



BSI Standards Publication

Household and similar electrical appliances — Safety

Part 2-119: Particular requirements for commercial vacuum packaging appliances

National foreword

This British Standard is the UK implementation of EN IEC 60335-2-119:2024+A11:2024. It is derived from IEC 60335-2-119:2021.

The start and finish of text introduced or altered by amendment A11 is indicated in the text by tags. Tags indicating changes to text carry the number of the CENELEC amendment. For example, text altered by CENELEC amendment A11 is indicated by A11 A11.

The UK participation in its preparation was entrusted to Technical Committee CPL/61/1, Motorised appliance group.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Particular requirements for commercial vacuum packaging
appliances
(IEC 60335-2-119:2021)

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-119: Exigences particulières pour les emballeuses
sous vide à usage commercial
(IEC 60335-2-119:2021)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-119: Besondere Anforderungen für
Vakuumverpackungsgeräte für den gewerblichen Gebrauch
(IEC 60335-2-119:2021)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
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European foreword

This document (EN IEC 60335-2-119:2024) consists of the text of document IEC 60335-2-119:2021, prepared by IEC/TC 61 "Safety of household and similar electrical appliances".

The following dates are fixed:

- latest date by which this document has to be (dop) 2024-12-07
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identical national standard or by endorsement
- latest date by which the national standards (dow) 2026-12-07
conflicting with this document have to be withdrawn

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 is read in conjunction with EN IEC 60335-2-119:2024/A11:2024.

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZZB, which is an integral part of EN IEC 60335-2-119:2024/A11:2024.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

European foreword to amendment A11

This document (EN IEC 60335-2-119:2024/A11:2024) has been prepared by CLC/TC 61 "Safety of household and similar electrical appliances".

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The numbering system for European clauses, subclauses, notes, tables, figures and annexes that are additional to those in the IEC standard are prefixed with the letter "Z".

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CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references	7
3 Terms and definitions	7
4 General requirement.....	8
5 General conditions for the tests	8
6 Classification.....	9
7 Marking and instructions.....	9
8 Protection against access to live parts.....	12
9 Starting of motor-operated appliances	12
10 Power input and current.....	12
11 Heating.....	12
12 Charging of metal-ion batteries.....	12
13 Leakage current and electric strength at operating temperature.....	12
14 Transient overvoltages	13
15 Moisture resistance	13
16 Leakage current and electric strength.....	14
17 Overload protection of transformers and associated circuits	14
18 Endurance	14
19 Abnormal operation	14
20 Stability and mechanical hazards.....	15
21 Mechanical strength	15
22 Construction	16
23 Internal wiring.....	18
24 Components	18
25 Supply connection and external flexible cords	18
26 Terminals for external conductors.....	18
27 Provision for earthing	18
28 Screws and connections	18
29 Clearances, creepage distances and solid insulation	19
30 Resistance to heat and fire	19
31 Resistance to rusting	19
32 Radiation, toxicity and similar hazards.....	19
Annexes	21
Annex AA (informative) Method for calculating the gas concentration	22
Bibliography.....	26
Figure 101 – Splash apparatus	20
Figure 102 – Weight for mechanical test	20

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –****Part 2-119: Particular requirements for commercial
vacuum packaging appliances**

FOREWORD

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IEC 60335-2-119 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances. It is an International Standard.

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

Draft	Report on voting
61/6176/CDV	61/6295/RVC

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/standardsdev/publications.

A list of all parts in the IEC 60335 series, published 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: Particular requirements for commercial vacuum packaging appliances.

When a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as is reasonable. When this standard states “addition”, “modification” or “replacement”, the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.

NOTE 3 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type*;
- notes: in small roman type.

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The committee has decided that the contents of 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,
- 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.

INTRODUCTION

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

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

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

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

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

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

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

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

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

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

A11 This European Amendment A11 supplements or modifies the corresponding clauses of the standards below:

- EN IEC 60335-1:2023+A11:2023 (Part 1)
- EN IEC 60335-2-119:2024 (Part 2) **A11**

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-119: Particular requirements for commercial vacuum packaging appliances

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335 deals with the safety of commercial electric packaging appliances using vacuum conditions for food preservation, their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances.

These appliances are not intended for household and similar purposes. They are used for commercial preservation of food in areas not open to the public, for example in kitchens of restaurants, canteens, hospitals and in commercial enterprises such as bakeries and butcheries.

Examples of appliances that are within the scope of this standard are:

- chamber vacuum packaging appliances;
- vacuum packaging appliances.

These appliances may be provided with a film-sealing function.

This standard also deals with the hygiene aspects of appliances.

A11 This document deals with the reasonably foreseeable hazards presented by appliances that are encountered by all persons in and around the installation place. However, in general, it does not take into account:

- **children** playing with the appliance;
- the use of the appliance by **children**;

It is recognized that **very vulnerable people** can have needs beyond the level addressed in this document. **A11**

Attention is drawn to the fact that:

- for appliances intended to be used in vehicles or onboard ships or aircraft, additional requirements may be necessary;
- in many countries, additional requirements for appliances incorporating pressure vessels are specified;
- in many countries, additional requirements are specified by the national health authorities, the national authorities responsible for the protection of labour, the national water supply authorities and similar authorities.

This standard does not apply to:

- appliances which operate with injection in the vacuum chamber of inert gas with an oxygen content exceeding 21 %;
- 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);
- vacuum packaging appliances for household and similar use (IEC 60335-2-45);
- **battery-operated appliances.**

A11 This annex deals with additional requirements concerning appliances and machines with power driven parts, intended to be used by experts or trained users for example in restaurants, canteens, hospitals and commercial enterprises such as bakeries, butcheries, pastries, fishmongiers, food laboratories, food preparation departments in supermarkets etc. and appliances and machines with power driven parts which are declared to be for commercial use by lay persons.

NOTE The statement from the manufacturer in the product information concerning the specific product is the criterion that is expected to be considered to determine the intended use of the appliance. The statement is expected to accurately reflect the reasonably foreseeable use of the product.

This document does not deal with any specific requirements on noise emitted from these appliances the generated noise is not considered to be a relevant hazard. Thus, the emission sound pressure level L_{pA} is considered to be $L_{pA} \leq 70 \text{ dB(A)}$. **A11**

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

A11 EN 1672-2:2020, *Food processing machinery - Basic concepts - Part 2: Hygiene and cleanability requirements*

EN 614-1:2006+A1:2009, *Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles*

EN 614-2:2000+A1:2008, *Safety of machinery - Ergonomic design principles - Part 2: Interactions between the design of machinery and work tasks* **A11**

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

ISO 683-1:2016, *Heat-treatable steels, alloy steels and free-cutting steels – Part 1: Non-alloy steels for quenching and tempering*

3 Terms and definitions

This clause of Part 1 is applicable except as follows.

3.1 Definitions relating to physical characteristics

3.1.9 Replacement:

operation of the appliance under the following conditions:

Vacuum packaging appliances and **chamber vacuum packaging appliances** without deaeration function are operated empty in vacuum and sealing cycles in accordance with the instructions, choosing the most unfavourable condition. If no instructions are given, the appliance is operated for the:

- vacuum function, the maximum period allowed by the construction;
- sealing function, 10 s or the maximum period allowed by a timer, if higher, with a rest period of 30 s between each cycle.

The sealing function is carried out by sealing together two sheets of plastic film. The plastic film is high pressure (low density) polyethylene, each sheet having a thickness of 50 µm.

Vacuum packaging appliances and **chamber vacuum packaging appliances** provided with deaeration function intended to remove air molecules from liquids, creams and sauces are operated as indicated above but for 5 min for the vacuum function.

Vacuum packaging appliances and **chamber vacuum packaging appliances** for vacuum and sealing and which can perform sealing function only, are also operated for a series of operating cycles as specified in the instruction for use, choosing the most unfavourable condition. If no instructions are given, in each cycle the sealing function is operated 10 s.

In all cases the sealing operation period is followed by a further period of 15 s for the appliance to be ready to perform the next sealing operation.

The sealing function is carried out by sealing together two sheets of plastic film. The plastic film is high pressure (low density) polyethylene, each sheet having a thickness of 50 µm.

3.5 Definitions relating to types of appliances

3.5.101

vacuum packaging appliance

appliance in which the vacuum function is performed with the packaging outside the vacuum chamber

Note 1 to entry: **Vacuum packaging appliances** may be provided with a sealing function.

3.5.102

chamber vacuum packaging appliance

appliance in which the vacuum function is performed with the packaging inside a vacuum chamber

Note 1 to entry: **Chamber vacuum packaging appliances** may be provided with a sealing function and/or gas injection function that avoids crushing of the food.

3.ZE1

guard

part of the appliance specifically designed to provide protection by means of a physical barrier.

3.ZE2

operator

person or persons installing, operating, adjusting, maintaining, cleaning, repairing or moving appliances

3.ZE3

workstation

place, as defined in the technical documentation of the relevant appliance, where the **operator** is expected to be in attendance to operate, or to adjust, or to control the appliance 

4 General requirement

This clause of Part 1 is applicable.

 *Replace the first paragraph of Part 1 by:*

Appliances shall be constructed so that they function safely so as to cause no danger to persons or surroundings during normal use, even in the event of carelessness, and during installation, adjusting, maintenance, cleaning, repairing or transportation. 

5 General conditions for the tests

This clause of Part 1 is applicable

6 Classification

This clause of Part 1 is applicable except as follows.

6.1 Modification:

Appliances shall be **class I**, **class II** or **class III**.

6.2 Addition:

Appliances normally used on a table shall be at least IPX3. Other appliances shall be at least IPX4.

7 Marking and instructions

This clause of Part 1 is applicable except as follows.

7.1 Modification:

Replace the fourth and fifth dashed items of Part 1 by:

- business name and full address of the manufacturer and, where applicable, their authorized representative;
- model or type reference, serial number, if any, and production year;

NOTE Production year is the year when the production process is completed. The production year can be a part of the serial number.

Add a new dashed item:

- designation of the appliance.

The designation may be a combination of letters and/or numbers and shall enable to identify the machine as specified in the instructions. 

Addition:

Appliances which may operate with gas injection in the vacuum chamber, shall be marked with:

- the substance of the following:
WARNING: The oxygen content in the gas shall not exceed 21 %
- the maximum pressure allowed at the injection gas inlet.

7.12 Replace the first sentence of Part 1 in the requirement by:

Instructions shall be provided with the appliance so that the appliance can be used safely. 

Modification:

 This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. 

Addition:

If symbol 5021 or 5036 or 5140 of IEC 60417 (2002-10) or ISO 7000-0434A (2004-01) is marked on the appliance, its meaning shall be explained. 