Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-30: Erinõuded ruumikütteseadmetele

Household and similar electrical appliances - Safety le quire. Part 2-30: Particular requirements for room heaters



# FESTI STANDARDI FESSÕNA

teate avaldamisel EVS Teatajas.

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 60335-2-30:2010 sisaldab Euroopa standardi EN 60335-2-30:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 23.12.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60335-2-30:2010 consists of the English text of the European standard EN 60335-2-30:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 23.12.2009.

The standard is available from Estonian standardisation organisation.

ICS 13.120, 97.100.10

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# **EUROPEAN STANDARD**

# EN 60335-2-30

# NORME EUROPÉENNE EUROPÄISCHE NORM

December 2009

ICS 13.120; 97.100.10

Supersedes EN 60335-2-30:2003 + A1:2004 + A2:2007

English version

# Household and similar electrical appliances - Safety -

Part 2-30: Particular requirements for room heaters

(IEC 60335-2-30:2009)

Appareils électrodomestiques et analogues - Sécurité - Partie 2-30: Règles particulières pour les appareils de chauffage des locaux (CEI 60335-2-30:2009)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -Teil 2-30: Besondere Anforderungen für Raumheizgeräte (IEC 60335-2-30:2009)

This European Standard was approved by CENELEC on 2009-12-01. 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.

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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: Avenue Marnix 17, B - 1000 Brussels

### Foreword

The text of document 61/3910/FDIS, future edition 5 of IEC 60335-2-30, prepared by IEC TC 61, Safety of household and similar electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60335-2-30 on 2009-12-01.

This European Standard supersedes EN 60335-2-30:2003 + A1:2004 + A2:2007.

The principal changes in EN 60335-2-30:2009 as compared with EN 60335-2-30:2003 are as follows (minor changes are not listed):

- some additional instructions are introduced for heaters without a built-in thermostat, or those installed in the floor or in a bathroom (7.12 and 7.12.1);
- a spillage test is introduced for appliances having a grille and that are built into the floor (15.2).

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) 2010-09-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2014-12-01

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 automatic machines for floor treatment for commercial use.

When a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies. 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.

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.

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 60335-2-30:2009 was approved by CENELEC as a European Standard without any modification.

# **Bibliography**

# p Add the following notes to the standards mentioned:

| IEC 60335-2-40 | NOTE Harmonized as EN 60335-2-40:2003 (modified).      |
|----------------|--|
| IEC 60335-2-53 | NOTE Harmonized as EN 60335-2-53:2003 (not modified).  |
| IEC 60335-2-61 | NOTE Harmonized as EN 60335-2-61:2003 (not modified).  |
| IEC 60335-2-71 | NOTE Harmonized as EN 60335-2-71:2003 (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 13732-1:2008 (not modified). |
|                |  |

p Add:

# **Annex ZC** (normative)

# Normative references to international publications with their corresponding European publications

| <u>Publication</u>                            | Year         | <u>Title</u>  | EN/HD             | <u>Year</u>          |  |  |  |
|---|--------------|---|-------------------|----------------------|--|--|--|
| IEC 60335-2-5 (mod)                           | 2002         | Household and similar electrical appliances - Safety -  | EN 60335-2-5      | 2003                 |  |  |  |
| A1<br>A2                                      | 2005<br>2008 | Part 2-5: Particular requirements for dishwashers   | A1<br>A2<br>+ A11 | 2005<br>2008<br>2009 |  |  |  |
| IEC 60335-2-43                                | _1)          | Household and similar electrical appliances -<br>Safety -<br>Part 2-43: Particular requirements for clothes<br>dryers and towel rails |                   | 2003 <sup>2)</sup>   |  |  |  |
| IEC 60335-2-80                                | _1)          | Household and similar electrical appliances -<br>Safety -<br>Part 2-80: Particular requirements for fans                              | EN 60335-2-80     | 2003 <sup>2)</sup>   |  |  |  |
| ISO 2758                                      | _1)          | Paper - Determination of bursting strength  | EN ISO 2758       | 2003 <sup>2)</sup>   |  |  |  |
| ISO 3864-1                                    | _1)          | Graphical symbols - Safety colours and safet signs -  | y -               | -                    |  |  |  |
|   |              | Part 1: Design principles for safety signs in workplaces and public areas   |                   |                      |  |  |  |
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| 1) Undated reference.                         |              |   |                   |                      |  |  |  |
| <sup>2)</sup> Valid edition at date of issue. |              |   |                   |                      |  |  |  |

<sup>1)</sup> Undated reference.

<sup>&</sup>lt;sup>2)</sup> Valid edition at date of issue.

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# 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 2-30: Particular requirements for room heaters

# 1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electric room heaters for household and similar purposes, their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances.

NOTE 101 Examples of appliances that are within the scope of this standard are

- convector heaters;
- fan heaters;
- heaters for use in greenhouses;
- liquid-filled radiators;
- panel heaters;
- radiant heaters;
- tubular heaters;
- ceiling mounted heat lamp appliances.

For extraction fans of **ceiling mounted heat lamp appliances**, IEC 60335-2-80 is applicable as far as is reasonable.

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 the shops, in light industry and on farms, are within the scope of this standard.

As 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, in general, it does not take into account

- persons (including children) whose
  - physical, sensory or mental capabilities; or
  - lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction;

children playing with the appliance.

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 by the national health authorities, the national authorities responsible for the protection of labour and similar authorities;
- for appliances intended to be used in the presence of combustible dust, for example in barns or stables, additional requirements may be necessary.

NOTE 103 This standard does not apply to

- appliances intended exclusively for industrial purposes;
- appliances intended to be used where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas);
- heaters that are built into air conditioners (IEC 60335-2-40);
- clothes dryers and towel rails (IEC 60335-2-43);
- heaters for saunas (IEC 60335-2-53);
- thermal-storage room heaters (IEC 60335-2-61);
- heating appliances for breeding and rearing animals (IEC 60335-2-71);
- foot warmers and heating mats (IEC 60335-2-81);
- flexible sheet heating elements for room heating (IEC 60335-2-96);
- heated carpets;
- central heating systems;
- heating cables (IEC 60800).

# 2 Normative references

This clause of Part 1 is applicable except as follows.

# Addition:

IEC 60335-2-5:2002, Household and similar electrical appliances – Safety – Part 2-5: Particular requirements for dishwashers

Amendment 1 (2005)

Amendment 2 (2008) 1)

IEC 60335-2-43, Household and similar electrical appliances – Safety – Part 2-43: Particular requirements for clothes dryers and towel rails

IEC 60335-2-80, Household and similar electrical appliances – Safety – Part 2-80: Particular requirements for fans

ISO 2758, Paper - Determination of bursting strength

ISO 3864-1, Graphical symbols – Safety colours and safety signs – Part 1: Design principles for safety signs in workplaces and public areas

# 3 Definitions

This clause of Part 1 is applicable except as follows.

## 3.101

# visibly glowing radiant heater

heater incorporating at least one visibly glowing heating element

### 3.102

### fan heater

heater in which the movement of the air over the heating element is assisted by a fan

### 3.103

# heater for mounting at high level

heater intended to be fixed at a height of at least 1,8 m above the floor

<sup>1)</sup> There exists a consolidated edition 5.2 (2008) that includes edition 5 and its Amendments 1 and 2.