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NSAI Standards

Irish Standard
I.S. EN IEC 60335-2-71:2020

Household and similar electrical appliances - Safety - Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals

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I.S. EN IEC 60335-2-71:2020

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National Foreword

I.S. EN IEC 60335-2-71:2020 is the adopted Irish version of the European Document EN IEC 60335-2-71:2020, Household and similar electrical appliances - Safety - Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60335-2-71

Février 2020

ICS 65.020.30; 97.100.10

Supersedes EN 60335-2-71:2003 and all of its amendments and corrigenda (if any)

English Version

Household and similar electrical appliances - Safety - Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals (IEC 60335-2-71:2018)

Appareils électrodomestiques et analogues - Sécurité - Partie 2-71: Règles particulières pour les appareils de chauffage électrique destinés à la reproduction et à l'élevage des animaux (IEC 60335-2-71:2018)

Sicherheit elektrischer Geräte für den Hausgebrauch und ähnliche Zwecke - Teil 2-71: Besondere Anforderungen für Elektrowärmegeräte für Tieraufzucht und Tierhaltung (IEC 60335-2-71:2018)

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Ref. No. EN IEC 60335-2-71:2020 E

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European foreword

The text of document 61H/348/CDV, future edition 3 of IEC 60335-2-71, prepared by SC 61H "Safety of electrically-operated farm appliances" 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 IEC 60335-2-71:2020.

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)	2020-08-21
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2023-02-21

This document supersedes EN 60335-2-71:2003 and all of its amendments and corrigenda (if any).

This standard is not linked to European legislation.

This standard shall be read in conjunction with IEC 60335-1:2010+A1:2013+A2:2016

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60335-2-30	NOTE	Harmonized as EN 60335-2-30
IEC 60335-2-96	NOTE	Harmonized as EN 60335-2-96

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Annex ZC
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

The Annex ZC of Part 1 is applicable, except as follows:

Publication	Year	Title	EN/HD	Year
Addition				
IEC 60068-2-11	-	Basic environmental testing procedures - Part 2-11: Tests - Test Ka: Salt mist	EN 60068-2-11	-
IEC 61184	-		EN 61184	-
ISO 3864-1	-	Graphical symbols - Safety colours and safety signs - Part 1: Design principles for safety signs and safety markings	-	-
ISO 7010	2011	Graphical symbols - Safety colours and safety signs - Registered safety signs	EN ISO 7010	2012

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IEC 60335-2-71

Edition 3.0 2018-01

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Household and similar electrical appliances – Safety – Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals

Appareils électrodomestiques et analogues – Sécurité – Partie 2-71: Exigences particulières pour les appareils de chauffage électrique destinés à la reproduction et à l'élevage des animaux

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IEC 60335-2-71

Edition 3.0 2018-01

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Household and similar electrical appliances – Safety – Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals

Appareils électrodomestiques et analogues – Sécurité – Partie 2-71: Exigences particulières pour les appareils de chauffage électrique destinés à la reproduction et à l'élevage des animaux

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals

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 60335-2-71 has been prepared by subcommittee 61H: Safety of electrically-operated farm appliances, of IEC technical committee 61: Safety of household and similar electrical appliances.

This third edition cancels and replaces the second edition published in 2002, its Amendment 1 (2007) and its Amendment 2 (2012). This edition constitutes a technical revision.

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

– two paragraphs are deleted (Introduction);
– normative references updated (Clause 2);
– colour required for symbols (7.6);
– some notes converted to normative text (19.2, 21.101, 22.104).

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

FDIS	Report on voting
61H/348/CDV	61H/357/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.

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 electrical heating appliances for breeding and rearing animals.

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 associated noun are also in bold.

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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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

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

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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.

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HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES – SAFETY –

Part 2-71: Particular requirements for electrical heating appliances for breeding and rearing animals

1 Scope

This clause of Part 1 is replaced by the following.

This part of IEC 60335 deals with the safety of all kinds of electrical heating appliances used for livestock rearing and breeding, such as: **heat-radiating appliances, electrical sitting-hens**, **incubators**, **chicken breeding units and heating plates for animals**, the **rated voltage** of the appliances being not more than 250 V for single-phase appliances and 480 V for other appliances.

NOTE 101 This standard applies to **heating appliances** used for livestock rearing and breeding that include an electrical motor.

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 can be necessary;

– 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.

NOTE 103 This standard does not apply to:

– 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);

– heating units embedded in the floor;

– flexible sheet heating elements for room heating (IEC 60335-2-96);

– room heaters (IEC 60335-2-30).

2 Normative references

This clause of Part 1 is applicable except as follows.

Addition:

IEC 60068-2-11, *Basic environmental testing procedures – Part 2-11: Tests –Test Ka: Salt mist*

IEC 61184, *Bayonet lampholders*

ISO 3864-1, *Graphical symbols – Safety colours and safety signs – Part 1: Design principles for safety signs and safety markings*

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.

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