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INTERNATIONAL STANDARD

Household and similar electrical appliances – Safety – Part 2-64: Particular requirements for commercial electric kitchen machines

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-64: Particular requirements for commercial electric kitchen machines

FOREWORD

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This part of International Standard IEC 60335 has been prepared by IEC subcommittee 61E: Safety of electrical commercial catering equipment, of IEC technical committee 61: Safety of household and similar electrical appliances.

This consolidated version of IEC 60335-2-64 consists of the third edition (2002) [documents 61E/408/FDIS and 61E/420/RVD] and its amendment 1 (2007) [documents 61E/587/FDIS and 61E/592/RVD].

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience.

It bears the edition number 3.1.

A vertical line in the margin shows where the base publication has been modified by amendment 1.

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 fourth edition (2001) 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 electric kitchen 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 of Part 1 concerns an adjective, the adjective and the associated noun are also in bold .

The following differences exist in the countries indicated below.

– 6.1: Class 01 appliances are allowed if their rated voltage does not exceed 150 V (Japan).
– 6.2: For appliances intended to be installed in a kitchen, an appropriate degree of protection against harmful ingress of water is required according to their height of installation (France).
– 13.2: Leakage current limits are different (Japan).
– 16.2: Leakage current limits are different (Japan).
– Clause 21: For appliances intended to be installed in a kitchen, different values of impact energy are applicable according to the height of the impact point (France).

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

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result 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.

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.

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.

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.

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 2-64: Particular requirements for commercial electric kitchen machines

1 Scope

This clause of Part 1 is replaced by the following.

This standard deals with the safety of electrically operated commercial **kitchen machines** not intended for household use, their **rated voltage** being not more than 250 V for single phase appliances connected between one phase and neutral, and 480 V for other appliances.

NOTE 101 These appliances are used for example in restaurants, canteens, hospitals and commercial enterprises such as bakeries, butchers, etc.

NOTE 102 Examples of kitchen machines are

- mixers;
- liquid or food blenders;
- kneaders;
- beaters;
- shredders;
- graters;
- mincers;
- slicers;
- peelers;
- tin openers;
- coffee grinders;
- machines used for washing and/or drying food;
- portioning machines;
- pastry rollers;
- noodle strip cutters;
- food processors;
- beam mixers.

This standard also applies to appliances which, in order to facilitate transport, are supplied in several parts (sub-assemblies) which, when assembled at the place of installation, form a constructional unit without the use of any additional parts.

The electrical part of appliances making use of other forms of energy is also within the scope of this standard.

As far as is practicable, this standard deals with the common hazards presented by these types of appliances.

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 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 designed 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);
- continuous process appliances for the mass production of food;
- independent conveying equipment, such as food distribution belts.

2 Normative references

This clause of Part 1 is applicable.

3 Definitions

This clause of Part 1 is applicable except as follows.

3.1.4 *Addition:*

NOTE 101 The **rated power input** is the sum of the power inputs of all the individual elements in the appliance that can be on at one time; where there are several such combinations possible, that giving the highest power input is used in determining the **rated power input**.

3.1.9 *Replacement:*

normal operation
operation of the appliance under the following conditions

The appliance is operated without load at **rated voltage** and with controls intended to be adjusted by the user set at maximum until steady conditions are established. The appliance is then loaded in appropriate steps, the supply voltage being maintained at its original value. For each step, steady conditions have to be established before increasing the load. This operation is repeated until just before an overload release operates, or until the steady condition with the highest temperature has been attained.

NOTE 101 The load may be achieved by using an electrical or mechanical brake.

Where it is not possible or is impractical to apply effectively an electrical or mechanical brake, the load is 115 % of the input measured when the appliance is operated without load at **rated voltage** and normal operating temperature, and with controls intended to be adjusted by the user set at maximum.

NOTE 102 Examples of such appliances are

– liquid blenders;
– slicers;
– peelers;
– coffee grinders;
– machines used for washing and/or drying food;
– portioning machines.

3.101
indicated level
mark on the appliance to indicate the maximum liquid level for correct operation

3.102
installation wall
special fixed construction containing supply facilities for appliances installed in conjunction with it