

Svenska Elektriska Kommissionen, SEK

Fastställt	Utgåva	Sida	Ingår i
2001-10-26	1	1 (1+21)	SEK Område 31

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

## Elektrisk utrustning för detektering av kolmonoxid i hemmiljö – Fordringar och provning

*Electrical apparatus for the detection of carbon monoxide in domestic premises –  
Test methods and performance requirements*

Som svensk standard gäller europastandarden EN 50291:2001. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50291:2001.

---

ICS 13.320

---

Denna standard är fastställd av Svenska Elektriska Kommissionen, SEK, som också kan lämna upplysningar om **sakinnehållet** i standarden.  
Postadress: SEK, Box 1284, 164 29 KISTA  
Telefon: 08 - 444 14 00. Telefax: 08 - 444 14 30  
E-post: sek@sekom.se. Internet: www.sekom.se

---



**Electrical apparatus for the detection of carbon monoxide  
in domestic premises -  
Test methods and performance requirements**

Appareils électriques pour la détection  
de monoxyde de carbone dans les  
locaux à usage domestique -  
Méthodes d'essais et prescriptions  
de performances

Elektrische Geräte für die Detektion  
von Kohlenmonoxid in Wohnhäusern -  
Prüfverfahren und Anforderungen an  
das Betriebsverhalten

This European Standard was approved by CENELEC on 2000-08-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

## CENELEC

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

---

### Foreword

This European Standard has been prepared by the Technical Committee CENELEC TC 216, Gas detectors.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50291 on 2000-08-01.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2002-02-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2006-04-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A and B are informative.

---

**Contents**

1	Scope.....	4
2	Normative references .....	4
3	Definitions .....	5
4	General requirements .....	6
4.1	General.....	6
4.2	Construction .....	6
4.3	Indicators and alarms.....	7
4.4	Fault signals.....	8
4.5	Output signal (applicable for type A apparatus only).....	8
4.6	Labelling and instructions .....	8
5	Test and performance requirements.....	9
5.1	General requirements for tests.....	9
5.2	Normal conditions for tests .....	10
5.3	Test methods and performance requirements.....	11
6	Self-contained battery powered apparatus.....	17
6.1	Battery fault warning .....	17
6.2	Battery capacity.....	17
6.3	Battery reversal .....	18
6.4	Battery connections .....	18
	Annex A (informative) Health effects .....	19
	Annex B (informative) A-deviations .....	21

## 1 Scope

This European Standard specifies general requirements for the construction, testing and performance of electrically operated carbon monoxide gas detection apparatus, designed for continuous operation in domestic premises. The apparatus may be mains or battery powered. Such apparatus is intended to warn of an accumulation of CO, enabling the occupant to react before being exposed to significant risk.

This standard specifies two types of apparatus, these are:

Type A - to provide a visual and audible alarm and an executive action in the form of an output signal that can be used to actuate directly or indirectly a ventilation or other ancillary device.

Type B - to provide a visual and audible alarm only.

This standard excludes apparatus:

- for the detection of combustible gases, other than carbon monoxide itself; (see EN 50194:2000);
- for the detection of CO in industrial installations or commercial premises; (see EN 45544 series);
- for use in boats, caravans or mobile homes;
- for CO measurement for smoke and fire detection (see prEN 12239).

## 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.

EN 50270	1999	Electromagnetic compatibility - Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen
EN 50292	2001	Electrical apparatus for the detection of carbon monoxide in domestic premises – Guide on the selection, installation, use and maintenance
EN 60335-1	1994	Safety of household and similar electrical appliances Part 1: General requirements (IEC 60335-1:1991, mod.)
EN 60529	1991	Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)
EN 60704-1	1997	Household and similar electrical appliances - Test code for the determination of airborne acoustical noise Part 1: General requirements (IEC 60407-1:1997)