IEC 60335-2-24

Edition 9.0 2025-03
COMMENTED VERSION

INTERNATIONAL STANDARD

Household and similar electrical appliances – Safety – Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 97.040.30

ISBN 978-2-8327-0332-8

Warning! Make sure that you obtained this publication from an authorized distributor.

® Registered trademark of the International Electrotechnical Commission

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

_____

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers

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.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

This commented version (CMV) of the official standard IEC 60335-2-24:2025 edition 9.0 allows the user to identify the changes made to the previous IEC 60335-2-24:2020 edition 8.0. Furthermore, comments from IEC SC 61C 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 60335-2-24 has been prepared by subcommittee 61C: Safety of refrigeration appliances for household and commercial use, of IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

This ninth edition cancels and replaces the eighth edition published in 2020. This edition constitutes a technical revision.

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

a) aligns the text with IEC 60335-1:2020;
b) new probe 19 has been introduced (8.1.1, 8.1.3, 20.2);
c) new exception for components inside the thermal insulation has been introduced (22.117);
d) new requirement for mobile refrigerating appliances, appliances to be used in leisure accommodation vehicles like motor caravans, boats for leisure purposes and appliances to be used on board ships has been introduced (Clause 1, 3.5.107, 3.5.108, 7.1, 7.6, 7.12, 7.14, 19.103, 21.101, 24.3, Annex FF);
e) text in 3.1.9.101, 3.1.9.102, 3.1.9.103 and 3.1.9.104 has been cancelled and the text copied in 5.104;
f) new requirement for the evaluation of non-dangerous moving parts has been introduced (20.2);
g) new abnormal test has been introduced (19.106);
h) reference to flammable refrigerant has been deleted (22.7);
i) new subclauses have been added (22.40, 22.49, 22.51);
j) requirement for the evaluation of motor-compressor has been updated (24.1);
k) Annex DD has been cancelled and the text copied to Annex A;
l) design pressure has been changed in maximum allowable pressure (3.8.101).

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

Draft	Report on voting
61C/929/FDIS	61C/931/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.

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.

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 refrigerating appliances, ice-cream appliances and ice-makers.

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.

The following differences exist in the countries indicated below.

– 22.101: E12 and E17 lamp holders are checked as specified for E14 and B15 lamp holders. E26 lamp holder is checked as specified for E27 and B22 lamp holders (Japan).

– 22.110: For unsealed glass tube heaters, the temperature requirements are different (Japan).

– 22.117: Only the first two dashed items in the first paragraph of the requirement are allowed (Australia and New Zealand).

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

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 and SC 61C supporting documents on the IEC websites.

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

https://www.iec.ch/sc61c/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.~~

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.

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 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335 deals with the safety of the following appliances, their **rated voltage** being not more than 250 V for single-phase appliances, 480 V for other appliances and 24 V DC for appliances when **battery-operated**:

– **refrigerating appliances** for household and similar use;

– **ice-makers** incorporating a motor-compressor and **ice-makers** intended to be incorporated in frozen food storage compartments intended for household use;

– **refrigerating appliances** and **ice-makers** for ~~use in camping, touring caravans and boats for leisure purposes~~ applications similar to household use such as for camping, in **leisure accommodation vehicles**, on boats for leisure purposes and on board ships; **1**

– **mobile refrigerating appliances**.

These appliances ~~may~~ can be operated from the mains, from a ~~separate~~ **separable battery** or operated either from the mains or from a ~~separate~~ **separable battery** or from other sources of energy (gas, liquid and solid fuel). **2**

This standard deals also with **refrigerating appliances** intended for the use on boats for leisure purposes and on board ships, for which the normative Annex FF is applicable. **3**

This standard also deals with the safety of **ice-cream appliances** intended for household use, their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances.

It also deals with **compression-type appliances** for household and similar use, which use **flammable refrigerants**.

This standard does not cover features of the construction and operation of those **refrigerating appliances** which are dealt with in other IEC standards.

Refrigerating appliances not intended for normal household use but which nevertheless ~~may~~ can be a source of danger to the public, such as

– **refrigerating appliances** used in staff kitchen areas in shops, offices and other working environments,

– **refrigerating appliances** used in farm houses and by clients in hotels, motels and other residential type environments,

– **refrigerating appliances** used in bed and breakfast type environments, and

– **refrigerating appliances** used in catering and similar non-retail applications

are within the scope of this standard.

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 1~~ Attention is drawn to the fact that

– for appliances intended to be used in vehicles, **leisure accommodation vehicles**, boats for leisure purposes, ~~or~~ on board ships or aircraft, additional requirements can be necessary;
– in many countries, additional requirements are specified by national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities;
– for appliances that are operated additional from other sources of energy (gas, liquid and solid fuel), additional requirements can be necessary.

This standard does not apply to

– appliances intended ~~to be used in the open air~~ for outdoor use, except for **mobile refrigerating appliances**; **4**
– 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 incorporating a **battery** intended as a power supply for the refrigerating function;
– appliances assembled on site by the installer;
– appliances with remote motor-compressors;
– motor-compressors (IEC 60335-2-34);
– commercial dispensing appliances and vending appliances (IEC 60335-2-75);
– commercial refrigerating appliances and ice-makers with an incorporated or remote refrigerant unit or motor-compressor (IEC 60335-2-89);
– professional ice-cream makers (IEC 60335-2-118).

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60068-2-6:2007, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-11:~~1981~~2021, ~~*Basic*~~ *Environmental testing* ~~*procedures*~~ *– Part 2-11: Tests – Test Ka: Salt mist*

IEC 60068-2-27:2008, *Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock*

IEC 60068-2-52:2017, *Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)*

IEC 60079 (all parts), *Explosive atmospheres*

IEC 60079-1:2014, *Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures "d"*

IEC 60079-7:2015, *Explosive atmospheres – Part 7: Equipment protection by increased safety "e"*
~~IEC 60079-7:2015/AMD1:2017[1]~~

IEC 60079-15:2017, *Explosive atmospheres – Part 15: Equipment protection by type of protection "n"*

IEC 60252-1:2010, *AC motor capacitors – Part 1: General – Performance, testing and rating – Safety requirements – Guidance for installation and operation*
IEC 60252-1:2010/AMD1:2013

~~IEC 60335-2-34:2012, *Household and similar electrical appliances – Safety – Part 2-34: Particular requirements for motor-compressors*~~
~~IEC 60335-2-34:2012/AMD1:2015~~
~~IEC 60335-2-34:2012/AMD2:2016[2]~~

IEC 60335-2-34:~~2021~~2024, *Household and similar electrical appliances – Safety – Part 2-34: Particular requirements for motor-compressors* **5**

~~IEC 60598-1:2014, *Luminaires – Part 1: General requirements and tests*~~
~~IEC 60598-1:2014/AMD1:2017[3]~~

IEC 60695-11-3:2012, *Fire hazard testing – Part 11-3: Test flames – 500 W flames – Apparatus and confirmational test methods*

IEC 60695-11-20:2015, *Fire hazard testing – Part 11-20: Test flames – 500 W flame test method*

IEC 60730-2-6:2015, *Automatic electrical controls – Particular requirements for automatic electrical pressure sensing controls including mechanical requirements*
IEC 60730-2-6:2015/AMD1:2019[4]

IEC 60730 (all parts), *Automatic electrical controls*

IEC 60851-4:2016, *Winding wires – Test methods – Part 4: Chemical properties*

ISO 209~~:2007~~, *Aluminium and aluminium alloys – Chemical composition*

ISO 817~~:2014~~, *Refrigerants – Designation and safety classification*
~~ISO 817:2014/AMD1:2017~~

ISO 4126-2:2018, *Safety devices for protection against excessive pressure – Part 2: Bursting disc safety devices*

_____

~~[1] There exists a consolidated edition 5.1:2017 that includes edition 5 and its Amendment 1.~~

~~[2] There exists a consolidated edition 5.2:2016 that includes edition 5 and its Amendment 1 and Amendment 2.~~

~~[3] There exists a consolidated edition 8.1:2017 that includes edition 8 and its Amendment 1~~

[4] ~~There exists A consolidated edition 3.1:2019 that includes edition 3 and its Amendment 1.~~ A consolidated version of this document exists, comprising IEC 60730-2-6:2015 and IEC 60730-2-6:2015/AMD1:2019.

~~ISO 5149-1:2014, *Refrigerating systems and heat pumps – Safety and environmental requirements – Part 1: Definitions, classification and selection criteria*~~
~~ISO 5149-1:2014/AMD1:2015~~

ISO 7010:2019, *Graphical symbols – Safety colours and safety signs – Registered safety signs*

Modification:

Replace

IEC 60598-1:2014, *Luminaires – Part 1: General requirements and tests*
IEC 60598-1:2014/AMD1:2017

with

IEC 60598-1:2020, *Luminaires – Part 1: General requirements and tests*

IEC 60335-2-24

Edition 9.0 2025-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Household and similar electrical appliances – Safety –
Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers

Appareils électrodomestiques et analogues – Sécurité –
Partie 2-24: Exigences particulières pour les appareils de réfrigération, les sorbetières et les fabriques de glace

IEC 60335-2-24:2025-03(en-fr)

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

_____

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers

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.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 60335-2-24 has been prepared by subcommittee 61C: Safety of refrigeration appliances for household and commercial use, of IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

This ninth edition cancels and replaces the eighth edition published in 2020. This edition constitutes a technical revision.

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

a) aligns the text with IEC 60335-1:2020;
b) new probe 19 has been introduced (8.1.1, 8.1.3, 20.2);

c) new exception for components inside the thermal insulation has been introduced (22.117);

d) new requirement for mobile refrigerating appliances, appliances to be used in leisure accommodation vehicles like motor caravans, boats for leisure purposes and appliances to be used on board ships has been introduced (Clause 1, 3.5.107, 3.5.108, 7.1, 7.6, 7.12, 7.14, 19.103, 21.101, 24.3, Annex FF);

e) text in 3.1.9.101, 3.1.9.102, 3.1.9.103 and 3.1.9.104 has been cancelled and the text copied in 5.104;

f) new requirement for the evaluation of non-dangerous moving parts has been introduced (20.2);

g) new abnormal test has been introduced (19.106);

h) reference to flammable refrigerant has been deleted (22.7);

i) new subclauses have been added (22.40, 22.49, 22.51);

j) requirement for the evaluation of motor-compressor has been updated (24.1);

k) Annex DD has been cancelled and the text copied to Annex A;

l) design pressure has been changed in maximum allowable pressure (3.8.101).

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

Draft	Report on voting
61C/929/FDIS	61C/931/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.

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.

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 refrigerating appliances, ice-cream appliances and ice-makers.

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.

The following differences exist in the countries indicated below.

– 22.101: E12 and E17 lamp holders are checked as specified for E14 and B15 lamp holders. E26 lamp holder is checked as specified for E27 and B22 lamp holders (Japan).

– 22.110: For unsealed glass tube heaters, the temperature requirements are different (Japan).

– 22.117: Only the first two dashed items in the first paragraph of the requirement are allowed (Australia and New Zealand).

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

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 and SC 61C supporting documents on the IEC websites.

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

https://www.iec.ch/sc61c/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 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 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.

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.

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 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice-makers

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335 deals with the safety of the following appliances, their **rated voltage** being not more than 250 V for single-phase appliances, 480 V for other appliances and 24 V DC for appliances when **battery-operated**:

– **refrigerating appliances** for household and similar use;

– **ice-makers** incorporating a motor-compressor and **ice-makers** intended to be incorporated in frozen food storage compartments intended for household use;

– **refrigerating appliances** and **ice-makers** for applications similar to household use such as for camping, in **leisure accommodation vehicles**, on boats for leisure purposes and on board ships;

– **mobile refrigerating appliances**.

These appliances can be operated from the mains, from a **separable battery** or operated either from the mains or from a **separable battery** or from other sources of energy (gas, liquid and solid fuel).

This standard deals also with **refrigerating appliances** intended for the use on boats for leisure purposes and on board ships, for which the normative Annex FF is applicable.

This standard also deals with the safety of **ice-cream appliances** intended for household use, their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances.

It also deals with **compression-type appliances** for household and similar use, which use **flammable refrigerants**.

This standard does not cover features of the construction and operation of those **refrigerating appliances** which are dealt with in other IEC standards.

Refrigerating appliances not intended for normal household use but which nevertheless can be a source of danger to the public, such as

– **refrigerating appliances** used in staff kitchen areas in shops, offices and other working environments,

– **refrigerating appliances** used in farm houses and by clients in hotels, motels and other residential type environments,

– **refrigerating appliances** used in bed and breakfast type environments, and

– **refrigerating appliances** used in catering and similar non-retail applications

are within the scope of this standard.

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 whose
  - physical, sensory or mental capabilities or
  - lack of experience and knowledge

prevents them from using the appliance safely without supervision or instruction.

Attention is drawn to the fact that

– for appliances intended to be used in vehicles, **leisure accommodation vehicles**, boats for leisure purposes, on board ships or aircraft, additional requirements can be necessary;
– in many countries, additional requirements are specified by national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities;
– for appliances that are operated additional from other sources of energy (gas, liquid and solid fuel), additional requirements can be necessary.

This standard does not apply to

– appliances intended for outdoor use, except for **mobile refrigerating appliances**;
– 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 incorporating a **battery** intended as a power supply for the refrigerating function;
– appliances assembled on site by the installer;
– appliances with remote motor-compressors;
– motor-compressors (IEC 60335-2-34);
– commercial dispensing appliances and vending appliances (IEC 60335-2-75);
– commercial refrigerating appliances and ice-makers with an incorporated or remote refrigerant unit or motor-compressor (IEC 60335-2-89);
– professional ice-cream makers (IEC 60335-2-118).

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60068-2-6:2007, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-11:2021, *Environmental testing – Part 2-11: Tests – Test Ka: Salt mist*

IEC 60068-2-27:2008, *Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock*

IEC 60068-2-52:2017, *Environmental testing – Part 2-52: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)*

IEC 60079 (all parts), *Explosive atmospheres*

IEC 60079-1:2014, *Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures "d"*

IEC 60079-7:2015, *Explosive atmospheres – Part 7: Equipment protection by increased safety "e"*

IEC 60079-15:2017, *Explosive atmospheres – Part 15: Equipment protection by type of protection "n"*

IEC 60252-1:2010, *AC motor capacitors – Part 1: General – Performance, testing and rating – Safety requirements – Guidance for installation and operation*
IEC 60252-1:2010/AMD1:2013

IEC 60335-2-34:2024, *Household and similar electrical appliances – Safety – Part 2-34: Particular requirements for motor-compressors*

IEC 60695-11-3:2012, *Fire hazard testing – Part 11-3: Test flames – 500 W flames – Apparatus and confirmational test methods*

IEC 60695-11-20:2015, *Fire hazard testing – Part 11-20: Test flames – 500 W flame test method*

IEC 60730-2-6:2015, *Automatic electrical controls – Particular requirements for automatic electrical pressure sensing controls including mechanical requirements*
IEC 60730-2-6:2015/AMD1:2019[1]

IEC 60730 (all parts), *Automatic electrical controls*

IEC 60851-4:2016, *Winding wires – Test methods – Part 4: Chemical properties*

ISO 209, *Aluminium and aluminium alloys – Chemical composition*

ISO 817, *Refrigerants – Designation and safety classification*

ISO 4126-2:2018, *Safety devices for protection against excessive pressure – Part 2: Bursting disc safety devices*

ISO 7010:2019, *Graphical symbols – Safety colours and safety signs – Registered safety signs*

Modification:

Replace

IEC 60598-1:2014, *Luminaires – Part 1: General requirements and tests*
IEC 60598-1:2014/AMD1:2017

with

IEC 60598-1:2020, *Luminaires – Part 1: General requirements and tests*

---

[1] A consolidated version of this document exists, comprising IEC 60730-2-6:2015 and IEC 60730-2-6:2015/AMD1:2019.

SOMMAIRE

COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

_____

APPAREILS ÉLECTRODOMESTIQUES ET ANALOGUES – SÉCURITÉ –

Partie 2-24: Exigences particulières pour les appareils de réfrigération, les sorbetières et les fabriques de glace

AVANT-PROPOS

1) La Commission Électrotechnique Internationale (IEC) est une organisation mondiale de normalisation composée de l'ensemble des comités électrotechniques nationaux (Comités nationaux de l'IEC). L'IEC a pour objet de favoriser la coopération internationale pour toutes les questions de normalisation dans les domaines de l'électricité et de l'électronique. À cet effet, l'IEC – entre autres activités – publie des Normes internationales, des Spécifications techniques, des Rapports techniques, des Spécifications accessibles au public (PAS) et des Guides (ci-après dénommés "Publication(s) de l'IEC"). Leur élaboration est confiée à des comités d'études, aux travaux desquels tout Comité national intéressé par le sujet traité peut participer. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec l'IEC, participent également aux travaux. L'IEC collabore étroitement avec l'Organisation Internationale de Normalisation (ISO), selon des conditions fixées par accord entre les deux organisations.
2) Les décisions ou accords officiels de l'IEC concernant les questions techniques représentent, dans la mesure du possible, un accord international sur les sujets étudiés, étant donné que les Comités nationaux de l'IEC intéressés sont représentés dans chaque comité d'études.
3) Les Publications de l'IEC se présentent sous la forme de recommandations internationales et sont agréées comme telles par les Comités nationaux de l'IEC. Tous les efforts raisonnables sont entrepris afin que l'IEC s'assure de l'exactitude du contenu technique de ses publications; l'IEC ne peut pas être tenue responsable de l'éventuelle mauvaise utilisation ou interprétation qui en est faite par un quelconque utilisateur final.
4) Dans le but d'encourager l'uniformité internationale, les Comités nationaux de l'IEC s'engagent, dans toute la mesure possible, à appliquer de façon transparente les Publications de l'IEC dans leurs publications nationales et régionales. Toutes divergences entre toutes Publications de l'IEC et toutes publications nationales ou régionales correspondantes doivent être indiquées en termes clairs dans ces dernières.
5) L'IEC elle-même ne fournit aucune attestation de conformité. Des organismes de certification indépendants fournissent des services d'évaluation de conformité et, dans certains secteurs, accèdent aux marques de conformité de l'IEC. L'IEC n'est responsable d'aucun des services effectués par les organismes de certification indépendants.
6) Tous les utilisateurs doivent s'assurer qu'ils sont en possession de la dernière édition de cette publication.
7) Aucune responsabilité ne doit être imputée à l'IEC, à ses administrateurs, employés, auxiliaires ou mandataires, y compris ses experts particuliers et les membres de ses comités d'études et des Comités nationaux de l'IEC, pour tout préjudice causé en cas de dommages corporels et matériels, ou de tout autre dommage de quelque nature que ce soit, directe ou indirecte, ou pour supporter les coûts (y compris les frais de justice) et les dépenses découlant de la publication ou de l'utilisation de cette Publication de l'IEC ou de toute autre Publication de l'IEC, ou au crédit qui lui est accordé.
8) L'attention est attirée sur les références normatives citées dans cette publication. L'utilisation de publications référencées est obligatoire pour une application correcte de la présente publication.
9) L'IEC attire l'attention sur le fait que la mise en application du présent document peut entraîner l'utilisation d'un ou de plusieurs brevets. L'IEC ne prend pas position quant à la preuve, à la validité et à l'applicabilité de tout droit de brevet revendiqué à cet égard. À la date de publication du présent document, l'IEC n'avait pas reçu notification qu'un ou plusieurs brevets pouvaient être nécessaires à sa mise en application. Toutefois, il y a lieu d'avertir les responsables de la mise en application du présent document que des informations plus récentes sont susceptibles de figurer dans la base de données de brevets, disponible à l'adresse https://patents.iec.ch. L'IEC ne saurait être tenue pour responsable de ne pas avoir identifié de tels droits de brevets.

L'IEC 60335-2-24 a été établie par le sous-comité 61C: Sécurité des appareils de réfrigération à usage domestique et commercial, du comité d'études 61 de l'IEC: Sécurité des appareils électrodomestiques et analogues. Il s'agit d'une Norme internationale.

Cette neuvième édition annule et remplace la huitième édition parue en 2020. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

a) le texte a été aligné sur l'IEC 60335-1:2020;

b) le nouveau calibre d'essai 19 a été introduit (8.1.1, 8.1.3, 20.2);

c) une nouvelle exception a été introduite pour les composants à l'intérieur de l'isolation thermique (22.117);

d) une nouvelle exigence relative aux appareils de réfrigération portables, aux appareils destinés à être utilisés dans des véhicules habitables de loisir comme les camping-cars, les bateaux de plaisance, et les appareils destinés à être utilisés à bord de navires a été introduite (Article 1, 3.5.107, 3.5.108, 7.1, 7.6, 7.12, 7.14, 19.103, 21.101, 24.3, Annexe FF);

e) le texte des 3.1.9.101, 3.1.9.102, 3.1.9.103 et 3.1.9.104 a été supprimé et copié au 5.104;

f) une nouvelle exigence relative à l'évaluation des parties mobiles non dangereuses a été introduite (20.2);

g) un nouvel essai de fonctionnement anormal a été introduit (19.106);

h) la référence au fluide frigorigène inflammable a été supprimée (22.7);

i) de nouveaux paragraphes ont été ajoutés (22.40, 22.49, 22.51);

j) l'exigence relative à l'évaluation des motocompresseurs a été mise à jour (24.1);

k) l'Annexe DD a été supprimée et le texte correspondant copié à l'Annexe A;

l) la pression de calcul a été remplacée par la pression maximale admissible (3.8.101).

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
61C/929/FDIS	61C/931/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/publications.

Une liste de toutes les parties de la série IEC 60335, publiées sous le titre général *Appareils électrodomestiques et analogues – Sécurité*, se trouve sur le site web de l'IEC.

La présente partie 2 doit être utilisée conjointement avec la dernière édition de l'IEC 60335-1 et ses amendements sauf si cette édition l'exclut. Dans ce cas, la dernière édition qui n'exclut pas la présente partie 2 est utilisée. Elle a été établie sur la base de la sixième édition (2020) de cette norme.

NOTE 1 L'expression "la Partie 1" utilisée dans la présente norme fait référence à l'IEC 60335-1.

La présente partie 2 complète ou modifie les articles correspondants de l'IEC 60335-1, de façon à transformer cette publication en norme IEC: Exigences de sécurité pour les appareils de réfrigération, les sorbetières et les fabriques de glace.

Lorsqu'un paragraphe particulier de la Partie 1 n'est pas mentionné dans cette partie 2, ce paragraphe s'applique pour autant que cela soit raisonnable. Lorsque la présente norme mentionne "addition", "modification" ou "remplacement", le texte correspondant de la Partie 1 doit être adapté en conséquence.

NOTE 2 Le système de numérotation suivant est utilisé:

– les paragraphes, tableaux et figures qui s'ajoutent à ceux de la Partie 1 sont numérotés à partir de 101;

– à l'exception de celles qui sont dans un nouveau paragraphe ou de celles qui concernent des notes de la Partie 1, les notes sont numérotées à partir de 101, y compris celles des articles ou paragraphes qui sont remplacés;

– les annexes qui sont ajoutées sont désignées AA, BB, etc.

NOTE 3 Les caractères d'imprimerie suivants sont utilisés:

– exigences: caractères romains;

– *modalités d'essais: caractères italiques;*

– notes: petits caractères romains.

Les termes en **gras** dans le texte sont définis à l'Article 3. Lorsqu'une définition concerne un adjectif, l'adjectif et le nom associé figurent également en gras.

NOTE 4 L'attention des Comités nationaux est attirée sur le fait que les fabricants d'appareils et les organismes d'essai peuvent avoir besoin d'une période transitoire après la publication d'une nouvelle publication IEC, ou d'une publication amendée ou révisée, pour fabriquer des produits conformes aux nouvelles exigences et pour adapter leurs équipements aux nouveaux essais ou aux essais révisés.

Le comité recommande que le contenu de cette publication soit entériné au niveau national au plus tôt 12 mois et au plus tard 36 mois après la date de publication.

Les différences suivantes existent dans les pays indiqués ci-après.

– 22.101: Les douilles E12 et E17 sont vérifiées comme cela est spécifié pour les douilles E14 et B15. La douille E26 est vérifiée comme cela est spécifié pour les douilles E27 et B22 (Japon).

– 22.110: Pour les éléments chauffants compris dans des tubes en verre non fermés, les exigences de température sont différentes (Japon).

– 22.117: Seuls les deux premiers tirets du premier alinéa de l'exigence sont admis (Australie et Nouvelle-Zélande).

Le comité a décidé que le contenu de ce document ne sera pas modifié avant la date de stabilité indiquée sur le site web de l'IEC sous webstore.iec.ch dans les données relatives au document recherché. À cette date, le document sera

- reconduit,
- supprimé, ou
- révisé.

INTRODUCTION

Il a été admis par hypothèse, en établissant la présente Norme internationale, que l'exécution de ses dispositions était confiée à des personnes expérimentées et ayant une qualification appropriée.

Les documents de recommandations concernant l'application des exigences de sécurité pour les appareils peuvent être consultés dans les documents de support du CE 61 et du SC 61C, accessibles sur les sites web de l'IEC.

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

https://www.iec.ch/sc61c/supportingdocuments

Cette information est donnée à l'intention des utilisateurs de la présente Norme internationale et ne constitue nullement un remplacement du texte normatif de la présente norme.

La présente norme reconnaît le niveau de protection internationalement accepté contre les dangers électriques, mécaniques, thermiques, liés au feu et au rayonnement des appareils, lorsqu'ils fonctionnent comme en usage normal en tenant compte des instructions du fabricant. Elle couvre également les situations anormales auxquelles on peut s'attendre dans la pratique et prend en considération les phénomènes électromagnétiques qui peuvent affecter le fonctionnement en toute sécurité des appareils.

La présente norme tient compte autant que possible des exigences de l'IEC 60364, de façon à rester compatible avec les règles d'installation quand l'appareil est raccordé au réseau d'alimentation. Cependant, des règles d'installation nationales peuvent être différentes.

Si un appareil compris dans le domaine d'application de la présente norme comporte également des fonctions qui sont couvertes par une autre partie 2 de l'IEC 60335, la partie 2 correspondante est appliquée à chaque fonction séparément, dans la limite du raisonnable. Si cela s'applique, l'influence d'une fonction sur les autres fonctions est prise en compte.

Lorsqu'une partie 2 ne comporte pas d'exigences complémentaires pour couvrir les dangers traités dans la Partie 1, la Partie 1 s'applique.

NOTE 1 Cela signifie que les comités d'études responsables pour les parties 2 ont déterminé qu'il n'était pas nécessaire de spécifier des exigences particulières pour l'appareil en question en plus des exigences générales.

La présente norme est une norme de famille de produits traitant de la sécurité d'appareils et a préséance sur les normes horizontales et génériques couvrant le même sujet.

NOTE 2 Les publications horizontales, les publications fondamentales de sécurité et les publications groupées de sécurité couvrant un danger ne s'appliquent pas, parce qu'elles ont été prises en considération lorsque les exigences générales et particulières ont été étudiées pour la série de normes IEC 60335.

NOTE 3 Les normes traitant des aspects non relatifs à la sécurité des appareils électrodomestiques sont:

– les normes IEC publiées par le comité d'études 59 concernant les méthodes de mesure de l'aptitude à la fonction;
– les normes CISPR 11 et CISPR 14-1, ainsi que les normes applicables de la série IEC 61000-3 concernant les émissions électromagnétiques;
– la norme CISPR 14-2 concernant l'immunité électromagnétique;
– les normes IEC publiées par le comité d'études 111 concernant l'environnement.

Un appareil conforme au texte de la présente norme ne sera pas nécessairement jugé conforme aux principes de sécurité de la norme si, lorsqu'il est examiné et soumis aux essais, il apparaît qu'il présente d'autres caractéristiques qui compromettent le niveau de sécurité visé par ces exigences.

Un appareil utilisant des matériaux ou présentant des modes de construction différents de ceux décrits dans les exigences de la présente norme peut être examiné et soumis aux essais en fonction de l'objectif poursuivi par ces exigences et, s'il est jugé pratiquement équivalent, il peut être estimé conforme aux principes de sécurité de la norme.

APPAREILS ÉLECTRODOMESTIQUES ET ANALOGUES – SÉCURITÉ –

Partie 2-24: Exigences particulières pour les appareils de réfrigération, les sorbetières et les fabriques de glace

1 Domaine d'application

L'article de la Partie 1 est remplacé par l'article ci-après.

La présente partie de l'IEC 60335 traite de la sécurité des appareils suivants, leur **tension assignée** n'étant pas supérieure à 250 V pour les appareils monophasés, à 480 V pour les autres appareils et à 24 V en courant continu pour les appareils **alimentés par batteries**:

– **appareils de réfrigération** pour usages domestiques et analogues;
– **fabriques de glace** comportant un motocompresseur et **fabriques de glace** conçues pour être incorporées dans des compartiments de stockage des denrées congelées à usage domestique;
– **appareils de réfrigération** et **fabriques de glace** pour applications analogues à l'usage domestique, par exemple pour le camping, dans des **véhicules habitables de loisir**, dans des bateaux de plaisance et à bord de navires;
– **appareils de réfrigération portables**.

Ces appareils peuvent être alimentés par secteur, par **batterie séparable**, ou être alimentés à la fois par secteur ou **batterie séparable**, ou par d'autres sources d'énergie (combustibles gazeux, liquides et solides).

La présente norme couvre également les **appareils de réfrigération** destinés à être utilisés dans des bateaux de plaisance et à bord de navires, pour lesquels l'Annexe FF normative s'applique.

La présente norme traite également de la sécurité des **sorbetières** à usage domestique, leur **tension assignée** n'étant pas supérieure à 250 V pour les appareils monophasés et à 480 V pour les autres appareils.

Elle traite également des **appareils à compression** pour usage domestique et analogue, qui utilisent des **fluides frigorigènes inflammables**.

La présente norme ne traite pas des caractéristiques de construction et de fonctionnement d'**appareils de réfrigération** qui font l'objet d'autres normes IEC.

Les **appareils de réfrigération** qui ne sont pas destinés à des usages domestiques normaux, mais qui peuvent néanmoins constituer une source de danger pour le public, tels que:

– les **appareils de réfrigération** utilisés dans les coins cuisines réservés au personnel des magasins, bureaux et autres environnements professionnels;
– les **appareils de réfrigération** utilisés dans les fermes et par les clients des hôtels, motels et autres environnements à caractère résidentiel;
– les **appareils de réfrigération** utilisés dans les environnements de type chambres d'hôtes; et
– les **appareils de réfrigération** utilisés en restauration et autres applications similaires hormis la vente au détail

sont compris dans le domaine d'application de la présente norme.

Dans la mesure du possible, la présente norme traite des dangers ordinaires présentés par les appareils, encourus par tous les individus à l'intérieur et autour de l'habitation. Cependant, elle ne tient en général pas compte:

– des personnes dont
  - les capacités physiques, sensorielles ou mentales; ou
  - le manque d'expérience et de connaissance

les empêchent d'utiliser l'appareil en toute sécurité sans surveillance ou instruction.

L'attention est attirée sur le fait que

– pour les appareils destinés à être utilisés dans des véhicules, des **véhicules habitables de loisir**, des bateaux de plaisance, ou à bord de navires ou d'avions, des exigences supplémentaires peuvent être nécessaires;
– dans de nombreux pays, des exigences supplémentaires sont spécifiées par les organismes nationaux de la santé, par les organismes nationaux responsables de la protection des travailleurs, par les organismes nationaux responsables de l'alimentation en eau et par des organismes similaires;
– pour les appareils qui sont alimentés en outre par d'autres sources d'énergie (combustibles gazeux, liquides et solides), des exigences supplémentaires peuvent être nécessaires.

La présente norme ne s'applique pas:

– aux appareils destinés à être utilisés à l'extérieur, à l'exception des **appareils de réfrigération portables**;
– aux appareils conçus exclusivement pour des usages industriels;
– aux appareils destinés à être utilisés dans des locaux présentant des conditions particulières, telles que la présence d'une atmosphère corrosive ou explosive (poussière, vapeur ou gaz);
– aux appareils équipés d'une **batterie** prévue comme source d'alimentation de la fonction de réfrigération;
– aux appareils assemblés sur le site par l'installateur;
– aux appareils avec motocompresseurs à distance;
– aux motocompresseurs (IEC 60335-2-34);
– aux distributeurs commerciaux avec ou sans moyen de paiement (IEC 60335-2-75);
– aux appareils de réfrigération et fabriques de glace à usage commercial avec une unité de fluide frigorigène ou un motocompresseur incorporés ou à distance (IEC 60335-2-89);
– aux fabriques de crème glacée à usage professionnel (IEC 60335-2-118).

2 Références normatives

L'article de la Partie 1 s'applique, avec l'exception suivante.

Addition:

IEC 60068-2-6:2007, *Essais d'environnement – Partie 2-6: Essais – Essai Fc: Vibrations (sinusoïdales)*

IEC 60068-2-11:2021, *Essais d'environnement – Partie 2-11: Essais – Essai kA: Brouillard salin*

IEC 60068-2-27:2008, *Essais d'environnement – Partie 2-27: Essais – Essai Ea et guide: Chocs*

IEC 60068-2-52:2017, *Essais d'environnement – Partie 2-52: Essais – Essai Kb: Brouillard salin, essai cyclique (solution de chlorure de sodium)*

IEC 60079 (toutes les parties), *Atmosphères explosives*

IEC 60079-1:2014, *Atmosphères explosives – Partie 1: Protection du matériel par enveloppes antidéflagrantes "d"*

IEC 60079-7:2015, *Atmosphères explosives – Partie 7: Protection du matériel par sécurité augmentée "e"*

IEC 60079-15:2017, *Atmosphères explosives – Partie 15: Protection du matériel par mode de protection "n"*

IEC 60252-1:2010, *Condensateurs des moteurs à courant alternatif – Partie 1: Généralités – Caractéristiques fonctionnelles, essais et valeurs assignées – Règles de sécurité – Lignes directrices pour l'installation et l'utilisation*
IEC 60252-1:2010/AMD1:2013

IEC 60335-2-34:2024, *Appareils électrodomestiques et analogues – Sécurité – Partie 2-34: Exigences particulières pour les motocompresseurs*

IEC 60695-11-3:2012, *Essais relatifs aux risques du feu – Partie 11-3: Flammes d'essai – Flamme de 500 W – Appareillage et méthodes d'essai de vérification*

IEC 60695-11-20:2015, *Essais relatifs aux risques du feu – Partie 11-20: Flammes d'essai – Méthode d'essai à la flamme de 500 W*

IEC 60730-2-6:2015, *Dispositifs de commande électrique automatiques – Exigences particulières pour les dispositifs de commande électrique automatiques sensibles à la pression y compris les exigences mécaniques*
IEC 60730-2-6:2015/AMD1:2019[1]

IEC 60730 (toutes les parties), *Dispositifs de commande électrique automatiques*

IEC 60851-4:2016, *Fils de bobinage – Méthodes d'essai – Partie 4: Propriétés chimiques*

ISO 209, *Aluminium et alliages d'aluminium – Composition chimique*

ISO 817, *Fluides frigorigènes – Désignation et classification de sécurité*

ISO 4126-2:2018, *Dispositifs de sécurité pour protection contre les pressions excessives – Partie 2: Dispositifs de sûreté à disque de rupture*

ISO 7010:2019, *Symboles graphiques – Couleurs de sécurité et signaux de sécurité – Signaux de sécurité enregistrés*

---

[1] Il existe une version consolidée de ce document, qui comprend l'IEC 60730-2-6:2015 et l'IEC 60730-2-6:2015/AMD1:2019.

Modification:

Remplacer

IEC 60598-1:2014, *Luminaires – Partie 1: Exigences générales et essais*
IEC 60598-1:2014/AMD1:2017

par

IEC 60598-1:2020, *Luminaires – Partie 1: Exigences générales et essais*