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I.S. EN 89:2015

Gas-fired storage water heaters for the production of domestic hot water

I.S. EN 89:2015

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Gas-fired storage water heaters for the production of domestic hot water

Appareils de production d'eau chaude par accumulation pour usages sanitaires utilisant les combustibles gazeux

Gasbeheizte Vorrats-Wasserheizer für den sanitären Gebrauch

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Contents

Page

Foreword.....	7
1 Scope	8
2 Normative references	8
3 Terms and definitions	10
4 Classification of storage water heaters.....	23
4.1 General.....	23
4.2 Classification of gases.....	23
4.3 Appliance categories.....	23
4.4 Mode of supply of the combustion air and evacuation of the combustion products (appliance types).....	23
5 Construction requirement.....	23
5.1 Introduction	23
5.2 General.....	24
5.2.1 Conversion to different gases	24
5.2.2 Materials	24
5.2.3 Design - Assembly - Strength.....	27
5.2.4 Accessibility - Ease of maintenance - Fitting and removal	27
5.2.5 Gas and water pipe connections.....	27
5.2.6 Means of achieving soundness.....	28
5.2.7 Supply of combustion air and evacuation of the combustion products	29
5.2.8 Checking the state of operation	32
5.2.9 Drainage.....	32
5.2.10 Electrical safety.....	32
5.2.11 Operational safety in the event of failure or restoration of the auxiliary energy	34
5.2.12 Mechanical resistance and stability of ducts, terminal and fitting pieces.....	34
5.3 Adjusting, control and safety devices	35
5.3.1 General.....	35
5.3.2 User controls.....	36
5.3.3 Preset gas rate adjusters	37
5.3.4 Gas pressure regulator	37
5.3.5 Pressure test points	37
5.3.6 Ignition devices.....	38
5.3.7 Flame supervision device	38
5.3.8 Combustion products discharge safety device.....	39
5.3.9 Protection against accidental overheating	40
5.3.10 Control thermostat.....	40
5.3.11 Automatic shut-off valves	40
5.3.12 Combustion products temperature limiter.....	41
5.3.13 Combined temperature and pressure relief valve	41
5.3.14 Flue damper.....	41
5.4 Main burner	42
5.5 Supplementary requirements for condensing water heaters	42
5.5.1 Materials in contact with condensate	42
5.5.2 Discharge of condensate	43
5.5.3 Control of the combustion products temperature	43
5.5.4 Chemical composition of the condensate	43
6 Operational requirements	43

6.1	Carrying out the tests	43
6.1.1	General	43
6.1.2	Characteristics of the test gases	44
6.1.3	Requirements for preparation of the test gases	44
6.1.4	Choice of test gases	44
6.1.5	Test pressures	44
6.1.6	General test conditions	44
6.2	Soundness	48
6.2.1	Soundness of the gas circuit	48
6.2.2	Soundness of the combustion circuit and evacuation of the combustion products	49
6.2.3	Hydraulic test and soundness of the water circuit	53
6.3	Heat inputs	54
6.3.1	General	54
6.3.2	Nominal heat input	55
6.4	Temperature of the control knobs	56
6.4.1	Requirements	56
6.4.2	Test	56
6.4.3	Supplementary requirements for type B ₁₄ , B ₂ and B ₃ water heaters	57
6.5	Temperature of the adjusting, control and safety devices	57
6.5.1	Requirement	57
6.5.2	Test	57
6.6	Limit temperature of the walls and the test panels	57
6.6.1	Side walls, front and top	57
6.6.2	Test panels	58
6.7	Ignition - Cross-lighting - Flame stability	59
6.7.1	Normal conditions	59
6.7.2	Special conditions	60
6.7.3	Reduction of supply to ignition burner	63
6.7.4	Additional requirements relating to operation of the permanent ignition burner when the fan is stopped	63
6.8	Temperature of combustion products in condensing appliances	64
6.8.1	Requirements	64
6.8.2	Tests	64
6.9	Adjusting, control and safety devices	64
6.9.1	General	64
6.9.2	Ignition devices	64
6.9.3	Opening and safety times	66
6.9.4	Endurance of thermostats and temperature limiters	69
6.9.5	Operation of water temperature safety devices	70
6.9.6	Combustion products evacuation safety device for type B _{11BS} appliances	71
6.9.7	Pressure regulator	73
6.9.8	Flue dampers	74
6.10	Repeated draw-off	74
6.10.1	Requirements	74
6.10.2	Tests	74
6.11	Nominal capacity	75
6.11.1	Requirements	75
6.11.2	Tests	75
6.12	Combustion	75
6.12.1	Requirements	75
6.12.2	Tests	75
6.13	Non-condensation in the flue (type B appliances)	79
6.13.1	Requirements	79
6.13.2	Tests	79
6.14	Supplementary tests for condensing water heaters	80
6.14.1	Formation of condensate	80
6.14.2	Temperature of combustion products	81

EN 89:2015 (E)

6.15	Prepurging.....	81
6.15.1	Requirements.....	81
6.15.2	Test.....	82
6.16	Air monitoring device.....	82
6.16.1	Type B ₁₂ and B ₁₃	82
6.16.2	Type C and other type B.....	83
6.16.3	Gas/air ratio controls.....	84
6.17	Functioning of the fan of a type C ₄ water heater.....	85
6.17.1	Requirements.....	85
6.17.2	Tests.....	85
6.18	Nitrogen oxides.....	86
6.18.1	General.....	86
6.18.2	Weighting.....	87
6.19	Electrical power measurements.....	88
6.19.1	Nominal conditions.....	88
6.19.2	Standby.....	88
7	Rational use of energy.....	88
7.1	Efficiency.....	88
7.1.1	Requirements.....	88
7.1.2	Tests.....	88
7.2	Maintenance consumption.....	89
7.2.1	Requirements.....	89
7.2.2	Tests.....	90
8	Fitness for purpose.....	91
8.1	Heating-up time.....	91
8.1.1	Requirements.....	91
8.1.2	Tests.....	91
8.2	Mixing factor of the water temperature in the appliance.....	91
8.2.1	Requirements.....	91
8.2.2	Tests.....	92
8.3	Draw-off limits causing operation of the burner.....	92
8.3.1	Requirements.....	92
8.3.2	Tests.....	92
8.4	Continuous draw-off.....	92
8.4.1	Requirements.....	92
8.4.2	Tests.....	93
8.5	Requirements for the specific rate.....	93
8.6	Designation and measurement of reference temperatures of flue systems.....	93
8.6.1	Nominal working combustion products temperature.....	93
8.6.2	Overheat combustion products temperature.....	93
8.6.3	Mechanical resistance and stability of ducts, terminal and fitting pieces.....	93
8.7	Requirements for plastic in the combustion product evacuation ducts, terminals and fitting pieces for appliances.....	95
8.7.1	Thermal resistance.....	95
8.7.2	Materials.....	95
8.8	Requirements for elastomeric seals and elastomeric sealants in the combustion product evacuation ducts, terminals and fitting pieces.....	101
8.8.1	Characterization.....	101
8.8.2	Long-term resistance to thermal load.....	101
8.8.3	Long-term resistance to condensate exposure.....	102
8.8.4	Cyclic condensate resistance test.....	103
8.8.5	Relaxation behaviour.....	104
8.8.6	Compression set.....	104
8.8.7	Low temperature resistance.....	105
8.8.8	Joints in elastomeric seals.....	105

9	Marking and instructions	105
9.1	Appliance marking	105
9.1.1	Data plate	105
9.1.2	Supplementary markings	106
9.1.3	Packaging	106
9.1.4	Warnings on the appliance and packaging	107
9.1.5	Other information	107
9.1.6	Additional marking for appliances with flue dampers	107
9.2	Instructions	107
9.2.1	Installation instructions	107
9.2.2	Instructions for use	111
9.2.3	Conversion instructions	112
9.3	Presentation	112
10	Ecodesign Data	112
10.1	Water heating energy efficiency (η_{wh})	112
10.2	Nitrogen oxides emissions	113
10.3	Additional product information	113
10.4	Storage volume	113
10.5	Mixed water at 40 °C (V_{40})	113
11	Energy Labelling Data	113
11.1	General	113
11.2	Printed label	113
11.2.1	General	113
11.2.2	Annual Electricity Consumption (AEC)	114
11.2.3	Annual Fuel Consumption (AFC)	114
11.2.4	Sound power level (L_{WA})	114
11.3	Product fiche	114
11.4	Technical documentation	114
12	Figures referenced in this standard	115
Annex A	(informative) National situations	126
Annex B	(normative) Test apparatus for type C₁₁ appliances (see 6.7.2.2.1)	130
Annex C	(normative) Test apparatus for type C₂₁ appliances (see 6.7.2.2.3)	135
Annex D	(informative) Examples of composition of the gas circuit	136
Annex E	(normative) Soundness test - Volumetric method	138
Annex F	(informative) Guidelines for extension to other categories	139
Annex G	(informative) A–deviations	140
Annex H	(informative) NO_x conversion calculation	141
Annex I	(informative) Requirements and test methods for separate air supply and combustion products evacuation ducts of type C₆ water heaters	142
Annex J	(normative) Lists of materials currently used	147
Annex K	(normative) Test methods to determine the effects of to long-term thermal load, long-term condensate exposure, condensing/ non- condensing cycling and resistance to UV radiation	149
Annex L	(normative) Parts in copper or copper alloys	150
Annex M	(informative) Compilation of the test conditions for the various gas families	151
Annex N	(informative) Alternative Method for the determination of the nominal heat input or the maximum and minimum heat input (according to 6.3.1) for appliances using a pneumatic gas/air ratio control system	153

EN 89:2015 (E)

Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of UE Directives	154
Annex ZB (informative) Relationship between this European Standard and the requirements of Commission Regulation (EU) No 814/2013	157
Annex ZC (informative) Relationship between this European Standard and the requirements of Commission Delegated Regulation (EU) No 812/2013	158
Bibliography	159

Foreword

This document (EN 89:2015) has been prepared by Technical Committee CEN/TC 48 "Domestic gas-fired water 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 November 2015 and conflicting national standards shall be withdrawn at the latest by November 2015.

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 89:1999.

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, Annex ZB or Annex ZC, which are integral parts of this document.

The present standard deals with:

- safety;
- rational use of energy;
- fitness for purpose.

It gives specific requirements relative to:

- appliances with burners with a fan;
- combustion products discharge orifice closure devices;
- type C water heaters with a fan incorporated in the combustion air supply circuit or in the combustion products evacuation circuit;
- condensing water heaters;
- measurement of NO_x emissions of water heaters;
- the metallic, plastic and other non-metallic materials that are used in water heaters and which come into contact with water intended for human consumption. It is intended to ensure that products of this kind complying with these requirements meet current technological development and requirements with regard to the service life of the water heaters and their physiological suitability;
- the growth of microorganism on materials in contact with drinking water.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 89:2015 (E)

1 Scope

This European Standard defines the specifications and test methods for the construction, safety, rational use of energy and fitness for purpose, environment and classification and marking of gas-fired storage water heaters for domestic hot water uses, hereafter called “appliance”.

This European Standard applies to appliances:

- of selected types B₁, B₂, B₃, B₅, C₁, C₂, C₃, C₄, C₅, C₆, C₇, C₈, C₉ according to CEN/TR 1749;
- fitted with atmospheric burners;
- using one or more combustible gases corresponding to the three gas families and the pressures indicated in EN 437;
- of nominal heat input not exceeding 150 kW (net calorific value);
- fitted with electrically operated mechanical flue dampers that are positioned downstream of the heat exchanger.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 88-1:2011, *Pressure regulators and associated safety devices for gas appliances — Part 1: Pressure regulators for inlet pressures up to and including 50 kPa*

EN 125, *Flame supervision devices for gas burning appliances — Thermoelectric flame supervision devices*

EN 126, *Multifunctional controls for gas burning appliances*

EN 161, *Automatic shut-off valves for gas burners and gas appliances*

EN 298:2012, *Automatic burner control systems for burners and appliances burning gaseous or liquid fuels*

EN 437, *Test gases — Test pressures — Appliance categories*

EN 513, *Unplasticized polyvinylchloride (PVC-U) profiles for the fabrication of windows and doors — Determination of the resistance to artificial weathering*

EN 549, *Rubber materials for seals and diaphragms for gas appliances and gas equipment*

EN 573-1, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 1: Numerical designation system*

EN 1057, *Copper and copper alloys — Seamless, round copper tubes for water and gas in sanitary and heating applications*

CR 1404, *Determination of emissions from appliances burning gaseous fuels during type-testing*

EN 1490, *Building valves — Combined temperature and pressure relief valves — Tests and requirements*

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