

**Gaas-keskküttekatlad. C tüüpi katlad,
mille nimisoojuskooormus ei ületa 70 kW**

Gas-fired central heating boilers - Type C boilers of
nominal heat input not exceeding 70 kW

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 483:2000 sisaldab Euroopa standardi EN 483:1999 + AC:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 17.03.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 483:2000 consists of the English text of the European standard EN 483:1999 + AC:2006.</p> <p>This document is endorsed on 17.03.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This standard specifies the requirements and test methods concerning, in particular, the construction, safety, fitness for purpose, and rational use of energy, as well as the classification and marking of gas-fired central heating boilers that are fitted with atmospheric burners, fan assisted atmospheric burners or premixed burners, and that are hereafter referred to as "boilers".</p>	<p>Scope:</p> <p>This standard specifies the requirements and test methods concerning, in particular, the construction, safety, fitness for purpose, and rational use of energy, as well as the classification and marking of gas-fired central heating boilers that are fitted with atmospheric burners, fan assisted atmospheric burners or premixed burners, and that are hereafter referred to as "boilers".</p>
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ICS 91.140.10

Võtmesõnad: boilers, central heating, classifications, equipment specifications, gaseous fuels, marking, performance evaluation, safety, technical notices, tests, thermal efficiency

ICS 91.140.10

English version

Gas-fired central heating boilers

Type C boilers of nominal heat input not exceeding 70 kW

Chaudières de chauffage central
utilisant les combustibles gazeux –
Chaudières de type C dont le débit
calorifique nominal est inférieur ou
égal à 70 kW

Heizkessel für gasförmige Brenn-
stoffe – Heizkessel des Typs C mit
einer Nennwärmebelastung gleich
oder kleiner als 70 kW

This European Standard was approved by CEN on 1998-08-02.

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 Central Secretariat or to any CEN member.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 109 "Central heating boilers using gaseous fuels", the secretariat of which is held by NNI.

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 April 2000, and conflicting national standards shall be withdrawn at the latest by April 2000.

This European Standard 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 standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

It was established to deal with aspects related to:

- safety;
- rational use of energy;
- fitness for purpose.

Other types of boilers such as boilers of higher nominal heat input, excluded from this draft European standard, are dealt with in separate standards.

In addition, amendments to this standard are being prepared and will modify EN 483 to include requirements and test methods supporting the Boiler Efficiency Directive and to extend the scope to operational conditions in which condensation can occur.

Questions related to quality assurance systems, tests during production, and certificates of conformity of auxiliary devices are not dealt with in this European standard.

To fulfil the Gas Appliance Directive this standard contains normative paragraphs specifying requirements for combustion products evacuation ducts which are part of an appliance. Constructional requirements may arise from the Construction Products Directive.

1. Scope

This standard specifies the requirements and test methods concerning, in particular, the construction, safety, fitness for purpose, and rational use of energy, as well as the classification and marking of gas-fired central heating boilers that are fitted with atmospheric burners, fan assisted atmospheric burners or premixed burners, and that are hereafter referred to as "boilers".

This European standard applies to type C¹⁾ boilers as listed in 4.2:

- types C₁, C₃ and C₅ boilers including their combustion air supply and combustion products evacuation ducts and their terminals;
- types C₂ and C₄ boilers including their connection ducts but without the shared duct system; this shared duct system is part of the building;

1) Except for type C₆ boilers, type C boilers are marketed with ducts. Combustion products evacuation ducts for installation in areas of the building other than the room in which the boiler is installed or ducts and chimneys which are part of the building are also subject to the Construction Products Directive. National installation regulations may specify further requirements and may limit the modes of installation permitted in the territory of a CEN member state.

- type C₆ boilers without any ducts; these ducts are separately approved and marketed;
 - type C₇ boilers until the draught diverter/air-inlet but without the secondary flue;
 - type C₈ boilers with their connecting ducts but without the chimney, which is part of the building;
- and those
- that are fitted with atmospheric burners, atmospheric burners assisted by a fan for the supply of combustion air or evacuation of combustion products, or fully premixed burners;
 - that use one or more combustible gases corresponding to the three gas families and to the pressures stated in 7.1.2.4;
 - that have a nominal heat input (on net calorific value) not exceeding 70 kW;
 - where the temperature of the water does not exceed 95 °C during normal operation;
 - where the maximum water-side operating pressure does not exceed 6 bar.

This European standard does not contain all the requirements necessary for:

- type C₄₁, C₅₁, C₆₁, C₇₁ and C₈₁ boilers;
- boilers intended to be installed in the open;
- boilers of the condensing type;
- boilers of the combination type (central heating and production of domestic hot water).

This European standard only covers type testing.

2. Normative references

This European standard includes the provisions of other publications by undated reference. These normative references are quoted in appropriate places in the text and the publications are listed below. For the dated references, later amendments or revisions of any of these publications apply to this European standard only where they have been incorporated in it by amendment or revision. For the undated references, the latest edition of the publication to which reference is made applies.

EN 88	Pressure governors for gas appliances for inlet pressures up to 200 mbar
EN 125	Flame supervision devices for gas burning appliances thermo-electric flame supervision devices
EN 126	Multifunctional controls for gas burning appliances
EN 161	Automatic shut-off valves for gas burners and gas appliances
EN 298	Automatic gas burner control systems for gas burners and gas-burning appliances with or without fans
EN 437	Test gases - Test pressures - Appliance categories
EN 549	Rubber materials for seals and diaphragms for gas appliances and gas equipment
EN 1057	Copper and copper alloys - Seamless, round copper tubes for water and gas in sanitary and heating applications
EN 1443	Chimneys – General requirements
EN 1561	Founding – Grey cast iron

prEN 1856-1	Chimneys- Performance requirements for metal chimneys - Part 1: System chimney products
prEN 1856-2	Chimneys- Performance requirements for metal chimneys - Part 2: Metal liners and connecting flue pipes products
EN 1859	Chimneys- Metal chimneys - Test methods
EN 10029	Hot rolled steel plate 3 mm thick or above - Tolerances on dimensions, shape and mass
EN 23166	Codes for the representation of names of countries (ISO 3166:1993)
EN 24063	Welding, brazing, braze-welding and soldering of metals - List of processes, for symbolic representation on drawings (ISO 4063:1990)
EN 50165	Electrical equipment of non-electric appliances for household and similar purposes – Safety requirements
EN 60335- 1:1991	Safety of household and similar electrical appliances - Part 1: General requirements (IEC 335-1:1991, modified)
EN 60529	Degrees of protection provided by enclosures (IP code) (IEC 529:1989)
EN 60730-2-9	Automatic electrical controls for household and similar use - Part 2: Particular requirements for temperature sensing controls (IEC 730-2-9:1992, modified)
EN 60742	Isolating transformers and safety isolating transformers - Requirements IEC 742:1983 + A1:1992, modified)
ISO 7-1	Pipe threads where pressure-tight joints are made on the threads - Part 1: Designation, dimensions and tolerances
ISO 228-1	Pipe threads where pressure-tight joints are not made on the threads - Part 1: Designation, dimensions and tolerances
ISO 262	ISO general purpose metric screw threads - Selected sizes for screws, bolts and nuts
ISO 301	Zinc alloy ingots intended for casting
ISO 857	Welding, brazing and soldering processes; vocabulary
ISO 2553	Welded brazed and soldered joints; symbolic -representation on drawings
ISO 7005-1	Metallic flanges; Part 1: Steel flanges
ISO 7005-2	Metallic flanges; Part 2: Cast iron flanges
ISO 7005-3	Metallic flanges; Part 3: Copper alloy and composite flanges

3. Definitions

For the purposes of this standard, the following definitions apply:

3.1 reference conditions

These correspond to 15 °C and 1 013,25 mbar, unless otherwise specified. [3.9 of EN 437:1993]

NOTE: 1 mbar = 10² Pa.