

**Gaasi/õhu suhte kontrollimine
gaasipõletites ja
gaasipõletusseadmetes. Osa 2:
Elektroonilised tüübid**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12067-2:2004 sisaldab Euroopa standardi EN 12067-2:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.07.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12067-2:2004 consists of the English text of the European standard EN 12067-2:2004.</p> <p>This document is endorsed on 27.07.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies the safety, construction and performance requirements for electronic gas/air ratio control systems (GARCs) intended for use with gas burners and gas burning appliances. It also describes the test procedures for evaluating these requirements and specifies information necessary for installation and use.</p>	<p>Scope:</p> <p>This European Standard specifies the safety, construction and performance requirements for electronic gas/air ratio control systems (GARCs) intended for use with gas burners and gas burning appliances. It also describes the test procedures for evaluating these requirements and specifies information necessary for installation and use.</p>
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Võtmesõnad: operating speci, permanency, pressure gradients, pressure regulators, product specification, properties, safety, safety engineering, specification (approval), specifications, technical documents, testing, thermal environment systems, typus of error, utilization

ICS 23.060.40; 27.060.20

English version

**Gas/air ratio controls for gas burners and gas
burning appliances**

Part 2: Electronic types

Dispositifs de régulation du rapport
air/gaz pour brûleurs à gaz et appa-
reils à gaz – Partie 2: Dispositifs élec-
troniques

Gas-Luft-Verbundregleinrichtun-
gen für Gasbrenner und Gasgeräte –
Teil 2: Elektronische Ausführung

This European Standard was approved by CEN on 2004-02-02.

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Foreword

This document (EN 12067-2:2004) has been prepared by Technical Committee CEN /TC 58, "Safety and control devices for gas-burners and gas-burning appliances", 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 2004, and conflicting national standards shall be withdrawn at the latest by September 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 European Standard covers type testing only.

This standard recognizes the safety level specified by CEN/TC 58 dealing with the safety, construction and performance of controls for Gas Burners and Gas Burning Appliances and to their testing.

Annex A is informative. Annexes B and C are normative.

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

Introduction

For electronic gas/air ratio control systems (GARC) there are numerous solutions for specific applications in the market. For that reason TC 58 decided to draft a standard for type testing for closed loop electronic GARC only.

This standard does not override requirements of relevant appliance standards.

This standard does not differentiate into classification by heat input or relates to applications. When GARCs are fitted to appliances the safety of the appliance should not be reduced by any normal or abnormal operation of the GARC described in this standard.

The accuracy of actual gas/air ratio is not specified as a fixed value in this standard.

The standard specifies which parameters have to be declared by the manufacturer and under what conditions these have to be fulfilled. These parameters will relate to the GARC rather than the combustion process.

The standard does not include a standard test rig, however the purpose of the tests is to verify the manufacturer's declaration under the conditions required in the standard.

1 Scope

This European Standard specifies the safety, construction and performance requirements for electronic gas/air ratio control systems (GARCs) intended for use with gas burners and gas burning appliances. It also describes the test procedures for evaluating these requirements and specifies information necessary for installation and use.

This standard is only applicable to closed loop gas/air ratio controls (see 3.1) and does not differentiate into classification by heat input.

This standard applies to electronic GARCs that can be tested independently, as well as part of an appliance or a gas burner.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 298:2003, *Automatic gas burner control systems for gas burners and gas burning appliances with or without fans*.

EN 13611:2000, *Safety and control devices for gas burners and gas-burning appliances - General requirements*.

ENV 14459:2002, *Method of risk analysis and recommendations for the use of electronics in systems for the control of gas burners and gas burning appliances*.

EN 60068-2-6:1995, *Environmental testing - Part 2: Tests – Tests Fc: Vibration (sinusoidal) (IEC 60068-2-6:1995 + Corrigendum 1995)*.

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 60730-2-5, *Automatic electrical controls for household and similar use - Part 2-5: Particular requirements for automatic electrical burner control systems (IEC 60730-2-5:2000, modified)*.

EN 61000-4-11, *Electromagnetic compatibility (EMC) — Part 4: Testing and measurement techniques — Section 11: Voltage dips, short interruptions and voltage variations immunity tests (IEC 61000-4-11:1994)*.

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

3.1 electronic gas/air ratio control (electronic GARC)

closed loop modulating system consisting of the electronic control, actuating elements for the gas flow and the air flow as a minimum, and allocated feedback signal(s), see Figure 1