

© Copyright SEK. Reproduction in any form without permission is prohibited.

Elektriska apparater för detektering av brännbara gaser i hemmiljö (gasvarnare) – Vägledning vid val, installation och underhåll

*Electrical apparatus for detection of combustible gases in domestic premises –
Guide on the selection, installation, use and maintenance*

Som svensk standard gäller europastandarden EN 50244:2016. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50244:2016.

Nationellt förord

Tidigare fastställd svensk standard SS-EN 50244, utgåva 1, 2000, gäller ej från 2019-03-14.

ICS 13.320.00

Denna standard är fastställd av SEK Svensk Elstandard,
som också kan lämna upplysningar om **sakinnehållet** i standarden.
Postadress: Box 1284, 164 29 KISTA
Telefon: 08 - 444 14 00.
E-post: sek@elstandard.se. Internet: www.elstandard.se

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 50244

May 2016

ICS 13.320

Supersedes EN 50244:2000

English Version

Electrical apparatus for the detection of combustible gases in domestic premises - Guide on the selection, installation, use and maintenance

Appareils électriques pour la détection des gaz combustibles dans les locaux à usage domestique - Guide de sélection, d'installation, d'utilisation et de maintenance

Elektrische Geräte für die Detektion von brennbaren Gasen in Wohnhäusern - Leitfaden für Auswahl, Installation, Einsatz und Wartung

This European Standard was approved by CENELEC on 2016-03-14. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

	Page
European foreword.....	3
Introduction	4
1 Scope	5
2 Normative references.....	5
3 Terms and definitions.....	5
4 Sensing of combustible gas	6
5 Types of apparatus	7
6 Installation	8
6.1 General	8
6.2 Gas releases.....	8
6.2.1 General.....	8
6.2.2 Source of the gas escape	8
6.2.3 Examples of behaviour of gas releases	9
6.2.4 Positioning of the gas detector.....	10
6.3 Remote Detector Heads	12
6.4 Mains power supply	12
7 Executive functions (type A apparatus only).....	13
7.1 General	13
7.2 Shut-off valve	13
7.3 Ventilation fan	13
7.4 Main electric switch.....	13
7.5 Remote alarm	13
7.6 Additional visual alarm	13
7.7 Link between detector and ancillary device	13
7.8 Fault relays	13
8 Advice to the user	14
8.1 Manufacturer's instructions	14
8.2 Location	14
8.3 Power supply	14
8.4 Indicators	14
8.5 Alarms.....	14
8.6 Maintenance	15
8.7 Lifetimes.....	15
9 Emergency actions.....	15
Bibliography	16

European foreword

This document (EN 50244:2016) has been prepared by CLC/TC 216 “Gas detectors”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2017-03-14
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2019-03-14

This document supersedes EN 50244:2000.

EN 50244:2016 includes the following significant technical changes with respect to EN 50244:2000 (various minor changes have also been made):

- General information added to cover domestic premises, boats and caravans. This is a result of the splitting of EN 50194 into EN 50194-1 and EN 50194-2.
- In Clause 4 text has been added regarding alarm set points for apparatus complying with EN 50194-1.
- A new Clause 5 has been created to provide further information to the user concerning the differences between Type A and Type B devices.
- Former Clause 5 has been renumbered Clause 6, text has been reformulated to avoid repetition and make it easier to understand.
- New Figures 1 and 2 created, to show the typical locations of combustible gas alarms when used with Natural Gas and LPG installations.
- The text in Clause 7 “Executive Actions” has been aligned with EN 50292, where applicable, for combustible gas alarms.
- In Clause 8 “Advice to the User”, additional text has been added to highlight the differences between location of a combustible gas detector and a carbon monoxide alarm.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Introduction

This European Standard is intended to be a guide for people who, in the course of their professional activities, are required to install combustible gas detectors in domestic premises. It is also aimed at anyone who might supply such gas detectors to members of the public for subsequent installation by competent persons according to national regulations, so that advice may be given based on good engineering practice.

Apparatus for the detection of combustible gases are not a substitute for good gas installation practice and regular servicing of gas appliances, although they may provide an added margin of reassurance for users of gaseous fuels. Domestic combustible gas detectors with or without some form of executive function may overcome fears of fuel safety and can be particularly beneficial in certain circumstances.

1 Scope

This European Standard provides information on the selection, installation, use and maintenance of apparatus for the detection of combustible gas designed for continuous operation in a fixed installation in domestic premises as described in the EN 50194 series. This guide should be read in conjunction with any additional relevant national or local regulations.

The European Standard refers to the installation of two types of apparatus designed to operate in the event of an escape of town gas, natural gas or liquefied petroleum gas:

- Type A apparatus - to provide a visual and audible alarm and an executive action in the form of an output signal that may actuate directly or indirectly a shut-off device and/or other ancillary device;
- Type B apparatus - to provide visual and audible alarms only.

This guide is not applicable to the use of apparatus:

- for the detection of toxic gases such as carbon monoxide, see EN 50292;
- for industrial or commercial premises, see EN 60079-29-2.

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 1775, *Gas supply - Gas pipework for buildings - Maximum operating pressure less than or equal to 5 bar - Functional recommendations*

EN 50194 (all parts), *Electrical apparatus for the detection of combustible gases in domestic premises*

EN 60079-29-2, *Explosive atmospheres — Part 29-2: Gas detectors — Selection, installation, use and maintenance of detectors for flammable gases and oxygen (IEC 60079-29-2)*