IEC 60335-2-23

Edition 7.0 2026-02

INTERNATIONAL STANDARD

EXTENDED VERSION

This full version of IEC 60335-2-23:2026 includes the content of the references made to IEC 60335-1:2020+AMD1:2025

Household and similar electrical appliances - Safety -
Part 2-23: Particular requirements for hair care and similar appliances

ICS 13.120; 97.040.50

ISBN 978-2-8327-1085-2

IEC 60335-2-23:2026-02 EXV(en)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC 60335-1
Edition 6.0 2020-09

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 1: General requirements

INTERPRETATION SHEET 1

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

The text of this Interpretation Sheet is based on the following documents:

Draft	Report on voting
61/5999/DISH	61/6009/RVDISH

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

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INTRODUCTION

Edition 6 of IEC 60335-1:2020 defines and introduces requirements for a detachable power supply part of an appliance. In the document, 24.2 prohibits the use of a power supply in a flexible cord.

QUESTION:

Does Subclause 24.2 prohibit the use of a detachable power supply part?

ANSWER

No, a "detachable power supply part" is a defined term and is not captured by the term "power supply" as used in Subclause 24.2.

NOTE A detachable power supply part is captured by the defined term when the output of the power supply part is detachable from the class III construction part of the appliance at:

– the power supply part, or

– the class III construction part of the appliance.

However, the supply cord (if any) does not have to be detachable from the detachable power supply part.

IEC 60335-1:2020-09/ISH1:2021-11(en)

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC 60335-1
Edition 6.0 2020-09

Household and similar electrical appliances - Safety - Part 1: General requirements

INTERPRETATION SHEET 2

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

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

DISH	Report on voting
61/7436/DISH	61/7464/RVDISH

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.

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TC 61 interpretation sheet on: Mechanical shock and vibration testing on large metal-ion batteries of IEC 60335-1:2020

INTRODUCTION

Currently the standard mentions:

> **B.24.1** *The relevant standards for non-acid based electrolyte **cells** employed in **batteries** are IEC 62133-1:2017 for nickel systems and IEC 62133-2:2017 for lithium systems.*
>
> NOTE The requirement for **cells** does not extend to the **battery** itself.
>
> *A **battery** that uses metal-ion chemistry shall additionally be subjected to the tests of Subclauses 7.3.8.1 (vibration) and 7.3.8.2 (mechanical shock) of IEC 62133-2:2017.*

When Annex B was written for the IEC 60335-1 edition 6, the batteries foreseen were for portable applications and rather lightweight. The IEC 62133-2:2017 standard referred to is applicable to portable lithium batteries only.

IEC 60335-1:2020-09/ISH2:2025-08(en-fr)

For non-portable and/or large batteries (mass > 12 kg), the tests of IEC 62133-2 for mechanical shock and vibration are not suitable.

QUESTION:

What test sequence for mechanical shock and vibration can be followed for large batteries?

ANSWER:

For practical reasons, IEC 60335-1 should follow the same differentiation as the UN 38.3 transport test or IEC 62281 standard (Safety of primary and secondary lithium cells and batteries during transport).

For larger batteries with a mass exceeding 12 kg, Subclauses 6.4.3 (Test T-3: Vibration) and 6.4.4 (Test T-4: Shock) of IEC 62281:2019, including AMD1:2021 and AMD2:2023, may be applied.

NOTE 1 The tests are technically identical to Test T.3 and Test T.4 of the UN manual of tests and criteria, section 38.3 rev.8 (2023).

NOTE 2 In accordance with Table 5 of IEC 62281:2019, testing is carried out on the battery without packaging.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Household and similar electrical appliances - Safety - Part 2-23: Particular requirements for hair care and similar appliances

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 extended version (EXV) of the official IEC Standard provides the user with the full content of the Standard.

IEC 60335-2-23:2026 EXV includes the content of IEC 60335-2-23:2026 and the references made to IEC 60335-1:2020+AMD1:2025.

The specific content of IEC 60335-2-23:2026 is displayed on a blue background.

IEC 60335-2-23 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

This seventh edition cancels and replaces the sixth edition published in 2016 and Amendment 1:2019. This edition constitutes a technical revision.

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

a) alignment with IEC 60335-1:2020;
b) conversion of some notes to normative text (Clause 1, 11.101, 20.1);
c) change in standard title and relocation of skin care appliances, such as facial saunas and foot care appliances, to IEC 60335-2-115 (Clause 1, 3.1.9, 3.5.103, 6.1, 7.12, 8.1.4, 11.8, 15.2, 21.1);
d) clarification of testing of appliances with PTC heating elements (10.1, 10.2);
e) clarification of the application of test probe 18 for appliances for use in hairdressing salons (8.1.1, 20.2, B.22.3, B.22.4);
f) addition of accessible surface temperature limits including marking of hot surfaces (7.1, 7.6, 7.12, 7.14, 7.15, 11.3, 11.8);
g) clarification of placement of the appliance in the test corner (19.2);
h) addition of moisture resistance and strength tests for detachable power supply parts (6.2, 21.102, 21.103, 24.2).

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

Draft	Report on voting
61/7533/FDIS	61/7542/RVD

Full information on the voting for its approval 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/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: Particular requirements for hair care and similar 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.

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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,

– withdrawn, or

– revised.

INTRODUCTION to IEC 60335-1:2020

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 –

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 differ.

If the functions of an appliance are covered by different parts 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.

Throughout this publication, when "part 2" is mentioned, it refers to the relevant part of IEC 60335.

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 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.

Individual countries may wish to consider the application of this standard, as far as is reasonable, to appliances not mentioned in a part 2, and to appliances designed on new principles. In this case, consideration should be given to defining normal operation, specifying the classification of the appliance according to Clause 6 and specifying whether the appliance is operated attended or unattended. Consideration should also be given to particular categories of likely users and to related specific risks such as access to live parts, hot surfaces or hazardous moving parts.

An appliance that complies with the text of this standard will not necessarily be considered to comply with the safety principles of this standard if, when examined and tested, it is found to have other features which 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 this 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.