
Plinski kotli za centralno ogrevanje - 3-2. del: H2NG - Razširitev standarda EN 15502-2-2:2024

Gas-fired central heating boilers - Part 3-2: H2NG - Expansion of EN 15502-2-2:2024

Heizkessel für gasförmige Brennstoffe - Teil 3-2: H2NG - Erweiterung von EN 15502-2-2:2024

Sample Document

Ta slovenski standard je istoveten z: FprCEN/TS 15502-3-2

get full document from standards.iteh.ai

ICS:

91.140.10	Sistemi centralnega ogrevanja	Central heating systems
97.100.20	Plinski grelniki	Gas heaters

kSIST-TS FprCEN/TS 15502-3-2:2026 **en,fr,de**

Sample Document

get full document from standards.iteh.ai

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

FINAL DRAFT
FprCEN/TS 15502-3-2

November 2026

ICS 27.060.30; 91.140.10

English Version

**Gas-fired central heating boilers - Part 3-2: H2NG -
Expansion of EN 15502-2-2:2024**

Heizkessel für gasförmige Brennstoffe - Teil 3-2: H2NG
- Erweiterung von EN 15502-2-2:2024

This draft Technical Specification is submitted to CEN members for Vote. It has been drawn up by the Technical Committee CEN/TC 109.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye 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 Technical Specification. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a Technical Specification.

get full document from standards.iteh.ai



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

© 2026 CEN All rights of exploitation in any form and by any means reserved
worldwide for CEN national Members.

Ref. No. FprCEN/TS 15502-3-2:2026 E

Contents	Page
European foreword	3
Introduction	5
1 Scope.....	6
2 Normative references.....	6
3 Terms, definitions and symbols	6
4 Classification.....	10
5 Construction	10
6 Electrical safety	10
7 Controls	10
8 Operational requirements.....	10
9 Useful efficiencies	15
10 Electric auxiliary energy	15
11 Risk assessment	15
12 Marking and instructions.....	15
Figures.....	16
Listing of tables and numbers	16
Annexes.....	16
Annex YA (normative) Limit gases for type B1 H2NG appliances	17
Annex YB (informative) Considerations on the use of limit gases for atmospheric H2NG appliances using an Injector-Venturi system as Pneumatic Gas Supply system (IV-PGS) without a fan.	18
Annex YC (informative) Summary of the test conditions for atmospheric H2NG appliances using an Injector-Venturi system as Pneumatic Gas Supply system (IV-PGS)	28
Bibliography.....	30

European foreword

This document (FprCEN/TS 15502-3-2:2026) has been prepared by Technical Committee CEN/TC 109 “Central heating boilers using gaseous fuels”, the secretariat of which is held by NEN.

This document is currently submitted to the Vote on TS.

This document contains an expansion of the scope of EN 15502-2-2:2024 and provides requirements needed for this expansion.

The only technical change compared to EN 15502-2-2:2024 is this expansion of the scope compared to EN 15502-2-2:2024.

EN 15502 consists of the following parts under the general title “Gas-fired heating boilers”:

- Part 1: General requirements and tests;
- Part 2-1: Specific standard for type C appliances and type B2, B3 and B5 appliances of a nominal heat input not exceeding 1 000 kW;
- Part 2-2: Specific standard for type B1 appliances;
- Part 2-3: Specific standard for hybrid units combining a gas-fired boiler and an electrical heat pump in a product;
- Part 3-1: H2NG and ACCF — Expansion of EN 15502-2-1:2022;
- Part 3-2: H2NG — Expansion of EN 15502-2-2:2024;
- Part 3-3: 100 % Hydrogen — Expansion of EN 15502-2-1:2022.

Relationship between this document, EN 15502-2-2:2024 and EN 15502-1:2021+A1:2023, the reader needs to be aware of the following information:

- a) This document (CEN/TS 15502-3-2) is to be used in conjunction with EN 15502-2-2:2024, while EN 15502-2-2:2024 is to be used in conjunction with EN 15502-1:2021+A1:2023. This means that this TS is to be used in conjunction with both EN 15502-2-2:2024 and EN 15502-1:2021+A1:2023 and that all information in EN 15502-2-2:2024 and EN 15502-1:2021+A1:2023 applies as well, unless stated otherwise, see under b).

NOTE 1 To find the actual requirements or information in the (sub)clauses of EN 15502-2-2:2024 referred to in this TS, one might need to check EN 15502-1:2021+A1:2023 (as EN 15502-2-2:2024 is to be used in conjunction with EN 15502-1:2021+A1:2023).

- b) The numbering structure of this TS is using the numbering structure of EN 15502-2-2:2024 and expanding on it. Where this TS states “Shall be according to EN 15502-2-2:2024, [clause number]” the numbering, title and text of that clause of EN 15502-2-2:2024 is to be used (including its sub clauses and sub clause numbering, tables and table numbering, formulae and formulae numbering, figures and figure numbering, lists and list numbering).

NOTE 2 The TS and its annexes can refer to (sub)clause numbers that are to be found either in this TS, or EN 15502-2-2:2024, or EN 15502-1:2021+A1:2023.

- c) The relevant text of EN 15502-2-2:2024 is to be adapted accordingly in all cases where this TS states:

FprEN/TS 15502-3-2:2026 (E)

- shall be according to EN 15502-2-2:2024, [clause number] with the following modification;
 - shall be according to EN 15502-2-2:2024, [clause number] with the following modification of [sub clause number(s)];
 - shall be according to EN 15502-2-2:2024, [clause number] with the following addition;
 - shall be according to EN 15502-2-2:2024, [clause number] with the addition of [sub clause number(s)] at the end;
 - EN 15502-2-2:2024, [clause number] is replaced by the following;
 - the title of EN 15502-2-2:2024 [clause number] is replaced by the following;
 - EN 15502-2-2:2024, [clause number] is not applicable.
- d) Clauses or subclauses in this TS that are additional to the structure of EN 15502-2-2:2024 are numbered “20x” (e.g. 3.1.201, 8.4.201, Table 201, Formula (201), Figure 201) or designated as Annex “Y” (e.g. Annex YA, YB, YC, etc.). These additional (sub)clauses provide requirements and information that is specific for the appliances that are covered in the scope of this TS.

NOTE 3 The additional (sub)clauses in this TS are not indicated as an addition to EN 15502-2-2:2024.

Sample Document

get full document from standards.iteh.ai

Introduction

The introduction of EN 15502-2-2:2026 applies.

Sample Document

get full document from standards.iteh.ai

FprEN/TS 15502-3-2:2026 (E)**1 Scope**

Shall be according to EN 15502-2-2:2024, Clause 1 with the following modifications:

Add at the end of the list, after h), the following:

“i) which are atmospheric fully premixed appliances equipped with a Pneumatic Gas Supply (PGS) that are intended to be connected to gas grids for natural gases of the second family where up to 20 mol% H₂ is added to the natural gas (H2NG-Y20), where the quality of the distributed gas without adding the hydrogen is not likely to vary to a large extent over the lifetime of the appliance”

Replace:

“ak) appliances that are intended to burn natural gases of the second family where hydrogen is added to the natural gas;”

with:

“ak) appliances that are intended to burn natural gases of the second family where hydrogen is added to the natural gas, except for atmospheric fully premixed appliances equipped with a Pneumatic Gas supply (PGS) (which are covered by this document);”

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

The normative references of EN 15502-2-2:2024 apply.

3 Terms, definitions and symbols**3.1 Terms and definitions**

For the purposes of this document, the terms and definitions given in EN 15502-2-2:2024, 3.1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1.201 Definitions introduced in this TS**3.1.201.1****H2NG grid**

grid intended to supply gas to H2NG appliances

3.1.201.2**H2NG appliances**

appliances that are intended to burn second family gases containing relevant amount of hydrogen

Note 1 to entry: Gas containing less than 0,5 % hydrogen is not considered to contain a relevant amount of hydrogen.

3.1.201.3**appliance category extension Y**

appliance category extension for H2NG appliances identifying the maximum hydrogen content of the H2NG gas, expressed as the molar percentage of the hydrogen content of the gas.

Note 1 to entry: If the maximum hydrogen percentage of the H2NG is 20 %, this is indicated with an extension "Y20".

Note 2 to entry: An I_{2E} appliance category boiler that is suitable to burn H2NG gases containing up to 20 mol% H₂ shall have the extended appliance category I_{2EY20}.

Note 3 to entry: vol % is equivalent to mol% as the used pressure is almost atmospheric.

3.1.201.4**reduced nominal heat input Q_{rn}**

nominal heat input obtained with the boiler set using the high Wobbe index reference gas at reference conditions and operated using the low Wobbe index reference gas at reference conditions

Note 1 to entry: This is only used for expressing the reduction on the heat input due to the variation of the gas composition supplied by H2NG gas grids.

3.1.201.5**reduced nominal heat output P_{rn}**

nominal heat output obtained with the boiler set using the high Wobbe index reference gas at reference conditions and operated using the low Wobbe index reference gas at reference conditions

Note 1 to entry: This is only used for expressing the reduction on the heat output due to the variation of the gas composition supplied by H2NG gas grids.

3.1.201.6**distributed gas**

gaseous fuel used on the territory of the CEN members and affiliated members

Note 1 to entry: Corresponds to the one given in the Regulation (EU) 2016/426 on gas appliances (article 2.2).

[SOURCE: EN 437:2021, 3.2, modified]

3.1.201.7**distribution Limit Gas DLG**

distribution gases that will most likely result in an undesired combustion phenomenon

Note 1 to entry: The DLG depends on the distributed gas and the combustion and mixing technology used in the appliance and the undesired combustion phenomenon.

Note 2 to entry: The DLG is specifying the normal operating range of gases for which the appliance is suitable for, as declared in the instructions for installation.

3.1.201.8**test gas**

gas intended for the verification of the operational characteristics of gas appliances

Note 1 to entry: Test gases include reference gases and limit gases.

[SOURCE: EN 437:2021, 3.3]