Gaasi- ja vedelkütuste põletite ja põletiga tarvitite automaatjuhtimissüsteemid

Automatic burner control systems for burners and asec a production of the produ appliances burning gaseous or liquid fuels



### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

See Eesti standard EVS-EN 298:2012 sisaldab	This Estonian standard EVS-EN 298:2012 consists of
Euroopa standardi EN 298:2012 ingliskeelset teksti.	the English text of the European standard EN
36	298:2012.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	This standard has been endorsed with a notification
avaldamisega EVS Teatajas.	published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud	Date of Availability of the European standard is
	23.05.2012.
kättesaadavaks 23.05.2012.	
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for
	Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <a href="mailto:standardiosakond@evs.ee">standardiosakond@evs.ee</a>.

ICS 27.060.01

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EUROPEAN STANDARD NORME EUROPÉENNE **EN 298** 

EUROPÄISCHE NORM

May 2012

ICS 27.060.01

### **English Version**

# Automatic burner control systems for burners and appliances burning gaseous or liquid fuels

Systèmes automatiques de commande pour brûleurs et appareils utilisant des combustibles gazeux ou liquides

Feuerungsautomaten für Brenner und Brennstoffgeräte für gasförmige oder flüssige Brennstoffe

This European Standard was approved by CEN on 9 March 2012.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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### **Foreword**

This document (EN 298:2012) 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 November 2012, and conflicting national standards shall be withdrawn at the latest by May 2015.

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 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 the relationship of this document with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This document supersedes EN 230:2005 and EN 298:2003.

This document refers to clauses of EN 13611:2007+A2:2011 and adapts them, indicating the changes by stating "with the following modification", "with the following addition", "is replaced by the following" or "is not applicable". It also adds clauses or sub-clauses to the structure of EN 13611:2007+A2:2011 which are particular to this standard (EN 298:2012). Additional sub-clauses or annexes are either numbered starting from 101 or are designated as Annex AA, BB, CC etc. It should be noted however that these clauses and sub-clauses are not indicated as additions in the text.

The following is a list of significant technical changes between this document and the previous editions:

- Alignment with EN 13611:2007+A2:2011;
- Integration of the requirements from EN 230 (EN 230 is merged into prEN 298);
  - NOTE If, due to the reference of EN 13611 the term "gas" will be part of a requirement or test, then the term "gas" shall be substituted by the term "fuel"
- Requirements from the flame supervision and the reactions in case of loss of flame have been adapted to modifications made in EN 267 and EN 676 and optimised for better understanding;
- Requirements and tests for "independent flame detectors" have been integrated;
- New requirements concerning "common cause" have been added;
- Requirements for the new function "remote reset from lock-out" have been added.

EN 298 compliance for burner control systems or flame detector devices cannot be claimed based upon SIL classification according to EN 61508.

SIL classification cannot be claimed based upon compliance with this standard only. A supplementary method for SIL determination is specified in EN 13611:2007+A2:2011, Annex J.

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,

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reden, Switzerla. Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain,

### 1 Scope

This European Standard specifies the safety, construction and performance requirements for automatic burner control systems, programming units and flame detector devices, intended for use with gas and oil burners and gas and oil burning appliances, with or without fans and similar use.

This European Standard is applicable to automatic burner control systems that include additional functions.

This European Standard does not cover automatic burner control systems utilizing thermo-electric flame supervision devices.

NOTE 1 European Standards for burners, appliances or processes which use automatic burner control systems, programming units or flame detectors can override the requirements of this standard.

NOTE 2 Provisions for production control are not part of this European Standard.

### 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 267:2009+A1:2011, Automatic forced draught burners for liquid fuels

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

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

EN 60730-1:2011, Automatic electrical controls for household and similar use — Part 1: General requirements (IEC 60730-1:2010 (modified))

EN 60730-2-5:2002+A1:2004+A11:2005+A2:2010, Automatic electrical controls for household and similar use — Part 2-5: Particular requirements for automatic electrical burner control systems (IEC 60730-2-5:2000+Am1:2004+Am2:2008, (modified))

EN 60947-5-1:2004, Low-voltage switchgear and controlgear — Part 5-1: Control circuit devices and switching elements — Electromechanical control circuit devices (IEC 60947-5-1:2003)

IEV 191, International Electrotechnical Vocabulary — Chapter 191: Dependability and quality of service (Consolidated version included Amendment 1 and Amendment 2); Identical with IEC 60050-191:1990-12 (Consolidated with IEC 60050-191/A1:1993-03 and IEC 60050-191/A2:2002-01)

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