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Elektriska hushållsapparater och liknande bruksföremål – Säkerhet – Del 2-102: Särskilda fordringar på elektriska apparater som eldas med fasta, flytande eller gasformiga bränslen

Household and similar electrical appliances –

Safety –

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

Som svensk standard gäller europastandarden EN 60335-2-102:2016. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60335-2-102:2016.

Nationellt förord

Europastandarden EN 60335-2-102:2016

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60335-2-102, First edition, 2004^{*)} - Household and similar electrical appliances - Safety - Part 2 - 102: Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 60335-1 och dess separat utgivna tillägg.

Tidigare fastställd svensk standard SS-EN 60335-2-102, utgåva 1, 2006 och SS-EN 60335-2-102/A1, utgåva 1, 2010, gäller ej fr o m 2019-01-22.

^{*)} Amendment No 1:2008 och No 2:2008 till IEC 60335-2-102:2004 är inarbetade i standarden. Ändringarna är markerade med ett lodrätt streck i marginalen.

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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 60335-2-102:2004 , modified + A1:2008 , modified
+ A2:2012 , modified)

Appareils électrodomestiques et analogues - Sécurité -
Partie 2-102: Règles particulières pour les appareils à
combustion au gaz, au mazout et à combustible solide
comportant des raccordements électriques
(IEC 60335-2-102:2004 , modifiée + A1:2008 , modifiée
+ A2:2012 , modifiée)

Sicherheit elektrischer Geräte für den Hausgebrauch und
ähnliche Zwecke - Teil 2-102: Besondere Anforderungen
für Gas-, Öl- und Festbrennstoffgeräte mit elektrischen
Anschlüssen
(IEC 60335-2-102:2004 , modifiziert + A1:2008 , modifiziert
+ A2:2012 , modifiziert)

This European Standard was approved by CENELEC on 2015-08-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

This document (EN 60335-2-102:2016) consists of the text of IEC 60335-2-102:2004 + A1:2008 + A2:2012 prepared by 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 the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-07-22
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-01-22

This document supersedes EN 60335-2-102:2006.

This Part 2 has to be used in conjunction with EN 60335-1, *Household and similar electrical appliances – Safety – Part 1: General requirements*, and with IEC 60335-2-102, Edition 1.2, 2012-11¹⁾, *Household and similar electrical appliances – Safety – Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections*.

When this standard states "addition", "modification" or "replacement", the relevant text of the IEC 60335-2-102 is to be adapted; if the subclause is not mentioned in IEC 60335-2-102, the corresponding subclause of Part 1 is to be adapted accordingly.

This standard is intended to be used in addition to the standards for non-electrical appliances and to any Part 2 of EN 60335, if applicable.

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, tables and annexes that are additional to those in the IEC standards 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.

1) IEC 60335-2-102, Edition 1.2, 2012-11 is the consolidated edition of IEC 60335-2-102:2004 + A1:2008 + A2:2012.

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 causing a deviation from this European Standard, other than those listed in Annex ZB to EN 60335-1.

p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version.

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

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for use within Certain Voltage Limits (LVD - 2006/95/EC).

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.

Annex ZC
(normative)

**Normative references to international publications
with their corresponding European publications**

Addition:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
–	–	Automatic burner control systems for burners and appliances burning gaseous or liquid fuels	EN 298	2012
IEC 60747-5-2	–	Discrete semiconductor devices and integrated circuits – Part 5-2: Optoelectronic devices - Essential ratings and characteristics	EN 60747-5-2	–
IEC 61310-1	–	Safety of machinery - Indication, marking and actuation Part 1: Requirements for visual, acoustic and tactile signals	EN 61310-1	–
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	EN 61558-2-3	–
IEC 61810-1	–	Electromechanical elementary relays - Part 1: General and safety requirements	EN 61810-1	–
ISO 3808	–	Road vehicles - Unscreened high-voltage ignition cables - General specifications, test methods and requirements	–	–

CONTENTS

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

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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- 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) 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 IEC Technical Committee 61: Safety of household and similar electrical appliances.

This consolidated version of IEC 60335-2-102 consists of the first edition (2004) [documents 61/2532/FDIS and 61/2576/RVD], its amendment 1 (2008) [documents 61/3695/FDIS and 61/3749/RVD] and its amendment 2 (2012) [documents 61/4445/FDIS and 61/4498/RVD].

The technical content is therefore identical to the base edition and its amendments and has been prepared for user convenience.

It bears the edition number 1.2.

A vertical line in the margin shows where the base publication has been modified by amendments 1 and 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 and its Amendment 1.

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 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.

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.

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.

This International Standard deals with the 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 standard covers the electrical safety and some other safety aspects of these appliances. All safety aspects are covered when the appliance also complies with the relevant standard for the fuel-burning appliance. If the appliance incorporates electric heating sources, it also has to comply with the relevant part 2 of IEC 60335.

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.

Appliances not intended for normal household use but which nevertheless may be a source of danger to the public, such as appliances intended to be used by laymen in shops, in light industry and on farms, 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 knowledgeprevents them from using the appliance safely without supervision or instruction;
- children playing with the appliance.

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*