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Standards

Irish Standard  
I.S. EN 61255:2014

# Household electric heating pads - Methods for measuring performance

**I.S. EN 61255:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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EUROPEAN STANDARD

**EN 61255**

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2014

ICS 97.100.10

Supersedes EN 61255:1994

English Version

**Household electric heating pads - Methods for measuring  
performance  
(IEC 61255:2014)**

Coussins chauffants électriques pour usage domestique -  
Méthodes de mesure des performances  
(CEI 61255:2014)

Elektrische Haushalt-Heizdecken - Prüfverfahren zur  
Bestimmung der Gebrauchseigenschaften  
(IEC 61255:2014)

This European Standard was approved by CENELEC on 2014-08-14. 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.

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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**

## **Foreword**

The text of document 59C/182/FDIS, future edition 2 of IEC 61255, prepared by SC 59C "Heating appliances" of IEC/TC 59 "Performance of household and similar electrical appliances" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61255:2014.

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) 2015-05-14
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-08-14

This document supersedes EN 61255:1994.

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

IEC 60335-2-17	NOTE	Harmonized as EN 60335-2-17.
ISO 3758	NOTE	Harmonized as EN ISO 3758.

## **Annex ZA**

(normative)

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

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62301 (mod)	2011	Household electrical appliances - Measurement of standby power	EN 50564	2011
ISO 2439	-	Flexible cellular polymeric materials - Determination of hardness (indentation technique)	EN ISO 2439	-

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**IEC 61255**

Edition 2.0 2014-07

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

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**Household electric heating pads – Methods for measuring performance**

**Coussins chauffants électriques pour usage domestique –  
Méthodes de mesure des performances**



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**IEC 61255**

Edition 2.0 2014-07

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Household electric heating pads – Methods for measuring performance**

**Coussins chauffants électriques pour usage domestique –  
Méthodes de mesure des performances**

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ELECTROTECHNICAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **HOUSEHOLD ELECTRIC HEATING PADS – METHODS FOR MEASURING PERFORMANCE**

#### 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 61255 has been prepared by sub-committee 59C: Heating appliances, of IEC technical committee 59: Performance of household electrical appliances.

This second edition cancels and replaces the first edition published in 1994. This edition constitutes a technical revision.

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

- a) extended classification;
- b) extended list of measurements;
- c) temperature measurement means changed to thermocouples.

The text of this standard is based on the following documents:

FDIS	Report on voting
59C/182/FDIS	59C/183/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.

In this standard, the following print types are used:

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

## HOUSEHOLD ELECTRIC HEATING PADS – METHODS FOR MEASURING PERFORMANCE

### 1 Scope

This International Standard applies to electric **heating pads** for household use.

This International Standard defines the main performance characteristics of electric **heating pads** and specifies methods for measuring these characteristics, for the information of users.

This International Standard does not specify values for performance characteristics.

NOTE This International Standard does not deal with safety requirements that are covered by IEC 60335-2-17.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62301:2011, *Household electrical appliances – Measurement of standby power*

ISO 2439, *Polymeric materials, cellular flexible – Determination of hardness (indentation technique)*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **heating pad**

appliance comprising a **flexible part** having a **heated area** not exceeding 0,3 m<sup>2</sup> on each face and which is intended to heat part of the human body

Note 1 to entry: If the **pad** is constructed in a cylindrical or similar form, the limit for **heated area** is 0,6 m<sup>2</sup>.

#### 3.2

##### **flexible part**

all layers of material forming the permanent enclosure of the appliance together with the heating element, thermostats and all other current-carrying parts contained within it

Note 1 to entry: The **flexible part** may be inside a detachable cover.

#### 3.3

##### **heated area**

area of the **flexible part** enclosed within the outer perimeter of the **heating element** or **electro-conductive textile**

Note 1 to entry: The **heated area** includes a margin outside the perimeter that has a width equal to 0,5 times the average distance between adjacent runs of the **heating element**.

Note 2 to entry: The **heated area** includes the return length of the **heating element** if the average distance between this part and the adjacent **heating element** does not exceed the average distance between adjacent runs of the **heating element**.

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