Väljaspool kodumajapidamist kasutatavad gaasiküttel sundkonvektsiooniga otsepõlemis-õhusoojendid ruumide soojendamiseks, soojuse netosisendväärtusega alla 300 kW

Non-domestic direct gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 525:2009 sisaldab Euroopa standardi EN 525:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 525:2009 consists of the English text of the European standard EN 525:2009.
Standard on kinnitatud Eesti Standardikeskuse 31.07.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 31.07.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 27.05.2009.	Date of Availability of the European standard text 27.05.2009.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 97.100.20

Võtmesõnad: andmeplaadid, gaasiseadmed, kütteseadmed, liigitused, märgistus, ohutus, seadmete eristuskiri, tehnilised andmed, tehnilised märkused, territoorium, testimine, tööomaduste hindamine, õhusoojendid

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 525

May 2009

ICS 97.100.20

Supersedes EN 525:1997

English Version

Non-domestic direct gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW

Générateurs d'air chaud à chauffage direct et à convection forcée utilisant les combustibles gazeux pour le chauffage de locaux à usage non-domestique, de débit calorifique sur Hi inférieur ou égal à 300 kW

Gasbefeuerte Warmlufterzeuger ohne Wärmetauscher mit erzwungener Konvektion zum Beheizen von Räumen für den nicht-häuslichen Gebrauch mit einer Nennwärmebelastung nicht über 300 kW

This European Standard was approved by CEN on 30 April 2009.

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: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 525:2009) has been prepared by Technical Committee CEN/TC 180 “Domestic and non-domestic overhead radiant heaters”, 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 November 2009, and conflicting national standards shall be withdrawn at the latest by November 2009.

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 525:1997.

The test gases, test pressures and appliance categories given in this European Standard are in accordance with those specified in EN 437:2003.

Other European Standards covering gas-fired air heaters are:

EN 621 *Non-domestic gas-fired forced convection air heaters for space heating not exceeding a net heat input of 300 kW, without a fan to assist transportation of combustion air and/or combustion products*

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

EN 1196 *Domestic and non-domestic gas-fired air heaters - Supplementary requirements for condensing air heaters*

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*

EN 12669 *Direct gas-fired hot air blowers for use in greenhouses and supplementary non-domestic space heating*

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 EC Directive 90/396/EEC.

For relationship with EC Directive 90/396/EEC, 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, 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 the United Kingdom.

1 Scope

This European Standard specifies the requirements and test methods for the safety of non-domestic direct gas-fired forced convection air heaters having fully automatic control systems, hereafter referred to as "appliances".

This European Standard applies to appliances of Type A_2 and Type A_3 with heat input based on the net calorific value of 300 kW or less fitted with integral burners intended for use other than in residential dwellings. It also applies to appliances designed for outdoor installation. For indoor appliances provision of the heated air may be by means of ducting or may be directly into the heated space.

This standard does not apply to:

a) appliances intended for use in residential dwellings;

b) portable or transportable forced convection appliances;

c) appliances fitted with gas boosters;

d) appliances fitted with air/gas ratio controls;

e) appliances which incorporate a main burner having more than one section under a common burner control, of which one or more sections may be extinguished whilst another section remains in operation.

This European Standard is applicable to appliances which are intended to be type tested.

NOTE Requirements for appliances which are not type tested would need to be subject to further consideration.

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 88-1:2007, *Pressure regulators and associated safety devices for gas appliances - Part 1: Pressure regulators for inlet pressures up to and including 500 mbar*

EN 126:2004, *Multifuctional controls for gas burning appliances*

EN 161:2007, *Automatic shut-off valves for gas burners and gas-burning appliances*

EN 257:1992, *Mechanical thermostats for gas burning appliances*

EN 298:2003, *Automatic burner control systems for gas burners and gas burning appliances with or without fans*

EN 437:2003, *Test gases - Test pressures - Appliance categories*

EN 10226-1:2004, *Pipe threads where pressure tight joints are made on the threads - Part 1: Taper external threads and parallel internal threads - Dimensions, tolerances and designation*

EN 10226-2:2005, *Pipe threads where pressure tight joints are made on the threads - Part 2: Taper external threads and taper internal threads - Dimensions, tolerances and designation*

EN 60335-1:2002, *Safety of household and similar electrical appliances - Part 1: General requirements*

EN 60335-2-102:2006, *Electrical equipment of non-electric heating appliances for household and similar appliances*

EN 60529:1991, *Degrees of protection provided by enclosures (IP code)*

EN 60730-1:2000, *Automatic electrical controls for household and similar use - Part 1: General requirements*

EN 60730-2-1:1997, *Automatic electrical controls for household and similar use - Part 2: Particular requirements for electrical controls for electrical household appliances*

EN 60730-2-9:2002, *Automatic electrical controls for household and similar use - Part 2: Particular requirements for temperature-sensing controls*

EN 61058-1:2002, *Switches for appliances - Part 1: General requirements*

EN 61558-2-6:1997, *Safety of power transformers, power supply units and similar – Part 2-6:. Particular requirements for safety isolating transformers for general use*

EN ISO 228-1:2003, *Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)*

EN ISO 3166-1:2006, *Codes for the representation of names of countries and their subdivisions - Part 1: Country codes (ISO 3166-1:2006)*

EN ISO 6976:2005, *Natural gas - Calculation of the calorific value, density, relative density and Wobbe index from composition (ISO 6976:1995 including Corrigendum 1:1997, Corrigendum 2:1997 and Corrigendum 3:1999)*

ISO 7005-1:1992, *Metallic flanges - Part 1: Steel flanges*

ISO 7005-2:1988, *Metallic flanges - Part 2: Cast iron flanges*

ISO 7005-3:1988, *Metallic flanges - Part 3: Copper alloy and composite flanges*