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Irish Standard I.S. EN 126:2012

# Multifunctional controls for gas burning appliances

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# EUROPÄISCHE NORM

ICS 23.060.40

Supersedes EN 126:2004

English Version

# Multifunctional controls for gas burning appliances

Equipements multifonctionnels pour les appareils à gaz

Mehrfachstellgeräte für Gasgeräte

This European Standard was approved by CEN on 30 December 2011.

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# Foreword

This document (EN 126:2012) 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of an identical text or by endorsement, at the latest by September 2012, and conflicting national standards shall be withdrawn at the latest by September 2012.

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 126:2004.

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 refers to clauses of EN 13611:2007+A2:2011 or adapts it 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 sub-clauses to the structure of EN 13611:2007+A2:2011 which are particular to this standard, i.e. sub-clauses or annexes which are additional to those in EN 13611:2007+A2:2011 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 technical changes have been made to the document since the previous edition:

- a) alignment with EN 13611:2007+A2:2011;
- b) the maximum inlet pressure is increased to 50 kPa (500 mbar);
- c) it is no longer necessary for at least one of the control functions to be a shut-off function but combinations of electronic controls only are excluded;
- d) introduction of Application Control Function in the scope (see 3.103, 6.103);
- e) referencing the control standards as shown in Figure 1 in total, instead of referencing these standards clause by clause.

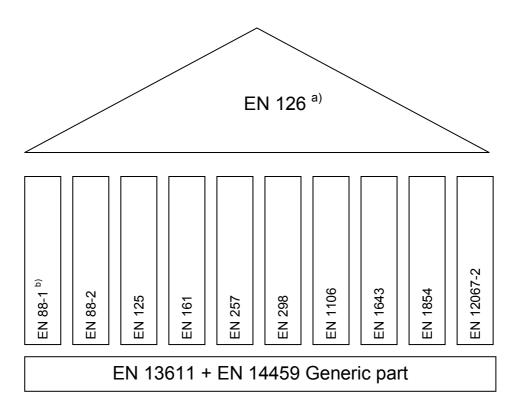
According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

The general requirements for controls are given in EN 13611:2007+A2:2011 and methods for classification and assessment for new controls and control functions are given in EN 14459:2007, Clauses 1 up to and including 7.13 (see Figure 1).

The requirements for controls are given in the specific control standard

EN 126 (see Figure 1) specifies multifunctional controls with two or more controls and Application Control Functions, e.g. the Gas Shut-off Control Function, being inherently multifunctional controls, see 6.103.



#### Key

- a) This European Standard specifies 'automatic water operated gas valves' in Annex AA
- b) EN 12067-1 (Gas/air ratio controls) and EN 12078 (Zero governors) were merged into the new EN 88-1(pressure regulators).

#### Figure 1 — Standards house

Each control integrated in the MFC shall meet the applicable requirements of the relevant control standard(s). In addition, this standard covers requirements for the safety related interactions between the different devices.

#### 1 Scope

This European Standard specifies the safety, construction and performance requirements for multifunctional controls intended for use with gas burners, gas appliances and similar use, hereafter referred to as "MFC".

This European Standard is applicable to MFC with declared maximum inlet pressures up to and including 50 kPa (500 mbar) of nominal connection sizes up to and including DN 150 for use with one or more fuel gases in accordance with EN 437.

MFC consist of two or more functions, at least one of which is a mechanical control, as specified in the relevant control standards (see Figure 1). MFC consisting only of electronics are not covered by EN 126 (an example is a combination of functions according to EN 298 and EN 1643).

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 26:1997, Gas-fired instantaneous water heaters for the production of domestic hot water, fitted with atmospheric burners

EN 88-1, Pressure regulators and associated safety devices for gas appliances — Part 1: Pressure regulators for inlet pressures up to and including 50 kPa

EN 125, Flame supervision devices for gas burning appliances — Thermoelectric flame supervision devices

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

EN 257, Mechanical thermostats for gas-burning appliances

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

EN 437, Test gases — Test pressures — Appliance categories

EN 1106, Manually operated taps for gas burning appliances

EN 1643, Valve proving systems for automatic shut-off valves for gas burners and gas appliances

EN 1854, Pressure sensing devices for gas burners and gas burning appliances

EN 12067-2, Gas/air ratio controls for gas burners and gas burning appliances — Part 2: Electronic types

EN 13611:2007+A2:2011, Safety and control devices for gas burners and gas-burning appliances — General requirements

EN 14459:2007, Control functions in electronic systems for gas burners and gas burning appliances — Methods for classification and assessment

ISO 262, ISO general purpose metric screw threads -- Selected sizes for screws, bolts and nuts



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