This is a free page sample. Access the full version online.

National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 14829:2007

ICS 97.100.20

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland
Tel: +353 1 807 3800
Fax: +353 1 807 3838
http://www.nsai.ie

Sales
http://www.standards.ie

INDEPENDENT GAS-FIRED FLUELESS SPACE HEATERS FOR NOMINAL HEAT INPUT NOT EXCEEDING 6 KW

This Irish Standard was published under the authority of the National Standards Authority of Ireland and comes into effect on:
27 August 2007

NO COPYING WITHOUT NSAI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

© **NSAI 2007**

Price Code W

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

This page is intentionally left BLANK.

This is a free page sample. Access the full version online.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 14829

August 2007

ICS 97.100.20

English Version

Independent gas-fired flueless space heaters for nominal heat input not exceeding 6 kW

Appareils de chauffage domestiques non raccordés indépendants utilisant les combustibles gazeux pour un débit calorifique nominal inférieur ou égal à 6 kW

Konvektions-Raumheizer ohne Abgasabführung für gasförmige Brennstoffe mit einer Nennwärmebelastung kleiner oder gleich 6 kW

This European Standard was approved by CEN on 24 June 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

© 2007 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 14829:2007: E

This is a free page sample. Access the full version online.

Contents

Page

Foreword ... 7
1 Scope ... 8
2 Normative references ... 8
3 Terms and definitions ... 9
4 Classification ... 15
4.1 Classification of gases ... 15
4.2 Categories of appliances ... 15
4.2.1 General ... 15
4.2.2 Category I ... 16
4.2.3 Category II ... 16
5 Constructional requirements ... 17
5.1 General ... 17
5.1.1 Conversion to different gases ... 17
5.1.2 Materials and method of construction ... 18
5.1.3 Accessibility for use and maintenance ... 18
5.1.4 Connections ... 19
5.1.5 Soundness of the gas circuit assembly ... 19
5.1.6 Electrical equipment ... 20
5.1.7 Safety in the event of fluctuation, interruption and restoration of the auxiliary energy ... 20
5.1.8 Appliance stability and fixing ... 20
5.1.9 Dress guards ... 20
5.1.10 Confirmation of operation ... 20
5.2 Adjusting, control and safety devices ... 21
5.2.1 General ... 21
5.2.2 Injectors and gas rate adjusters ... 21
5.2.3 Aeration adjusters ... 22
5.2.4 Shut-off valves ... 22
5.2.5 Flame supervision devices ... 23
5.2.6 Pressure regulators ... 23
5.2.7 Thermostats ... 24
5.2.8 Atmosphere sensing device ... 24
5.3 Ignition devices ... 24
5.3.1 General ... 24
5.3.2 Ignition burners ... 25

This is a free page sample. Access the full version online.

5.4 Flame supervision systems (Appliances with automatic burner systems only) ... 25
5.5 Ignition burner or start-gas flame establishment ... 25
5.5.1 Appliances with non-automatic burner systems ... 25
5.5.2 Appliances with automatic burner systems ... 25
5.6 Main flame establishment ... 25
5.6.1 General ... 25
5.6.2 Appliances with non-automatic burner systems ... 25
5.6.3 Appliances with automatic burner systems ... 26
5.6.4 Direct establishment of the main flame ... 26
5.7 Burners ... 26
5.7.1 General ... 26
5.7.2 Pan burners ... 26
5.8 Fan to assist in the distribution of heat ... 26
5.9 Pressure test points ... 26
6 Operational requirements ... 27
6.1 General ... 27
6.2 Soundness ... 27
6.3 Heat inputs ... 27
6.3.1 Nominal heat input ... 27
6.3.2 Reduced rate heat input ... 27
6.4 Temperature of various parts of the appliance ... 27
6.4.1 Temperature of external parts of the appliance ... 27
6.4.2 Temperature of components ... 28
6.4.3 Temperature of floor, shelf and walls ... 28
6.5 Ignition and cross-lighting ... 28
6.5.1 General ... 28
6.5.2 Construction integrity test on glass fronted appliances ... 28
6.6 Flame stability ... 28
6.7 Pressure regulators ... 28
6.8 Combustion ... 29
6.8.1 Reference gas ... 29
6.8.2 Limit gas ... 29
6.8.3 Appliances fitted with a fan to assist in the evacuation of the products of combustion ... 29
6.8.4 Normal and abnormal voltage fluctuation ... 29
6.8.5 Measurement of nitrogen dioxide (NO_2). ... 29
6.8.6 Values to be used in Annex G ... 29
6.9 Sooting ... 29
6.9.1 Cold condition ... 29

This is a free page sample. Access the full version online.

6.9.2 Hot condition ... 30
6.10 Atmosphere sensing device ... 30
6.11 Flame supervision devices ... 30
6.11.1 Thermoelectric device ... 30
6.11.2 Automatic burner control system ... 30
7 Test methods ... 30
7.1 General ... 30
7.1.1 Characteristics of test gases: reference and limit gases ... 30
7.1.2 Conditions for preparation of the test gases ... 31
7.1.3 Practical application of test gases ... 31
7.1.4 Test pressures ... 31
7.1.5 General test conditions ... 32
7.2 Appliance stability and fixing ... 33
7.3 Soundness of the gas circuit ... 33
7.4 Heat inputs ... 33
7.4.1 Nominal heat input ... 33
7.4.2 Reduced rate ... 35
7.5 Temperature of various parts of the appliance ... 35
7.5.1 General ... 35
7.5.2 Temperature of external parts of the appliance ... 35
7.5.3 Temperature of components ... 35
7.5.4 Temperature of floor, shelf and walls ... 36
7.6 Ignition and cross-lighting ... 36
7.6.1 General ... 36
7.6.2 Ignition performance ... 37
7.6.3 Crosslighting ... 37
7.6.4 Supplementary tests ... 38
7.7 Flame stability ... 38
7.7.1 Lift ... 38
7.7.2 Light back ... 38
7.7.3 Resistance to draught ... 38
7.8 Pressure regulators ... 39
7.8.1 Operational pressure regulator ... 39
7.8.2 Pressure regulator out of service ... 39
7.9 Combustion ... 39
7.9.1 General ... 39
7.9.2 Combustion when tested in an atmosphere with approximately normal level of oxygen ... 40
7.9.3 Normal and abnormal voltage fluctuation ... 42

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation