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OHUTUS. OSA 2-24: ERINÕUDED
KÜLMUTUSSEADMETELE, JÄÄTISE- JA JÄÄVALMISTITELE**

**Household and similar electrical appliances - Safety -
Part 2-24: Particular requirements for refrigerating
appliances, ice-cream appliances and ice-makers
(IEC 60335-2-24:2010 + IEC 60335-2-24:2010/A1:2012 ,
modified + IEC 60335-2-24:2010/A2:2017)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60335-2-24:2010 +A1+A2+A11:2020 sisaldab Euroopa standardi EN 60335-2-24:2010 ja selle muudatuste A1:2019, A2:2019 ja A11:2020 ingliskeelset teksti.	This Estonian standard EVS-EN 60335-2-24:2010 +A1+A2+A11:2020 consists of the English text of the European standard EN 60335-2-24:2010 and its amendments A1:2019, A2:2019 and A11:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 09.04.2010, muudatused A1 11.01.2019, A2 11.01.2019 ja A11 04.09.2020.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. Date of Availability of the European standard is 09.04.2010, for A1 11.01.2019, A2 11.01.2019 and A11 04.09.2020.
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April 2010, January 2019, January 2019,
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Supersedes EN 60335-2-24:2003 + A1:2005 + A2:2007 +
A11:2004 + A12:2009

English Version

**Household and similar electrical appliances - Safety - Part 2-24:
Particular requirements for refrigerating appliances, ice-cream
appliances and ice makers (IEC 60335-2-24:2010 + IEC 60335-
2-24:2010/A1:2012 , modified + IEC 60335-2-24:2010/A2:2017)**

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-24: Règles particulières pour les appareils de
réfrigération, les sorbetières et les fabriques de glace
(CEI 60335-2-24:2010 + IEC 60335-2-24:2010/A1:2012 ,
modifiée + IEC 60335-2-24:2010/A2:2017)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-24: Besondere Anforderungen für
Kühl-/Gefriergeräte und Speiseeis- und Eisbereiter
(IEC 60335-2-24:2010 + IEC 60335-2-24:2010/A1:2012 ,
modifiziert + IEC 60335-2-24:2010/A2:2017)

This European Standard was approved by CENELEC on 2010-03-01. Amendment A1 was approved by CENELEC on 2018-12-17. Amendment A2 was approved by CENELEC on 2017-04-10. Amendment A11 was approved by CENELEC on 2020-06-03. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard and its amendments the status of a national standard without any alteration.

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This European Standard and its amendments A1, A2 and A11 exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Foreword

The text of document 61C/459/FDIS, future edition 7 of IEC 60335-2-24, prepared by SC 61C, Household appliances for refrigeration, of IEC TC 61, Safety of household and similar electrical appliances, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60335-2-24 on 2010-03-01.

This European Standard supersedes EN 60335-2-24:2003 + A1:2005 + A2:2007 + A11:2004 + A12:2009.

The principal changes in this edition as compared with EN 60335-2-24:2003 are as follows (minor changes are not listed):

- aligns the text with EN 60335-1, and its Amendments 1, 2, 11, 12 and 13;
- clarifies the term “household and similar use” (1, 7.12);
- updates marking requirements for supply terminals of battery operated appliances (7.6, 7.101);
- introduces requirements for appliances using transcritical refrigerant systems (3.112, 3.113, 3.114, 3.115, 3.116, 7.1, 7.6, 7.12.1, 22.103, 24.1.4, 24.102);
- introduces an enhanced flexing test (23.3);
- introduces requirements for accessible glass panels (22.116);
- clarifies tests for appliances using flammable refrigerants (22.107, Annex DD).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2010-12-01
- date on which national standards
conflicting with the EN have to be withdrawn (dow) 2015-03-01

This Part 2 has to be used in conjunction with EN 60335-1, Household and similar electrical appliances – Safety – Part 1: General requirements. It was established on the basis of the 2002 edition of that standard. Amendments and revisions of Part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of Part 1.

This Part 2 supplements or modifies the corresponding clauses of EN 60335-1, so as to convert it into the European Standard: Household and similar electrical appliances - Safety - Part 2-24: Particular 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 of Part 1 is to be adapted accordingly.

NOTE 1 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.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letter Z.

NOTE 2 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.

There are no special national conditions causing a deviation from this European Standard, other than those listed in Annex ZA to EN 60335-1.

There are no national deviations from this European Standard, other than those listed in Annex ZB to EN 60335-1.

Endorsement notice

The text of the International Standard IEC 60335-2-24:2010 was approved by CENELEC as a European Standard without any modification.

A1 Amendment A1 European foreword

This document (EN 60335-2-24:2010/A1:2019) consists of the text of IEC 60335-2-24:2010/A1:2012 prepared by IEC/SC 61C, "Safety of refrigeration appliances for household and commercial use", of IEC/TC 61, "Safety of household and similar electrical appliances", together with the common modifications prepared by CLC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-07-11
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2019-07-11

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This amendment supplements or modifies the corresponding clauses of EN 60335-1:2012 including its amendments and EN 60335-2-24:2010.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 60335-2-24:2010/A1:2012 are prefixed "Z".

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard IEC 60335-2-24:2010/A1:2012 was approved by CENELEC as a European Standard with agreed common modifications. **A1**

A2 Amendment A2 European foreword

The text of document 61C/694/FDIS, future edition 7 of IEC 60335-2-24:2010/A2, prepared by IEC/SC 61C, "Safety of refrigeration appliances for household and commercial use", of IEC/TC 61, "Safety of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60335-2-24:2010/A2:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-07-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-07-11

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard IEC 60335-2-24:2010/A2:2017 was approved by CENELEC as a European Standard without any modification. **A2**

A11 Amendment A11 European foreword

This document (EN 60335-2-24:2010/A11:2020) consists of the text has been prepared by CLC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be (dop) 2021-06-03 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2023-06-03 with this document have to be withdrawn

This amendment supplements or modifies the corresponding clauses of EN 60335-1:2012 including its amendments, and EN 60335-2-24:2010 + A1:2019 +A2:2019.

EN 60335-2-24:2010/A11:2020 is to be read in conjunction with EN 60335-1:2012 and its amendments, which are referred to in this text as "Part 1".

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

For the relationship with EU Directive(s) see informative Annex ZZA, which is an integral part of this document. **A11**

CONSOLIDATED VERSION

VERSION CONSOLIDÉE

**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: Règles particulières pour les appareils de réfrigération, les
sorbetières et les fabriques de glace**



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Edition 7.2 2017-04

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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.
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- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

This part of International Standard IEC 60335 has been prepared by subcommittee 61C: Household appliances for refrigeration, of IEC technical committee 61: Safety of household and similar electrical appliances.

This seventh edition cancels and replaces the sixth edition published in 2002 including its Amendment 1 (2005) and Amendment 2 (2007). It constitutes a technical revision.

The principal changes in this edition as compared with the previous edition of IEC 60335-2-24 are as follows (minor changes are not listed):

- aligns the text with IEC 60335-1, and its Amendments 1 and 2;
- clarifies the term “household and similar use” (1, 7.12);
- updates marking requirements for supply terminals of battery operated appliances (7.6, 7.101);

- introduces requirements for appliances using transcritical refrigerant systems (3.112, 3.113, 3.114, 3.115, 3.116, 7.1, 7.6, 7.12.1, 22.103, 24.1.4, 24.102);
- introduces an enhanced flexing test (23.3);
- introduces requirements for accessible glass panels (22.116);
- clarifies tests for appliances using flammable refrigerants (22.107, Annex DD)

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

FDIS	Report on voting
61C/459/FDIS	61C/461/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part 2 is to be used in conjunction with the latest edition of IEC 60335-1 and its amendments. It was established on the basis of the fourth edition (2001) of that standard.

NOTE 1 When "Part 1" is mentioned in this standard, it refers to IEC 60335-1.

This part 2 supplements or modifies the corresponding clauses in IEC 60335-1, so as to convert that publication into the IEC standard: Safety requirements for electric 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 smaller 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.

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 the base publication and its amendments will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE 4 The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

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).

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

A1 AMENDMENT A1 FOREWORD

This amendment has been prepared by sub-committee 61C: Safety of refrigeration appliances for household and commercial use, of IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61C/506/FDIS	61C/509/RVD

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

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

A2 AMENDMENT A2 FOREWORD

This amendment has been prepared by sub-committee 61C: Safety of refrigeration appliances for household and commercial use, of IEC technical committee 61: Safety of household and similar electrical appliances.

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

FDIS	Report on voting
61C/694/FDIS	61C/700/RVD

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

The contents of the interpretation sheet 1 of April 2018 and interpretation sheet 2 of March 2020 have been included in this copy. **A2**

INTRODUCTION

It has been assumed in the drafting of this international standard that the execution of its provisions is entrusted to appropriately qualified and experienced persons.

This standard recognizes the internationally accepted level of protection against hazards such as electrical, mechanical, thermal, fire and radiation of appliances when operated as in normal use taking into account the manufacturer's instructions. It also covers abnormal situations that can be expected in practice and takes into account the way in which electromagnetic phenomena can affect the safe operation of appliances.

This standard takes into account the requirements of IEC 60364 as far as possible so that there is compatibility with the wiring rules when the appliance is connected to the supply mains. However, national wiring rules may differ.

If an appliance within the scope of this standard also incorporates functions that are covered by another part 2 of IEC 60335, the relevant part 2 is applied to each function separately, as far as is reasonable. If applicable, the influence of one function on the other is taken into account.

When a part 2 standard does not include additional requirements to cover hazards dealt with in Part 1, Part 1 applies.

NOTE 1 This means that the technical committees responsible for the part 2 standards have determined that it is not necessary to specify particular requirements for the appliance in question over and above the general requirements.

This standard is a product family standard dealing with the safety of appliances and takes precedence over horizontal and generic standards covering the same subject.

NOTE 2 Horizontal and generic standards covering a hazard are not applicable since they have been taken into consideration when developing the general and particular requirements for the IEC 60335 series of standards. For example, in the case of temperature requirements for surfaces on many appliances, generic standards, such as ISO 13732-1 for hot surfaces, are not applicable in addition to Part 1 or part 2 standards.

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

An appliance employing materials or having forms of construction differing from those detailed in the requirements of this standard may be examined and tested according to the intent of the requirements and, if found to be substantially equivalent, may be considered to comply with the standard.

A1 *deleted text* **A1**

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 International Standard 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 d.c. 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;
- **refrigerating appliances** and **ice-makers** for use in camping, touring caravans and boats for leisure purposes.

These appliances may be operated from the mains, from a separate battery or operated either from the mains or from a separate battery.

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 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.

A1) This standard deals with the reasonably foreseeable hazards presented by appliances and machines that are encountered by all persons. However, in general, it does not take into account

- **children** playing with the appliance,
- the use of the **refrigerating appliances** by **very young children**,

- the use of **ice-cream appliances** and separated **ice-makers** by **young children** and by **very young children**.

It is recognized that **very vulnerable people** may have needs beyond the level addressed in this standard. ^{A1}

NOTE 1 Attention is drawn to the fact that

- for appliances intended to be used in vehicles or on board ships or aircraft, additional requirements may be necessary;
- in many countries, additional requirements are specified by national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities.
- ^{A1} in some countries, specific legislation covers surfaces and materials in contact with food. ^{A1}

NOTE 2 This standard does not apply to

- appliances intended to be used in the open air;
- 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 refrigerators and freezers used for the display of food products, including beverages, for retail sale (IEC 60335-2-89);
- commercial ice-cream appliances.

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

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

^{A2} *deleted text* ^{A2}

^{A1} IEC 60079-15:2010, *Explosive atmospheres – Part 15: Equipment protection by type of protection "n"* ^{A1}

^{A2} *deleted text* ^{A2}

^{A2} IEC 60079-20-1, *Explosive atmospheres – Part 20-1: Material characteristics for gas and vapour classification – Test methods and data* ^{A2}

IEC 60335-2-5:2002, *Household and similar electrical appliances – Safety – Part 2-5: Particular requirements for dishwashers*

IEC 60335-2-34:2002, *Household and similar electrical appliances – Safety – Part 2-34: Particular requirements for motor-compressors*

Amendment 1 (2004)

Amendment 2 (2008)¹⁾

¹⁾ There exists a consolidated edition 4.2 (2002) that includes edition 4 and its Amendment 1 and Amendment 2.

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

ISO 817, *Refrigerants – Designation and safety classification*

ISO 4126-2:2003, *Safety devices for protection against excessive pressure – Bursting disc safety devices*

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

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

3 Terms and definitions

This clause of Part 1 is applicable except as follows.

3.1.9 Replacement:

normal operation

operation of the appliance under the following conditions

3.1.9.101

normal operation of a refrigerating appliance

operation at an ambient temperature in accordance with 5.7, empty, with the doors and lids closed. User-adjustable temperature control devices which control the operation of the motor-compressor in **compression-type appliances** are short-circuited or otherwise rendered inoperative

3.1.9.102

normal operation of an ice-maker

operation at an ambient temperature in accordance with 5.7, with the supply water at a temperature of $15\text{ °C} \pm 2\text{ °C}$

3.1.9.103

normal operation of an incorporated ice-maker

operation at the normal temperature of the frozen food storage compartment, with the supply water at a temperature of $15\text{ °C} \pm 2\text{ °C}$

3.1.9.104

normal operation of an ice-cream appliance

operation of the appliance using the maximum quantity of the mixture of ingredients indicated in the instructions; the mixture used being that which gives the most unfavourable results, the mixture being at an initial temperature of $23\text{ °C} \pm 2\text{ °C}$

3.101

refrigerating appliance

enclosed thermally insulated appliance of suitable volume for household use, cooled by an incorporated device and having one or more compartments intended for the preservation of foodstuffs including cooling of beverages

3.102

compression-type appliance

appliance in which refrigeration is effected by the vaporization at low pressure in a heat exchanger (**evaporator**) of a liquid refrigerant, the vapour thus formed being restored to the original state by mechanical compression at a higher pressure and subsequent cooling in another heat exchanger (**condenser**)