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**Električne naprave za uporabo v prisotnosti gorljivega prahu - 11. del: Zaščita z lastno varnostjo "iD" (IEC 61241-11:2005 s popravkom feb. 2006)**

Electrical apparatus for use in the presence of combustible dust - Part 11: Protection by intrinsic safety "iD" (IEC 61241-11:2005 + corrigendum Feb. 2006)

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**Electrical apparatus for use in the presence of combustible dust  
Part 11: Protection by intrinsic safety "iD"  
(IEC 61241-11:2005 + corrigendum February 2006)**

Matériels électriques pour utilisation en présence de poussières combustibles  
Partie 11: Protection par sécurité intrinsèque "iD"  
(CEI 61241-11:2005  
+ corrigendum février 2006)

Elektrische Betriebsmittel zur Verwendung in Bereichen mit brennbarem Staub  
Teil 11: Schutz durch Eigensicherheit "iD"  
(IEC 61241-11:2005  
+ Corrigendum Februar 2006)

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This European Standard was approved by CENELEC on 2005-11-01. 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, 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 and the 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

The text of document 31H/194/FDIS, future edition 1 of IEC 61241-11, prepared by SC 31H, Apparatus for use in the presence of combustible dust, of IEC TC 31, Electrical apparatus for explosive atmospheres, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61241-11 on 2005-11-01.

This European Standard is to be read in conjunction with EN 61241-0.

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) 2007-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2008-11-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 94/9/EC. See Annex ZZ.

Annexes ZA and ZZ have been added by CENELEC.

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

The text of the International Standard IEC 61241-11:2005 and its corrigendum February 2006 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 referenced documents are indispensable for the application 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.

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60079-0 (mod)	- <sup>1)</sup>	Electrical apparatus for explosive gas atmospheres Part 0: General requirements	EN 60079-0	2006 <sup>2)</sup>
IEC 60079-11	- <sup>1)</sup>	Explosive atmospheres Part 11: Equipment protection by intrinsic safety "i"	EN 60079-11	200X <sup>3)</sup>
IEC 60079-25	- <sup>1)</sup>	Electrical apparatus for explosive gas atmospheres Part 25: Intrinsically safe systems	EN 60079-25 + corr. April	2004 <sup>2)</sup> 2006
IEC 60529	- <sup>1)</sup>	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 <sup>2)</sup> 1993
IEC 61241-0 (mod)	- <sup>1)</sup>	Electrical apparatus for use in the presence of combustible dust Part 0: General requirements	EN 61241-0 SIST EN 61241-11:2007	2006 <sup>2)</sup>
IEC 61241-1	- <sup>1)</sup>	Electrical apparatus for use in the presence of combustible dust Part 1: Protection by enclosures "tD"	EN 61241-1 + corr. December	2004 <sup>2)</sup> 2006

<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

<sup>3)</sup> To be published.

## **Annex ZZ** (informative)

### **Coverage of Essential Requirements of EC Directives**

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers only the following essential requirements out of those given in Annex II of the EC Directive 94/9/EC:

- ER 1.0.1, ER 1.0.2, ER 1.0.4, ER 1.0.5 (partly), ER 1.0.6 (partly)
- ER 1.1 (partly)
- ER 1.2.1 (partly), ER 1.2.2 (partly), ER 1.2.4 to ER 1.2.6
- ER 1.3.1
- ER 1.6.4
- ER 2.1.2, ER 2.1.2.1 to ER 2.1.2.2
- ER 2.2.2.1, ER 2.2.2.2

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directive concerned.

WARNING: Other requirements and other EC Directives may be applicable to the products falling within the scope of this standard.

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NORME  
INTERNATIONALE  
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STANDARD

CEI  
IEC

61241-11

Première édition  
First edition  
2005-10

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**Matériels électriques pour utilisation  
en présence de poussières combustibles –**

**Partie 11:  
Protection par sécurité intrinsèque «iD»**

**iTeh STANDARD PREVIEW**

**Electrical apparatus for use in the presence  
of combustible dust –**

*SIST EN 61241-11:2007*

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**Part 11:  
Protection by intrinsic safety 'iD'**

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## CONTENTS

FOREWORD.....	5
INTRODUCTION.....	11
1 Scope.....	15
2 Normative references .....	19
3 Terms and definitions .....	19
4 Grouping and classification of intrinsically safe apparatus and associated apparatus .....	19
5 Categories of electrical apparatus .....	19
6 Apparatus construction.....	21
6.1 Enclosures .....	21
6.2 Temperatures of apparatus immersed in dust.....	21
6.3 Facilities for connection of external circuits .....	23
6.4 Separation distances .....	25
6.5 Protection against polarity reversal.....	25
6.6 Earth conductors, connections and terminals.....	25
6.7 Encapsulation used for exclusion of potentially explosive atmosphere.....	25
7 Components on which intrinsic safety depends.....	25
7.1 Rating of components.....	25
7.2 Connectors for internal connections, plug-in cards and components .....	25
7.3 Fuses .....	25
7.4 Primary and secondary cells and batteries .....	25
7.5 Semiconductors.....	25
7.6 Failure of components and connections.....	25
7.7 Piezo-electric devices.....	25
8 Infallible components, infallible assemblies of components and infallible connections .....	25
9 Diode safety barriers .....	27
10 Type verifications, assessments and type tests .....	27
10.1 Spark ignition assessment.....	27
10.2 Temperature tests .....	27
10.3 Voltage tests .....	27
10.4 Small component ignition test.....	27
10.5 Determination of parameters of loosely specified components.....	27
10.6 Tests for cells and batteries .....	27
10.7 Mechanical test .....	27
10.8 Tests for apparatus containing piezoelectric devices .....	29
10.9 Type tests for diode safety barriers and safety shunts .....	29
10.10 Cable pull test.....	29
11 Routine verifications and tests.....	29
12 Marking .....	29
12.1 General .....	29
12.2 Marking of connection facilities.....	31
13 Documentation .....	33
Annex A (normative) See Annex B of IEC 60079-11.....	35
Annex B (informative) See Annex C of IEC 60079-11.....	35
Annex C (normative) See Annex D of IEC 60079-11 .....	35



## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICAL APPARATUS FOR USE IN THE  
PRESENCE OF COMBUSTIBLE DUST –****Part 11: Protection by intrinsic safety ‘iD’**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61241-11 has been prepared by subcommittee 31H: Apparatus for use in the presence of combustible dusts, of IEC technical committee 31: Electrical apparatus for explosive atmospheres.

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

FDIS	Report on voting
31H/194/FDIS	31H/198/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This part of IEC 61241 is to be read in conjunction with IEC 61241-0.

IEC 61241 consists of the following parts under the general title *Electrical apparatus for use in the presence of combustible dust*:

- Part 0: General requirements
- Part 1: Protection by enclosures “tD”
- Part 2: Protection by pressurization “pD”
- Part 10: Classification of areas where combustible dusts are or may be present
- Part 11: Protection by intrinsic safety “iD”
- Part 14: Selection and installation
- Part 17: Inspection and maintenance of electrical installations in hazardous areas (other than mines)
- Part 18: Protection by encapsulation “mD”
- Part 20: Test methods
- Part 20-1: Methods for determining the minimum ignition temperatures of dust
- Part 20-2: Method for determining the electrical resistivity of dust in layers
- Part 20-3: Method for determining minimum ignition energy of dust/air mixtures

NOTE All references in this standard to the IEC 61241 series follow the proposed re-numbering of the dust standards agreed by SC31H and TC31. It may be necessary to alter these numbers if the relevant standards are not yet published.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

The contents of the corrigendum of February 2006 have been included in this copy.

**REFERENCE TABLE**

<b>Existing standard</b>	<b>New number assigned</b>	<b>Subject</b>	<b>Anticipated date of change</b>
IEC 61241-1-1	IEC 61241-0	General requirements	2004
	IEC 61241-1	Protection by enclosure	2004
IEC 61241-1-2	IEC 61241-14	Selection and installation	2004
IEC 61241-2-1	IEC 61241-20-1	Test methods	2005
IEC 61241-2-2	IEC 61241-20-2	Test methods	2005
IEC 61241-2-3	IEC 61241-20-3	Test methods	2005
IEC 61241-3	IEC 61241-10	Classification	2004
IEC 61241-4	IEC 61241-2	Protection by pressurization	2005
	IEC 61241-11	Protection by intrinsic safety	2005
	IEC 61241-17	Inspection and maintenance	2004
	IEC 61241-18	Protection by encapsulation	2004

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