

INTERNATIONAL STANDARD

COMMENTED VERSION

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

CONTENTS

FOREWORD	3
INTRODUCTION	6
1 Scope	7
2 Normative references	8
3 Terms and definitions	8
4 General requirement	11
5 General conditions for the tests	11
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	14
11 Heating	15
12 Void Charging of metal-ion batteries	16
13 Leakage current and electric strength at operating temperature	16
14 Transient overvoltages	16
15 Moisture resistance	17
16 Leakage current and electric strength	18
17 Overload protection of transformers and associated circuits	19
18 Endurance	19
19 Abnormal operation	19
20 Stability and mechanical hazards	21
21 Mechanical strength	22
22 Construction	24
23 Internal wiring	25
24 Components	26
25 Supply connection and external flexible cords	26
26 Terminals for external conductors	27
27 Provision for earthing	28
28 Screws and connections	28
29 Clearances, creepage distances and solid insulation	28
30 Resistance to heat and fire	28
31 Resistance to rusting	28
32 Radiation, toxicity and similar hazards	28
Annexes	32
Annex B (normative) Appliances powered by rechargeable batteries that are recharged in the appliance	36
Annex B (normative) Battery-operated appliances, separable batteries and detachable batteries for battery-operated appliances	36
Annex C (normative) Ageing test on motors	39
Annex R (normative) Software evaluation	40
Annex S (normative) Battery-operated appliances powered by batteries that are non-rechargeable or not recharged in the appliance	40

Bibliography.....	44
List of comments.....	45
Figure 105 101 – Probe for measuring surface temperatures	29
Figure 101 102 – Apparatus for testing the abrasion resistance of current-carrying hoses.....	29
Figure 102 103 – Apparatus for testing the resistance to flexing of current-carrying hoses.....	30
Figure 103 104 – Configuration of the hose for the freezing treatment	30
Figure 104 105 – Flexing positions for the hose after removal from the freezing cabinet	31
Table 101 – Maximum temperature rises for specified external accessible external surfaces under normal operating conditions	16

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

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This commented version (CMV) of the official standard IEC 60335-2-2:2026 edition 8.0 allows the user to identify the changes made to the previous IEC 60335-2-2:2019 edition 7.0. Furthermore, comments from IEC TC 61 experts are provided to explain the reasons of the most relevant changes, or to clarify any part of the content.

A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text. Experts' comments are identified by a blue-background number. Mouse over a number to display a pop-up note with the comment.

This publication contains the CMV and the official standard. The full list of comments is available at the end of the CMV.

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

This eighth edition cancels and replaces the seventh edition published in 2019. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- alignment with IEC 60335-1:2020;
- conversion of some notes to normative text (Clause 1);
- addition of multi-phase central vacuum cleaners to the scope (Clause 1);
- addition of appliances with a blowing or inflating function to the scope (Clause 1, 3.1.9.103, 3.8.102, 3.8.103, 7.12);
- clarification of uses similar to household use (Clause 1, 7.12);
- addition of test probes 18 and 19 for accessibility of live parts (8.1.1, 20.2, B.22.3, B.22.4);
- relocation of the replacement in 19.9 to 19.106;
- clarification that the stability test is not applicable to appliances held in the hand during normal use while also being supported by the floor unless they have a stand or rest (20.1);
- allowance for a detachable power supply part in a flexible cord (6.2, 21.107, 21.108, 24.2);
- clarification of remote operation requirements (22.40, 22.49, 22.51, Annex B 22.40);
- addition of requirements for the supply cord of automatic battery-operated cleaners (25.7);
- addition of a running overload test for brush and traction motors of automatic battery-operated cleaners (B.19.101);
- clarification of requirements for docking stations (30.2);
- addition of requirements for spray extraction appliances (Clause 1, 3.1.9.104, 3.5.105, 5.101, 7.12);
- clarification of requirements for appliances with appliance outlets or socket-outlets (6.1, 19.1, 19.107, 22.61, 25.8);
- addition of requirements for appliances with reservoirs that can be overfilled (15.2);
- clarification of air inlets (3.1.9.101, 11.3, 19.4, 19.10, 19.103, 22.32).

The text of this International Standard is based on the following documents:

Draft	Report on voting
61/7568/FDIS	61/7597/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments unless that edition precludes it; in that case, the latest edition that does not preclude it is used. It was established on the basis of the sixth edition (2020) 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 following differences exist in the countries indicated below.

6.1: Irrespective of the rated voltage Class 0 appliances are not allowed (Australia, New Zealand).

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations can 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 committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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.

Guidance documents concerning the application of the safety requirements for appliances can be accessed via TC 61 supporting documents on the IEC website

<https://www.iec.ch/tc61/supportingdocuments>

This information is given for the convenience of users of this International Standard and does not constitute a replacement for the normative text in this standard.

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~~ can 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~~ Horizontal publications, basic safety publications and group safety publications 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.~~ **1**

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.

NOTE 3 Standards dealing with non-safety aspects of household appliances are:

- IEC standards published by TC 59 concerning methods of measuring performance;
- CISPR 11, CISPR 14-1 and relevant IEC 61000-3 series standards concerning electromagnetic emissions;
- CISPR 14-2 concerning electromagnetic immunity;
- IEC standards published by TC 111 concerning environmental matters. **1**

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335 deals with the safety of electric vacuum cleaners and **water-suction cleaning appliances** for household and similar purposes, ~~including vacuum cleaners for animal grooming,~~ their **rated voltage** being not more than 250 V for single phase (AC) supplied appliances, direct current (DC) supplied appliances and **battery-operated appliances** and 480 V for multi-phase **centrally-sited vacuum cleaners** **2**.

This standard also applies to **vacuum cleaners for animal grooming**, **centrally-sited vacuum cleaners**, and **automatic battery-operated cleaners**.

This standard also applies to **spray extraction appliances** in which

- the pressure of the employed liquid solution does not exceed 2,5 MPa;
- the product of the pressure (in MPa) and the flow of liquid solution (in litres per minute) does not exceed 100; and
- the temperature of the liquid solution at the spray nozzle outlet does not exceed 60 °C. **3**

This standard also applies to vacuum cleaners and **water-suction cleaning appliances** provided with a **blowing function** or **inflating function**. **4**

This standard also applies to **motorized cleaning heads** and current-carrying hoses associated with a particular vacuum cleaner or **water-suction cleaning appliance**.

~~Battery-operated appliances and other DC-supplied appliances are within the scope of this standard. Dual supply appliances, either mains-supplied or battery-operated, are regarded as battery-operated appliances when operated in the battery mode.~~

Appliances not intended for normal household use, but which nevertheless ~~may~~ can be a source of danger to the public, such as appliances intended to be used by ~~laymen~~ laypersons in shops and other premises for normal housekeeping purposes, are within the scope of this standard.

~~NOTE 101—Examples of such appliances are appliances intended to be used for normal housekeeping purposes in hotels, offices, schools, hospitals and similar premises.~~

Examples of appliances for household use are appliances for typical housekeeping functions used in the household environment that can also be used by non-expert users for typical intermittent housekeeping functions: **5**

- in shops, schools and other similar working environments;
- in farm houses;
- by clients in hotels, motels and other residential type environments;
- in bed and breakfast type environments.

NOTE 101 Household environments include the dwelling and its associated buildings, the garden, etc.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in and around the home. However, in general, it does not take into account

- persons (including children) whose
 - physical, sensory or mental capabilities; or
 - lack of experience and knowledge
 prevents them from using the appliance safely without supervision or instruction;
- children playing with the appliance.

~~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 can 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 intended 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);
- wet and dry vacuum cleaners, including power brush, for commercial use (IEC 60335-2-69);
- floor treatment and wet scrubbing machines, including rug shampooers, for household and similar use (IEC 60335-2-10);
- hand-held mains-operated garden blowers, vacuums and blower vacuums (IEC 60335-2-100, IEC 62841-4-6);
- spray extraction machines for commercial use (IEC 60335-2-68);
- high-pressure cleaners and steam cleaners (with a rated pressure not less than 2,5 MPa) (IEC 60335-2-79);
- appliances having vacuum-pressure functions for skin care (IEC 60335-2-115).

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

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

IEC TS 62885-1:~~2018~~2026, *Surface cleaning appliances - Part 1: General requirements on test material and test equipment*

ISO 216, *Writing paper and certain classes of printed matter - Trimmed sizes - A and B series, and indication of machine direction*

ISO 6344-2:2021, *Coated abrasives—~~Grain size analysis~~ - Determination and designation of grain size distribution - Part 2: Macrogrit sizes P12 to P220*

ISO 7010:~~2011~~, *Graphical symbols - Safety colours and safety signs - Registered safety signs*

ISO 14688-1, *Geotechnical investigation and testing - Identification and classification of soil - Part 1: Identification and description*

Bibliography

The Bibliography of Part 1 is applicable except as follows.

Addition:

IEC 60335-2-10, *Household and similar electrical appliances - Safety - Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines*

IEC 60335-2-68, *Household and similar electrical appliances - Safety - Part 2-69: Particular requirements for spray extraction machines, for commercial use*

IEC 60335-2-69, *Household and similar electrical appliances - Safety - Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use*

IEC 60335-2-79, *Household and similar electrical appliances - Safety - Part 2-79: Particular requirements for high pressure cleaners and steam cleaners*

IEC 60335-2-100, *Household and similar electrical appliances - Safety - Part 2-100: Particular requirements for hand-held mains-operated garden blowers, vacuums and blower vacuums*

IEC 60335-2-115, *Household and similar electrical appliances - Safety - Part 2-115: Particular requirements for skin beauty care appliances*

IEC 62841-4-6, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-6: Particular requirements for garden blowers, garden vacuums and garden blower/vacuums*