# Heating boilers - Special requirements for oil fired room sealed units up to 70 kW

Heating boilers - Special requirements for oil fired room sealed units up to 70 kW



EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

not integrated into the boiler; - type C83

boilers, including their connection ducts

but without the chimney which is part of

the building;

Käesolev Eesti standard EVS-EN 15035:2007 sisaldab Euroopa standardi EN 15035:2006 ingliskeelset teksti.	This Estonian standard EVS-EN 15035:2007 consists of the English text of the European standard EN 15035:2006.		
Käesolev dokument on jõustatud 29.01.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 29.01.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.		
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.		
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**ICS** 97.100.40

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Võtmesõnad:

Eesti Standardikeskusele kuulub standardite reprodutseerimis- ja levitamisõigus

# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

## EN 15035

December 2006

ICS 97,100,40

**English Version** 

### Heating boilers - Special requirements for oil fired room sealed units up to 70 kW

Chaudières de chauffage - Système de circuit de combustion étanche des chaudières au fioul

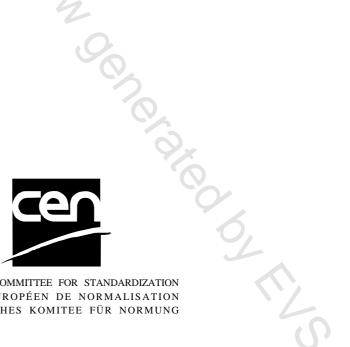
Heizkessel - Besondere Anforderungen an ölbefeuerte Units für den raumluftunabhängigen Betrieb bis einschließlich 70 kW

This European Standard was approved by CEN on 4 November 2006.

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.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

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## Foreword

This document (EN 15035:2006) has been prepared by Technical Committee CEN/TC 57 "Central heating boilers", the secretariat of which is held by DIN.

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 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

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, which is an integral part of this document.

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

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#### 1 Scope

This European Standard applies to type  $C_{X3}$  central heating boilers as specified in 4.1, equipped with atomizing oil burners:

- type C<sub>13</sub>, type C<sub>33</sub>, and type C<sub>53</sub> boilers, including their combustion air supply and combustion products evacuation ducts and their terminals;
- type C<sub>43</sub> boilers including their connection ducts but without the chimney which is erected as a shared duct system and which is part of the building;
- type C<sub>63</sub> boilers, including the connecting piece as specified in 3.7, if not integrated into the boiler;
- type C<sub>83</sub> boilers, including their connection ducts but without the chimney which is part of the building;
- that have a nominal useful heat output below or equal to 70 kW;
- where the temperature of the water does not exceed 100 °C during normal operation;
- where the maximum water-side operating pressure does not exceed 8 bar.

This European Standard is intended to establish specific requirements and test methods for type C atomizing oil burning central heating boilers with respect to construction, safety, fitness for purpose, rational use of energy, classification and marking.

This European Standard covers only standard tests.

For boilers that produce domestic hot water by a drum or a heat exchanger, integrated or juxtaposed, (by accumulation of instant production), this standard only applies to hot water reheating system components that are not subject to operating conditions applicable to the boiler heating system.

This European Standard covers units consisting of boilers equipped with burners that meet the requirements of EN 267, with the following exceptions:

- maximum NO<sub>x</sub> and CO emission values, estimated for boilers according to the classes defined in EN 303-2;
- air factor value, defined by the manufacturer and stated in the boiler's technical specifications;
- marking and/or burner data plate which may provide information for the boiler data plate;
- installation recommendations for installing the burner on the boiler included in the boiler operating instructions.

This European Standard modifies EN 303-1, EN 303-2, EN 304 and specifies supplementary requirements only for room sealed operations.

#### 2 Normative references

The following referenced documents are indispensable for the application 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 267, Forced draught oil burners — Definitions, requirements, testing, marking

EN 303-1, Heating boilers — Part 1: Heating boilers with forced draught burners — Terminology, general requirements, testing and marking

EN 303-2:1998, Heating boilers — Part 2: Heating boilers with forced draught burners — Special requirements for boilers with atomizing oil burners

EN 303-4, Heating boilers — Part 4: Heating boilers with forced draught burners — Special requirements for boilers with forced draught oil burners with outputs up to 70 kW and a maximum operating pressure of 3 bar — Terminology, special requirements, testing and marking

EN 304:1992, Heating boilers — Test code for heating boilers for atomizing oil burners

EN 1443, Chimneys — General requirements

EN 1457, Chimneys — Clay/Ceramic Flue Liners - Requirements and test methods

EN 1856-1, Chimneys — Requirements for metal chimneys — Part 1: System chimney products

EN 1856-2, Chimneys — Requirements for metal chimneys — Part 2: Metal liners and connecting flue pipes

EN 13063-1, Chimneys — System chimneys with clay/ceramic flue liners — Part 1: Requirements and test methods for sootfire resistance

EN 13063-2, Chimneys — System chimneys with clay/ceramic flue liners — Part 2: Requirements and test methods under wet conditions

EN 13216-1, Chimneys — Test methods for system chimneys — Part 1: General test methods

EN 14471, Chimneys — System chimneys with plastic flue liners — Requirements and test methods

EN 15034, Heating boilers — Condensing heating boilers for fuel oil

#### 3 Terms and definitions

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

#### 3.1

#### required draught

difference in pressure between the static pressure of the air in the area where the boiler is installed and the static pressure of combustion products leaving the boiler (combustion products measuring hole), required to ensure good working order

#### 3.2

#### room-sealed boiler

boiler in which the combustion circuit is sealed off from the area where the boiler is installed