ICS 31.140 SLOVENSKÁ TECHNICKÁ NORMA August 2018

STN	**Piezoelektrické, dielektrické a elektrostatické oscilátory stanovenej kvality Časť 1: Všeobecná špecifikácia**	**STN EN 60679-1** 35 8430

Piezoelectric, dielectric and electrostatic oscillators of assessed quality - Part 1: Generic specification

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. 07/18

Obsahuje: EN 60679-1:2017, IEC 60679-1:2017

Oznámením tejto normy sa od 30.08.2020 ruší
STN EN 60679-1 (35 8430) z februára 2008

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60679-1

November 2017

ICS 31.140

Supersedes EN 60679-1:2007

English Version

Piezoelectric, dielectric and electrostatic oscillators of assessed quality - Part 1: Generic specification (IEC 60679-1:2017)

Oscillateurs piézoélectriques, diélectriques et électrostatiques sous assurance de la qualité - Partie 1: Spécification générique
(IEC 60679-1:2017)

Piezoelektrische, dielektrische und elektrostatische Oszillatoren mit bewerteter Qualität - Teil 1: Fachgrundspezifikation
(IEC 60679-1:2017)

This European Standard was approved by CENELEC on 2017-08-30. 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 CEN-CENELEC Management Centre 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 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 60679-1:2017 E

EN 60679-1:2017

European foreword

The text of document 49/1229/FDIS, future edition 4 of IEC 60679-1, 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 60679-1:2017.

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)	2018-05-30
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-08-30

This document supersedes EN 60679-1:2007.

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 60679-1:2017 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 60068-2-6	NOTE	Harmonized as EN 60068-2-6.
IEC 60068-2-17	NOTE	Harmonized as EN 60068-2-17.
IEC 60068-2-27	NOTE	Harmonized as EN 60068-2-27.
IEC 60068-2-64	NOTE	Harmonized as EN 60068-2-64.
IEC 60122-1:2002	NOTE	Harmonized as EN 60122-1:2002 (not modified).
IEC 60679-3:2012	NOTE	Harmonized as EN 60679-3:2013 (not modified).
IEC 60679-4	NOTE	Harmonized as EN 60679-4.
IEC 60679-5	NOTE	Harmonized as EN 60679-5.
IEC 61019-1:2004	NOTE	Harmonized as EN 61019-1:2005 (not modified).
IEC 61019-2:2005	NOTE	Harmonized as EN 61019-2:2005 (not modified).
IEC 61837-1:2012	NOTE	Harmonized as EN 61837-1:2012 (not modified).
IEC 61837-2:2011	NOTE	Harmonized as EN 61837-2:2011 (not modified).
IEC 61837-3:2015	NOTE	Harmonized as EN 61837-3:2015 (not modified).
IEC 61837-4:2015	NOTE	Harmonized as EN 61837-4:2015 (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 TR 61000-4-1	-	Electromagnetic compatibility (EMC) - Part 4-1: Testing and measurement techniques - Overview of the IEC 61000-4 series	-	-
IEC 60027	series	Letter symbols to be used in electrical technology	EN 60027	series
IEC 60050-561	-	International electrotechnical vocabulary - Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection	-	-
IEC 60469	-	Transitions, pulses and related waveforms - Terms, definitions and algorithms	EN 60469	-
IEC 60617	-	Standard data element types with associated classification scheme for electric components - Part 4: IEC reference collection for standard data element types and component classes	-	-
IEC 60748-2	-	Semiconductor devices - Integrated circuits - Part 2: Digital integrated circuits		-
IEC 60749-26	-	Semiconductor devices - Mechanical and climatic test methods - Part 26: Electrostatic discharge (ESD) sensitivity testing - Human body model (HBM)	EN 60749-26	-
IEC 60749-27	-	Semiconductor devices - Mechanical and climatic test methods - Part 27: Electrostatic discharge (ESD) sensitivity testing - Machine model (MM)	EN 60749-27	-
IEC 61340-5-1	-	Electrostatics - Part 5-1: Protection of electronic devices from electrostatic phenomena - General requirements	EN 61340-5-1	-
IEC 62884-1	2017	Measurement techniques of piezoelectric, dielectric and electrostatic oscillators - Part 1: Basic methods for the measurement	EN 62884-1	2017
ISO 80000-1	-	Quantities and units - Part 1: General	EN ISO 80000-1	-

IEC 60679-1

Edition 4.0 2017-07

INTERNATIONAL STANDARD

Piezoelectric, dielectric and electrostatic oscillators of assessed quality – Part 1: Generic specification

IEC 60679-1:2017-07(en)

IEC 60679-1

Edition 4.0 2017-07

INTERNATIONAL STANDARD

Piezoelectric, dielectric and electrostatic oscillators of assessed quality – Part 1: Generic specification

INTERNATIONAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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PIEZOELECTRIC, DIELECTRIC AND ELECTROSTATIC OSCILLATORS OF ASSESSED QUALITY –

Part 1: Generic specification

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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8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60679-1 has been prepared by IEC technical committee TC 49: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection.

This fourth edition cancels and replaces the third edition published in 2007. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) the title has been changed;
b) additional matters related to oscillator using SAW or MEMS resonator in "Terms, definitions and general information" have been included;
c) measurement methods of IEC 60679-1:2007 have been removed (they will be moved to IEC 62884 series);

d) the content of Annex A has been extended;

e) a new term and definition DIXO (Digital interfaced Crystal Oscillator) has been added;

f) a new term and definition SSXO (Spread Spectrum Crystal Oscillator) has been added;

g) Annex D has been added.

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

FDIS	Report on voting
49/1229/FDIS	49/1233/RVD

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 of the IEC 60679 series, published under the general title *piezoelectric, dielectric and electrostatic oscillators of assessed quality* can be found on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

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

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

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

PIEZOELECTRIC, DIELECTRIC AND ELECTROSTATIC OSCILLATORS OF ASSESSED QUALITY –

Part 1: Generic specification

1 Scope

This part of IEC 60679 specifies general requirements for piezoelectric, dielectric and electrostatic oscillators, including Dielectric Resonator Oscillators (DRO) and oscillators using FBAR (hereinafter referred to as "Oscillator"), of assessed quality using either capability approval or qualification approval procedures.

NOTE Dielectric Resonator Oscillators (DRO) and oscillators using FBAR are under consideration.

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, *International electrotecnical vocabulary – Part 561: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection.* Available at www.electropedia.org

IEC 60469, *Transitions, pulses and related waveforms – Terms, definitions and algorithms*

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

IEC 60748-2, *Semiconductor devices – Integrated circuits – Part 2: Digital integrated circuits*

IEC 60749-26, *Semiconductor devices – Mechanical and climatic test methods – Part 26: Electrostatic discharge (ESD) sensitivity testing – Human body model (HBM)*

IEC 60749-27, *Semiconductor devices – Mechanical and climatic test methods – Part 27: Electrostatic discharge (ESD) sensitivity testing – Machine model (MM)*

IEC TR 61000-4-1, *Electromagnetic compatibility (EMC) – Part 4-1: Testing and measurement techniques – Overview of the IEC 61000-4 series*

IEC 61340-5-1, *Electrostatics – Part 5-1: Protection of electronic devices from electrostatic phenomena – General requirements*

IEC 62884-1:2017, *Measurement techniques of piezoelectric, dielectric, and electrostatic oscillators – Part 1: Basic methods for the measurement*

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

Where any discrepancies occur for any reason, documents shall rank in the following order of precedence:

- detail specification;
- sectional specification;
- generic specification;
- any other international documents (for example of the IEC) to which reference is made.

The same order of precedence shall apply to equivalent national documents.