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Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60335-2-	This Estonian standard EVS-EN 60335-2-	
17:2003 sisaldab Euroopa standardi EN 60335-	17:2003 consists of the English text of the	
2-17:2002 ingliskeelset teksti.	European standard EN 60335-2-17:2002.	
Standard on kinnitatud Eesti Standardikeskuse	This standard is ratified with the order of	
17.07.2003 käskkirjaga ja jõustub sellekohase	Estonian Centre for Standardisation dated	
teate avaldamisel EVS Teatajas.	17.07.2003 and is endorsed with the notification	
	published in the official bulletin of the Estonian	
2.	national standardisation organisation.	
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Standard on kättesaadav Eesti	The standard is available from Estonian	
standardiorganisatsioonist.	standardisation organisation	
	oran care or gameatorn	
ICS 13.120, 97.040.50	12.12.2002. The standard is available from Estonian standardisation organisation.	
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EUROPEAN STANDARD

EN 60335-2-17

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2002

ICS 13.120; 97.040.50

Supersedes EN 60335-2-17:1999

English version



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Foreword

The text of document 61/2168/FDIS, future second edition of IEC 60335-2-17, prepared by the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60335-2-17 on 2002-11-01.

This European Standard replaces EN 60335-2-17:1999.

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) 2003-08-01
- date on which national standards conflicting with the EN laye to be withdrawn

(dow) 2005-11-01

This part 2 has to be used in conjunction with EN 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements. It was established on the basis of the 2002 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 blankets, pads and similar flexible heating appliances.

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.

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 10 signal to those in Part 1;
- 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;
- additional annexes are lettered AA, BB, etc.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letter Z.

NOTE 2 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 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

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.

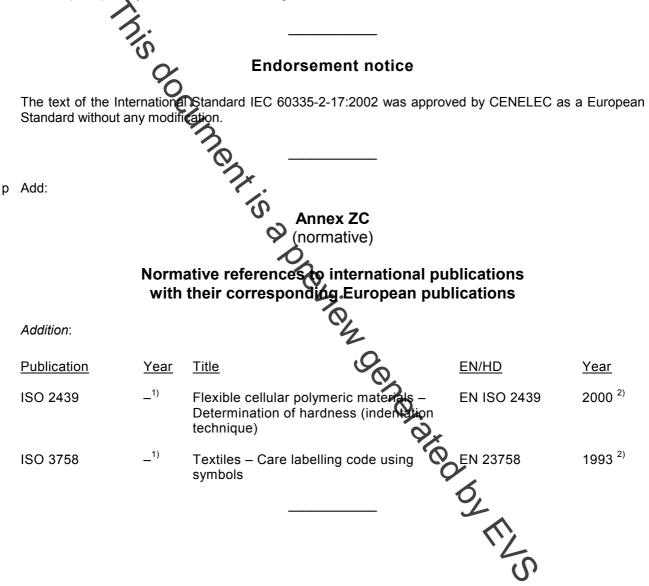
Annexes AA and BB are normative and form an integral part of this standard.

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

Introduction

p Add:

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. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 98/37/EC, 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.



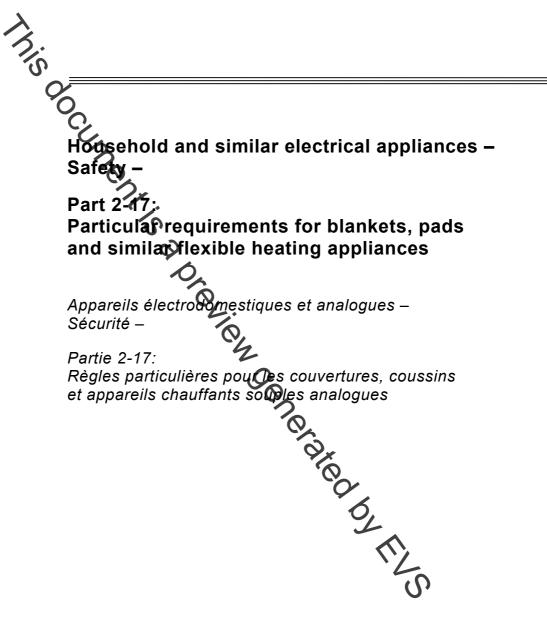
¹⁾ undated reference

²⁾ valid edition at date of issue

INTERNATIONAL STANDARD

IEC 60335-2-17

Second edition 2002-10





Reference number IEC 60335-2-17:2002(E)

Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

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The technical content of IEC publications is kept under constant review by the IEC, thus ensuing that the content reflects current technology. Information relating to this publication, including its validity, is available in the IEC Catalogue of publications (see below) in addition to new editions, amendments and corrigenda. Information of the subjects under consideration and work in progress undertaken by the technical committee which has prepared this publication, as well as the list of publications issued, is also available from the following:

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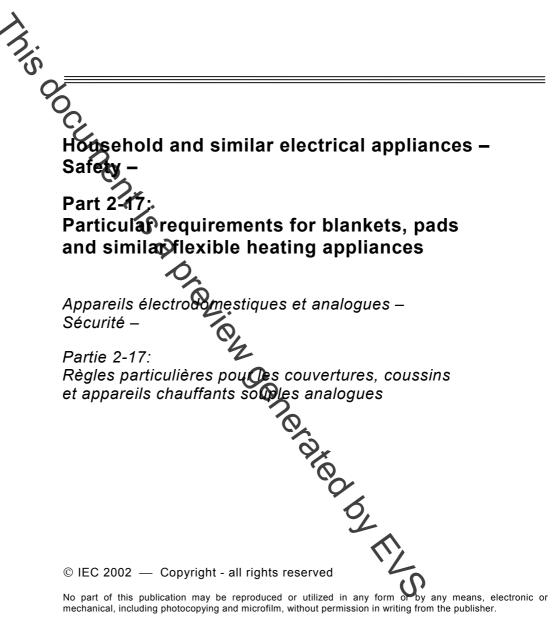
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INTERNATIONAL STANDARD

IEC 60335-2-17

Second edition 2002-10



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-17: Particular requirements for blankets, pads and similar flexible heating appliances



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 toork. 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 (SO) 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 exten 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 second edition cancels and replaces the first edition published in 1998. It constitutes a technical revision.

The text of this part of IEC 60335 is based on the following documents

FDIS	Report on voting	
61/2168/FDIS	61/2249/RVD	Ľ
		- · · ·

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 to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fourth edition (2001) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for electric blankets, pads and similar flexible heating appliances.

NOTE 2 Annex AA contains provisions from ISO 2439.

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 in Part 1 is to be adapted accordingly.

NOTE 3 The following numbering system is used:

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

NOTE 4 The following print types are used:

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- test specifications: in italic type;
- notes: in small romantype. _

Words in **bold** in the text ace defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold

The committee has decided the contents of this publication will remain unchanged until 2004. At this date, the publication will be

- reconfirmed; •
- withdrawn;
- replaced by a revised edition, or
- amended. .

The following differences exist in the count indicated below.

- 6.1: Class 0 products are allowed (Japan and USA)
- 19.108: The fuse is not required to rupture (Australia).
- 22.102: Thermostats and thermal cut-outs are not allowed in the flexible part of underblankets (Australia and New Zealand).
- Annex AA: Felt is used for the thermal insulation (USA).

 Annex AA: Felt is used for the means.
A bilingual version of this publication may be issued at a later date. a taked by TTLS

INTRODUCTION

It has been assumed in the drafting of this International Standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

This standard is a product fand, standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of the standard if, when examined and tested, it is found to have other features that impair the level of safety covered by these requirements.

An appliance employing materials or having mass of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantiate equivalent, may be considered to comply with the standard.

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES -SAFETY -

Part 2-17: Particular requirements for blankets, pads and similar flexible heating appliances

1 Scope

This clause of Part is replaced by the following.

This International Standard deals with the safety of electric blankets, pads and other flexible appliances that heat the bed or human body, for household and similar purposes, their rated voltage being not more than 250 V.

This standard also applies to **control units** supplied with the appliance.

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

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

NOTE 101 Children are considered to be old enough use an appliance without supervision when they have been adequately instructed by a parent or guardian and are deemed competent to use the appliance safely.

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NOTE 102 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
- in many countries, additional requirements are specified in many countries, additional requirements are specified when the national health authorities, the national authorities responsible for the protection of labour and similar authorities.

NOTE 103 This standard does not apply to

- 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); Ô
- rigid bed warmers, such as those of metal or ceramic material;
- water bed heaters (IEC 60335-2-66);
- heating appliances for breeding and rearing animals (IEC 60335-2-71);
- foot warmers and heating mats (IEC 60335-2-81);
- foot warmers and heating mats (IEC 60335-2-81), appliances specifically intended for use under medical supervision (IEC 60601-2-35)

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

ISO 2439, Flexible cellular polymeric materials – Determination of hardness (indentation *technique*)

ISO 3758, Textiles – Care labelling code using symbols