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Measuring method of the energy consumption of gas fired ovens

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/20

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English Version

Measuring method of the energy consumption of gas fired ovens

Méthode de mesurage de la consommation d'énergie
des fours à gaz

Bestimmung des Energieverbrauchs von Gasbacköfen

This European Standard was approved by CEN on 16 January 2017 and includes Amendment 1 approved by CEN on 28 March 2020.

CEN 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 CEN 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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EN 15181:2017+A1:2020 (E)

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EN 15181:2017+A1:2020 (E)**European foreword**

This document (EN 15181:2017+A1:2020) has been prepared by Technical Committee CEN/TC 49 “Gas cooking appliances”, the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2020, and conflicting national standards shall be withdrawn at the latest by November 2020.

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

This document includes Amendment 1, approved by CEN on 2020-03-28.

This document supersedes A1 EN 15181:2017. A1

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The main changes to the previous version of EN 15181:2008 are the following:

- the implementation of Annex ZA which shows the coverage of Regulation 66/2014 concerning Ecodesign requirements for domestic ovens, hobs and range hoods and of Delegated Regulation 65/2014 on the Energy Labelling of domestic ovens and range hoods;
- the verification procedure for ensuring that the temperature inside the oven cavity reaches the temperature setting of the thermostat and/or the oven control display within the duration of the test cycle for measuring the energy consumption;
- the revision of Clause 9, Uncertainty and verification procedures;
- the amending of Clause 6, Calculated oven volume and mass, to ensure high reproducibility.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The object of this European Standard is to specify, in accordance with Regulation 66/2014 concerning Ecodesign requirements for domestic ovens, hobs and range hoods and of Delegated Regulation 65/2014 on the Energy Labelling of domestic ovens and range hoods:

- energy consumption using a standardized load during a standardized procedure,
- some performance characteristics (like volume, correspondence between set and measured oven temperature, permitted tolerances to values declared by the manufacturer and control procedures for checking the declared values).

EN 15181:2017+A1:2020 (E)**1 Scope**

This European Standard specifies the method of test for determining the gas energy consumption in gas-fired domestic ovens when they are being used in one or more of the oven cooking modes defined in 3.1. It applies to the gas-fired domestic ovens which are capable of utilizing gases of group H or group E ^{A1} or third family gases ^{A1}, possibly after conversion according to instructions for use.

This European Standard applies to these gas-fired domestic ovens, whether they are separate appliances or component parts of domestic cooking appliances.

This European Standard also applies to domestic appliances that can utilize gas and/or electrical energy to provide heat for cooking when the ovens are utilizing gas energy to provide heat for cooking, but not when electric energy is used to provide any or all of the heat for cooking in the oven.

It is not applicable to:

- microwave combination ovens;
- small cavities ovens (3.2);
- oven cavities not provided with devices to detect and control the temperature for the preparation of food;
- cooking modes others than defined in 3.1.1 and 3.1.2;
- ovens connected to a chimney in which the gas energy for cooking provides, by design, also space and/or water heating;

^{A1} Deleted text ^{A1}

This European Standard is concerned neither with safety nor with overall performance requirements.

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.

<std>EN 30-1-1:2008+A3:2013, *Domestic cooking appliances burning gas - Part 1-1: Safety - General*</std>

<std>EN 30-1-2:2012, *Domestic cooking appliances burning gas - Safety - Part 1-2: Appliances having forced-convection ovens and/or grills*</std>

<std>EN 30-1-4:2012, *Domestic cooking appliances burning gas - Safety - Part 1-4: Appliances having one or more burners with an automatic burner control system*</std>

<std>^{A1} EN 437:2018, *Test gases - Test pressures - Appliance categories* ~~^{A1}~~</std>

<std>^{A1} EN 60584-1:2013, *Thermocouples - Part 1: EMF specifications and tolerances (IEC 60584-1:2013)* ~~^{A1}~~</std>

koniec náhľadu – text ďalej pokračuje v platenej verzii STN