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Household and similar electrical appliances - Safety - Part 2-75: Particular requirements for commercial dispensing appliances and vending machines



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 60335-2-75:2023 sisaldab Euroopa standardi EN IEC 60335-2-75:2023 ingliskeelset teksti.

This Estonian standard EVS-EN IEC 60335-2-75:2023 consists of the English text of the European standard EN IEC 60335-2-75:2023.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.05.2023.

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### **EN IEC 60335-2-75**

May 2023

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Household and similar electrical appliances - Safety - Part 2-75: Particular requirements for commercial dispensing appliances and vending machines (IEC 60335-2-75:2012)

Appareils électrodomestiques et analogues - Sécurité - Partie 2-75: Exigences particulières pour les distributeurs commerciaux avec ou sans moyen de paiement (IEC 60335-2-75:2012)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-75: Besondere Anforderungen für Ausgabegeräte und Warenautomaten für den gewerblichen Gebrauch (IEC 60335-2-75:2012)

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### **European foreword**

This document (EN IEC 60335-2-75:2023) consists of the text of document IEC 60335-2-75:2012 edition 3.0 prepared by IEC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be (dop) 2023-11-05 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2026-05-05 conflicting with this document have to be withdrawn

This document supersedes EN 60335-2-75:2004+A1:2005+A11:2006+A2:2008+A12:2010 when EN IEC 60335-2-75/A11:2023 is published.

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Edition 3.0 2012-12

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

Household and similar electrical appliances – Safety – Part 2-75: Particular requirements for commercial dispensing appliances and vending machines

Appareils électrodomestiques et analogues – Sécurité – Partie 2-75: Exigences particulières pour les distributeurs commerciaux avec ou sans moyen de paiement





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Edition 3.0 2012-12

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### CONTENTS

FO	FOREWORD3		
INT	INTRODUCTION6		
1	Scope	7	
2	Normative references	8	
3	Terms and definitions	8	
4	General requirement	. 10	
5	General conditions for the tests	. 10	
6	Classification	. 11	
7	Marking and instructions	. 12	
8	Protection against access to live parts	. 14	
9	Starting of motor-operated appliances	. 14	
10	Power input and current		
11	Heating	. 14	
12	Void	. 15	
13	Leakage current and electric strength at operating temperature	. 15	
14	Transient overvoltages	. 16	
15	Moisture resistance	. 16	
16	Leakage current and electric strength	. 19	
17	Overload protection of transformers and associated circuits	. 19	
18	Endurance		
19	Abnormal operation	. 19	
20	Stability and mechanical hazards	.21	
21	Mechanical strength		
22	Construction		
23	Internal wiring		
24	Components		
25	Supply connection and external flexible cords	. 26	
26	Terminals for external conductors		
27	Provision for earthing		
28	Screws and connections	. 26	
29	Clearances, creepage distances and solid insulation		
30	Resistance to heat and fire	. 27	
31	Resistance to rusting	. 27	
32	Radiation, toxicity and similar hazards	. 27	
Anr	nexes	. 29	
Annex AA (normative) Aging test for elastomeric parts29			
Bibliography31			
Figure 101 – Splash apparatus28			

### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

### Part 2-75: Particular requirements for commercial dispensing appliances and vending machines

### **FOREWORD**

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This part of International Standard IEC 60335 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This third edition cancels and replaces the second edition published in 2002 including its Amendment 1 (2004) and its Amendment 2 (2008). It constitutes a technical revision.

The principal changes in this edition as compared with the second edition of IEC 60335-2-75 are as follows (minor changes are not listed):

- some notes have been deleted or converted to normative text (5.2, 5.6, 5.104, 7.12.1, 7.12.101.1, 11.2, 11.8, 15.2.103, 15.2.104, 15.2.106, 15.2.109, 15.2.111, 19.102, 19.6, 19.13, 19.101, 22.6, 22.7, 22.112, 22.113, 22.114, 24.102, 27.2).
- added requirements for espresso coffee makers in 3.115, 22.114 and throughout standard;

- modified 11.4 to address heating appliances with electronic process controls and 11.6 to address combined appliances without electronic process controls;
- modified Clause 22 to indicate that pressure regulating devices are to be rendered inoperable;
- deleted ISO 13732-1 from Bibliography.

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

FDIS	Report on voting
61/4458/FDIS	61/4512/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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 fifth edition (2010) 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 commercial dispensing appliances and vending machines.

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;
- 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 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 stability 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,
- · withdrawn,
- replaced by a revised edition, or
- · amended.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

A list of all parts of the IEC 60335 series, under the general title: Household and similar electrical appliances - Safety, can be found on the IEC website.

The following differences exist in the countries indicated below.

- 6.1: Class 0I is allowed for appliances used indoors having a rated voltage not exceeding 150 V (Japan).
- CUTY

  ,e CUTTET:

  CONTROL

  CON 13.2: The leakage current limits are different (Japan).
- 16.2: The leakage current limits are different (Japan).

30/1/5

### 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 2-75: Particular requirements for commercial dispensing appliances and vending machines

### 1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electric commercial **dispensing appliances** and **vending machines** for preparation or delivery of food, drinks and consumer products, 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

- bulk tea or coffee brewing machines;
- cigarette vending machines;
- coffee grinders;
- commercial liquid heaters;
- coffee makers with or without integrated coffee grinder;
- coffee makers with cooling systems;
- hot and cold beverage vending machines;
- hot water dispensers;
- ice cream and whipped cream dispensers;
- ice dispensers;
- newspaper, audio or video tape or disc vending machines;
- packaged food and drink vending machines;
- refrigerated merchandisers.

Appliances can have more than one function.

NOTE 102 Other standards may be applicable for some functions such as

- refrigeration (IEC 60335-2-24);
- heating by microwaves (IEC 60335-2-25).

This standard also deals with the hygiene aspects of appliances.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by users and **maintenance persons**. However, in general, it does not take into account young children playing with the appliance.

NOTE 103 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 for appliances incorporating pressure vessels are specified;
- 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 104 This standard does not apply to

- appliances intended to be used exclusively for household purposes;
- appliances intended to be used 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);
- commercial electric boiling pans (IEC 60335-2-47);
- commercial electric bains-marie (IEC 60335-2-50);
- amusement machines and personal service machines (IEC 60335-2-82);
- appliances solely used for dispensing money;
- display cabinets;
- appliances incorporating electrode-type water heaters.

### 2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60335-2-34, Household and similar electrical appliances – Safety – Part 2-34: Particular requirements for motor-compressors

ISO 1817:2011, Rubber, vulcanized or thermoplastic – Determination of the effect of liquids

### 3 Terms and definitions

This clause of Part 1 is applicable except as follows.

### 3.1.9 Replacement:

### normal operation

operation of the appliance under the following conditions:

The appliance is operated in the **standby mode** until steady conditions are established and then under the most unfavourable dispensing procedure. The appliance is refilled when necessary in accordance with the instructions for use, or the **instructions for maintenance**, and the next operating period started as soon as possible.

Lids and covers of appliances of the professional type and of appliances of the supervised type are placed in their intended positions.

Coffee makers are operated with their container filled with the **rated capacity** of water, or connected to the water mains, if applicable. Coffee makers with a heated surface intended to keep the liquid warm are operated with or without the container, whichever is the more unfavourable.

### 3.6.2 Replacement:

### detachable part

part that can be removed without the aid of a **tool**, a part that is removed in accordance with the instructions for use or the **instructions for maintenance**, even if a **tool** or **access key** is needed for removal, or a part that does not fulfill the test of 22.11

Note 1 to entry: If a part has to be removed for installation purposes, this part is not considered to be detachable even if the instructions state that it is to be removed.

Note 2 to entry: A part that can be opened is considered to be a part that can be removed.

### 3.7.3 Replacement:

### thermal cut-out

device that during abnormal operation limits the temperature of the controlled part by automatically opening the circuit, or reducing the current, and is constructed so that its setting cannot be altered by the user or the **maintenance person**