Majapidamis- ja muud taolised elektriseadmed. Ohutus. Erinõuded ehisrobotitele

Household and similar electrical appliances -Safety - Particular requirements for decorative robots



### EESTI STANDARDI EESSÕNA

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 50410:2008 sisaldab Euroopa standardi EN 50410:2008 ingliskeelset teksti.

This Estonian standard EVS-EN 50410:2008 consists of the English text of the European standard EN 50410:2008.

Standard on kinnitatud Eesti Standardikeskuse 20.02.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 20.02.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 18.01.2008.

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The standard is available from Estonian standardisation organisation.

ICS 97.190, 97.200.50

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN 50410

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ICS 97.200.50; 97.190

**English version** 

## Household and similar electrical appliances -Safety -Particular requirements for decorative robots

Appareils électrodomestiques et analogues -Sécurité -Règles particulières pour les robots décoratifs Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke -Besondere Anforderungen für Geräte für Dekorationszwecke

This European Standard was approved by CENELEC on 2007-12-01. 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.

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**

This European Standard has been prepared by the Technical Committee CENELEC TC 61, Safety of household and similar electrical appliances. During the Brussels meeting in November 2002, it was decided to submit a draft to the CENELEC enquiry. The result of the enquiry was discussed during the Brughes meeting in June 2005, where it was decided to submit a draft to the formal vote.

The draft was circulated in April 2007 and was approved by CENELEC as EN 50410 on 2007-12-01.

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) 2008-12-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2010-12-01

This standard 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 EN 60335-1 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 EN 60335-1.

This standard, which is regarded as a Part 2 of EN 60335, supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Safety requirements for decorative robots.

When a particular subclause of EN 60335-1 is not mentioned in this standard, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of EN 60335-1 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 EN 60335-1;
- unless notes are in a new subclause or involve notes in EN 60335-1, 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.

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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, 2006/95/EC. 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.

Decorative robots designed for use with a rated voltage between and including 50 V a.c. and 1 000 V a.c. or between and including 75 V d.c. and 1 500 V d.c. are covered by the Low Voltage Directive.

ned for any Directiv. Some decorative robots designed for use with a rated voltage below 50 V a.c. or 75 V d.c. are covered by the General Product Safety Directive, 2001/95/EC.

### 1 Scope

This clause of EN 60335-1 is replaced by the following.

This European Standard deals with the safety of electric **decorative robots** for household and similar purposes, including child-appealing and those intended for seasonal use, their **rated voltage** being not more than 250 V.

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 and other premises for normal housekeeping purposes, are within the scope of this standard.

NOTE 101 Examples of such appliances are appliances intended to be used for normal housekeeping purposes in hotels, offices, schools, hospitals and similar premises.

As far as is practicable, this standard deals with the common hazards presented by robots that are encountered by all persons in and around the home.

Robots intended for playing are considered as toys and are covered by EN 62115.

This standard is not applicable to functional robots, which by their design are intended for practical use. They are covered by other standards of the EN 60335 series.

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, the national water supply authorities and similar authorities.

NOTE 103 This standard does not apply to

- electric toys (covered by EN 62115);
- 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, vapor or gas).

#### 2 Normative references

This clause of EN 60335-1 is applicable except as follows.

Addition:

EN 62115, Electric toys – Safety (IEC 62115, mod.)

### 3 Definitions

This clause of EN 60335-1 is applicable except as follows.

### 3.1.9 Replacement:

#### normal operation

operation of the appliance under the following conditions:

The appliance is supplied at **rated voltage** and operated continuously as far as intended by the construction. Battery operated appliances are operated with the batteries recommended