

**SLOVENSKI STANDARD  
SIST EN 50194-2:2007/A1:2016**

## **Električne naprave za zaznavanje vnetljivega plina v gospodinjstvih - 2. del: Električne naprave za neprekinjeno delovanje v inštalacijah, vgrajenih v vozilih za rekreacijo, in na sorodnih področjih - Dodatne preskusne metode in zahteve za delovanje - Dopolnilo A1**

## Electrical apparatus for the detection of combustible gases in domestic premises - Part 2: Electrical apparatus for continuous operation in a fixed installation in recreational vehicles and similar premises - Additional test methods and performance requirements

# iTeh STANDARD PREVIEW

# **Elektrische Geräte für die Detektion von brennbaren Gasen in Wohnhäusern - Teil 2: Ortsfeste elektrische Geräte zum kontinuierlichen Betrieb in Freizeitfahrzeugen oder ähnlichen Umgebungen - Ergänzende Prüfverfahren und Anforderungen an das Betriebsverhalten**

## Matériels électriques pour la détection des gaz combustibles dans les locaux à usage domestique - Partie 2: Matériels électriques en fonctionnement continu et en installation fixe dans les véhicules de loisir et locaux similaires - Méthodes d'essai supplémentaires et exigences de qualité de fonctionnement

**Ta slovenski standard je istoveten z: EN 50194-2:2006/A1:2016**

**ICS:**

## 13.320 Alarmni in opozorilni sistemi Alarm and warning systems

SIST EN 50194-2:2007/A1:2016 en

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[SIST EN 50194-2:2007/A1:2016](#)

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 50194-2:2006/A1**

June 2016

ICS 13.320

English Version

**Electrical apparatus for the detection of combustible gases in domestic premises - Part 2: Electrical apparatus for continuous operation in a fixed installation in recreational vehicles and similar premises - Additional test methods and performance requirements**

Matériels électriques pour la détection des gaz combustibles dans les locaux à usage domestique - Partie 2: Matériels électriques en fonctionnement continu et en installation fixe dans les véhicules de loisir et locaux similaires - Méthodes d'essai supplémentaires et exigences de qualité de fonctionnement

Elektrische Geräte für die Detektion von brennbaren Gasen in Wohnhäusern - Teil 2: Ortsfeste elektrische Geräte zum kontinuierlichen Betrieb in Freizeitfahrzeugen oder ähnlichen Umgebungen - Ergänzende Prüfverfahren und Anforderungen an das Betriebsverhalten

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This amendment A1 modifies the European Standard EN 50194-2:2006; it 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 amendment 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.

<https://standards.iteh.ai/catalog/standards/sist/9f6661fa-00f0-45df-83da-9d2385c5ab43/sist-en-50194-2-2007-a1-2016>

This amendment 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.

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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**

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## European foreword

This document (EN 50194-2:2006/A1:2016) 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

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.

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[SIST EN 50194-2:2007/A1:2016](#)

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## 1 Scope

*In the entire clause replace EN 50194 by EN 50194-1.*

*In the following sentence replace EN 61779-1 and EN 61779-4 by EN 60079-29-1:*

Apparatus complying with this standard is not considered suitable for industrial or commercial installations for which EN 60079-29-1 apply.

*In the following note replace EN 61779 series by EN 60079-29-1:*

NOTE 2 Apparatus tested in accordance with EN 60079-29-1 will not necessarily comply with this standard.

## 2 Normative references

*Replace the entire Clause 2 by:*

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 437:2003, *Test gases – Test pressures – Appliance categories*

EN 13878:2003, *Leisure accommodation vehicles – Terms and definitions*

EN 50194-1:2009, *Electrical apparatus for the detection of combustible gases in domestic premises – Test methods and performance requirements*

EN 60079-1:2008, *Explosive atmospheres - Part1: Equipment protection by flameproof enclosures “d”*

EN 50270:2015, *Electromagnetic compatibility – Electrical apparatus for the detection and measurement of combustible gases, toxic gases or oxygen*

EN 60068-2-6, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal) (IEC 60068-2-6)*

EN 60068-2-7, *Environmental testing – Part 2-7: Tests – Test Ga: Acceleration, steady state (IEC 60068-2-7)* <https://standards.iehb.ai/catalog/standards/sist/9f6661fa-00f0-45df-83da-9d2385c5ab43/sist-en-50194-2-2007-a1-2016>

EN 60068-2-27, *Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock (IEC 60068-2-27)*

EN 60068-2-52, *Environmental testing - Part 2-52: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution) (IEC 60068-2-52)*

EN 60529, *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*

EN 60721-3-6:1993, *Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 6: Ship environment (IEC 60721-3-6:1987 + A1:1991)*

EN 60945:2002, *Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results (IEC 60945:2002)*

ISO 7637-2:2011, *Road vehicles - Electrical disturbances from conduction and coupling - Part 2: Electrical transient conduction along supply lines only*

### 3 Terms and definitions

*Replace the introductory sentence by:*

For the purposes of this document, the terms and definitions of EN 50194-1:2009 and the following apply.

*In 3.19, 3.21 and 3.22, replace the term NOTE by Note 1 to entry.*

*In the Note 1 to entry of 3.22, replace EN 50194 by EN 50194-1:2009.*

*In 3.20, 3.25 and 3.26, replace [EN 13878] by [SOURCE: EN 13878].*

### 4 General requirements

#### 4.1 General

*In the entire clause replace EN 50194 by EN 50194-1.*

#### 4.2 Construction

*In the first sentence replace EN 50194 by EN 50194-1.*

#### 4.3 Indicators and alarms

*In the first sentence replace EN 50194 by EN 50194-1.*

#### 4.4 Fault signals **iTeh STANDARD PREVIEW**

*In the first sentence replace EN 50194 by EN 50194-1.*

#### 4.5 Output signal **(standards.iteh.ai)**

*In the first sentence replace EN 50194 by EN 50194-1.*

#### 4.6 Labelling and instructions iteh.ai/catalog/standards/sist/9f6661fa-00f0-45df-83da-042385c5ab42/sist\_en\_50194-2-2007-a1-2016

*In the first sentence replace EN 50194 by EN 50194-1.*

##### 4.6.1 Labelling

*In the first sentence replace EN 50194 by EN 50194-1.*

##### 4.6.2 Cautions

*In the first sentence replace EN 50194 by EN 50194-1.*

##### 4.6.3 Instruction booklet

*Replace the entire subclause by:*

*This subclause of EN 50194-1 is applicable with the following additions:*

- p) power consumption;
- q) the correct operating voltage, fuse-rating, if any, and method of connection to the vehicle's power system;
- r) a list of materials that may be expected to be found in recreational vehicles that may produce vapours or gases, e.g. oils, cleaning fluids, polishes, paints, greases, cooking operations, etc. which may affect the reliability of the apparatus in the short or long term;
- s) recommendation that the gas installation should comply with the requirements of 5.5 of Annex 1 of Directive 94/25/EC (EN ISO 10239:2014) (applicable for recreational craft only);
- t) the expected lifetime for the control unit and sensors except for sensors to be installed in the bilge of boats (4.6.101 applies);
- u) a note stating the working temperature and humidity range for control unit and remote sensors;
- v) the gas volume ratios at which the alarm threshold has to be triggered, specified for LPG and/or petrol vapour.

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#### **4.6.4 Packaging**

*In the first sentence replace EN 50194 by EN 50194-1.*

### **5 Test and performance requirements**

#### **5.1 General requirements for tests**

*In the sentence replace EN 50194 by EN 50194-1.*

#### **5.2 Normal conditions for tests**

##### **5.2.1 General**

*In the sentence replace EN 50194 by EN 50194-1.*

##### **5.2.2 Test gases for alarm testing**

*In the first sentence replace EN 50194 by EN 50194-1.*

##### **5.2.3 Test gas volume ratios**

*In the first sentence replace EN 50194 by EN 50194-1.*

##### **5.2.4 Speed of test gases**

*In the first sentence replace EN 50194 by EN 50194-1.*

##### **5.2.5 Power supply**

*In the sentence replace EN 50194 by EN 50194-1.*

#### **5.2.6 Temperature iTeh STANDARD PREVIEW**

*In the sentence replace EN 50194 by EN 50194-1.*

##### **5.2.7 Humidity (standards.iteh.ai)**

*In the sentence replace EN 50194 by EN 50194-1.*

##### **5.2.8 Pressure https://standards.iteh.ai/catalog/standards/sist/9f6661fa-00f0-45df-83da-**

*In the sentence replace EN 50194 by EN 50194-1.*

##### **5.2.9 Removable parts**

*In the sentence replace EN 50194 by EN 50194-1.*

### **5.3 Test methods and performance requirements**

*In the first and second sentences replace EN 50194 by EN 50194-1.*

*In the third sentence replace EN 50194 by EN 50194-1:2009.*

#### **5.3.1 General**

*In the whole subclause replace EN 50194 by EN 50194-1.*

##### **5.3.5 Alarm test during warm-up time**

*In the sentence replace EN 50194 by EN 50194-1.*

##### **5.3.11 Electromagnetic compatibility**

*In the sentence replace EN 50194 by EN 50194-1.*

##### **5.3.13 Effects of other gases**

*In the first sentence replace EN 50194 by EN 50194-1.*

*In the second sentence replace EN 50194 by EN 50194-1:2009.*

##### **5.3.15 Ignition test**

*In the first sentence replace EN 50194 by EN 50194-1.*

*In the following sentence replace EN 50018 by EN 60079-1.*

b) an enclosure of protection type 'd' complying with EN 60079-1.

*Delete the words NOTE 101, 102 and 103 to read as follows:*

It is highly recommended that the test chamber selected is suitable for the ignition test due to the dangers involved in performing this test.

National regulations may exist for the safety of personnel carrying out this test, therefore they should be carried out by suitably qualified and experienced personnel.

For carrying out the compliance test with EN 50018, complex equipment and experienced personnel are required.

### **5.3.101 Mechanical environment**

#### **5.3.101.1.2 Performance requirement**

*In the first sentence replace EN 50194 by EN 50194-1:2009.*

#### **5.3.101.2.2 Performance requirement**

*In the first sentence replace EN 50194 by EN 50194-1:2009.*

#### **5.3.101.3.2 Performance requirement**

*In the first sentence replace EN 50194 by EN 50194-1:2009.*

#### **5.3.101.4.2 Performance requirement**

*iTeh STANDARD PREVIEW  
In the first sentence replace EN 50194 by EN 50194-1:2009.  
(standards.iteh.ai)*

#### **5.3.101.5.2 Performance requirement**

*In the first sentence replace EN 50194 by EN 50194-1:2009.*

### **5.3.102 Corrosion (salt mist) (applicable to recreational craft only)**

#### **5.3.102.2 Performance requirement**

*In the second sentence replace EN 50194 by EN 50194-1:2009.*

### **5.3.103 Electromagnetic emission (applicable for recreational craft only)**

#### **5.3.103.1 Test and performance requirements**

*In the second paragraph replace EN 50194 by EN 50194-1.*

### **5.3.104 Immunity to electromagnetic environment**

#### **5.3.104.1 General**

*In the first sentence replace EN 50194 by EN 50194-1.*

*In the second sentence, delete "subclause".*

#### **5.3.104.3 Performance requirement**

##### **5.3.104.3.1 General**

*In the first sentence, delete "subclause".*

##### **5.3.104.3.2 Electrical transient conduction immunity for DC powered controls**

*Replace Table 103 by the following:*