

Gaas-keskküttekatlad. B tüüpi katlad, üle 70 kW nimisoojuskooormusega, kuid ei ületa 300 kW

Gas-fired central heating boilers - Type B boilers of nominal heat input exceeding 70 kW but not exceeding 300 kW

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 656:2000 sisaldab Euroopa standardi EN 656:1999 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 656:2000 consists of the English text of the European standard EN 656:1999.</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: 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.</p>	<p>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.</p>
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ICS 91.140.10

Võtmesõnad: boilers, central heating, classifications, equipment specifications, gas appliances, heaters, leaktightness, marking, name plates, performance evaluation, safety, technical notices, tests

ICS 91.140.10

English version

Gas fired central heating boilers

Type B boilers of nominal heat input exceeding 70 kW but not exceeding 300 kW

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

Heizkessel für gasförmige Brennstoffe
– Heizkessel des Typs B mit einer
Nennwärmebelastung größer als
70 kW aber gleich oder kleiner als
300 kW

This European Standard was approved by CEN on 1998-12-13.

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.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

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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.

It was established to deal with aspects related to:

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

Other types of boilers are dealt with in separate standards.

Amendments are being prepared and will complete EN 656 eventually.

This draft European standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports and supports Essential Requirements of EU Directive(s).

For relationship with EU Directives 90/396/EEC "Approximation of the laws of Member States concerning gas appliances" and 92/42/EEC "Efficiency requirements for new hot water boilers fired with liquid or gaseous fuels" see informative Annex ZA, which is an integral part of this standard.

This standard only covers type testing.

The test gases, test pressures and appliance categories given in this European standard are in accordance with those specified in EN 437.

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

Boilers exceeding 70 kW are typically installed in a room separated from living rooms and provided with appropriate ventilation directly to the outside. They need not be fitted with a combustion products discharge safety device, even when fitted with a draught diverter, but appropriate warnings on the packaging and in the instructions shall clearly indicate the limit on the use of this type of boiler.

In conformity with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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 fully premixed burners, and are hereafter referred to as "boilers".

This standard applies to boilers of type B, as listed in 4.2:

- that use one or more combustible gases of the three gas families at the pressures stated in Tables 14 and 15;
- that have a nominal heat input (net CV basis) exceeding 70 kW, but not exceeding 300 kW, including modular boilers;
- where the temperature of the heat transfer fluid does not exceed 105 °C during normal operation;
- where the maximum operating pressure in the water circuit does not exceed 6 bar.

The standard applies to boilers designed for sealed water systems or for open water systems.

The standard does not contain all the requirements necessary for boilers:

- intended to be installed in the open or in living rooms;
- permanently fitted with more than one flue outlet;
- where the combustion circuit is sealed with respect to the room where the boiler is installed:
 - of the condensing type;
 - of the low temperature type;
- intended to be connected to a common flue having mechanical extraction;
- fitted with a forced draught burner in accordance with EN 676;
- producing hot water for domestic purposes.

This standard only covers type testing.

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2 Normative references

This European standard includes provisions from other publications, either by dated or undated reference. These normative references are quoted in the appropriate places in the text and the publications are listed below. For the dated references, amendments or revisions later than one or other of the publications only apply to this standard where they have been incorporated in it by amendment or revision. For undated references, the last 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	Specification for flame supervision devices for gas burning appliances - Thermoelectric flame supervision devices
EN 126	Multi-functional controls for gas burning appliances
EN 161	Automatic shut-off valves for gas burners and gas appliances
EN 257	Mechanical thermostats for gas burning appliances
EN 297	Gas-fired central heating boilers - Type B ₁₁ and B _{11BS} boilers fitted with atmospheric burners of nominal heat input not exceeding 70 kW
EN 298	Automatic burner control systems for gas burners and gas burning appliances with or without fans
EN 437	Test gases - Test pressures - Appliance categories (EN 437:1993 + A1:1997)
EN 1057	Copper and copper alloys - Seamless, round copper tubes for water and gas in sanitary and heating applications
EN 1561	Founding - Grey cast irons
EN 1854	Pressure sensing devices for gas burners and gas burning appliances
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, soldering and braze welding of metals - Nomenclature of processes and reference numbers for symbolic representation on drawings (ISO 4063:1990)
EN 50165	Electrical equipment of non-electric heating appliances for household and similar purposes - Safety requirements
EN 60335-1:1991	Safety of household and similar electrical appliances - Part 1: General requirements
EN 60529	Degrees of protection provided by enclosures (IP code)
EN 60730-2-9	Automatic electrical controls for household and similar use - Part 2: Particular requirements for heat-sensing controls
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 274	Copper tubes of circular section - Dimensions
ISO 857	Welding, brazing and soldering processes - Vocabulary - Bilingual edition

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 flanges and composite flanges
CR 1404	Determination of emissions from appliances burning gaseous fuels during type testing
CR 1472	General guidance for the marking of gas appliances
CR 1749	European scheme for the classification of gas appliances according to the method of evacuation of the products of combustion (types)

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