

GAASKÜTTEGA VEEKUUMUTUSSEADMED
KODUMAJAPIDAMISES. OSA 5: ELEKTRILISE
SOOJUSPUMBAGA VARUSTATUD GAASKÜTTEGA
SEADMETE ENERGIATARBIMISE HINDAMINE

Gas-fired domestic appliances producing hot water -
Part 5: Assessment of energy consumption of gas-fired
appliances combined with electrical heat pump

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13203-5:2018 sisaldab Euroopa standardi EN 13203-5:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 13203-5:2018 consists of the English text of the European standard EN 13203-5:2018.
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.
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ICS 91.140.65

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English Version

Gas-fired domestic appliances producing hot water - Part 5: Assessment of energy consumption of gas fired appliances combined with electrical heat pump

Appareils domestiques produisant de l'eau chaude sanitaire utilisant les combustibles gazeux - Partie 5 : Évaluation de la consommation énergétique des appareils utilisant les combustibles gazeux combinés à une pompe à chaleur électrique

Gasbeheizte Geräte für die sanitäre Warmwasserbereitung für den Hausgebrauch - Teil 5: Bewertung des Energieverbrauchs von Gasgeräten mit elektrischer Wärmepumpe

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European foreword

This document (EN 13203-5:2018) 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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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 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, ZB, ZC or ZD, which are integral parts 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.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, 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 standard. Safety should be proved by means of the essential safety requirements of the Gas Appliances Directive 2009/142/EC. This may be achieved by compliance with the appropriate existing harmonized standards.

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

NOTE 2 The Gas Appliances Directive 2009/142/EC has been replaced by the Gas Appliances Regulation 426/2016/EU.

1 Scope

This European Standard is applicable to gas-fired appliances producing domestic hot water. It applies to both instantaneous and storage gas-fired combined with electrical heat pump.

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

- a heat input not exceeding 400 kW; and
- a hot water storage tank capacity (if any) not exceeding 2000 l.

EN 13203-1 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 gas fired appliances combined with heat pump with electrically driven compressor according to EN 16147. It defines a number of 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.

The present document does not apply for gas boilers with recovery systems using combustion products as heat source for the electrical heat pump.

When the electrical heat pump does not work for domestic hot water production in the summer period, the present standard is not applicable for energy performances assessing, EN 13203-2 should be used.

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 14511-3:2018, *Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling - Part 3: Test methods*

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

3.1

storage tank

reservoir for domestic hot water

3.2

nominal domestic hot water heat input of the boiler (Q_{NW})

value of the heat input of the boiler for the production of domestic hot water stated in the instructions, the symbol of which is Q_{NW} and the unit of which is kilowatt (kW)