

<b>STN</b>	<b>Detektory plynu Elektrické zariadenia na detekciu oxidu uhoľnatého v obytných priestoroch Časť 1: Skúšobné metódy a požiadavky na prevádzkové vlastnosti</b>	<b>STN EN 50291-1</b>  37 8331
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Gas detectors - Electrical apparatus for the detection of carbon monoxide in domestic premises - Part 1: Test methods and performance requirements

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/19

Obsahuje: EN 50291-1:2018

Oznámením tejto normy sa od 26.02.2021 ruší  
STN EN 50291-1 (37 8331) z novembra 2010

**127842**

EUROPEAN STANDARD

**EN 50291-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2018

ICS 13.320

Supersedes EN 50291-1:2010

English Version

## Gas detectors - Electrical apparatus for the detection of carbon monoxide in domestic premises - Part 1: Test methods and performance requirements

Détecteurs de gaz - Appareils électriques pour la détection de monoxyde de carbone dans les locaux à usage domestique - Partie 1 : Méthodes d'essai et exigences de performances

Gaswarngeräte - Elektrische Geräte für die Detektion von Kohlenmonoxid in Wohnhäusern - Teil 1: Prüfverfahren und Anforderungen an das Betriebsverhalten

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN 50291-1:2018 (E)**

<b>Contents</b>	<b>Page</b>
European foreword .....	5
<b>1 Scope .....</b>	<b>6</b>
<b>2 Normative references .....</b>	<b>6</b>
<b>3 Terms and definitions .....</b>	<b>7</b>
<b>4 Symbols and abbreviations .....</b>	<b>9</b>
<b>5 Design requirements .....</b>	<b>9</b>
5.1 General requirements.....	9
5.2 Construction.....	10
5.3 Visual indicators .....	10
5.4 Alarms.....	11
5.5 End-of-life .....	11
5.5.1 General.....	11
5.5.2 Prediction of end-of-life .....	11
5.5.3 Inbuilt testing of end-of-life .....	12
5.5.4 End of life fault warnings .....	12
5.6 Fault warnings.....	12
5.7 Alarm silence facility (optional).....	12
5.8 Fault warning silence facility.....	13
5.9 Transmittable output signal (applicable for type A apparatus only).....	13
5.10 Software-controlled apparatus.....	13
5.11 Labelling .....	13
5.12 Requirements for the use of batteries .....	14
5.12.1 Battery low voltage warning .....	14
5.12.2 Battery capacity .....	14
5.12.3 Battery reversal.....	15
5.12.4 Battery connections .....	15
5.12.5 Battery removal feature.....	15
5.13 Inter-connectable apparatus.....	15
5.14 Back-up power source .....	15
5.14.1 General.....	15
5.14.2 Monitoring of back-up power source.....	16
<b>6 Test and performance requirements .....</b>	<b>16</b>
6.1 General requirements for tests .....	16
6.1.1 Test samples for type testing.....	16
6.1.2 Preparation of samples .....	17
6.1.3 Use of mask for testing .....	17
6.1.4 Test chamber.....	17
6.1.5 Unpowered storage .....	17
6.2 Normal conditions for tests .....	17
6.2.1 General.....	17
6.2.2 Test gases for alarm testing .....	18
6.2.3 Test gases for specified tests .....	18
6.2.4 Speed of air and test gas .....	18
6.2.5 Power supply.....	18
6.2.6 Temperature .....	18
6.2.7 Humidity.....	18

6.2.8	Pressure .....	18
6.3	Test methods and performance requirements .....	18
6.3.1	General .....	18
6.3.2	CO gas test.....	19
6.3.3	Transmittable output signal .....	19
6.3.4	Alarm conditions .....	20
6.3.5	Alarm during warm-up time.....	20
6.3.6	Response and recovery to a high CO volume ratio .....	20
6.3.7	Temperature effects .....	21
6.3.8	Humidity effects.....	21
6.3.9	Air velocity test.....	21
6.3.10	Supply voltage variations (mains powered apparatus only) .....	21
6.3.11	Electromagnetic compatibility .....	21
6.3.12	Response to mixtures of carbon monoxide and other gases.....	22
6.3.13	Effects of other gases .....	22
6.3.14	Long term stability .....	23
6.3.15	Drop test.....	23
6.3.16	Alarm sound level.....	24
6.3.17	Battery fault warning.....	24
6.3.18	Battery capacity.....	25
6.3.19	Battery reversal .....	25
6.3.20	Battery connections with flexible leads only.....	26
6.3.21	Inter-connectable apparatus .....	26
6.3.22	Back-up power source .....	27
6.3.23	Stability in high humidity (non- condensing) test.....	27
6.3.24	Stability to low humidity test.....	27
7	Apparatus using radio links .....	28
7.1	General .....	28
7.1.1	RF range and reproducibility tests .....	28
7.1.2	Failure of radio link .....	28
7.1.3	Identification codes .....	28
7.1.4	Environmental requirements.....	28
7.2	Radio link tests .....	28
7.2.1	RF Range.....	28
7.2.2	Failure of radio link tests .....	29
7.2.3	Identification codes verification tests .....	29
7.2.4	Environmental tests .....	29
8	User instructions .....	30
9	Packaging.....	31
Annex A (informative)	Extended stability test – Sample protocol .....	32
A.1	General requirements .....	32
A.2	Test .....	32
A.3	Performance requirement.....	32
Annex B (informative)	Calculation of the expected battery service life .....	33
B.1	General requirements .....	33
B.2	Example.....	33
B.2.1	Capacity required for 1 year operation in milli Ampere hours (mAh).....	33
B.2.2	Capacity required for 4 min alarm .....	33
B.2.3	Capacity required for 30 days low battery beeping .....	33
B.2.4	Carbon Monoxide Alarm Voltage Operating Range.....	33

**EN 50291-1:2018 (E)**

<b>B.2.5</b>	<b>Battery Data</b> .....	<b>34</b>
<b>B.2.6</b>	<b>Expected Service Life</b> .....	<b>34</b>
	<b>Annex C (informative) Visual and audible fault indication sequences</b> .....	<b>35</b>
	<b>Annex D (informative) A–deviations</b> .....	<b>36</b>
	<b>Annex E (informative) Test arrangement schematics</b> .....	<b>37</b>
	<b>Annex F (informative) Additional requirements for units displaying low (warning) CO concentrations</b> .....	<b>39</b>
<b>F.1</b>	<b>General</b> .....	<b>39</b>
<b>F.2</b>	<b>Requirements</b> .....	<b>39</b>
	<b>Bibliography</b> .....	<b>40</b>

## European foreword

This document (EN 50291-1:2018) has been prepared by Technical Committee CLC/TC 216 "Gas detectors", the secretariat of which is held by BSI.

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) 2019-02-26
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2021-02-26

This document supersedes EN 50291-1:2010.

The main technical changes compared to the previous edition EN 50291-1:2010 are:

- End of Life indicator has been made mandatory and must include an audible and visible warning;
- Guidance has been added for assessing battery capacity and expected life;
- Requirements for mains powered alarms with back-up supply have been added;
- The number of potential interference gases has been increased;
- Tests have been added for an optional alarm silence facility;
- Requirements for the audible alarm and associated red visual signal have been clarified; low battery, fault and End-of-life audible and visual warnings are given in an informative annex;
- An informative annex has been added for apparatus displaying low (Warning) CO levels;
- Requirements have been added for apparatus using radio links;
- The sound output alarm requirement has been increased in line with the EN 14604 smoke alarm requirements.

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

**EN 50291-1:2018 (E)****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 objective is to detect defective fossil fuel or solid fuel appliances so that they can be repaired or replaced. The function of the standard is not to monitor low levels of CO for health purposes. (Annex F gives recommendations for units displaying low (warning) CO concentrations). The apparatus may be mains-powered or battery-powered. Such apparatus is intended to warn of an acute level of CO, enabling the occupant to react before being exposed to significant risk.

Additional requirements for apparatus to be used in recreational vehicles and similar premises are specified in EN 50291-2.

NOTE 1 For caravan holiday homes EN 50291-1 applies.

This European 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 a transmittable 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.

NOTE 2 Both type A and type B apparatus can be interconnected.

This European Standard excludes apparatus for:

- the detection of combustible gases, other than carbon monoxide itself (see EN 50194-1);
- the detection of CO in industrial installations (see EN 45544-1, EN 45544-2 and EN 45544-3) or commercial premises;
- CO measurement for smoke and fire detection;
- CO measurement in car parks and tunnels.

NOTE 3 See EN 50545-1.

**2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50270, *Electromagnetic compatibility — Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen*

EN 50271:2010, *Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen — Requirements and tests for apparatus using software and/or digital technologies*

EN 50292, *Electrical apparatus for the detection of carbon monoxide in domestic premises, caravans and boats — Guide on the selection, installation, use and maintenance*

EN 60335-1:2012, *Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1:2010, modified)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**