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**Varnost gospodinjskih in podobnih električnih aparatov - 2-11. del: Posebne zahteve za bobenske sušilnike (IEC 60335-2-11:2000; spremenjen)**

Safety of household and similar electrical appliances - Part 2-11: Particular requirements for tumble dryers (IEC 60335-2-11:2000, modified)

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EUROPEAN STANDARD

**EN 60335-2-11**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2001

ICS 13.120; 97.060

Supersedes EN 60335-2-11:1995 + A1:1998

English version

**Safety of household and similar electrical appliances**  
**Part 2-11: Particular requirements for tumble dryers**  
(IEC 60335-2-11:2000, modified)

Sécurité des appareils  
électrodomestiques et analogues  
Partie 2-11: Règles particulières pour les  
sèche-linge à tambour  
(CEI 60335-2-11:2000, modifiée)

Sicherheit elektrischer Geräte für den  
Hausgebrauch und ähnliche Zwecke  
Teil 2-11: Besondere Anforderungen für  
Trommeltrockner  
(IEC 60335-2-11:2000, modifiziert)

This European Standard was approved by CENELEC on 2000-08-01. 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 amendment 2:1999 to IEC 60335-2-11:1993, prepared by the IEC Technical Committee 61, was submitted to the Unique Acceptance Procedure.

The text of document 61/1646/FDIS, future amendment to IEC 60335-2-11:1993 prepared by the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote.

The above texts were combined with the text of IEC 60335-2-11:1993 and its amendment 1:1998 into a new edition of IEC 60335-2-11 which, together with the common modification in EN 60335-2-11:1995, was approved by CENELEC as a new edition of EN 60335-2-11 on 2000-08-01.

The following dates are applicable:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-08-01
- date on which national standards conflicting with the EN have to be withdrawn (dow) 2007-08-01

This European Standard replaces EN 60335-2-11:1995 and its amendment A1:1998.

This standard has to be used in conjunction with EN 60335-1, Safety of household and similar electrical appliances, Part 1: General requirements. It was established on the basis of the 1994 edition of that standard. Amendments and revisions of part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of part 1.

This part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Safety requirements for electric tumble dryers.

When a particular subclause of part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of part 1 is to be adapted accordingly.

Subclauses and figures which are additional to those in part 1 are numbered starting with 101.

There are no special national conditions causing a deviation from this European Standard, other than those listed in annex ZA to EN 60335-1.

There are no national deviations from this European Standard, other than those listed in annex ZB to EN 60335-1.

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NOTE The following print types are used:

- requirements: in roman type; (standards.iteh.ai)
- test specifications: in italic type;
- notes: in small roman type.

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Words in bold in the text are defined in clause 2. When a definition of part 1 concerns an adjective, the adjective and the associated noun are also in bold.

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p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version.

## Introduction

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 73/23/EEC. If the product has mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 89/392/EEC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

**Endorsement notice**

The text of the International Standard IEC 60335-2-11:2000 was approved by CENELEC as a European Standard with agreed common modifications as given below.

**COMMON MODIFICATIONS**

**24 Components**

p Add:

24.Z101 Components necessary for the connection of the washing machine to the water mains shall comply with EN 61770. They shall be supplied with the appliance.

*Compliance is checked by inspection.*

**Annexes**

**Annex A - Normative references**

p *Replace by:*

**Annex A**  
(normative)

**Normative references**

**International publications with their relevant European publication**

*Addition:*

<u>IEC standard</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60417-1	1998	Graphical symbols for use on equipment Part 1: Overview and application	EN 60417-1	1999
IEC 61770	1998	Electric appliances connected to the water mains - Avoidance of backsiphonage and failure of hose-sets	EN 61770	1999

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# INTERNATIONAL STANDARD

# IEC 60335-2-11

Fifth edition  
2000-02

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## Safety of household and similar electrical appliances –

### Part 2-11: Particular requirements for tumble dryers

*Sécurité des appareils électrodomestiques et analogues –*

*Partie 2-11:  
Règles particulières pour les sèche-linge à tambour*

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF HOUSEHOLD AND SIMILAR  
ELECTRICAL APPLIANCES –

## Part 2-11: Particular requirements for tumble dryers

## 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 specifications, 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.

This part of International Standard IEC 60335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This fifth edition cancels and replaces the fourth edition published in 1993, amendment 1 (1998) and amendment 2 (1999). This fifth edition constitutes a technical revision.

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The text of this standard is based on the fourth edition, amendments 1 and 2 and the following documents:

SIST EN 60335-2-11:2001

FDIS	Report on voting
61/1646/FDIS	61/1742/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 part 2 is intended to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the third edition (1991) of that standard.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert it into the IEC standard: Safety requirements for electric tumble dryers (fourth edition).

Where a particular subclause of part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. Where this standard states "addition", "modification" or "replacement", the relevant text in part 1 should be adapted accordingly.

NOTE 1 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type;

Words in **bold** in the text are defined in clause 2.

NOTE 2 Subclauses and figures which are additional to those in part 1 are numbered starting from 101.

The following differences exist in some countries:

- 2.2.9: Different size cloths are used (USA).
- 6.2: Tumble dryers are not required to be IPX4 (USA).
- 7.1: An instruction concerning cleaning the lint trap is to be marked on the dryer in letters not less than 8 mm high and is to be conspicuous when the dryer door is open (Australia, New Zealand).
- 7.12: Actual articles of clothing can be specified instead and warnings are required to be marked on the appliance regarding the use of chemicals for cleaning (USA).
- 11.2: Other methods are used for conducting heating tests on tumble dryers (USA).
- 11.7: This test is continued until steady conditions are established and different criteria are used to determine when steady conditions are reached (USA).
- 19.4: The test is conducted differently (USA).
- 19.9: A running overload test is required on automatically controlled tumble dryers (USA).
- 20.101: The requirement is applicable to door openings with a dimension exceeding 20 cm (Norway).
- 20.102: When considering accessibility to rotating drums, the maximum drum volume is 60 dm<sup>3</sup> and the maximum door opening is 20 cm (USA).
- 20.103: This test is not conducted (USA).
- 22.103: Different methods are used to evaluate the stability of stacked tumble dryers and washing machines (USA).
- 27.1: Earthing terminals and contacts are permitted to be electrically connected to the neutral conductor of a tumble dryer (USA)

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A bilingual version of this standard may be issued at a later date.  
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## SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –

### Part 2-11: Particular requirements for tumble dryers

#### 1 Scope

This clause of part 1 is replaced by:

This standard deals with the safety of electric **tumble dryers** intended for household and similar purposes and having a **rated voltage** not more than 250 V for single-phase appliances and 480 V for other appliances.

NOTE 1 This standard applies to the drying function of appliances having both a washing and drying function.

Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances for communal use in blocks of flats or in laundrettes, are also within the scope of this standard.

So far as is practicable, this standard deals with the common hazards presented by appliances which are encountered by all persons in and around the home. However, this standard does not in general take into account

- the use of appliances by young children or infirm persons without supervision;
- playing with the appliance by young children.

NOTE 2 Attention is drawn to the fact that:

- For appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;
- For appliances intended to be used in tropical countries, special requirements may be necessary;
- In many countries additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities.

NOTE 3 – This standard does not apply to:

- appliances intended exclusively for industrial or commercial purposes;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

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