

# INTERNATIONAL STANDARD

# IEC 60335-2-24

1997

AMENDMENT 2  
1999-08

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## Amendment 2

### **Safety of household and similar electrical appliances –**

#### **Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers**

#### *Amendement 2*

#### *Sécurité des appareils électrodomestiques et analogues –*

#### *Partie 2-24: Règles particulières pour les appareils de réfrigération, les appareils de glaces à la crème et les fabriques de glace*

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## FOREWORD

This amendment has been prepared by subcommittee 61C: Household appliances for refrigeration, of IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61C/155+156/FDIS	61C/167+168/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

A bilingual version of this amendment may be issued at a later date.

Amend the title of this standard on the cover page, the title page and on pages 5 and 9 as follows:

### **Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers**

Page 5

#### FOREWORD

Replace, on page 7, the first paragraph by the following:

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 refrigerating appliances, ice-cream appliances and ice-makers.

Page 9

#### **1 Scope**

Add the following new paragraph after the second paragraph:

This standard also deals with the safety of **ice-cream appliances** intended for household use, their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances.

In note 2, on page 11, replace the last dashed item by:

- commercial dispensing appliances and vending appliances (IEC 60335-2-75);
- commercial ice-cream appliances.

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## 2 Definitions

Add, after definition 2.2.9.3, the following new definition:

### 2.2.9.4

#### **normal operation of an ice-cream appliance**

operation of the appliance using the maximum quantity of the mixture of ingredients indicated in the instructions. The mixture used being that which gives the most unfavourable results, the mixture being at an initial temperature of  $23\text{ °C} \pm 2\text{ °C}$

Replace definition 2.109 by the following:

### 2.109

#### **flammable refrigerant**

refrigerant with a flammability classification of group 2 or 3 according to ISO 5149

NOTE For refrigerant blends which have more than one flammability classification the most unfavourable classification is taken for the purpose of this definition.

Add, after definition 2.109, the following new definitions:

### 2.110

#### **ice-cream appliance**

**compression-type appliance** which is used to make ice-cream

### 2.111

#### **free space**

space with a volume exceeding 60 l where a child can be entrapped and which is accessible after opening any door, lid or drawer and removing any **detachable internal part**, including shelves, containers or removable drawers which are themselves only accessible after opening any door or lid. In calculating the volume, a space with any single dimension not exceeding 150 mm or any two orthogonal dimensions each of which do not exceed 200 mm is ignored.

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## 4 General conditions for the tests

4.3 Replace the first paragraph by:

Before starting the tests:

- **ice-cream appliances** are operated empty at **rated voltage** for 1 h or the maximum setting of an incorporated timer, whichever is shorter;
- other **compression-type appliances** shall be operated at **rated voltage** for at least 24 h, then switched off and left to stand for at least 12 h.

#### 4.7 Replace the first paragraph by:

For **ice-cream appliances**, tests specified in clauses 10, 11 and 13 are carried out at an ambient temperature of  $23\text{ °C} \pm 2\text{ °C}$ .

For other appliances, tests specified in clauses 10, 11, 13 and subclause 19.103 are carried out at an ambient temperature of:

$32\text{ °C} \pm 1\text{ °C}$  on appliances of extended temperate (SN) and temperate (N) classes;

$38\text{ °C} \pm 1\text{ °C}$  on appliances of subtropical (ST) class;

$43\text{ °C} \pm 1\text{ °C}$  on appliances of tropical (T) class;

Before starting these tests, the appliance with the doors or lids open is brought to within 2 K of the ambient temperature specified.

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## 6 Classification

### 6.101 Replace the first line by:

Appliances, other than **ice-cream appliances**, shall be of one or more of the following climatic classes:

## 7 Marking and instructions

### 7.1 Modification:

Replace the third dash by :

- **rated power input** in watts or **rated current** in amperes, except that **compression-type appliances**, other than **ice-cream appliances**, shall be marked only with the **rated current** in amperes;

Add the following:

For **compression-type appliances**, the defrosting power input in watts shall be marked separately if the current corresponding to the defrosting power input is greater than the **rated current** of the appliance.

### 7.12 Add the following:

The instructions for **ice-cream appliances** shall include the ingredients and maximum quantity of mixtures that can be used in the appliance.