

**MAJAPIDAMIS- JA MUUD TAOLISED ELEKTRISEADMED.
OHUTUS. OSA 2-102: ERINÕUDED ELEKTRILISI
ÜHENDUSI OMAVATELE GAASI, ÕLI JA TAHKEKÜTUSE
PÕLETAMISE SEADMETELE**

**Household and similar electrical appliances - Safety -
Part 2-102: Particular requirements for gas, oil and
solid-fuel burning appliances having electrical
connections (IEC 60335-2-102:2017)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 60335-2-102:2024+A11:2024 sisaldab Euroopa standardi EN IEC 60335-2-102:2024 ja selle muudatuse A11:2024 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60335-2-102:2024+A11:2024 consists of the English text of the European standard EN IEC 60335-2-102:2024 and its amendment A11:2024.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.11.2024, muudatus A11 15.11.2024.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 15.11.2024, for A11 15.11.2024.
Muudatusega A11 lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega A11 A11 . Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	The start and finish of text introduced or altered by amendment A11 is indicated in the text by tags A11 A11 . The standard is available from the Estonian Centre for Standardisation and Accreditation.

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English Version
Household and similar electrical appliances - Safety - Part 2-102:
Particular requirements for gas, oil and solid-fuel burning
appliances having electrical connections
(IEC 60335-2-102:2017)

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-102: Exigences particulières pour les appareils à
combustion au gaz, au mazout et à combustible solide
comportant des raccordements électriques
(IEC 60335-2-102:2017)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-102: Besondere Anforderungen für
Gas-, Öl- und Festbrennstoffgeräte mit elektrischen
Anschlüssen
(IEC 60335-2-102:2017)

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European foreword

This document (EN IEC 60335-2-102:2024) consists of the text of document IEC 60335-2-102:2017, 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) 2025-05-15 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards (dow) 2027-11-15 conflicting with this document have to be withdrawn

This document supersedes EN 60335-2-102:2016 and all of its amendments and corrigenda (if any).

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This document is read in conjunction with EN IEC 60335-2-102:2024/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.

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.

Endorsement notice

The text of the International Standard IEC 60335-2-102:2017 was approved by CENELEC as a European Standard without any modification.

A11 Amendment A11 European foreword

This document (EN IEC 60335-2-102:2024/A11:2024) 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 implemented at national level by publication of an identical national standard or by endorsement (dop) 2025-05-15
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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.

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INTERNATIONAL STANDARD

**Household and similar electrical appliances – Safety –
Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances
having electrical connections**



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Edition 2.0 2017-12

INTERNATIONAL STANDARD

**Household and similar electrical appliances – Safety –
Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances
having electrical connections**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections

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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International Standard IEC 60335-2-102 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This bilingual version (2018-11) corresponds to the monolingual English version, published in 2017-12.

This second edition cancels and replaces the first edition published in 2004 including its Amendment 1 (2008) and its Amendment 2 (2012). This edition constitutes a technical revision.

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

- a spillage test is introduced for appliances that have a flat surface on which a cup may be placed (15.101);
- terms and definitions were renumbered;
- some notes have been converted to normative text or deleted (19.11.2, 22.103).

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

CDV	Report on voting
61/5295/CDV	61/5381A/RVC

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

The French version of this standard has not been voted upon.

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

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. It was established on the basis of the fifth edition (2010) 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 gas, oil and solid-fuel burning appliances having electrical connections.

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 "<http://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.

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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.

A11 With European Amendment A11 the EN 60335-2-102:2016 is superseded.

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

- EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019+A15:2021+A16:2023 (Part 1)
- EN IEC 60335-2-102:2024 (Part 2) **A11**

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections

1 Scope

This clause of Part 1 is replaced by the following.

A11 This document deals with the electrical safety of gas, oil and solid-fuel burning appliances having electrical connections, for household and similar purposes, their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances.

This document covers the electrical safety of these appliances. All safety aspects of these appliances, including those relevant to the noise emitted, are only covered when the appliance also complies with the relevant product standard for the fuel-burning appliance. If the appliance incorporates electric heating sources, safety aspects concerning these electric sources are covered when the appliance also complies with the relevant Part 2 of EN 60335. **A11**

NOTE 101 Examples of appliances within the scope of this standard are

- central heating boilers;
- commercial catering equipment;
- cooking appliances;
- laundry and cleaning appliances;
- room heaters;
- warm air heaters;
- water heaters.

A11 Additional requirements for appliances and machines with moving parts and intended for commercial use are given in Annex ZE.

NOTE Z101 Examples of appliance for household environment are appliances for typical housekeeping functions used in the household environment and appliances for typical housekeeping functions used by non-expert users:

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

NOTE Z102 Household environment includes the dwelling and its associated buildings, the garden, etc. **A11**

This standard deals with the reasonably foreseeable hazards presented by appliances that are encountered by all persons.

A11 However, in general, it does not take into account:

- **children** playing with the appliance;
- the use of the appliance by **very young children**;
- the use of the appliance by **young children** without supervision.

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

^{A11} This document is read in conjunction with the relevant standards for fuel-burning appliances and for control devices. Examples are listed in Annexes ZAA and ZBB. ^{A11}

NOTE 102 Attention is drawn to the fact that

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

NOTE 103 This standard does not apply to

- appliances intended exclusively for industrial purposes;
- appliances intended to be used in locations where special conditions prevail, such as the presence of a corrosive or explosive atmosphere (dust, vapour or gas).

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 61558-2-3, *Safety of transformers, reactors, power supply units and combinations thereof – Part 2-3: Particular requirements and tests for ignition transformers for gas and oil burners*

ISO 3808, *Road vehicles – Unscreened high-voltage ignition cables – General specifications, test methods and requirements*

^{A11} EN 298:2022, *Automatic burner control systems for burners and appliances burning gaseous or liquid fuels*

EN IEC 60747-5-5:2020, *Semiconductor devices - Part 5-5: Optoelectronic devices – Photocouplers (IEC 60747-5-5:2020)*

EN 61810-1:2015, ¹ *Electromechanical elementary relays – Part 1: General and safety requirements (IEC 61810-1:2015)* ^{A11}

3 Terms and definitions

This clause of Part 1 is applicable except as follows.

3.5.101

spark-ignition circuit

electrical circuit for producing sparks which ignite gaseous or liquid fuel

^{A11} 3.8.101

lock-out

process in which the appliance goes into one of two lock-out conditions following **shut-down** ^{A11}

¹ As impacted by EN 61810-1:2015/AC:2017, EN 61810-1:2015/AC:2018 and EN 61810-1:2015/A1:2020.