

საქართველოს სტანდარტი

გაზის თბოგენერატორები იძულებითი კონვექციის დროს არასაყოფაცხოვრებო
ნაგებობების გათბობისათვის, რომლის ნომინალური თბური სიმძლავრეა, არა
უმეტეს, 300 კვტ-ის. წვის ზონაში ჰაერის მოწოდება ან/და წვის პროდუქტების
მოცილება ვენტილატორის გარეშე

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

საინფორმაციო მონაცემები

1 შემუშავებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ

2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2018 წლის 17 აგვისტოს № 85 განკარგულებით

3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 621:2009 „გაზის თბოგენერატორები იძულებითი კონვექციის დროს არასაყოფაცხოვრებო ნაგებობების გათბობისათვის, რომლის ნომინალური თბური სიმძლავრეა, არა უმეტეს, 300 კვტ-ის. წვის ზონაში ჰაერის მოწოდება ან/და წვის პროდუქტების მოცილება ვენტილატორის გარეშე“

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2018 წლის 17 აგვისტო №268-1.3-013887

აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

**EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM**

EN 621

November 2009

ICS 97.100.20

Supersedes EN 621:1998

English Version

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

Générateurs d'air chaud à convection forcée utilisant les combustibles gazeux pour le chauffage de locaux autres que l'habitat individuel, de débit calorifique sur H_i inférieur ou égal à 300 kW, sans ventilateur pour aider l'alimentation en air comburant et/ou l'évacuation des produits de combustion

Gasbefeuerte Warmlufterzeuger mit erzwungener Konvektion zum Beheizen von Räumen für den nicht-häuslichen Gebrauch mit einer Nennwärmebelastung nicht über 300 kW, ohne Gebläse zur Beförderung der Verbrennungsluft und/oder der Abgase

This European Standard was approved by CEN on 10 October 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

Contents

Page

Foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions.....	7
3.1 Appliance and its constituent parts.....	7
3.2 Adjustment, control and safety devices.....	9
3.3 Operation of the appliance	11
3.4 Gases	14
3.5 Conditions of operation and measurement	15
3.6 Marking of the appliance and packaging	16
4 Classification.....	16
4.1 Classification of gases	16
4.2 Classification of appliances according to the gases capable of being used	17
4.3 Classification of appliances according to the mode of evacuation of the combustion products.....	18
5 Construction and design requirements.....	19
5.1 General.....	19
5.2 Adjusting, control and safety devices	25
5.3 Ignition devices	28
5.4 Flame supervision system	29
5.5 Start-gas flame establishment.....	30
5.6 Main flame establishment	31
5.7 Main burner	32
5.8 Facility for remote control	32
5.9 Thermostats and control of air temperature	32
5.10 Combustion chamber pressure reliefs	33
5.11 Facilities for commissioning and testing	33
6 Operational requirements	34
6.1 Safety of operation	34
6.2 Efficiency	38
7 Test methods.....	39
7.1 General.....	39
7.2 Construction and design	46
7.3 Safety of operation	47
7.4 Efficiency	69
8 Marking and instructions	75
8.1 Marking of the appliance.....	75
8.2 Marking of the packaging	76
8.3 Utilization of symbols on the appliance and packaging.....	76
8.4 Instructions	78
9 Evaluation of POCED conformity and their associated terminals	80
9.1 General.....	80
9.2 Type testing	80
9.3 Factory production control (FPC)	81
Annex A (informative) National situations	83
A.1 General.....	83
A.2 Categories listed in the body of the standard and marketed in different countries	83

A.3	Appliance supply pressures corresponding to the categories given in A.2	85
A.4	Special categories marketed nationally or locally	86
A.5	Test gases corresponding to the special categories given in A.4	90
A.6	Gas connections in the various countries	91
A.7	Flue connections in the various countries	93
Annex B (informative) Equivalence rules	94	
B.1	Conversion to categories within a restricted Wobbe index range	94
B.2	Conversion to categories within an identical Wobbe index range	94
B.3	Conversion to categories within a wider Wobbe index range	95
Annex C (informative) Facilities for commissioning and testing	96	
C.1	Appliances with automatic ignition of a start-gas flame	96
C.2	Appliances with direct automatic ignition of the main burner	96
Annex D (informative) Identification of gas types in use in various countries	97	
Annex E (informative) A-deviations	98	
E.1	General	98
E.2	Switzerland	98
Annex F (normative) Special national conditions	99	
F.1	General	99
F.2	Belgium	99
F.3	Italy	99
Annex G (informative) National solutions for countries whose national bodies are Affiliate Members of CEN	100	
G.1	Categories listed in the body of the standard and marketed in different countries	100
G.2	Appliance supply pressures corresponding to the categories given in G.1	100
G.3	Special categories marketed nationally or locally	100
G.4	Gases and test pressures corresponding to the special categories given in G.3	100
Annex H (informative) Calculation of conversions of NOx	101	
Annex I (informative) An example of a sampling plan	102	
I.1	Sampling plans	102
I.2	Inspection levels and procedures	103
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 90/396/EEC	104	
Annex ZB (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive	106	
ZB.1	Scope and relevant characteristics	106
ZB.2	Procedure(s) for attestation of conformity of [construction products]	108
ZB.3	CE marking and labelling	110
Bibliography	112	

Foreword

This document (EN 621:2009) has been prepared by Technical Committee CEN/TC 180 "Domestic and non-domestic gas fired air heaters 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 May 2010, and conflicting national standards shall be withdrawn at the latest by May 2010.

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 621:1998.

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 Annexes ZA and ZB, which are integral parts of this document.

This revision modifies EN 621:1998. It has been prepared to incorporate requirements for combustion products evacuation ducts, POCEs, supplied as an integral part of the system to support the EU Directive 89/106/EEC on construction products under mandate M105. To this end it extends the scope of the standard to cover Type B₄₁ appliances.

Furthermore, the opportunity presented by this revision has been taken to update the standard in respect to EN 437:2003.

NOTE For countries requesting special categories (specified in EN 437:2003), the absence of specific information concerning A.4.3 and A.4.4 implies that the general requirements described in the body of the standard (see 5.1.1, 5.2.2, 5.2.3 and 5.2.5) also apply to these special categories.

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.