



SLOVENSKI STANDARD
SIST EN 60335-2-4:1997/A2:2001
01-julij-2001

Safety of household and similar electrical appliances - Part 2-4: Particular requirements for spin extractors - Amendment A2 (IEC 60335-2-4:1993/A2:1999)

Safety of household and similar electrical appliances -- Part 2-4: Particular requirements for spin extractors

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -- Teil 2-4: Besondere Anforderungen für Wäscheschleudern

Sécurité des appareils électrodomestiques et analogues -- Partie 2-4: Règles particulières pour lesessoreuses centrifuges

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Ta slovenski standard je istoveten z: EN 60335-2-4:1995/A2:2000

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13.120	Varnost na domu	Domestic safety
97.060	Aparati za nego perila	Laundry appliances

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EUROPEAN STANDARD

EN 60335-2-4/A2

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2000

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English version

Safety of household and similar electrical appliances
Part 2-4: Particular requirements for spin extractors
(IEC 60335-2-4:1993/A2:1999)

Sécurité des appareils
électrodomestiques et analogues
Partie 2-4: Règles particulières pour les
essoreuses centrifuges
(CEI 60335-2-4:1993/A2:1999)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2-4: Besondere Anforderungen für
Wäscheschleudern
(IEC 60335-2-4:1993/A2:1999)

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This amendment A2 modifies the European Standard EN 60335-2-4:1995; it 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 amendment 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 amendment 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.

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 60335-2-4:1993, prepared by the IEC Technical Committee 61, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A2 to EN 60335-2-4 on 2000-08-01.

The following dates are applicable:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2001-05-01
- date on which national standards conflicting with the amendment have to be withdrawn (dow) 2007-08-01

This amendment supplements or modifies the corresponding clauses of EN 60335-2-4:1995.

There are no special national conditions causing a deviation from this amendment.

There are no national deviations from this amendment.

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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 amendment 2:1999 to the International Standard IEC 60335-2-4:1993 was approved by CENELEC as an amendment to the European Standard without any modification.

**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

60335-2-4

Edition 4.2

2000-03

Edition 4:1993 consolidée par les amendements 1:1997 et 2:1999
Edition 4:1993 consolidated with amendments 1:1997 and 2:1999

**Sécurité des appareils électrodomestiques
et analogues –**

**Partie 2-4:
Règles particulières pour les essoreuses
centrifuges**

(standards.iteh.ai)

**Safety of household and similar electrical
appliances –**

<https://standards.iteh.ai/catalog/standards/sist/7ef6f4de-9576-4502-afd3-e4bd34302033/sist-en-60335-2-4-1997-a2-2001>

**Part 2-4:
Particular requirements for spin extractors**

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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 2-4: Particular requirements for spin extractors

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 consolidated version of IEC 60335-2-4 is based on the fourth edition (1993) [documents 61(CO)764 and 61(CO)778], its amendment 1 (1997) [documents 61/1098/FDIS and 61/1205/RVD] and its amendment 2 (1999) [documents 61/1560/FDIS and 61/1603/RVD].

It bears the edition number 4.2.

A vertical line in the margin shows where the base publication has been modified by amendments 1 and 2.

This part 2 is 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 publication.

This part 2 supplements or modifies the corresponding clauses of IEC 60335-1, so as to convert it into the IEC standard: Safety requirements for electric spin extractors.

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 is to 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 additional differences exist in some countries:

- 2.2.9: As an alternative to the test material specified, pieces of cloth having an area between 4 800 cm² and 5 000 cm², with one side at least 55 cm, may be used for the tests (U.S.A.).
- clause 3: The allowable d.c. component in the appliance neutral is limited (Australia).
- 6.2: IPX0 appliances are permitted (U.S.A.).
- 15.2: The test is conducted differently (U.S.A.).
- 18.101: 6 000 cycles are required (Canada and U.S.A.).
- 19.7: This subclause is applicable (U.S.A.).
- 20.101: The test is not carried out (U.S.A.).
- 20.103: The requirement is different (U.S.A.).
- 20.104: The requirement is different (U.S.A.).
- 20.105: The requirement is different (U.S.A.).
- 20.106: The requirement is different (U.S.A.).
- 21.101, 21.102: Construction specifications are used for metal lids and different tests are used for thermoplastic lids (U.S.A.).

SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –

Part 2-4: Particular requirements for spin extractors

1 Scope

This clause of part 1 is replaced by:

This standard deals with the safety of electric spin extractors for household and similar purposes, having a capacity not exceeding 10 kg of dry cloth and a drum peripheral speed not exceeding 50 m/s, their **rated voltages** being not more than 250 V for single-phase appliances and 480 V for other appliances.

NOTE 1 Spin extractors incorporated in washing machines are within the scope of this standard, irrespective of their capacity.

Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, are within the scope of this standard.

NOTE 2 Examples of such appliances are spin extractors for communal use in blocks of flats or in launderettes.

So far as practicable, this standard deals with the common hazard presented by appliances which are encountered by all persons in and around the home.

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 3 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 4 This standard does not apply to:

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

2 Definitions

This clause of part 1 is applicable except as follows:

2.2.9 Replacement:

normal operation

appliances are operated with the drum filled with a quantity of cloth having a mass in the dry condition equal to the maximum mass specified in the instructions for use.

The cloth is pre-washed double-hemmed cotton sheets having dimensions of approximately 70 cm × 70 cm and a mass between 140 g/m² and 175 g/m² in the dry condition. It is saturated with cold water before being evenly distributed in the drum.

2.7.2 Addition:

NOTE When reference is made to lids, doors are included.

3 General requirement

This clause of part 1 is applicable.

4 General conditions for the tests

This clause of part 1 is applicable except as follows:

4.2 Addition:

The test of 22.101 is carried out before the tests of clause 20.

4.101 Spin extractors are tested as portable appliances, unless they are fixed appliances or are incorporated in another appliance.

5 Void

6 Classification

This clause of part 1 is applicable except as follows:

6.1 Replacement:

Appliances shall be of **class I**, **class II**, or **class III** with respect to protection against electric shock.

Compliance is checked by inspection and by the relevant tests.

6.2 Addition:

Appliances shall be at least IPX4.

7 Marking and instructions

This clause of part 1 is applicable except as follows:

7.10 Addition:

If the **off position** is only indicated by letters, the word "off" shall be used.

7.12 Addition:

The instructions for use shall specify the maximum mass of dry cloth in kg, for which the appliance is designed.

7.12.1 Addition:

For appliances intended for communal use in blocks of flats and which are provided with an interlock system which has to be energized in order to release the lid, the substance of the following shall be stated:

This spin extractor has to be connected to the supply before the lid can be opened. Do not force it open.

This instruction shall be on a permanent notice for fixing to the wall close to the appliance unless it is marked on the appliance.

For appliances intended for communal use in blocks of flats and which are provided with an interlock system which has to be energized in order to release the lid, the installation instructions shall state that a timer or similar device that switches off the appliance automatically is not to be installed in the supply circuit.

8 Protection against access to live parts

This clause of part 1 is applicable.

9 Starting of motor-operated appliances

This clause of part 1 is not applicable.

10 Power input and current

This clause of part 1 is applicable.

11 Heating

This clause of part 1 is applicable except as follows:

11.7 Replacement:

Appliances are operated for five periods of water extraction, the periods being separated by a rest period. Each rest period, which includes the braking time, has a duration of 1 min for each kg of dry cloth or 4 min, whichever is the longer. During the rest period, the cloth is re-saturated with cold water.