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Safety and control devices for burners and appliances burning gaseous fuels - Multifunctional controls

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/25

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EUROPEAN STANDARD
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EN 126

May 2025

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Supersedes EN 126:2012

English Version

**Safety and control devices for burners and appliances
burning gaseous fuels - Multifunctional controls**

Équipements auxiliaires pour brûleurs et appareils
utilisant des combustibles gazeux - Équipements
multifonctionnels pour les appareils à gaz

Sicherheits- und Regeleinrichtungen für Brenner und
Brennstoffgeräte für gasförmige Brennstoffe -
Mehrfachstellgeräte für Gasgeräte

This European Standard was approved by CEN on 5 April 2025.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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

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EN 126:2025 (E)**European foreword**

This document (EN 126:2025) has been prepared by Technical Committee CEN/TC 58 “Safety and control devices for burners and appliances burning gaseous or liquid fuels”, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by November 2025 and conflicting national standards shall be withdrawn at the latest by November 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 126:2012.

The main changes compared with EN 126:2012 are as follows:

- a) alignment with EN 13611:2019;
- b) referencing the control standards as shown in Figure 1 in total, instead of referencing these standards clause by clause;
- c) combinations of electronic controls only are excluded.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, 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 the United Kingdom.

Introduction

This document is intended to be used in conjunction with EN 13611:2019.

EN 13611:2019 recognizes the safety level specified by CEN/TC 58 and is regarded as a horizontal standard dealing with the safety, construction, performance, and testing of controls for burners and appliances burning gaseous and/or liquid fuels.

The general requirements for controls are given in EN 13611:2019, and methods for classification and assessment for new controls and control functions are given in EN 14459:2021. This document (see Figure 1) specifies multifunctional controls combining two or more control functions, one of which is a mechanical control function. The requirements for controls are given in the specific control standard.

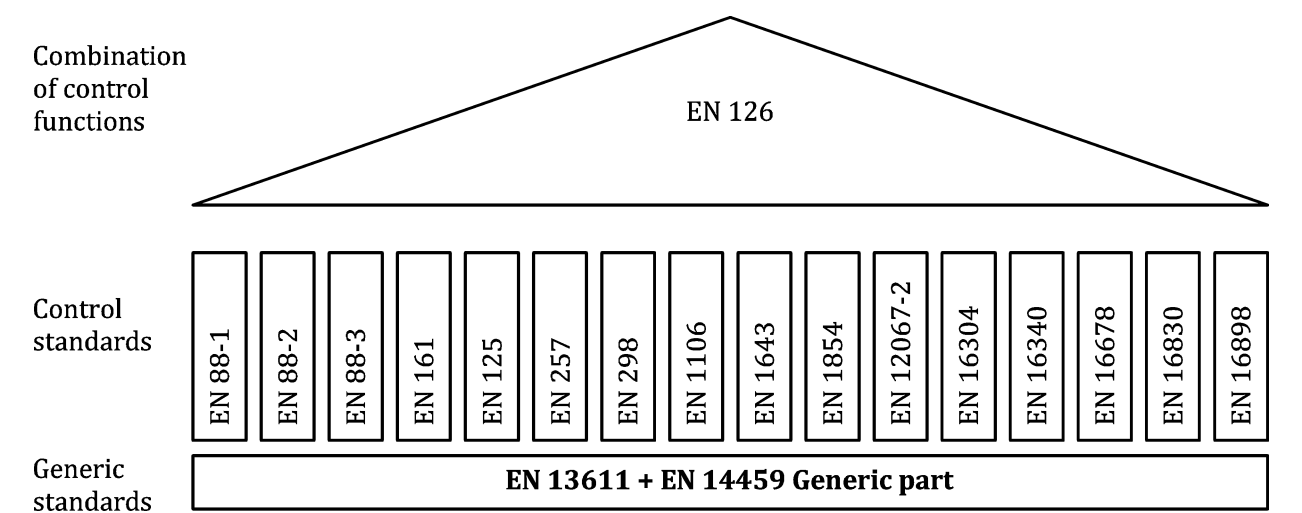


Figure 1 — Interrelation of control standards

EN 13611:2019 should be used in conjunction with the specific standard for a specific type of control (e.g. EN 88-1:2022+A1:2023, EN 88-2:2022+A1:2024, EN 88-3:2022+A1:2024, EN 125:2022+A1:2024, EN 126:2025, EN 161:2022, EN 257:2022+A1:2023, EN 298:2022, EN 1106:2022+A1:2023, EN 1643:2022, EN 1854:2022+A1:2023, EN 12067-2:2022, EN 16304:2022+A1:2024, EN 16340:2014, EN 16678:2022, EN 16830:2022 and EN 16898:2022+A1:2023), or for controls for specific applications.

EN 13611:2019 can also be applied, so far as reasonable, to controls not mentioned in a specific standard and to controls designed on new principles, in which case additional requirements can be necessary. EN 14459:2021 provides methods for classification and assessment of new control principles.

In addition, this standard covers requirements for the safety related interactions between the different devices.

Primarily in industrial applications it is common practice to rate the safety of a plant based on values describing the likelihood of a dangerous failure. These values are being used to determine Safety Integrity Levels or Performance Levels when the system is being assessed in its entirety.

CEN/TC 58 standards for safety relevant controls do go beyond this approach, because for a certain life time for which the product is specified, designed, and tested a dangerous failure is not allowed at all. Failure modes are described and assessed in greater detail.

Measures to prevent from dangerous situations are defined. Field experience over many decades is reflected in the CEN/TC 58 standards. Requirements of EN 13611:2019 can be considered as proven in practice.

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This document refers to clauses of EN 13611:2019 or adapts clauses by stating “with the following modification”, “with the following addition”, “is replaced by the following” or “is not applicable” in the corresponding clause.

This document adds clauses or subclauses to the structure of EN 13611:2019 which are particular to this document. Subclauses which are additional to those in EN 13611:2019 are numbered starting from 101. Additional Annexes are designated as Annex AA, Annex BB, Annex CC, etc. It should be noted that these clauses, subclauses, and Annexes are not indicated as an addition.

If by reference to EN 13611:2019 the term “control” is given, this term should be read as “MFC”.

1 Scope

EN 13611:2019, Clause 1 is applicable with the following modification and addition:

Modification:

The 1st paragraph of EN 13611:2019, Clause 1 is replaced by:

This document specifies the safety, design, construction, and performance requirements and testing for multifunctional controls for burners and appliances burning one or more gaseous fuels, hereafter referred to as 'MFC'. This document is applicable to MFCs with declared maximum inlet pressures up to and including 50 kPa and nominal connection sizes up to and including DN 150.

Addition:

This document is applicable to MFCs consisting of two or more functions, at least one of which is a mechanical control, as specified in the relevant control standard (see Figure 1).

This document does not apply to MFCs consisting only of electronics (an example is a combination of functions according to EN 298:2022 and EN 1643:2022).

The 4th paragraph of EN 13611:2019, Clause 1 is removed.

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.

EN 26:2023, *Gas-fired instantaneous water heaters for the production of domestic hot water*

EN 88-1:2022+A1:2023, *Safety and control devices for gas burners and gas burning appliances — Part 1: Pressure regulators for inlet pressures up to and including 50 kPa*

EN 88-3:2022+A1:2024, *Safety and control devices for gas burners and gas burning appliances — Part 3: Pressure and/or flow rate regulators for inlet pressures up to and including 500 kPa, electronic types*

EN 125:2022+A1:2024, *Flame supervision devices for gas burning appliances — Thermoelectric flame supervision devices*

EN 161:2022, *Automatic shut-off valves for gas burners and gas appliances*

EN 257:2022+A1:2023, *Mechanical thermostats for gas-burning appliances*

EN 298:2022, *Automatic burner control systems for burners and appliances burning gaseous or liquid fuels*

EN 1106:2022+A1:2023, *Manually operated taps for gas burning appliances*

EN 1643:2022, *Safety and control devices for burners and appliances burning gaseous and/or liquid fuels — Valve proving systems for automatic shut-off valves*

EN 1854:2022+A1:2023, *Safety and control devices for burners and appliances burning gaseous and/or liquid fuels — Pressure sensing devices for gas burners and gas burning appliances*

EN 12067-2:2022, *Safety and control devices for burners and appliances burning gaseous or liquid fuels — Control functions in electronic systems — Part 2: Fuel/air ratio control/supervision of the electronic type*

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EN 13611:2019,¹ *Safety and control devices for burners and appliances burning gaseous and/or liquid fuels — General requirements*

EN 14459:2021, *Safety and control devices for burners and appliances burning gaseous or liquid fuels — Control functions in electronic systems — Methods for classification and assessment*

EN 16304:2022+A1:2024, *Automatic vent valves for gas burners and gas burning appliances*

EN 16340:2014, *Safety and control devices for burners and appliances burning gaseous or liquid fuels — Combustion product sensing devices*

EN 16830:2022, *Safety and control devices for burners and appliances burning gaseous or liquid fuels — Control functions in electronic systems — Temperature control function*

EN 16898:2022+A1:2023, *Safety and control devices for gas burners and gas burning appliances — Gas filters having a maximum working pressure up to and including 600 kPa*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

¹ As impacted by EN 13611:2019/AC:2021.