SLOVENSKI STANDARD

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Prostostoječi in plinski konvekcijski grelniki - Dopolnilo A1

Independent gas-fired convection heaters

Konvektions-Raumheizer für gasförmige Brennstoffe

Appareils de chauffage indépendants a convection utilisant les combustibles gazeux

Ta slovenski standard je istoveten z: **EN 613:2000/A1:2003**

ICS:

97.100.20

SIST EN 613:2002/A1:2004 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 613:2000/A1

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ICS 97.100.20

English version

Independent gas-fired convection heaters

Appareils de chauffage indépendants à convection utilisant les combustibles gazeux

Konvektions - Raumheizer für gasförmige Brennstoffe

This amendment A1 modifies the European Standard EN 613:2000; it was approved by CEN on 7 February 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This amendment 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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 613:2000/A1:2003 E

Foreword

This document (EN 613:2000/A1:2003) has been prepared by Technical Committee CEN /TC 62 "Independent gas-fired space heaters", the secretariat of which is held by BSI.

This Amendment to the European Standard EN 613:2000 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

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).

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

1 Clause 2 Normative references

Amend the following:

Delete the date «1991» after EN 161.

Include the following references:

EN 50165	Electrical equipment of non-electric appliances for household and similar purposes – Safety requirements.'

Reposition and amend EN 23166: 1993 to read as follows:

EN ISO 3166-1:1997	Codes for the representation of names of countries and their subdivisions - Part 1: Country Codes (ISO 3166-1:1997).

2 Clause 5 Constructional requirements

5.1.3 Accessibility for use and maintenance

Replace the second paragraph by:

'Removable parts shall be so designed or marked that they are easy to reassemble correctly according to the manufacturer's instructions and any incorrect assembly shall be obvious.'

5.1.7.2 *Type B_1 appliances*

Replace the third paragraph by:

'It shall be possible to insert into the socket, or adaptor, a pipe, with an outside diameter of (*D* - 2) mm, for a distance of at least equal to:

a) 30 mm for a horizontal connection,

b) 15 mm for a vertical connection,

but it shall be impossible to insert it to such a depth that the evacuation of the products of combustion is impaired.

NOTE: Where *D* is the nominal internal diameter of the appliance outlet.

5.1.8 Electrical equipment

Replace the first paragraph with the following:

' The electrical equipment of the appliance shall be so designed and constructed as to obviate hazards of an electrical origin. The appliance shall comply with the requirements of EN 50165 which covers such hazards.'

Second paragraph shall be deleted.

5.1.9 Safety in the event of fluctuation, interruption and restoration of the auxiliary energy

Replace the first paragraph by:

'**5.1.9.1** *Interruption and restoration*'

'When interruption and subsequent restoration affects safety, then interruption and subsequent restoration of the electricity supply at any time during the starting up or operation of the appliance shall result in either safety shutdown, or, the appliance shall comply with 6.5.3.'

The second paragraph shall be entitled as follows:

'**5.1.9.2** *Fluctuation*'

5.2.2 Gas rate adjusters

The fourth paragraph shall be replaced by:

'Appliances in categories $I_{2H,}$ I_{2L}, I_{2E}, $I_{2E+,}$ $I_{3B/P,}$ $I_{3P,}$ I_{3+}, $II_{2H3B/P,}$ II_{2H3+}, $II_{2H3P,}$ II_{2L3P}, $II_{2L3B/P,}$ $II_{2E3B/P,}$ II_{2E+3+} and II_{2E+3P} shall not be fitted with gas rate adjusters. However governed appliances in all of these categories except category I_{2E+}, and II_{2E+3+} may have a gas rate adjuster consisting of an adjusting screw on the gas governor.'

Delete the date “1991” after EN 161.

5.2.4.3 *Automatic valve systems*

Delete the date "1991" after EN 161

5.5 Burners

Include the following text as a new first paragraph:

‘Every removable injector and/or removable restrictor shall carry an indelible means of identification preventing any confusion.’

5.6 Motors and fans

Delete clause.

5.7 Gas pressure test points

Replace by:

'**5.6 Gas pressure test points**'

3 Clause 6 Operational requirements

6.7.1 *CO concentration for all appliances*

Replace the text of indent b)*' by:*

'0,2 % when the appliance is supplied with the incomplete combustion limit gas under the test conditions described in 7.7.2.2, and, under all test conditions described in 7.7.3, excluding 7.7.3.1 a), including the arithmetic mean calculated as given in 7.7.3.3.'

6.11 Efficiency

Replace Table 4 with the following Table:

Table 4 - Efficiency

Efficiency Class	Minimum net Efficiency[a] for appliances of heat input greater than 5 kW[b]	Minimum net Efficiency[a] for appliances of heat input less than or equal to 5 kW[b]
1	82[a] %	80[a] %
2	65[a] %	65[a] %

[a] The efficiency value η based on gross calorific value is related to the net value for the five reference gases as follows:

G 110 net value = 0,880 x gross value

G 120 net value = 0,882 x gross value

G 20 net value = 0,900 x gross value

G 25 net value = 0,901 x gross value

G 30 net value = 0,923 x gross value

[b] The heat input based on gross calorific value is related to the net value for the five reference gases as follows:

G 110 gross value = 1,136 x net value

G 120 gross value = 1,133 x net value

G 20 gross value = 1,111 x net value

G 25 gross value = 1,110 x net value

G 30 gross value = 1,083 x net value

4 Clause 7 Test methods

7.1.5.3 *Test installation*

Include the following text as a new final paragraph:

'The test duct length for type C_{11} appliances shall be the minimum vertical length and maximum horizontal length specified by the manufacturer.'

7.2.3 Escape of unburnt gas - burner (Type B appliances only)

In paragraph 2, delete the following text:

', e.g. a match,'

7.4 Temperature of various parts of the appliance

7.4.1 *Temperature of external parts of the appliance*

Replace the first paragraph by:

'The test is carried out with reference gas at the nominal heat input with the appliance installed as described in 7.4.3.'

7.4.3.1 *General*

Delete the second paragraph.

7.5 Ignition, cross-lighting and flame stability

7.5.1 Ignition and cross-lighting

7.5.1.1 *All appliances*

Test No. 1

Replace the first paragraph by:

'For this test the burner and ignition burner are adjusted in accordance with 7.1.3.2.1. The appliance is operated in accordance with the manufacturer's instructions using the appropriate reference, light back and lift gases, according to the appliance category (see Table 5), at the normal pressure (see 7.1.4).'

Test no. 2 b)

At the end of indent b) *add the following text:*

'…or 95 % for the third family gases.'

Test no. 3 a)

At the end of indent a) *add the following text:*

'or 95 % for the third family gases (for the reference gases).'

7.5.2 Flame stability

Test no. 1

At the end of paragraph 2 add the following text:

'or 95 % for the third family gases (for the reference gases).

Test no. 2

The last line of paragraph 2 shall end as follows:

'..input for second family gases and third family gases (for the flame lift gas).'