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Piezoelectric sensors - Part 1: Generic specifications

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/19

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**Piezoelectric sensors - Part 1: Generic specifications
(IEC 63041-1:2017)**

Capteurs piézoélectriques - Partie 1: Spécifications
génériques
(IEC 63041-1:2017)

Piezoelektrische Sensoren - Teil 1: Fachgrundspezifikation
(IEC 63041-1:2017)

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EN IEC 63041-1:2018 (E)**European foreword**

The text of document 49/1220/CDV, future edition 1 of IEC 63041-1, 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 63041-1:2018.

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-01-17

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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 60689	NOTE	Harmonized as EN 60689.
IEC 60758:2016	NOTE	Harmonized as EN 60758:2016 (not modified).
IEC 60862-1	NOTE	Harmonized as EN 60862-1.
IEC 61019-1	NOTE	Harmonized as EN 61019-1.
IEC 61240:2016	NOTE	Harmonized as EN 61240:2017 (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).
ISO 80000 (series)	NOTE	Harmonized as EN ISO 80000 (series).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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 60122-2-1	-	Quartz crystal units for frequency control and selection. Part 2: Guide for the use of quartz crystal units for frequency control and selection -. Section one : Quartz crystal units for microprocessor clock supply	-	-
IEC 60444-9	-	Measurement of quartz crystal unit parameters -- Part 9: Measurement of spurious resonances of piezoelectric crystal units	EN 60444-9	-
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	-	-
ISO 2859-1	1999	Sampling procedures for inspection by attributes -- Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection	-	-
ISO 80000-1	2009	Quantities and units -- Part 1: General	EN ISO 80000-1	2013



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INTERNATIONAL STANDARD

**Piezoelectric sensors –
Part 1: Generic specifications**





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INTERNATIONAL STANDARD

Piezoelectric sensors – Part 1: Generic specifications

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PIEZOELECTRIC SENSORS –**Part 1: Generic specifications**

FOREWORD

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International Standard IEC 63041-1 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
49/1220/CDV	49/1249/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.

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

PIEZOELECTRIC SENSORS –

Part 1: Generic specifications

1 Scope

This part of IEC 63041 applies to piezoelectric sensors of resonator, delay-line and non-acoustic types, which are used in physical and engineering sciences, chemistry and biochemistry, medical and environmental sciences, etc.

The purpose of this document is to specify the terms and definitions for the piezoelectric sensors, and to make sure from a technological perspective that users understand the state-of-art piezoelectric sensors and how to use them correctly.

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 60122-2-1, *Quartz crystal units for frequency control and selection – Part 2: Guide to the use of quartz crystal units for frequency control and selection – Section One: Quartz crystal units for microprocessor clock supply*

IEC 60444-9, *Measurement of quartz crystal unit parameters – Part 9: Measurement of spurious resonances of piezoelectric crystal units*

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

ISO 2859-1:1999, *Sampling procedures for inspection by attributes – Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

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

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