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Flame supervision devices for gas burning appliances — Thermoelectric flame supervision devices

ICS 13.220.20; 27.060.20

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A list of organizations represented on this committee can be obtained on request to its secretary.

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ICS 27.060.20

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English Version

Flame supervision devices for gas burning appliances - Thermoelectric flame supervision devices

Dispositifs de surveillance de flamme pour appareils à gaz - Dispositifs thermoélectriques de surveillance de flamme

Flammenüberwachungseinrichtungen für Gasgeräte - Thermoelektrische Zündsicherungen

This European Standard was approved by CEN on 22 April 2010 and includes Amendment 1 approved by CEN on 5 September 2015.

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Contents	Page
European foreword.....	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Classification	7
4.1 Classes of control.....	7
4.2 Groups of control.....	7
4.3 Classes of control functions.....	7
5 Units of measurement and test conditions	7
6 Construction requirements	7
6.1 General.....	7
6.2 Mechanical parts of the control.....	7
6.2.1 Appearance.....	7
6.2.2 Holes.....	7
6.2.3 Breather holes.....	7
6.2.4 Test for leakage of breather holes.....	8
6.2.5 Screwed fastenings.....	8
6.2.6 Jointing.....	8
6.2.7 Moving parts.....	8
6.2.8 Sealing caps.....	8
6.2.9 Dismantling and reassembly.....	8
6.3 Materials.....	8
6.3.1 General material requirements.....	8
6.3.2 Housing.....	8
6.3.3 Test for leakage of housing after removal of non-metallic parts.....	8
6.3.4 Zinc alloys.....	8
6.3.5 Springs providing closing and/or sealing force.....	8
6.3.6 Resistance to corrosion and surface protection.....	8
6.3.7 Impregnation.....	8
6.3.8 Seals for glands for moving parts.....	8
6.4 Gas connections.....	9
6.4.1 Making connections.....	9
6.4.2 Connection sizes.....	9
6.4.3 Threads.....	9
6.4.4 Union joints.....	9
6.4.5 Flanges.....	9
6.4.6 Compression fittings.....	9
6.4.7 Nipples for pressure test.....	9
6.4.8 Strainers.....	9
6.5 Electronic parts of the control.....	9
6.6 Protection against internal faults for the purpose of functional safety.....	9
7 Performance	9
7.1 General.....	9
7.2 Leak-tightness.....	10

This is a preview of "BS EN 125:2010+A1:20...". [Click here to purchase the full version from the ANSI store.](#)

7.3	Test for leak-tightness	10
7.3.1	General	10
7.3.2	External leak-tightness.....	10
7.3.3	Internal leak-tightness	11
7.4	Torsion and bending	11
7.5	Torsion and bending tests	11
7.6	Rated flow rate	11
7.7	Test for rated flow rate.....	11
7.7.1	Apparatus	11
7.7.2	Test procedure	11
7.7.3	Conversion of air flow rate.....	11
7.8	Durability.....	11
7.9	Performance tests for electronic controls.....	12
7.10	Long-term performance for electronic controls	12
7.101	Operating torque and force.....	12
7.101.1	Requirement	12
7.101.2	Test for operating torque and force	12
7.102	Interlocks.....	13
7.102.1	Requirement	13
7.102.2	Test for interlocks.....	13
7.103	Closing current	13
7.103.1	Requirement	13
7.103.2	Test for closing current.....	13
7.104	Sealing force	14
7.104.1	Requirement	14
7.104.2	Test for sealing force.....	14
7.105	Endurance	14
7.105.1	Requirement	14
7.105.2	Endurance test.....	14
8	EMC/Electrical requirements.....	15
9	Marking, installation and operating instructions.....	15
9.1	Marking	15
9.2	Installation and operating instructions	16
9.3	Warning notice	16
	Annex A (informative) Gas connections in common use in the various countries.....	17
	Annex B (informative) Leak-tightness test – volumetric method.....	18
	Annex C (informative) Leak-tightness test – pressure loss method	19
	Annex D (normative) Conversion of pressure loss into leakage rate	20
	Annex E (normative) Electrical/electronic component fault modes	21
	Annex F (normative) Additional requirements for safety accessories and pressure accessories as defined in EU Directive 97/23/EC	22
	Annex G (normative) Materials for pressurized parts	23
	Annex H (informative) Additional materials for pressurized parts.....	24
	Annex I (normative) Requirements for controls used in DC supplied gas burners and gas burning appliances.....	25
	Annex AA (informative) Types of flame supervision devices.....	26

This is a preview of "BS EN 125:2010+A1:20...". [Click here to purchase the full version from the ANSI store.](#)

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2009/142/EC relating to appliances burning gaseous fuels	28
Bibliography	30
Figures	
Figure AA.1 — Various types of thermoelectric flame supervision device in the closed position	27
Figure AA.2 — Various types of thermoelectric flame supervision device in the operating and ignition position	28
Tables	
Table 1 — Sequence of testing	10
Table 2 — Maximum leakage rates	10
Table 3 — Nominal sizes and operating torque.....	12
Table 4 — Operating cycles	15
Table ZA.1 — Correspondence between this European Standard and Directive 2009/142/EC relating to appliances burning gaseous fuels	28

This is a preview of "BS EN 125:2010+A1:20...". [Click here to purchase the full version from the ANSI store.](#)

European foreword

This document (EN 125:2010+A1:2015) 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 May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

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 includes Amendment 1 approved by CEN on 2015-09-05.

This document supersedes A1 EN 125:2010 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

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 document is intended to be used in conjunction with EN 13611:2007. This document refers to clauses of EN 13611:2007 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 European Standard adds clauses or subclauses to the structure of EN 13611:2007 which are particular to this standard. It should be noted that these clauses and subclauses are not indicated as an addition.

It should be noted that the following significant technical changes compared to the previous edition have been incorporated in this European Standard:

- a) alignment with EN 13611:2007;
- b) updating of Clause 2, Normative references;
- c) new declaration of nominal diameter and maximum inlet pressure.

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.

1 Scope

This European Standard specifies the safety, construction and performance requirements for thermoelectric flame supervision devices, energized by a thermocouple intended for use with gas burners, gas appliances and similar use, hereafter referred to as "controls".

This European Standard is applicable to controls with declared maximum inlet pressures up to and including 500 kPa (5 bar) of nominal connection sizes up to and including DN 50 for use with one or more fuel gases in accordance with EN 437.

This European Standard is not applicable to:

- a) the thermocouple;
- b) controls which use auxiliary energy (e.g. electrical energy supplied externally).

2 Normative references

The following referenced documents are indispensable for the application 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 13611:2007, *Safety and control devices for gas burners and gas burning appliances — General requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13611:2007 and the following apply.

3.101

thermocouple

thermoelectric flame sensing element that responds to the temperature of the supervised flame, and in which the flame effect produces an electromotive force (e.m.f.)

3.102

flame supervision device

control which, in response to the e.m.f. produced by the thermocouple, maintains the gas way to the main burner or the main burner and the pilot burner open and which shuts off the gas way to the main burner at least, after extinction of the supervised flame

NOTE For further reference see Figure AA.1 and Figure AA.2.

3.103

ignition interlock

part which prevents the igniter from operating as long as the main gas way is open

3.104

re-start interlock

mechanism which prevents the re-opening of the gas way to the main burner or to the main burner and the pilot burner until the armature plate has separated from the magnetic element

NOTE For further reference see Figure AA.1 and Figure AA.2.