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Domestic and non-domestic gas-fired air heaters -
Supplementary requirements for condensing air heaters

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1196:2011 sisaldab Euroopa standardi EN 1196:2011 ingliskeelset teksti.

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English Version

Domestic and non-domestic gas-fired air heaters -
Supplementary requirements for condensing air heaters

Générateurs d'air chaud à usages domestique et non
domestique utilisant les combustibles gazeux - Exigences
complémentaires pour les générateurs d'air chaud à
condensation

Gasbefeuerte Warmluftterzeuger für den häuslichen und
den nicht-häuslichen Gebrauch - Zusätzliche
Anforderungen an kondensierende Warmluftterzeuger

This European Standard was approved by CEN on 14 July 2011.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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Foreword

This document (EN 1196:2011) has been prepared by Technical Committee CEN/TC 180 “Decentralized gas heating”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by February 2012, and conflicting national standards shall be withdrawn at the latest by February 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1196:1998.

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.

Compared to the former edition, attention is drawn to the amendment of Annex A and to the expansion of Annex B which reflects the increase in the number of CEN Member States.

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, Croatia, 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 the United Kingdom.

1 Scope

This European Standard specifies the additional requirements and test methods for gas-fired air heaters which are designed so that water vapour condenses from combustion products. On this subject, it extends the European Standards EN 778 and EN 1319 for domestic air heaters, and EN 1020 for non-domestic air heaters.

This European Standard applies to gas-fired air heaters with or without a fan in the combustion circuit in one of the following constructional types:

- an integral air heater with at least one condensing heat exchanger;
- a non-condensing air heater with an integrated additional condensing heat exchanger;
- a non-condensing air heater, with an integrated additional condensing heat exchanger for the recovery of heat from combustion products and from ventilation air if appropriate.

This European Standard covers type-testing only.

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 778, *Domestic gas-fired forced convection air heaters for space heating not exceeding a net heat input of 70 kW, without a fan to assist transportation of combustion air and/or combustion products*

EN 1020, *Non-domestic forced convection gas-fired air heaters for space heating not exceeding a net heat input of 300 kW incorporating a fan to assist transportation of combustion air or combustion products*

EN 1319, *Domestic gas-fired forced convection air heaters for space heating, with fan-assisted burners not exceeding a net heat input of 70 kW*

3 Terms and definitions

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

NOTE They supplement the definitions in the aforementioned air heater standards.

3.1

condensing air heater

air heater in which, under normal operating conditions, the water vapour in the combustion products is totally or partially condensed in order to make use of the latent heat in this water vapour for heating purposes

3.2

condensate

liquid formed from the combustion products during the condensation process