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Household and similar electrical appliances - Safety - Part 2-106: Particular requirements for heated carpets and for heating units for room heating installed under removable floor coverings

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-106: Besondere Anforderungen für beheizte Teppiche und für Heizsysteme zur Raumheizung unter abnehmbaren Fußbodenbelägen

Appareils électr odomesticques et analogues Sécurité Partie 2-106: Regles particulieres pour les tapis chauffants et les unités chauffantes installées sous des revetements de sol amovibles, pour le chauffage des locaux

Ta slovenski standard je istoveten z: EN 60335-2-106:2007

ICS:

13.120	Varnost na domu	Domestic safety
97.100.10	Ò\ dã } Æ ! ^ } ã ã	Electric heaters

SIST EN 60335-2-106:2008**en,fr,de**

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English version

**Household and similar electrical appliances -
Safety -
Part 2-106: Particular requirements for heated carpets
and for heating units for room heating
installed under removable floor coverings
(IEC 60335-2-106:2007)**

Appareils électrodomestiques
et analogues -
Sécurité -
Partie 2-106: Règles particulières
pour les tapis chauffants
et les unités chauffantes installées
sous des revêtements de sol
amovibles,
pour le chauffage des locaux
(CEI 60335-2-106:2007)

Sicherheit elektrischer Geräte
für den Hausgebrauch
und ähnliche Zwecke -
Teil 2-106: Besondere Anforderungen
für beheizte Teppiche und für
Heizsysteme zur Raumheizung
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This European Standard was approved by CENELEC on 2007-05-01. 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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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 document 61/3220/FDIS, future edition 1 of IEC 60335-2-106, prepared by the IEC Technical Committee 61, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60335-2-106 on 2007-05-01.

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) 2008-02-01
- date on which national standards conflicting with the EN have to be withdrawn (dow) 2010-05-01

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 heated carpets and for heating units for room heating installed under removable floor coverings.

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 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.;
- 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.

Special national conditions causing a deviation from this European Standard are listed in Annex ZA and are in addition to those in EN 60335-1.

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

- 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, 2006/95/EC. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 2006/42/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.

Endorsement notice

The text of the International Standard IEC 60335-2-106:2007 was approved by CENELEC as a European Standard without any modification.

Bibliography

p Add the following notes to the standards mentioned:

IEC 60335-2-17: NOTE Harmonized as EN 60335-2-17:2002 (not modified).

IEC 60335-2-81: NOTE Harmonized as EN 60335-2-81:2003 (not modified).

IEC 60335-2-96: NOTE Harmonized as EN 60335-2-96:2002 (not modified).

ISO 13732-1: NOTE Harmonized as EN ISO 13732-1:2006 (not modified).

p Add:

Annex ZA (normative)

Special national conditions

Addition:

Clause Special national condition

General **Finland**

Only Class III heating units are allowed.

p Add:

Annex ZC
(normative)**Normative references to international publications
with their corresponding European publications**

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60884-1	2002	Plugs and socket-outlets for household and similar purposes – Part 1: General requirements	–	–

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IEC

60335-2-106

Première édition
First edition
2007-02

**Appareils électrodomestiques et analogues –
Sécurité –**

**Partie 2-106:
Règles particulières pour les tapis chauffants
et les unités chauffantes installées sous des
revêtements de sol amovibles, pour le
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**Household and similar electrical appliances –
Safety –**

**Part 2-106:
Particular requirements for heated carpets and for
heating units for room heating installed under
removable floor coverings**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –**
**Part 2-106: Particular requirements for heated carpets and for heating
units for room heating installed under removable floor coverings**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60335-2-106 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61/3220/FDIS	61/3241/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 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 heated carpets and for heating units for room heating installed under removable floor coverings.

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 2 The following numbering system is used:

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

NOTE 3 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**.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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; <https://standards.iteh.ai/catalog/standards/sist/b0bb6f23-60a6-4754-9806-62f4e7c2a4c7/sist-en-60335-2-106-2008>
- withdrawn;
- replaced by a revised edition, or
- amended.

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 and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

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.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

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

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

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 forms 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 substantially equivalent, may be considered to comply with the standard.

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-106: Particular requirements for heated carpets and for heating units for room heating installed under removable floor coverings

1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of

- heated carpets and similar appliances;
- **heating units** to heat the room in which they are located and that are intended to be installed directly under a floor covering that is itself intended to be removable;

their **rated voltage** being not more than 250 V for single-phase installations and 480 V for other installations.

NOTE 101 Examples of materials used as removable floor coverings are carpet, cushion vinyl, or loose laid laminate.

NOTE 102 Attention is drawn to the fact that

- in many countries different wiring rules apply;
- 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 by the national authorities for fire protection, the national authorities for building regulations, 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 exclusively for industrial 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);
- blankets, pads and similar flexible heating appliances (IEC 60335-2-17);
- heated mats and foot warmers (IEC 60335-2-81);
- flexible sheet heating systems permanently incorporated in the floor of the building structure (IEC 60335-2-96);
- flexible heating elements incorporated in other appliances.

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60884-1:2002, *Plugs and socket-outlets for household and similar purposes – Part 1: General requirements*

3 Definitions

This clause of Part 1 is applicable except as follows.