Heating boilers - Energetic assessment of hot water storage tanks

Heating boilers - Energetic assessment of hot water storage tanks

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 15332:2007 sisaldab Euroopa standardi EN 15332:2007 ingliskeelset teksti. Käesolev dokument on jõustatud 18.12.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 15332:2007 consists of the English text of the European standard EN 15332:2007. This document is endorsed on 18.12.2007 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This European Standard specifies a method for energy assessment of un-vented (closed) hot water storage tanks with a capacity up to 1 500 l, intended to be equipped with an external heat source and used for domestic hot water production. Whilst storage water heaters intended primarily for direct heating are not covered by this European Standard, it does allow the provision of electric heating elements for auxiliary use.	**Scope:** This European Standard specifies a method for energy assessment of un-vented (closed) hot water storage tanks with a capacity up to 1 500 l, intended to be equipped with an external heat source and used for domestic hot water production. Whilst storage water heaters intended primarily for direct heating are not covered by this European Standard, it does allow the provision of electric heating elements for auxiliary use.

ICS 91.140.65

Võtmesõnad:

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 15332

November 2007

ICS 91.140.65

English Version

Heating boilers - Energy assessment of hot water storage systems

Chaudières de chauffage - Evaluation de la performance énergétique des préparateurs d'eau chaude

Heizkessel - Energetische Bewertung von Warmwasserspeichersystemen

This European Standard was approved by CEN on 22 March 2007.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Ref. No. EN 15332:2007: E

Contents

Page

Foreword

This document (EN 15332:2007) 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 May 2008, and conflicting national standards shall be withdrawn at the latest by May 2008.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard : Austria, Belgium, Bulgaria, 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.

1 Scope

This European Standard specifies a method for the energy assessment of a domestic hot water system comprising an external heating boiler of specified minimum output indirectly heating an unvented (closed) hot water tank of up to 1 500 l. Whilst tanks intended primarily for direct heating are not covered by this European Standard, it does allow the provision of electric heating elements for auxiliary use.

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 12897, *Water supply — Specification for indirectly heated unvented (closed) storage water heaters*

3 Terms and definitions

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

3.1
indirectly heated un-vented (closed) hot water storage tanks
storage vessels used for heating up domestic hot water with an external heat source where the hot water side is not vented to atmosphere, including all devices delivered with it

3.2
hot water side
side of the storage tank which contains domestic hot water

NOTE If a mixing valve is delivered with the storage tank, it is considered as part of the hot water side.

3.3
heating side
side of the storage tank which contains the heating medium

3.4
temperature of the cold water
ϑ_c
temperature at the entrance of the hot water side of the storage tank in °C

3.5
temperature of the warm water
ϑ_w
temperature at the outlet of the hot water side in °C

3.6
usable hot water temperature
ϑ_u
minimum temperature for the hot water to be usable

NOTE Minimum temperature for the hot water defined here as difference between the temperature of the warm water ϑ_w = 45 °C minus the temperature of cold water ϑ_c = 10 °C ($\vartheta_u = \vartheta_w - \vartheta_c$ = 35 K).