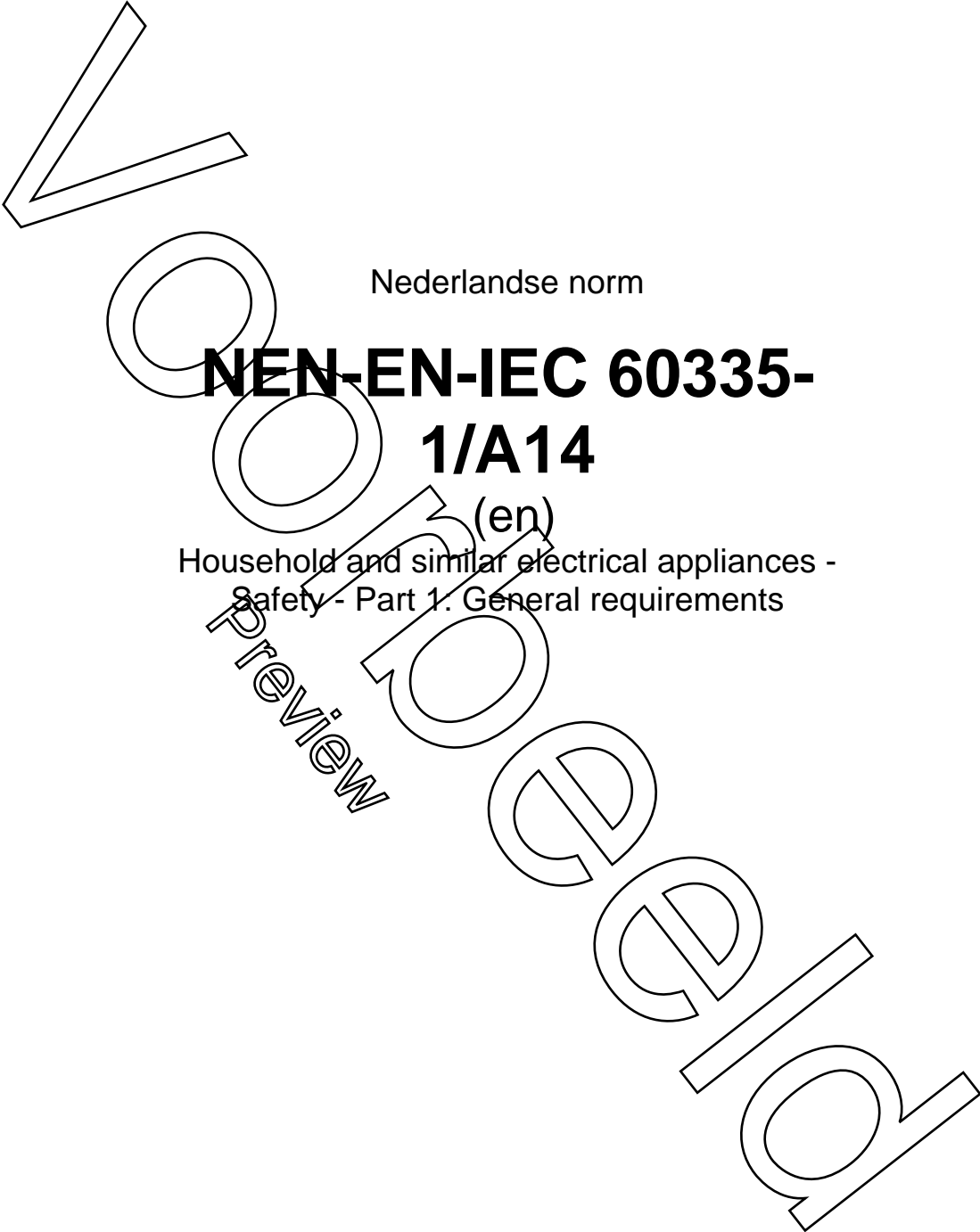


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Nederlandse norm

# **NEN-EN-IEC 60335- 1/A14**

(en)

Household and similar electrical appliances -  
Safety - Part 1. General requirements

ICS 13.120; 97.030

augustus 2010

Als Nederlands wijzigingsblad is aanvaard:  
- EN 60335-1:2002/A14:2010, IDT

Nederlands Elektrotechnisch Comité  
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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60335-1/A14**

July 2010

ICS 13.120; 97.030

English version

**Household and similar electrical appliances -  
Safety -  
Part 1: General requirements**

Appareils électrodomestiques  
et analogues -  
Sécurité -  
Partie 1: Prescriptions générales

Sicherheit elektrischer Geräte  
für den Hausgebrauch  
und ähnliche Zwecke -  
Teil 1: Allgemeine Anforderungen

This amendment A14 modifies the European Standard EN 60335-1:2002; it was approved by CENELEC on 2010-04-14. 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, Bulgaria, Croatia, 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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

This amendment to the European Standard EN 60335-1:2002 was prepared by the Technical Committee CENELEC TC 61, Safety of household and similar electrical appliances.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A14 to EN 60335-1:2002 on 2010-04-14.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2010-11-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2013-05-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 2006/42/EC. See Annex ZZ.

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## Introduction

Replace "73/23/EEC" by "2006/95/EC" and "98/37/EC" by "2006/42/EC"<sup>1)</sup>.

Add the following footnote:

<sup>1)</sup> Annex ZE has also to be applied for the verification of compliance of the relevant product to the Essential Health and Safety Requirements (EHSR) of Directive 2006/42/EC. The application of EN 60335-1 alone does not give presumption of conformity for a product. This is achieved by complying with the requirements of EN 60335-1 and the relevant Part 2, when this Part 2 is also listed in the OJ under the Directive.

## 1 Scope

Replace the first two paragraphs, NOTE 1 and the first sentence of the third paragraph by:

This European Standard deals with the safety of electrical appliances and machines for household environment and commercial purpose, their rated voltage being not more than 250 V for single-phase appliances and machines and 480 V for other appliances and machines.

NOTE Z1 Examples of appliance for household environment are appliances for typical housekeeping functions used in the household environment that may also be used by non expert users for typical housekeeping functions:

- in shops, offices and other similar working environments;
- in farm houses;
- by clients in hotels, motels and other residential type environments;
- in bed and breakfast type environments.

NOTE Z2 Household environment includes the dwelling and its associated buildings, the garden, etc.

Appliances and machines intended to be used by expert or trained users in shops, in light industry and on farms, and appliances and machines which are declared to be for commercial use by lay persons are within the scope of this standard.

Additional requirements for such appliances are given in Annex ZE.

NOTE Z3 Examples of such appliances and machines are catering equipment, cleaning machines for commercial use, and appliances for hairdressers.

NOTE Z4 Criteria applied for the allocation of products covered by standards in the EN 60335 series under either the Low Voltage Directive (LVD) or the Machinery Directive (MD) are given for information in Annex ZF.

This standard deals with the reasonably foreseeable hazards presented by appliances and machines that are encountered by all persons.

## 2 Normative references

Add the following references:

CLC/TR 50417, *Safety of household and similar electrical appliances – Interpretations related to European Standards within the scope of CENELEC/TC 61*

EN 50366:2003<sup>1)</sup>, *Household and similar electrical appliances - Electromagnetic fields - Methods for evaluation and measurement*

EN 62233, *Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure (IEC 62233)*

<sup>1)</sup> EN 50366:2003 will be superseded by EN 62233:2008 on 2012-12-01.

### 3 Definitions

#### 3.1 Add as a first paragraph:

When the term “appliance” is used, it is intended to cover appliances and/or machines for household use and appliances and/or machines for commercial use.

### 4 General requirement

Add:

The interpretations included in CLC/TR 50417 shall be taken into consideration together with the relevant requirements in the standards listed therein.

### 19 Abnormal operation

#### 19.14 Modification:

Add the content of the note to the requirement as follows:

*Appliances are operated under the conditions of Clause 11. Any contactor or relay contact that operates under the conditions of Clause 11 is short-circuited. If a relay or contactor with more than one contact is used, all contacts are short-circuited at the same time.*

### 24 Components

#### 24.1 Replace by:

Components shall comply with the safety requirements specified in the relevant standards as far as they reasonably apply.

NOTE Z1 Compliance with the standard for the relevant component does not necessarily ensure compliance with the requirements of this standard.

NOTE Z2 Motors are not required to comply with EN 60034-1.

Unless otherwise specified, the requirements of Clause 29 of this standard apply between **live parts** of components and **accessible parts** of the appliance.

Unless otherwise specified, the requirements of 30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections inside components.

Components that have not been previously tested or do not comply with the standard for the relevant component are tested according to the requirements of 30.2 of this standard.

NOTE Z3 Components that have been previously tested and shown to comply with the resistance to fire requirements in the standard for the relevant component need not be retested provided that:

- the severity specified in the component standard is not less than the severity specified in 30.2 of this standard,
- and
- unless the preselection alternative is used, the test report for the component states whether it complied with the standard for the relevant component with or without flame. Flames existing for a cumulative time not exceeding 2 s during the test are ignored.

If the above two conditions are not satisfied, the component is tested as part of the appliance.

There are two levels of severity specified for appliances for which 30.2.3 is applicable.

*Unless components have been previously tested and found to comply with the relevant standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9.*

*Components that have not been separately tested and found to comply with the relevant standard, components that are not marked or not used in accordance with their marking, are tested in accordance with the conditions occurring in the appliance, the number of samples being that required by the relevant standard.*

NOTE Z4 For automatic controls, marking includes documentation and declaration as specified in Clause 7 of EN 60730-1.

Lampholders and starterholders that have not been previously tested and found to comply with the relevant standard are tested as a part of the appliance and shall additionally comply with the gauging and interchangeability requirements of the relevant standard under the conditions occurring in the appliance. Where the relevant standard for lampholders and starterholders specifies gauging and interchangeability requirements at elevated temperatures, the temperatures measured during the tests of Clause 11 are used.

*When no standard does exist for a component, there are no additional tests specified.*

## **25 Supply connection and external flexible cords**

### **25.7 Modification:**

*Add the content of NOTE 1 to the requirement as follows:*

Their properties shall be at least those of ordinary tough rubber sheathed cords (code designation 60245 IEC 53). These cords are not suitable for appliances intended to be used outdoors or when they are liable to be exposed to significant amounts of ultraviolet radiation.

## **26 Terminals for external conductors**

### **26.2 Modification:**

*Change the Note into a requirement.*

### **26.11 Modification:**

*Change the Note into a requirement.*

## **29 Clearances, creepage distances and solid insulation**

### **29.1 Modification:**

*Replace NOTE 6 by:*

NOTE 6 Attention is drawn on the fact that for appliances intended for use at altitudes exceeding 2 000 m, the altitude correction factors, relevant to the intended altitude, for clearances specified in Table A.2 of EN 60664-1 may need to be taken into account.

### **29.2 Modification:**

*Change NOTE 6 into a requirement.*

## **32 Radiation , toxicity and similar hazards**

*Add at the end:*

*Compliance regarding electromagnetic fields is checked according to EN 50366 or EN 62233.*

**Annex ZC**

*Add:*

-	-	Safety of household and similar electrical appliances – Interpretations related to European Standards within the scope of CENELEC/TC 61	CLC/TR 50417	-
-	-	<i>Household and similar electrical appliances - Electromagnetic fields - Methods for evaluation and measurement</i>	EN 50366 <sup>2)</sup>	2003
IEC 62233	-	<i>Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure</i>	EN 62233	-

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<sup>2)</sup> EN 50366:2003 will be superseded by EN 62233:2008 on 2012-12-01.



Add the following annex:

## **Annex ZE** (informative)

### **Specific additional requirements for appliances and machines intended for commercial use**

The following modifications to this standard are applicable for appliances and machines intended for commercial use.

#### **Introduction**

*Add:*

For the verification of compliance of appliances or machines intended for commercial use with the Essential Health and Safety Requirements (EHSR) of the Directive 2006/42/EC, the requirements in this Annex ZE will be modified by specific provisions in the relevant Parts 2.

When a specific Part 2 does not mention Annex ZE then Annex ZE of this EN 60335-1 is not applicable.

#### **1 Scope**

*Addition:*

This annex deals with additional requirements concerning appliances and machines intended for commercial use by persons that have been trained on the use of such appliances and concerning appliances and machines which are declared to be for commercial use by lay persons.

#### **3 Definitions**

##### **3.ZE1**

##### **guard**

part of the appliance specifically designed to provide protection by means of a physical barrier

##### **3.ZE2**

##### **operator**

person or persons installing, operating, adjusting, maintaining, cleaning, repairing or moving appliances

##### **3.ZE3**

##### **workstation**

the place, as defined in the technical documentation of the relevant appliance, where the operator has to be in attendance to operate, or to adjust, or to control the appliance

NOTE Examples are the driving place of commercial cleaning machines or the location where the operator loads the conveyor of commercial conveyor dishwashing machines.

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