Annexe P
(informative)

Lignes directrices pour l'application de la présente norme aux appareils utilisés en climat tropical

13 Courant de fuite et rigidité diélectrique à la température de régime

13.2 *Modification:*

*A la place du courant de fuite admissible pour les **appareils fixes de la classe I,** ce qui suit s'applique:*

– *pour les appareils raccordés par câble et fiche*	*0,5 mA ou 0,5 mA par kW de **puissance assignée** à l'appareil, avec un maximum de 5 mA;*
– *pour les autres appareils*	*0,5 mA ou 0,5 mA par kW de **puissance assignée** à l'appareil, sans limite maximale.*

*A la place du courant de fuite admissible pour les **appareils mobiles de la classe I,** ce qui suit s'applique:*

– *pour les appareils raccordés par câble et fiche*	*0,5 mA ou 0,5 mA par kW de **puissance assignée** à l'appareil, avec un maximum de 5 mA, en prenant la valeur la plus élevée.*

16 Courant de fuite et rigidité diélectrique

16.2 *Modification:*

*A la place du courant de fuite admissible pour les **appareils fixes de la classe I,** ce qui suit s'applique:*

– *pour les appareils raccordés par câble et fiche*	*0,5 mA ou 0,5 mA par kW de **puissance assignée** à l'appareil, avec un maximum de 5 mA;*
– *pour les autres appareils*	*0,5 mA ou 0,5 mA par kW de **puissance assignée** à l'appareil, sans limite maximale.*

*A la place du courant de fuite admissible pour les **appareils mobiles de la classe I**, ce qui suit s'applique:*

– *pour les appareils raccordés par câble et fiche*	*0,5 mA ou 0,5 mA par kW de **puissance assignée** à l'appareil, avec un maximum de 5 mA, en prenant la valeur la plus élevée.*

Bibliographie

La bibliographie de la Partie 1 est applicable avec les exceptions suivantes:

Addition:

IEC 60335-2-37, *Appareils électrodomestiques et analogues – Sécurité – Partie 2-37: Règles particulières pour les friteuses et les friteuses à beignets électriques à usage collectif*

~~ISO 13732-1, *Ergonomie des ambiances thermiques – Méthodes d'évaluation de la réponse humaine au contact avec des surfaces – Partie 1: Surfaces chaudes*~~

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IEC 60335-2-39

Edition 6.1 2017-04

FINAL VERSION

VERSION FINALE

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Household and similar electrical appliances – Safety – Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans

Appareils électrodomestiques et analogues – Sécurité – Partie 2-39: Exigences particulières pour les sauteuses électriques à usage collectif

IEC 60335-2-39:2012-04+AMD1:2017-04 CSV(en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-39: Particular requirements for commercial electric multi-purpose cooking pans

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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This Consolidated version is not an official IEC Standard and has been prepared for user convenience. Only the current versions of the standard and its amendment(s) are to be considered the official documents.

This Consolidated version of IEC 60335-2-39 bears the edition number 6.1. It consists of the sixth edition (2012-04) [documents 61E/695/FDIS and 61E/696/RVD] and its amendment 1 (2017-04) [documents 61/5324/FDIS and 61/5385/RVD]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendments 1 and 2. A separate Redline version with all changes highlighted is available in this publication.

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 sixth edition constitutes a technical revision.

The principal changes in this edition as compared with the fifth edition of IEC 60335-2-39 are as follows (minor changes are not listed):

– addition to definition of portable appliances, atmospheric multi-purpose cooking and rated pressure;
– deletion of equipotential symbol 5021 of IEC 60417 covered by Part 1;
– addition of instructions for multi-purpose cooking pans;
– modification on leakage current permissible for portable class I appliances;
– addition to abnormal test requirements;
– addition to mechanical hazard test for multi-purpose cooking pans;
– addition of construction test for multi-purpose cooking pans;
– addition to construction requirements for lids and theirs grips;
– addition to construction requirements for positioning of pressure reliefs;
– addition to construction's fixed appliances which are moved forward and backward for cleaning purposes.

This part 2 is to be used in conjunction with latest edition of IEC 60335-1 and its amendments. It was established on 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 electric multi-purpose cooking pans.

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.

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 01 appliances are allowed (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).

The committee has decided that the contents of the base publication and its amendment 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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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 2-39: Particular requirements for commercial electric multi-purpose cooking pans

1 Scope

This clause of Part 1 is replaced by the following.

This International Standard deals with the safety of electrically operated commercial **multi-purpose cooking pans** not intended for household and similar 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. This standard also deals with pressurized appliances and appliances with pressurized parts.

NOTE 101 These appliances are used for processing food for commercial consumption, for example in kitchens of restaurants, canteens, hospitals and in commercial enterprises such as bakeries, butcheries, etc.

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 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

– 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);

– appliances for continuous mass production of food;

– deep fat fryers (IEC 60335-2-37).

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60584-1, *Thermocouples - Part 1: EMF specifications and tolerances*

ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel – Part 1: Bolts, screws and studs with specified property classes – Coarse thread and fine pitch thread*

ISO 3506-1, *Mechanical properties of corrosion-resistant stainless steel fasteners – Part 1: Bolts, screws and studs*