SLOVENSKI STANDARD
SIST EN IEC 63041-2:2018

01-maj-2018

Piezoelektrični senzorji - 2. del: Kemični in biokemični senzorji (IEC 63041-2:2017)

Piezoelectric Sensors - Part 2: Chemical and Biochemical Sensors (IEC 63041-2:2017)

Ta slovenski standard je istoveten z: **EN IEC 63041-2:2018**

ICS:

31.140	Piezoelektrične naprave	Piezoelectric devices

SIST EN IEC 63041-2:2018 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 63041-2

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ICS 31.140

English Version

Piezoelectric sensors - Part 2: chemical and biochemical sensors (IEC 63041-2:2017)

Capteurs piézoélectriques - Partie 2: Capteurs chimiques et biochimiques (IEC 63041-2:2017)

Piezoelektrische Sensoren - Teil 2: Chemische und biochemische Sensoren (IEC 63041-2:2017)

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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

Ref. No. EN IEC 63041-2:2018 E

European foreword

The text of document 49/1221/CDV, future edition 1 of IEC 63041-2, prepared by IEC/TC 49 "Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63041-2:2018.

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) 2018-10-17
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-01-17

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.

Endorsement notice

The text of the International Standard IEC 63041-2:2017 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60068 (series)	NOTE	Harmonized as EN 60068 (series).
IEC 60122-1	NOTE	Harmonized as EN 60122-1.
IEC 60444-1	NOTE	Harmonized as EN 60444-1.
IEC 60444-5	NOTE	Harmonized as EN 60444-5.
IEC 60444-9	NOTE	Harmonized as EN 60444-9.
IEC 60679 (series)	NOTE	Harmonized as EN 60679 (series).
IEC 60758:2008	NOTE	Harmonized as EN 60758:2009 (not modified).
IEC 60862-1	NOTE	Harmonized as EN 60862-1.
IEC 61019-1:2004	NOTE	Harmonized as EN 61019-1:2005 (not modified).
IEC 61240:2016	NOTE	Harmonized as EN 61240:2016 (not modified).
IEC 61760 (series)	NOTE	Harmonized as EN 61760 (series).
IEC 61837 (series)	NOTE	Harmonized as EN 61837 (series).
IEC 62276:2016	NOTE	Harmonized as EN 62276:2016 (not modified).

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60027	series	Letter symbols to be used in electrical technology - Part 1: General	EN 60027	series
IEC 60050-561	2014	International electrotechnical vocabulary - Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection	-	-
IEC 60617	-	Standard data element types with associated classification scheme for electric components - Part 4: IEC reference collection fo standard data element types and component classes	-	-
IEC 63041-1	-	Piezoelectric sensors - Part 1: Generic specifications	EN IEC 63041-1	-
ISO 80000-1	2009	Quantities and units - Part 1: General	EN ISO 80000-1	2013

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INTERNATIONAL STANDARD

colour inside

Piezoelectric sensors – Part 2: Chemical and biochemical sensors

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PIEZOELECTRIC SENSORS –

Part 2: Chemical and biochemical sensors

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 63041-2 has been prepared by IEC technical committee TC 49: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection.

The text of this International Standard is based on the following documents:

CDV	Report on voting
49/1221/CDV	49/1250/RVC

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

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

A list of all parts in the IEC 63041 series, published under the general title *Piezoelectric sensors*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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.

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

PIEZOELECTRIC SENSORS –

Part 2: Chemical and biochemical sensors

1 Scope

This part of IEC 63041 is applicable to piezoelectric chemical sensors mainly used in the field of biological, medical, gas and environmental sciences. It provides users with technical guidelines on biochemical sensors as well as basic knowledge of common chemical sensors.

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.

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60050-561-:2014, *International Electrotechnical Vocabulary – Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection*

IEC 60617, *Graphical symbols for diagrams*, available at http://std.iec.ch/iec60617

IEC 63041-1, *Piezoelectric sensors – Part 1: Generic specifications*

ISO 80000-1:2009, *Quantities and units – Part 1: General*

3 Terms and definitions

3.1 General

For the purpose of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses;

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

Units, letter symbols and terminology shall, wherever possible, be taken from the following standards: IEC 60027, IEC 60050-561, IEC 60617, IEC 63041-1, and ISO 80000-1.

NOTE 1 In the market of chemical and biochemical sensors, the terms related in fields such as chemistry, biochemistry, healthcare, etc. are widely used.

NOTE 2 Piezoelectric sensors covered herein are those used for the detection and measurement of either chemical substance in the gas phase or biological molecules in aqueous media.