IEC 63041-2

Edition 1.0 2017-12

INTERNATIONAL STANDARD

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Piezoelectric sensors –
Part 2: Chemical and biochemical sensors

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 31.140

ISBN 978-2-8322-5144-7

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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PIEZOELECTRIC SENSORS –

Part 2: Chemical and biochemical sensors

FOREWORD

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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- withdrawn,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.

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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.