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**Impregnirani izolacijski materiali - Uporaba analize raztopljenih plinov pri tovarniškem preskušanju električne opreme**

Mineral oil-filled electrical equipment - Application of dissolved gas analysis (DGA) to factory tests on electrical equipment

Getränkte Isolierstoffe - Verwendung der Gasanalyse für gelöste Gase (DGA) als Werksprüfung für elektrische Betriebsmittel

Matériels électriques imprégnés d'huile minérale - Application de l'analyse des gaz dissous (AGD) lors d'essais en usine de matériels électriques

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**Ta slovenski standard je istoveten z: EN 61181:2007/A1:2012**

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**ICS:**

29.040.01      Izolacijski fluidi na splošno      Insulating fluids in general

**SIST EN 61181:2010/A1:2012**      en

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61181/A1**

May 2012

ICS 29.040

English version

**Mineral oil-filled electrical equipment -  
Application of dissolved gas analysis (DGA) to factory tests on electrical  
equipment  
(IEC 61181:2007/A1:2012)**

Matériels électriques imprégnés d'huile  
minérale -  
Application de l'analyse des gaz dissous  
(AGD) lors d'essais en usine de matériels  
électriques  
(CEI 61181:2007/A1:2012)

Getränkte Isolierstoffe -  
Verwendung der Gasanalyse für gelöste  
Gase (DGA) als Werksprüfung für  
elektrische Betriebsmittel  
(IEC 61181:2007/A1:2012)

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This amendment A1 modifies the European Standard EN 61181:2007: it was approved by CENELEC on 2012-03-29. 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.

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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, 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.

**CENELEC**

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 10/881/FDIS future edition 1 of IEC 61181:2007/A1, prepared by IEC/TC 10 "Fluids for electrotechnical applications" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61181:2007/A1:2012.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2012-12-29
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-03-29

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.

## Endorsement notice

The text of the International Standard IEC 61181:2007/A1:2012 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

**Replace Annex ZA of EN 61181:2007 by:**

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60475	2011	Method of sampling insulating liquids	EN 60475	2011
IEC 60567	2011	Oil-filled electrical equipment - Sampling of gases and analysis of free and dissolved gases - Guidance	EN 60567	2011

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## Annex ZB (normative)

### Special national conditions

**Special national condition:** National characteristic or practice that cannot be changed even over a long period, e.g. climatic conditions, electrical earthing conditions.

NOTE If it affects harmonization, it forms part of the European Standard / Harmonization Document.

For the countries in which the relevant special national conditions apply these provisions are normative, for other countries they are informative.

Clause      Special national condition

#### Annex A    France

##### Table

##### A.1

Due to historical electrical service conditions of shell-type transformers, the typical values of CO<sup>2</sup> gas production during temperature rise tests shall be in accordance with EN 60076-2:2011, Annex D.

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IEC 61181

Edition 2.0 2012-02

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 1  
AMENDEMENT 1

**Mineral oil-filled electrical equipment – Application of dissolved gas analysis (DGA) to factory tests on electrical equipment**

**Matériels électriques imprégnés d'huile minérale – Application de l'analyse des gaz dissous (AGD) lors d'essais en usine de matériels électriques**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

PRICE CODE  
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ICS 29.040

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## FOREWORD

This amendment has been prepared by IEC technical committee 10: Fluids for electrotechnical applications.

The text of this amendment is based on the following documents:

FDIS	Report on voting
10/881/FDIS	10/886/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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## 2 Normative references

[SIST EN 61181:2010/A1:2012](https://standards.iteh.ai/catalog/standards/sist/e2b800f5-11d5-4f8a-8ba2-2010-a1-2012)

<https://standards.iteh.ai/catalog/standards/sist/e2b800f5-11d5-4f8a-8ba2-2010-a1-2012>

Replace the reference to IEC 60567 by the following:

IEC 60475:2011, *Method of sampling insulating liquids*

IEC 60567:2011, *Oil-filled electrical equipment – Sampling of gases and analysis of free and dissolved gases – Guidance*

## 4 Oil sampling

Replace, under 4.1 General, the two references to IEC 60567 by IEC 60475:2011.

Replace, under 4.2 Sample containers, the reference to IEC 60567 by IEC 60475:2011.

## 6 Dissolved gas extraction and analysis

Replace in the text of Clause 6, the five references to IEC 60567 by IEC 60567:2011.

Replace the existing paragraph 6 by the following new paragraph.

The use of high sensitivity capillary columns, as in example 2 of Table 4 of IEC 60567:2011, is recommended.