



**SLOVENSKI STANDARD**  
**SIST EN 50014:2000/A1:2000**  
**01-september-2000**

---

**Electrical apparatus for potentially explosive atmospheres - General requirements  
- Amendment A1**

Electrical apparatus for potentially explosive atmospheres - General requirements

Elektrische Betriebsmittel für explosionsgefährdete Bereiche - Allgemeine Bestimmungen

Matériel électrique pour atmosphères explosives - Règles générales

**Ta slovenski standard je istoveten z: EN 50014:1997/A1:1999**  
SIST EN 50014:2000/A1:2000  
<https://standards.iteh.ai/catalog/standards/sist/3e8c4158-155c-4234-940f-a865f41fe36b/sist-en-50014-2000-a1-2000>

---

**ICS:**

29.260.20	Električni aparati za eksplozivna ozračja	Electrical apparatus for explosive atmospheres
-----------	---	--

**SIST EN 50014:2000/A1:2000** en

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 50014:2000/A1:2000](https://standards.iteh.ai/catalog/standards/sist/3ebc4138-f35c-4234-940f-a865f41fe36b/sist-en-50014-2000-a1-2000)

<https://standards.iteh.ai/catalog/standards/sist/3ebc4138-f35c-4234-940f-a865f41fe36b/sist-en-50014-2000-a1-2000>

EUROPEAN STANDARD

EN 50014/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 1999

ICS 29.260.20

Incorporates corrigendum April 1998

Descriptors: Electrical apparatus, potentially explosive atmosphere, explosive atmosphere, explosion proofing, general requirement, oil immersion "o", pressurized apparatus "p", powder filling "q", flameproof enclosure "d", increased safety "e", intrinsic safety "i", encapsulation "m"

English version

## Electrical apparatus for potentially explosive atmospheres General requirements

Matériel électrique pour atmosphères  
explosibles - Règles générales

Elektrische Betriebsmittel für  
explosionsgefährdete Bereiche  
Allgemeine Bestimmungen

### iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 50014:2000/A1:2000](https://standards.iteh.ai/catalog/standards/sist/3ebc4138-f35c-4234-940f-a865f41fe36b/sist-en-50014-2000-a1-2000)

<https://standards.iteh.ai/catalog/standards/sist/3ebc4138-f35c-4234-940f-a865f41fe36b/sist-en-50014-2000-a1-2000>

This amendment A1 modifies the European Standard EN 50014:1997; it was approved by CENELEC on 1998-08-01. 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 Central Secretariat or to any CENELEC member.

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 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

Page 2

EN 50014:1997/A1:1999

### Foreword

This amendment was prepared by the Technical Committee CENELEC TC 31, Electrical apparatus for explosive atmospheres - General requirements

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to EN 50014:1997 on 1998-08-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1999-10-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) -

NOTE: This amendment includes the text of the corrigendum to EN 50014:1997 of April 1998, and some further editorial corrections to the text of EN 50014:1997.

---

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 50014:2000/A1:2000](https://standards.iteh.ai/catalog/standards/sist/3ebc4138-f35c-4234-940f-a865f41fe36b/sist-en-50014-2000-a1-2000)

<https://standards.iteh.ai/catalog/standards/sist/3ebc4138-f35c-4234-940f-a865f41fe36b/sist-en-50014-2000-a1-2000>

**Contents** Delete Annex E.

**3.11** Replace "IP" by "(IP)".

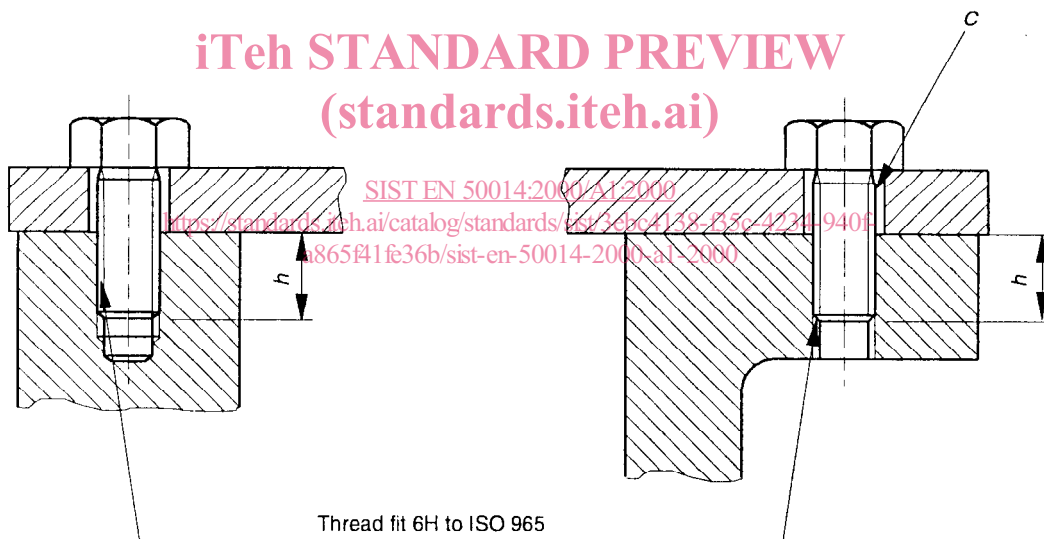
**7.3.2** Under b), **replace** "limitation of the surface area of plastics enclosures" by "limitation of the surface area, projected in any direction, of plastic enclosures."

**8.2** In the last paragraph, **replace** "Group I measuring instruments" by "Group I surveying instruments".

**9.3.1** **Replace** the text by:

Holes for the threaded fasteners of 9.2 shall be threaded for a distance to accept a thread engagement,  $h$ , at least equal to the major diameter of the thread of the fastener (see Figures 1 and 2).

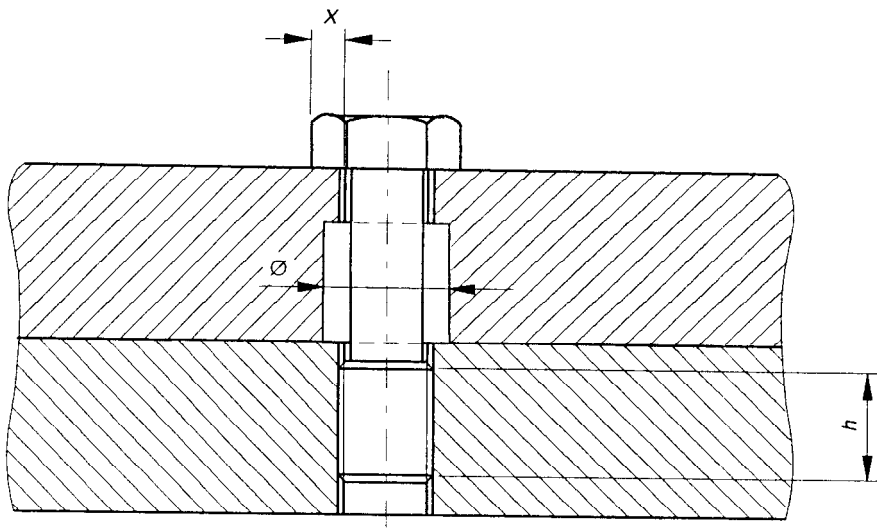
**Figure 1** Replace by:



$h \geq$  major diameter of the thread of the fastener

$c \leq$  maximum clearance permitted by tolerance of fit H13 of ISO 286-2.

**Figure 1 – Tolerances and clearance for threaded fasteners**



- Ø standard clearance hole appropriate to the threadform
- $h \geq$  major diameter of the thread of the fastener
- $X$  the contact dimension of a reduced shank fastener
- $X \geq$  the contact dimension of a standard head of a standard fastener (without reduced shank) threaded throughout its length with the size of thread used

Figure 2 – Contact surface under head of fastener with a reduced shank

SIST EN 50014:2000/A1:2000

15.3

**Delete** “, such as apparatus with metallic enclosures used with metallic conduit systems”.

23.4.7.1

**Replace** “ambient temperature values, these ambient temperatures shall be” by “service temperatures of the apparatus, the ambient temperatures shall be.”

**Replace** the text of the first indent by:

- for the upper ambient temperature, the maximum service temperature of the apparatus increased by at least 10 K, but at most 15 K;

23.4.7.6

**Replace** the text of the second indent of the second paragraph by:

- the two other samples shall remain for  $(24 \pm 2)$  h in a fire resistant hydraulic fluid, rated for operating at temperatures between  $-20$  °C and  $+60$  °C, comprising an aqueous solution of polymer in 35 % water, at a temperature of  $(50 \pm 2)$  °C.

23.4.7.8

**Delete** the last sentence of the fourth paragraph.

**Delete** the sixth paragraph referring to annex E.

**Annex B****B.3.3** Replace the note by a fourth paragraph:

Where a cable entry is intended to be used at a temperature above that foreseen in 16.8, the ageing test shall be carried out at a temperature  $(20 \pm 5)$  °K above the declared maximum operating temperature at the branching point of the conductors. Where a cable entry is intended to be used in an ambient temperature below -20 °C, the test in the refrigerator shall be carried out at the declared minimum ambient temperature, with a tolerance of  $\pm 2$  °C.

**Annex E** Delete.**Editorial corrections to EN 50014:1997**

NOTE: These corrections include and replace the corrigendum to EN 50014 of April 1998.

**Foreword** Replace the fourth paragraph by:

This European Standard is to be read in conjunction with editions published during and after 1997 of the European Standards for specific types of protection listed in the scope of this standard. It does not apply to the editions of those standards and their amendments published before 1997.

<https://standards.iteh.ai/catalog/standards/sist/5ebc4138-f35c-4234-940f-a865f41fe36b/sist-en-50014-2000-a1-2000>

**Contents** Insert the heading "REQUIREMENTS FOR ALL ELECTRICAL APPARATUS" before clause 4 and **delete** it from before clause 6.

**2** Replace "EN 60034-5:1991" by "EN 60034-5:1986".

For EN 60192:1993, **replace** the reference document by "(IEC 192:1973 + A1:1979 + A2:1988 + A3:1992)".

**3.11** At the third indent, **delete** "or liquids".

**3.30** In the note, **replace** "Directive" by "Directive 94/9/EC".

**3.31** In the note, **replace** "Directive" by "Directive 94/9/EC".

**Page 13** Insert the heading "REQUIREMENTS FOR ALL ELECTRICAL APPARATUS" before clause 4.

**Page 16** Delete the heading "REQUIREMENTS FOR ALL ELECTRICAL APPARATUS".

**7.3.1** In the second paragraph, third line, **replace** "(50 + 5) %" by "(50 ± 5) %".

**Page 31** Insert the heading "VERIFICATOINS AND TESTS" before clause 23.

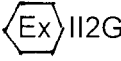
**23.4.3.1**

**Table 4** Under d), **replace** "in 3" by "in c)".

Page 6

EN 50014:1997/A1:1999

## Editorial corrections to EN 50014:1997 (end)

- 24 **Replace** "carried out" by "carry out" (twice).
- 27.2 In the first two lines on page 45, **delete** "2)" and **replace** "Items a) and b)" by "item a)", so as to have them read:
- "Where reference is made to Directive 94/4/EC, item a) above shall not apply and shall be replaced by the following:"
- 27.7.6 **Replace** example 1) by:
- |    |   |  |
|----|---|--|
| 1) | ACEX Paris, Rue Napoleon  | (name and address of manufacturer)             |
|    | HW 6446-1995  | (type, serial number and year of production)   |
|    |  | (Group II Category 2 Gas atmosphere equipment) |
- Replace** the last line of example 2) by:
- xxx (further items according to 27.2-j and 27.2-k)
- <https://standards.iteh.ai/catalog/standards/sist/3ebc4138-f35c-4234-940f-a865f41fe36b/sist-en-50014-2000-a1-2000>
- 28.1 **Delete** the third dashed paragraph ( i.e. last two lines on page 48).
- In the fifth dashed paragraph (i.e. second paragraph on page 49), **delete** "or a protective system".
- 28.2 **Delete** in the third line: "or protective system".
- 28.3 **Delete**.
- B.4.2 In the second paragraph, **replace** "Then" by "When".
- Annex C Page 65, **delete** the note at the bottom of the table.