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Edition 6.0 2009-12

INTERNATIONAL STANDARD

Withdrawn

Household and similar electrical appliances – Safety – Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances

IEC 60335-2-2:2009(E)

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IEC 60335-2-2
Edition 6.0 2009-12

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances

INTERPRETATION SHEET 1

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This interpretation sheet has been prepared by technical committee 61: Safety of household and similar electrical appliances

The text of this interpretation sheet is based on the following documents:

ISH	Report on voting
61/5297/ISH	61/5311/RVD

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

TC 61 interpretation sheet on: Robotic vacuum cleaners supplied with a rechargeable battery that is not recharged in the appliance.

Introduction

There are robotic vacuum cleaners that are supplied with a rechargeable battery that is not recharged in the appliance. A docking station may not be supplied but if it is, it does not provide automatic battery charging facilities. The battery must be removed from the robotic vacuum cleaner for recharging.

Amendment 1 to IEC 60335-1 published in December 2013 changed the title of Annex B from "**Appliances powered by rechargeable batteries**" to "**Appliances powered by rechargeable batteries that are recharged in the appliance**" and introduced a new annex "**Battery-operated appliances powered by batteries that are non-rechargeable or not recharged in the appliance**"

Amendment 1 to IEC 60335-2-2 is now out of step with IEC 60335-1 ed 5.1. It is stated in the Foreword of IEC 60335-2-2 Ed 6 and Ed 6.1 "This Part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments"

ICS 13.120; 97.080

IEC 60335-2-2:2009-12/ISH1:2016-12(en)

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This situation has caused uncertainty on how to test robotic vacuum cleaners supplied with a rechargeable battery that is not recharged in the appliance.

Questions:

1) Should these appliance be tested in accordance with IEC 60335-2-2 and Annex S to IEC 60335-1 Ed 5.1
2) Should any on the modification to Annex B of IEC 60335-1 included in IEC 60335-2-2 Ed 6 and Ed 6.1 be taken into account.

ANSWERS

1) Yes. Annex S of IEC 60335-1 Ed 5.1 is applicable for these appliances
2) The following modifications to Annex B of IEC 60335-1 included in IEC 60335-2-2 Ed 6 and Ed 6.1 should be taken into account: Modification to Clauses 19, 21, 22, 24 and 30

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances

FOREWORD

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International Standard IEC 60335-2-2 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This sixth edition cancels and replaces the fifth edition published in 2002 including its Amendment 1 (2004) and Amendment 2 (2006). It constitutes a technical revision.

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

– the text is aligned with IEC 60335-1:2001, and its Amendments 1 and 2 (see text marked with a marginal bar).

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

FDIS	Report on voting
61/3871/FDIS	61/3923/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 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 vacuum cleaners and water-suction cleaning appliances.

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 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.

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.

The following differences exist in the countries indicated below.

– 3.1.9: Normal operation is defined differently (USA).

– 6.1: Class 0 appliances are allowed (Canada, Japan, USA).

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- 6.1: Household vacuum cleaners are required to be class II or class III (Denmark, France, Italy, Netherlands, Norway and Turkey).
- 6.2: IPX4 is not required (USA).
- 7.1: The additional marking for appliance outlets for accessories is not required (USA).
- 10.1: The power input of booster settings is taken into account (USA).
- 11.5: Booster settings are activated every 2 min out of 8 min (USA).
- 11.7: The test is carried out with one-third of the cord unreeled until steady conditions are established (USA).
- 15.2: The test is carried out differently (USA).
- 16.3: The test is carried out differently (USA).

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.

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

The contents of the interpretation sheet of December 2016 have been included in this copy.

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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.

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