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SENSORSEADISED

Safety and control devices for burners and appliances
burning gaseous and/or liquid fuels - Pressure sensing
devices for gas burners and gas burning appliances

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 1854:2022 sisaldab Euroopa standardi EN 1854:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 1854:2022 consists of the English text of the European standard EN 1854:2022.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.12.2022.	Date of Availability of the European standard is 21.12.2022.
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English Version

Safety and control devices for burners and appliances
burning gaseous and/or liquid fuels - Pressure sensing
devices for gas burners and gas burning appliances

Equipements auxiliaires pour brûleurs et appareils
utilisant des combustibles gazeux ou liquides -
Dispositifs de surveillance de pression pour brûleurs à
gaz et appareils à gaz

Sicherheits- und Regeleinrichtungen für Brenner und
Brennstoffgeräte für gasförmige und/oder flüssige
Brennstoffe - Druckwächter für Gasbrenner und
Gasgeräte

This European Standard was approved by CEN on 26 September 2022.

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

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

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European foreword

This document (EN 1854:2022) 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 June 2023, and conflicting national standards shall be withdrawn at the latest by December 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 1854:2010.

EN 1854:2022 includes the following significant technical changes with respect to EN 1854:2010:

- a) alignment with EN 13611:2019;
- b) reference to gas families removed;
- c) clarification regarding classified PSD's (Clause 3 and 4.1);
- d) technical changes to subclause 6.3.2 Housing;
- e) long-term performance of EPSD added (subclause 7.7);
- f) new reference to thermal stress test and vibration test.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Regulation(s).

For relationship with EU Regulation(s), see informative Annex ZB, which is an integral part of this document.

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 organisations 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.

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 “pressure sensing device”.

1 Scope

EN 13611:2019, Clause 1 applies with the following modification:

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 of pressure sensing devices for burners and appliances burning one or more gaseous fuels.

This document is applicable to pressure sensing devices for gaseous fuels, air, or combustion products with declared maximum inlet pressures up to and including 500 kPa.

It applies to all types of pressure sensing devices, including electronic, differential and inferential types.

It also specifies requirements for pressure sensing devices which are intended to be applied to steam boilers and as such need to meet increased reliability requirements.

EN 13611:2019 Clause 1, 4th paragraph is not applicable.

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 13611:2019¹, *Safety and control devices for burners and appliances burning gaseous and/or liquid fuels — General requirements*

EN 60529:1991², *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

EN 60730-2-6:2016³, *Automatic electrical controls — Part 2-6: Particular requirements for automatic electrical pressure sensing controls including mechanical requirements (IEC 60730-2-6:2015)*

EN ISO 75-1:2020, *Plastics — Determination of temperature of deflection under load — Part 1: General test method (ISO 75-1:2020)*

EN IEC 61058-1:2018, *Switches for appliances — Part 1: General requirements (IEC 61058-1:2016)*

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

² As amended by EN 60529:1991/A1:2000 and EN 60529:1991/A2:2013 (EN 60529:1991/A2:2013/AC:2019-02), and corrected by EN 60529:1991/AC:2016-12 and EN 60529:1991/corrigendum May 1993.

³ As amended by EN 60730-2-6:2016/A1:2020.