



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 14829:2007

ICS 97.100.20

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

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>

*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 page is intentionally left BLANK.

EUROPEAN STANDARD

EN 14829

NORME EUROPÉENNE

EUROPÄISCHE NORM

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

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

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

EN 14829:2007 (E)

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

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](#)
-