GAASKÜTTEGA VEEKUUMUTUSSEADMED KODUMAJAPIDAMISES. OSA 4: KUUMA VEE JA ELEKTRI TOOTMISEL GAASIGA TÖÖTAVATES SOOJUSE JA ELEKTRI KOOSTOOTMISSEADMETES (MIKROCHP) ENERGIATARBIMISE HINDAMINE

Gas-fired domestic appliances producing hot water - Part 4: Assessment of energy consumption of gas combined heat and power appliances (mCHP) producing hot water and electricity

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13203-4:2022 sisaldab Euroopa standardi EN 13203-4:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 13203-4:2022 consists of the English text of the European standard EN 13203-4:2022.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.08.2022.	Date of Availability of the European standard is 10.08.2022.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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Gas-fired domestic appliances producing hot water - Part 4: Assessment of energy consumption of gas combined heat and power appliances (mCHP) producing hot water and electricity

Appareils domestiques produisant de l'eau chaude sanitaire utilisant les combustibles gazeux - Partie 4 : Évaluation de la consommation énergétique des appareils à gaz de production combinée de chaleur et d'électricité (mCHP) produisant de l'eau chaude et de l'électricité

Gasgeräte für die häusliche Warmwasserbereitung - Teil 4: Bewertung des Energieverbrauchs von Gas-Kraft-Wärme-Kopplungsgeräten (μKWK), die Warmwasser und Strom erzeugen

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

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

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European foreword

This document (EN 13203-4:2022) 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 13203-4:2016.

The main technical changes compared to EN 13203-4:2016 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 safety operation of the boiler is not covered by this standard. Safety is proved by means of the essential safety requirements of the Gas Appliances Regulation n°426/2016/UE. This way be achieved by compliance with the appropriate existing harmonized standards.

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

This document refers to clauses of EN 13203-2:2022 or adapts clauses by stating in the corresponding clause, on the principle:

— shall be according to EN 13203-2:2022, (clause number) with the following modification;

— shall be according to EN 13203-2:2022, (clause number) with the following addition;

— EN 13203-2:2022, (clause number) is replaced by the following;

— EN 13203-2:2022, (clause number) is not applicable.

NOTE Useful standards are EN 26, EN 89, EN 15502–1, EN 15502–2–1, EN 15502–2–2 and EN 50465:2015.

1 Scope

This document is applicable to gas-fired mCHP appliances producing domestic hot water and electricity. The electricity is generated in a process linked to the production of useful heat.

It applies to a mCHP appliances marketed as single unit or as a package fully specified by a manufacturer that have:

— a gas heat input not exceeding 400 kW;

— an electrical output not exceeding 50 kW;

— a hot water storage capacity (if any) not exceeding 2 000 l.

EN 13203-1:2015 sets out in qualitative and quantitative terms the performance in delivery of domestic hot water for a 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 gas fired mCHP appliances. It defines several daily tapping cycles 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.

When the mCHP generator does not supply domestic hot water in the summer period, the present standard is not applicable. EN 13203-2:2022 is used for performance assessment of these generators.

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.

Shall be according to EN 13203-2:2022, Clause 2 with the following addition:

EN 13203-2:2022, *Gas-fired domestic appliances producing hot water — Part 2: Assessment of energy consumption*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13203-2:2022, Clause 3, and the following additions 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
mCHP appliance
appliance which is placed on the market either as a complete package or specified as a complete package to deliver safely and effectively the heating, electrical power and the domestic hot water service claimed, comprising as relevant:

— primary heat and power generator;

— supplementary heat generator;

— flue ducts;