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Irish Standard
I.S. EN 161:2011

Automatic shut-off valves for gas burners and gas appliances

I.S. EN 161:2011

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Údarás um Chaighdeáin Náisiúnta na hÉireann

English Version

Automatic shut-off valves for gas burners and gas appliances

Robinets automatiques de sectionnement pour brûleurs à
gaz et appareils à gaz

Automatische Absperrventile für Gasbrenner und
Gasgeräte

This European Standard was approved by CEN on 20 February 2011.

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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Foreword

This document (EN 161:2011) 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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by March 2014.

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 161:2007.

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 sub-clauses to the structure of EN 13611:2007 which are particular to this European Standard i.e. sub-clauses or annexes, which are additional to those in EN 13611:2007, are numbered starting from 101 or are designated as Annex AA, BB, CC etc. It should be noted that these clauses and sub-clauses are not indicated as an addition.

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

- a) alignment to EN 13611:2007;
- b) normative references: ISO 4400 and ISO 6952 are changed to EN 175301-803;
- c) terms and definitions are aligned to EN 13611:2007;
- d) sub-clause 6.101 has been moved to sub-clause 8.11.102;
- e) installation and operating instructions are integrated in one sub-clause;
- f) changes in Annex ZA regarding 1.2, 1.2.2, 1.2.3, 1.3, 3.1.1, 3.3, 3.6, 3.7, 3.8, 3.11, 3.12, 3.2.1 and in addition Annex II and III were deleted.

SIL classification according to EN 61508 cannot be claimed based upon compliance with this standard. Valves with SIL classification do not meet automatically the requirements of this standard.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the safety, construction and performance requirements for automatic shut-off valves for use with gas burners, gas appliances and similar use, hereafter referred to as 'valves'.

This European Standard is applicable to valves with declared maximum inlet pressures up to and including 500 kPa (5 bar) of nominal connection sizes up to and including DN 250 for use with one or more fuel gases in accordance with EN 437.

This European Standard is applicable to electrically operated valves and to valves actuated by fluids where the control valves for these fluids are actuated electrically, but not to any external electrical devices for switching the control signal or actuating energy.

An assessment method for valve designs is given by this European Standard.

This European Standard is also applicable to valves where the flow rate is controlled by external electrical signals, either in discrete steps or proportional to the applied signal.

This European Standard is also applicable to valves fitted with closed position indicator switches.

NOTE Provisions for final product inspection and testing by the manufacturer are not specified.

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 30 (all parts), *Domestic cooking appliances burning gas*

EN 298, *Automatic gas burner control systems for gas burners and gas burning appliances with or without fans*

EN 13611:2007, *Safety and control devices for gas burners and gas burning appliances — General requirements*

EN 13906-1, *Cylindrical helical springs made from round wire and bar — Calculation and design — Part 1: Compression springs*

EN 13906-2, *Cylindrical helical springs made from round wire and bar — Calculation and design — Part 2: Extension springs*

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

EN 60730-1:2000, *Automatic electrical controls for household and similar use — Part 1: General requirements (IEC 60730-1:1999, modified)*

EN 61058-1, *Switches for appliances — Part 1: General requirements (IEC 61058-1:2000 modified + A1:2001 (Equivalent))*

EN 175301-803, *Detail Specification: Rectangular connectors — Flat contacts, 0,8 mm thickness, locking screw not detachable*

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