commission's Directive 95/13/EC of 23 May 1995 implementing Council Directive 92/75/EEC with regard to energy labelling of household Electric Tumble Dryers and adds clauses defining permitted tolerances to values declared by the manufacturer and control procedures for checking these declared values.

#### 2 Normative references

Add:

IEC 60704-2-6:1994 *Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances - - Part 2: Particular requirements for tumble dryers*

IEC 60704-3:1992 *Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances - - Part 3: Procedure for determining and verifying declared noise emission values*

#### 6 General conditions for measurements

##### 6.1 General

Add a second sentence:

For the purpose of energy labelling only those test methods are applicable which are required according to the Commission Directive mentioned in clause 1: Scope.

##### 6.2.1 Electrical supply

Replace the existing text by:

The supply voltage shall be maintained at 230 V  $\pm$  1%.  
The supply frequency shall be 50 Hz  $\pm$  1%.

##### 7.3.1 Preparation of textiles

Add a third paragraph:

Water hardness shall comply with 6.2.2.

## 8.6 Electrical energy

Replace the existing paragraph by:

The measurement shall have an accuracy that provides less than 2 % inaccuracy of the highest nominal value according to rated power input data specified by the manufacturer.

### 9.2.1 Drying program

Delete in all three sentences: (dried down to conditioned mass).

Add the following clause:

## 101 Tolerances and control procedures

### 101.1 Energy consumption

For each drying program the value of the energy consumption, measured according to 10.1.1 and determined according to 10.2.2 on the first appliance shall not be greater than the value declared by the manufacturer plus 15%.

If the result(s) of the test carried out on the first appliances is (are) greater than the value declared for the drying program(s) plus 15%, the test for the relevant drying program(s) shall be carried out on a further three appliances.

The arithmetic mean of the values of these three appliances for the relevant drying program shall not be greater than the declared value plus 10%.

### 101.2 Water consumption (where applicable)

For each drying program the value of the water consumption, measured according to 10.1.2 and determined according to 10.2.3 on the first appliance shall not be greater than the water consumption declared by the manufacturer plus 15%.

If the result(s) of the test carried out on the first appliances is (are) greater than the value declared for the drying program(s) plus 15%, the test for the relevant drying programs(s) shall be carried out on a further three appliances.

The arithmetic mean of the values of these three appliances for the relevant drying program shall not be greater than the declared value plus 10%.

### 101.3 Drying time

The drying time, measured and determined according to 9.3.4 for the relevant program, shall not be greater than the value declared by the manufacturer plus 15%.

## Annex ZA (normative)

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

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60456 (mod)	1998	Electric clothes washing machines for household use - Methods for measuring the performance	EN 60456	1999
IEC 60704-2-6	1994	Test code for the determination of airborne acoustical noise emitted by household and similar electrical appliances Part 2: Particular requirements for tumbler dryers	EN 60704-2-6	1995
IEC 60704-3	1992	Part 3: Procedure for determining and verifying declared noise emission values	EN 60704-3	1994
IEC 60734	1993	Hard water to be used for testing the performance of some household electrical appliances	EN 60734	1993
ISO 5167-1	1991	Measurement of fluid flow by means of pressure differential devices Part 1: Orifice plates, nozzles and Venturi tubes inserted in circular cross-section conduits running full	EN ISO 5167-1	1995

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**61121**

Deuxième édition  
Second edition  
1997-10

**Sèche-linge à tambour à usage domestique –  
Méthodes de mesure de l'aptitude à la fonction**

**Tumble dryers for household use –  
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International Electrotechnical Commission  
Telefax: +41 22 919 0300

3, rue de Varembe Geneva, Switzerland  
e-mail: inmail@iec.ch IEC web site <http://www.iec.ch>



Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

CODE PRIX  
PRICE CODE

**S**

*For price, voir catalogue en vigueur  
For price, see current catalogue*

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**TUMBLE DRYERS FOR HOUSEHOLD USE –  
Methods for measuring the performance**

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61121 has been prepared by subcommittee 59D: Home laundry appliances, of IEC technical committee 59: Performance of household electrical appliances.

This second edition cancels and replaces the first edition published in 1991, of which it constitutes a technical revision.

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

FDIS	Report on voting
59D/127/FDIS	59D/134/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.

The French version of this standard has not been voted upon.

Annexes A and B form an integral part of this standard.

Annex C is for information only.

In this standard, the following print types are used:

- *test specifications: in italic type;*
- notes: in small roman type;
- other text: in roman type.

Words in **bold** in the text are defined in clause 3.