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KODUMAJAPIDAMISES. OSA 2: ENERGIATARBIMISE
HINDAMINE

Gas-fired domestic appliances producing hot water -
Part 2: Assessment of energy consumption

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13203-2:2022 sisaldab Euroopa standardi EN 13203-2:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 13203-2:2022 consists of the English text of the European standard EN 13203-2:2022.
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English Version

Gas-fired domestic appliances producing hot water - Part 2: Assessment of energy consumption

Appareils domestiques produisant de l'eau chaude
sanitaire utilisant les combustibles gazeux - Partie 2 :
Évaluation de la consommation énergétique

Gasgeräte für die häusliche Warmwasserbereitung -
Teil 2: Bewertung des Energieverbrauchs

This European Standard was approved by CEN on 13 June 2022.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 7 September 2022.

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
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 13203-2:2022) has been prepared by Technical Committee CEN/TC 109 “Central heating boilers using gaseous fuels”, the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by February 2023, and conflicting national standards shall be withdrawn at the latest by February 2023.

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 supersedes EN 13203-2:2018.

The main technical changes compared to EN 13203-2:2018 are the following:

- improvement of editorial errors;
- incorporation of ECOTESTS results;
- alignment of the text with the relevant Eco-design and Energy Labelling provisions in force.

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

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, ZB, ZC or ZD, which is an integral part of this document.

The main purpose of this revision is to provide a means of conforming to requirements of Commission Delegated Regulation (EC) n° 813/2013, (EC) n° 811/2013, (EC) n° 812/2013 and (EC) n° 814/2013.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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 safety operation of the boiler or water heater is not covered by this document. Safety is proved by means of the essential safety requirements of the Gas Appliances Regulation 2016/426/UE. This may be achieved by compliance with the appropriate existing harmonized standards.

NOTE Useful standards are EN 26, EN 89, EN 15502-1, EN 15502-2-1 and EN 15502-2-2.

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1 Scope

This document is applicable to gas-fired appliances producing domestic hot water. It applies to both instantaneous and storage tank appliances; water-heaters and combination boilers that have:

- a heat input not exceeding 400 kW;
- a hot water storage tank capacity (if any) not exceeding 2 000 l.

In the case of combination boilers, with or without storage tank, domestic hot water production is integrated or coupled, the whole being marketed as a single unit.

The water heaters covered by the present standard are considered “conventional water heaters” as defined by the Transitional Methods (Commission Communication 2014/C 207/03) then in the calculation formula for the Annual Electricity Consumption (AEC), Q_{COR} is equal to zero.

In case of the boiler is equipped with an internal or external Passive Flue Heat Recovery Device (PFHRD), the boiler efficiency can be assessed by applying EN 13203-2:2022 in combination with EN 13203-7:2022. In case of a PFHRD, where the technology has the ability to recover energy out of flue gasses during central heating production to be able to preheat the domestic hot water (indirect contribution), to assess this indirect contribution EN 13203-7:2022 applies. EN 13203-2:2022 is applicable for measuring and calculating the direct efficiency (direct contribution) while combining the measuring results of EN 13203-7:2022 the overall efficiency (direct and indirect) can be calculated. EN 13203-1:2015 sets out in qualitative and quantitative terms the performance in delivery of domestic hot water for a selected variety of uses. It also gives a system for presenting the information to the user. The present document sets out a method for assessing the energy performance of the appliances. It specifies a few daily load profiles for each domestic hot water use, kitchen, shower, bath and a combination of these, together with corresponding test procedures, enabling the energy performances of different gas-fired appliances to be compared and matched to the needs of the user. Where other technologies are combined with a gas-fired boiler or a water heater to produce domestic hot water, specific parts of EN 13203 apply.

2 Normative references

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.

EN 13203-7:2022, *Gas-fired domestic appliances producing hot water — Part 7: Assessment of energy consumption of combination boilers equipped with a passive flue heat recovery device*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

3.1

storage tank

reservoir for domestic hot water