

SLOVENSKI STANDARD**kSIST FprEN 1458-1:2011****01-junij-2011****Gospodinjski bobnasti sušilniki s plinskim ogrevanjem tipov B22D in B23D z imensko močjo do vključno 6 kW - 1. del: Varnost**

Domestic direct gas-fired tumble dryers of types B22D and B23D, of nominal heat input not exceeding 6 kW - Part 1: Safety

Direkt gasbeheizte Haushalts-Trommeltrockner der Typen B22D und B23D mit Nennwärmebelastungen nicht über 6 kW - Teil 1: Sicherheit

Sèche-linge domestiques à tambour rotatif à chauffage direct utilisant les combustibles gazeux, de type B22D et B23D, de débit calorifique nominal ne dépassant pas 6 kW - Partie 1: Sécurité

Ta slovenski standard je istoveten z: FprEN 1458-1

ICS:

97.060 Aparati za nego perila Laundry appliances

kSIST FprEN 1458-1:2011**en**

**EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM**

**FINAL DRAFT
FprEN 1458-1**

March 2011

ICS 97.060

Will supersede EN 1458-1:1999

English Version

**Domestic direct gas-fired tumble dryers of types B22D and
B23D, of nominal heat input not exceeding 6 kW - Part 1: Safety**

Sèche-linge domestiques à tambour rotatif à chauffage direct utilisant les combustibles gazeux, de type B22D et B23D, de débit calorifique nominal ne dépassant pas 6 kW
- Partie 1: Sécurité

Direkt gasbeheizte Haushalts-Trommeltrockner der Typen B22D und B23D mit Nennwärmebelastungen nicht über 6 kW - Teil 1: Sicherheit

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 299.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, 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.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

FprEN 1458-1:2011 (E)

Contents

	Page
Foreword.....	6
1 Scope.....	7
2 Normative references	7
3 Terms and definitions.....	8
4 Classification	17
4.1 Classification of gases	17
4.2 Classification of appliances.....	18
4.2.1 Classification according to the gases capable of being used	18
4.2.2 Classification according to the mode of evacuation of the combustion products/supply of combustion air	20
5 Construction and design requirements.....	21
5.1 General.....	21
5.1.1 Conversion to different gases	21
5.1.2 Materials and method of construction.....	22
5.1.3 Screws.....	22
5.1.4 Maintenance and use.....	22
5.1.5 Thermal insulation	23
5.1.6 Gas connections	23
5.1.7 Soundness of the gas circuit.....	24
5.1.8 Supply of combustion air and evacuation of combustion products	24
5.1.9 Lint collection	24
5.1.10 Flame visibility	24
5.1.11 Electrical equipment.....	25
5.1.12 Motors and fans	25
5.1.13 Operational safety in the event of fluctuation, interruption and restoration of the auxiliary energy.....	25
5.1.14 Combustion air flow failure.....	26
5.2 Requirements for adjusting, control and safety devices.....	26
5.2.1 General	26
5.2.2 Automatic shut-off valves	26
5.2.3 Multifunctional controls	27
5.2.4 Flame supervision devices	27
5.2.5 Regulators	27
5.2.6 Preset gas rate adjusters	28
5.2.7 Automatic burner control systems	28
5.2.8 Gas strainers	28
5.3 Ignition devices	29
5.3.1 General	29
5.3.2 Ignition device for the main burner.....	29
5.3.3 Ignition burners	29
5.4 Ignition burner or start-gas flame establishment	29
5.5 Main flame establishment	29
5.5.1 Establishment by means of an ignition burner or start-gas flame	29
5.5.2 Direct establishment of the main flame e.g. spark ignition, hot surface igniter	29
5.6 Burners	30

5.7	Thermostats and control of air temperature	30
5.7.1	General requirements	30
5.7.2	Overheat cut-off device	30
5.8	Clocks and timing devices	30
5.9	Pressure test points	31
5.10	Mechanical hazards	31
5.10.1	General	31
5.10.2	Requirements for appliances with an opening dimension exceeding 200 mm and a drum having a volume exceeding 60 dm ³	31
6	Operational safety	31
6.1	General	31
6.1.1	Characteristics of test gases: reference and limit gases	31
6.1.2	Conditions for preparation of test gases	33
6.1.3	Practical application of test gases	34
6.1.4	Test pressures	36
6.1.5	Use of test gases	37
6.1.6	Test room	38
6.1.7	Preparation of the appliance	38
6.1.8	Test conditions	38
6.2	Screws	39
6.2.1	Requirements	39
6.2.2	Tests	39
6.3	Manually operated devices of the automatic burner control systems	39
6.3.1	Requirements	39
6.3.2	Tests	40
6.4	Mechanical hazards	40
6.4.1	General	40
6.4.2	Appliances with an opening dimension exceeding 200 mm and a drum having a volume exceeding 60 dm ³	40
6.5	Stability of appliances	40
6.6	Soundness of the gas circuit	40
6.6.1	Requirements	40
6.6.2	Tests	40
6.7	Heat inputs	41
6.7.1	Nominal heat input	41
6.7.2	Reduced rate	43
6.7.3	Heat input of ignition burners	44
6.8	Burners	44
6.8.1	Resistance to overheating	44
6.8.2	Escape of unburnt gas	44
6.9	Limiting temperature of various parts of the appliance	45
6.9.1	Requirements	45
6.9.2	Tests	45
6.10	Limiting temperature of floor, walls and worktop	46
6.10.1	Requirements	46
6.10.2	Tests	46
6.11	Limiting temperature of components	47
6.11.1	Normal operation	47
6.11.2	Severe operation	47
6.11.3	Abnormal operation	47
6.12	Motor temperatures	48
6.12.1	Motor bearings	48
6.12.2	Motor windings	48
6.13	Ignition, cross-lighting and flame stability	49
6.13.1	Ignition and cross-lighting	49

FprEN 1458-1:2011 (E)

6.13.2	Flame stability	51
6.13.3	Supplementary requirements and tests	52
6.14	Flame supervision devices	52
6.14.1	Manual devices.....	52
6.14.2	Automatic devices	53
6.15	Regulators	53
6.15.1	Requirements	53
6.15.2	Tests	53
6.16	Combustion	54
6.16.1	General.....	54
6.16.2	Requirements	55
6.16.3	Tests under normal conditions	56
6.16.4	Supplementary tests under special conditions	57
6.17	Sooting	60
6.17.1	Requirements	60
6.17.2	Tests	60
6.18	Cyclic operation	60
6.18.1	Requirements	60
6.18.2	Tests	60
7	Marking	61
7.1	Marking of the appliance	61
7.1.1	Data plates	61
7.1.2	Warning notices	62
7.1.3	Other marking.....	62
7.2	Marking of the packaging	62
7.3	Utilization of symbols on the appliance and packaging	62
7.3.1	Electrical supply.....	62
7.3.2	Type of gas	62
7.3.3	Gas supply pressure.....	63
7.3.4	Country of destination.....	63
7.3.5	Category.....	64
7.3.6	Other optional information.....	64
7.4	Instructions.....	65
7.4.1	General	65
7.4.2	Technical instructions for installation and adjustment	65
7.4.3	Instructions for use and maintenance	67
7.5	Presentation	67
Annex A	(informative) National situations	77
A.1	General	77
A.2	Categories listed in the body of the standard and marketed in different countries	77
A.3	Appliance supply pressures corresponding to the categories given in A.2	80
A.4	Special categories marketed nationally or locally.....	81
A.4.1	General	81
A.4.2	Definition of special categories	84
A.4.3	Gas rate adjusters, aeration adjusters and regulators	87
A.4.4	Conversion to different gases	87
A.5	Test gases corresponding to the special categories given in A.4.....	87
A.6	Gas connections in the various countries	90
A.7	Equivalence rules.....	91
A.7.1	General	91
A.7.2	Conversion to categories within a restricted Wobbe index range	91
A.7.3	Conversion to categories within an identical Wobbe index range	91
A.7.4	Conversion to categories within a wider Wobbe index range.....	92
Annex B	(normative) Special national conditions	93

B.1	Special national conditions	93
B.2	Belgium	93
B.3	Italy	93
B.4	Poland	93
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EC Directive 90/396/EEC on the approximation of the laws of Member States concerning gas appliances		94
Bibliography		98

FprEN 1458-1:2011 (E)

Foreword

This document (FprEN 1458-1:2011) has been prepared by Technical Committee CEN/TC 299 "Gas-fired sorption appliances, indirect fired sorption appliances, gas-fired endothermic engine heat pumps and domestic gas-fired washing and drying appliances", the secretariat of which is held by UNI.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 1458-1:1999.

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 Annex ZA, which is an integral part of this document.

This edition has been prepared to up-date this European Standard in the following respects:

- a) electrical safety by calling up EN 60335-2-102,
- b) its normative references, and
- c) the CEN Member countries and their national situations.

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

For gas-fired type B tumble dryers of nominal heat input not exceeding 20 kW see EN 12752-1 and EN 12752-2.

The marking requirements in this European Standard take into account CR 1472.

The first part of the standard specifies the requirements and test methods for the construction, safety, marking and testing of the appliances. The second part of the standard specifies the requirements for rational use of energy.

This European Standard covers type testing only.