



BSI Standards Publication

Household and similar electrical appliances — Safety

Part 2-30: Particular requirements for room heaters

National foreword

This British Standard is the UK implementation of EN 60335-2-30:2009+A12:2020, incorporating corrigendum March 2010. It is derived from IEC 60335-2-30:2009, incorporating corrigendum November 2014 and amendment 1:2016. It supersedes BS EN 50408:2008+A1:2011 and BS EN 60335-2-30:2009+A11:2012, which will both be withdrawn on 12 February 2023.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to text carry the number of the IEC or CENELEC amendment. For example, text altered by IEC amendment A1 is indicated by $\boxed{A1}$ $\langle A1 \rangle$; text altered by CENELEC amendment A11 is indicated by $\boxed{A11}$ $\langle A11 \rangle$.

The CENELEC common modifications have been implemented at the appropriate places in the text. The start and finish of each common modification is indicated in the text by tags \boxed{C} $\langle C \rangle$. Where a common modification to an IEC amendment has been introduced, the tags carry the number of the amendment. For example, the common modifications introduced by CENELEC to IEC amendment 1 are indicated by $\boxed{C1}$ $\langle C1 \rangle$.

The UK participation in its preparation was entrusted to Technical Committee CPL/61/7, Safety of electrical appliances - Heated appliance group.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

This publication has been prepared under a mandate given to the European Standards Organizations by the European Commission and the European Free Trade Association and is intended to support essential requirements of the EU legislation detailed in the European foreword. Annex ZZA describes how the publication relates to the legislation.

For the Great Britain market (England, Scotland and Wales), if the UK Government has designated this publication for conformity with UKCA marking legislation and has not amended the essential requirements of that legislation, Annex ZZA and any references to EU law in the publication should be read in accordance with the designation as applying to UK legislation in the same way as to EU law. Further information on designated standards can be found at www.bsigroup.com/standardsandregulation.

For the Northern Ireland market, UK law will continue to implement relevant EU law subject to periodic confirmation. References to EU legislation are therefore still valid.

More information on legislation can be found at www.gov.uk.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

Date	Text affected
31 May 2010	Implementation of CENELEC corrigendum March 2010. Replacement of sixth paragraph in CENELEC foreword.
31 May 2012	Implementation of CENELEC amendment A11:2012
30 November 2014	Implementation of IEC corrigendum November 2014: Table 101, replacement of second entry in second row of first column
28 February 2021	Implementation of IEC amendment 1:2016 with CENELEC endorsement A1:2020, including the addition of Annexes ZA and ZZ
28 February 2021	Implementation of CENELEC amendment A12:2020; Annexes ZA and ZZ renamed as Annexes ZC and ZZA respectively

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

**EN 60335-2-30:2009
+A12**

August 2020

ICS 13.120; 97.100.10

Supersedes EN 60335-2-30:2003 + A1:2004 + A2:2007

Supersedes EN 50408:2008
and all of its amendments and corrigenda (if any)

English version

**Household and similar electrical appliances -
Safety -
Part 2-30: Particular requirements for room heaters
(IEC 60335-2-30:2009)**

Appareils électrodomestiques
et analogues - Sécurité -
Partie 2-30: Règles particulières
pour les appareils de chauffage
des locaux
(CEI 60335-2-30:2009)

Sicherheit elektrischer Geräte
für den Hausgebrauch
und ähnliche Zwecke -
Teil 2-30: Besondere Anforderungen
für Raumheizgeräte
(IEC 60335-2-30:2009)

This European Standard was approved by CENELEC on 2009-12-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

European Foreword

The text of document 61/3910/FDIS, future edition 5 of IEC 60335-2-30, prepared by 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 60335-2-30 on 2009-12-01.

This European Standard supersedes EN 60335-2-30:2003 + A1:2004 + A2:2007.

The principal changes in EN 60335-2-30:2009 as compared with EN 60335-2-30:2003 are as follows (minor changes are not listed):

- some additional instructions are introduced for heaters without a built-in thermostat, or those installed in the floor or in a bathroom (7.12 and 7.12.1);
- a spillage test is introduced for appliances having a grille and that are built into the floor (15.2).

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) 2010-09-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2014-12-01

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: Safety requirements for automatic machines for floor treatment for commercial use.

When a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies. 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.

Introduction

An investigation by CENELEC TC 61 has shown that all risks from products within the scope of this standard are fully covered by the Low Voltage Directive, 2006/95/EC. For products having mechanical moving parts, a risk assessment in accordance with the Machinery Directive, 2006/42/EC, has shown that the risks are mainly of electrical origin and consequently this directive is not applicable. However, the relevant essential safety requirements of the Machinery Directive are covered by this standard together with the principal objectives of the Low Voltage Directive.

Endorsement notice

The text of the International Standard IEC 60335-2-30:2009 was approved by CENELEC as a European Standard without any modification.

European foreword to amendment A11

This document (EN 60335-2-30:2009/A11:2012) 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) 2013-02-20
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2015-02-20

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

This amendment supplements or modifies the corresponding clauses of EN 60335-1:2012 and EN 60335-2-30:2009.

There are no special national conditions causing a deviation from this amendment.

There are no national deviations from this amendment.

European foreword to amendment A1

The text of document 61/5281/FDIS, future IEC 60335-2-30/A1, prepared by IEC/TC 61 "Safety of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60335-2-30:2009/A1:2020.

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) 2020-11-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-02-12

This document supersedes EN 50408:2008 and all of its amendments and corrigenda (if any).

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 60335-2-30:2009/A1:2016 was approved by CENELEC as a European Standard without any modification.

European foreword to amendment A12

This document (EN 60335-2-30:2009/A12:2020) 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 (dop) 2021-08-28
to be implemented at national level
by publication of an identical
national standard or by endorsement
- latest date by which the national (dow) 2023-02-12
standards conflicting with this document
have to be withdrawn

This amendment supplements or modifies the corresponding clauses of the standards below:

- EN 60335-1:2012+A11:2014+A13:2017+A1:2019+A14:2019+A2:2019 (Part 1)
- EN 60335-2-30:2009+AC:2010+A11:2012+AC:2014+A1:2020 (Part 2)

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)/Regulation(s).

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES –
SAFETY –****Part 2-30: Particular requirements for room heaters**

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.

International Standard IEC 60335-2-30 has been prepared by IEC technical committee 61: Safety of household and similar electrical appliances.

This fifth edition cancels and replaces the fourth edition published in 2002, its Amendment 1 (2004) and Amendment 2 (2007). It constitutes a technical revision.

The principal changes in this edition as compared with the fourth edition of IEC 60335-2-30 are as follows (minor changes are not listed):

- some additional instructions are introduced for heaters without a built-in thermostat, or those installed in the floor or in a bathroom (7.12 and 7.12.1);
- a spillage test is introduced for appliances having a grille and that are built into the floor (15.2).

IEC 60335-2-30:2009+A1:2016
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The text of this standard is based on the following documents:

FDIS	Report on voting
61/3910/FDIS	61/3957/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 room heaters.

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 maintenance result 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.

- 3.105: The immediate surround of a fireguard is extended to 50 mm (Austria, Germany and United Kingdom).
- 7.1: All heaters, except those for mounting at high level, are to be marked with a warning against covering (Norway).
- 7.1: All heaters, except those for permanent connection to fixed wiring, are to be marked with the minimum distances to combustibile surfaces (Norway).
- 7.1: Appliances are not required to be marked "Do not cover" (USA).
- 7.12: Some of the instructions specified are to be marked on the heater (Norway and USA).
- Clause 11: The test methods are different (USA).
-  Text deleted 
- 11.8: For all fixed heaters, other than those for mounting at high level, the limit is 115 K for metallic air-outlet grilles and their surrounds (France).
- 11.8: For heaters used in hygiene rooms of dwellings, nurseries or after-school centres, the temperatures of surfaces accessible to test probe B of IEC 61032 are not to exceed 60 °C (Sweden).
- Clause 19: The tests are different (Canada and USA).
- 19.103: Visibly glowing radiant heaters, other than those for mounting at high level, have to withstand the test of this subclause (Sweden).
- 20.1: The test is different (USA).
- 22.7: The test is different (USA).
- 22.24: The test is different (USA).
- 22.101: The requirement is different (Canada and USA).
- 22.102: The requirement is different (Canada and USA).
- 22.103: The requirement is different (Canada and USA).
- 22.105: The requirement is different (USA).
- 22.108: The requirement is different (USA).
- 24.1.3: The number of cycles of operation is 6 000 (USA).
- 24.1.4: Thermal cut-outs that protect heating elements against overheating, incorporated in fan heaters and in stationary heaters intended to be mounted on or near to a wall, other than those for mounting at high level, are to be of the non-self-resetting type (Sweden).
- 25.3: Fixed appliances are to be appliances intended to be permanently connected to fixed wiring (France).

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.

A bilingual version of this publication may be issued at a later date.

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 2-30: Particular requirements for room heaters

A11 1 Scope

This clause of Part 1 is replaced by the following.

This European Standard deals with the safety of electric room heaters for household and similar purposes, their **rated voltage** being not more than 250 V for single-phase appliances and 480 V for other appliances.

NOTE Z101 Examples of appliances that are within the scope of this standard are

- convector heaters;
- **fan heaters**;
- heaters for use in greenhouses;
- liquid-filled radiators;
- panel heaters;
- radiant heaters;
- tubular heaters;
- **ceiling mounted heat lamp appliances**;
- **A11** **cab heaters**.

This standard also deals with the safety of electric heaters intended for the heating of driver and passenger compartments of motor vehicles when they are stationary, their **rated voltage** being not more than 250 V. **A11**

For extraction fans of **ceiling mounted heat lamp appliances**, EN60335-2-80 is applicable as far as is reasonable.

Appliances intended to be used by laymen in shops and other premises for normal housekeeping purposes, are within the scope of this standard.

NOTE Z102 Examples of appliance for household environment are appliances for typical housekeeping functions used in the household environment that may also be used by non expert users for typical housekeeping functions:

- in shops 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 Z103 Household environments include the dwelling and its associated buildings, the garden, etc.

As far as is practicable, this standard deals with the common hazards presented by appliances that are encountered by all persons in household and similar environments.

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 may have needs beyond the level addressed in this European Standard.

NOTE Z104 Attention is drawn to the fact that

- for appliances intended to be used in **A11** moving vehicles **A11** 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;
- for appliances intended to be used in the presence of combustible dust, for example in barns or stables, additional requirements may be necessary.