



SLOVENSKI STANDARD
SIST EN 60679-1:2002
01-september-2002

Quartz crystal controlled oscillators of assessed quality - Part 1: Generic specification (IEC 60679-1:1997)

Quartz crystal controlled oscillators of assessed quality -- Part 1: Generic specification

Quarzoszillatoren mit bewerteter Qualität -- Teil 1: Fachgrundspezifikation

Oscillateurs pilotés par quartz sous assurance de la qualité -- Partie 1: Spécification générique

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Ta slovenski standard je istoveten z: EN 60679-1:1998

SIST EN 60679-1:2002
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ICS:

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Piezoelectric and dielectric devices

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60679-1

February 1998

ICS 31.140

Supersedes EN 169000:1992 and its amendment

English version

**Quartz crystal controlled oscillators of assessed quality
Part 1: Generic specification
(IEC 60679-1:1997)**

Oscillateurs pilotés par quartz
sous assurance de la qualité
Partie 1: Spécification générique
(CEI 60679-1:1997)

Quarzoszillatoren mit bewerteter
Qualität
Teil 1: Fachgrundspezifikation
(IEC 60679-1:1997)

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This European Standard was approved by CENELEC on 1998-01-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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 49/385/FDIS, future edition 2 of IEC 60679-1, prepared by IEC TC 49, Piezoelectric and dielectric devices for frequency control and selection, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60679-1 on 1998-01-01.

This European Standard supersedes EN 169000:1992 and its amendment A1:1998.

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) 1998-10-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) -

NOTE: The latest date of withdrawal will be fixed when all parts of EN 60679, which are to replace EN 169000 and its related specifications, are approved.

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A and ZA are normative and annex B is informative.

Annex ZA has been added by CENELEC.

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Endorsement notice

SIST EN 60679-1:2002

The text of the International Standard IEC 60679-1:1997 was approved by CENELEC as a European Standard without any modification.

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

IEC 60027-2 NOTE: Harmonized, together with supplements A:1975 and B:1980, as HD 245.2 S1:1983 (not modified).

IEC 61000-4-3 NOTE: Harmonized as EN 61000-4-3:1996 (not modified).



Annex ZA (normative)

Normative references to international publications
with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 60027	series	Letter symbols to be used in electrical technology	HD 245	series
IEC 60050(561)	1991	International Electrotechnical Vocabulary (IEV) Chapter 561: Piezoelectric devices for frequency control and selection	-	-
IEC 60068-1 + corr. October + A1	1988 1988 1992	Environmental testing Part 1: General and guidance	SIST EN 60679-1:2002 EN 60068-1	1994
IEC 60068-2-1 A1 A2	1990 1993 1994	Part 2: Tests - Tests A: Cold	EN 60068-2-1 A1 A2	1993 1993 1994
IEC 60068-2-2 A1 A2	1974 1993 1994	Part 2: Tests - Test B: Dry heat	EN 60068-2-2 ¹⁾ A1 A2	1993 1993 1994
IEC 60068-2-3	1985 ²⁾	Part 2: Tests - Test Ca: Damp heat, steady state	HD 323.2.3 S2	1987
IEC 60068-2-6 + corr. March	1995 1995	Part 2: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	1995
IEC 60068-2-7 + A1	1983 1986	Part 2: Tests - Test Ga and guidance: Acceleration, steady state	EN 60068-2-7	1993
IEC 60068-2-10	1988	Part 2: Tests - Test J and guidance: Mould growth	HD 323.2.10 S3	1988
IEC 60068-2-13	1983	Part 2: Tests - Test M: Low air pressure	HD 323.2.13 S1	1987

1) EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2.

2) IEC 60068-2-3:1985 is a reprint of IEC 60068-2-3:1969 + A1:1984.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-14	1984	Part 2: Tests - Test N: Change of temperature		
+ A1	1986		HD 323.2.14 S2	1987
IEC 60068-2-17	1994	Part 2: Tests - Test Q: Sealing	EN 60068-2-17	1994
IEC 60068-2-20	1979	Part 2: Tests - Test T: Soldering		
+ A2	1987		HD 323.2.20 S3	1988
IEC 60068-2-21	1983	Part 2: Tests - Test U: Robustness of terminations and integral mounting devices		
+ corr. November	1991			
+ A1	1985		EN 60068-2-21	1997
A2	1991		A2	1997
A3	1992		A3	1997
IEC 60068-2-27	1987	Part 2: Tests - Test Ea and guidance: Shock	EN 60068-2-27	1993
IEC 60068-2-29	1987	Part 2: Tests - Test Eb and guidance: Bump	EN 60068-2-29	1993
+ corrigendum				
IEC 60068-2-30	1980	Part 2: Tests - Test Db and guidance: Damp heat, cyclic (12 + 12 hour cycle)		
+ A1	1985		HD 323.2.30 S3	1988
IEC 60068-2-32	1975	Part 2: Tests - Test Ed: Free fall		
+ A2	1990		HD 323.2.32 S2	1991
IEC 60068-2-36	1973	Part 2: Tests - Test Fdb: Random vibration wide band - Reproducibility Medium		
+ A1	1983		HD 323.2.36 S1	1988
IEC 60068-2-45	1980	Part 2: Tests - Test Xa and guidance: Immersion in cleaning solvents	EN 60068-2-45	1992
A1	1993		A1	1993
IEC 60068-2-52	1996	Part 2: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution)	EN 60068-2-52	1996
IEC 60068-2-58	1989	Part 2: Tests - Test Td: Solderability, resistance to dissolution of metallization and to soldering heat of Surface Mounting Devices (SMD)	HD 323.2.58 S1	1991
IEC 60469-1	1987	Pulse techniques and apparatus Part 1: Pulse terms and definitions	-	-
IEC 60617	series	Graphical symbols for diagrams	EN 60617	series

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60679-4	1997	Quartz crystal controlled oscillators of assessed quality Part 4: Sectional specification - Capability approval	EN 60679-4	1998
IEC 60679-5	- ³⁾	Part 5: Sectional specification - Qualification approval	-	-
IEC 60801-2	1991	Electromagnetic compatibility for industrial-process measurement and control equipment Part 2: Electrostatic discharge requirements	EN 60801-2	1993
IEC QC 001001	1986	Basic rules of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-
A2	1994		-	-
A3	1995		-	-
IEC QC 001002	1986	Rules of procedure of the IEC Quality Assessment System for Electronic Components (IECQ)	-	-
A2	1994		-	-
IEC QC 001005	1996	Register of firms, products and services approved under the IECQ System, including ISO 9000	-	-
ISO 31-3	1992	Quantities and units Part 3: Mechanics	-	-
ISO 1000	1992	SI units and recommendations for the use of their multiples and of certain other units	-	-

3) To be published.

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NORME
INTERNATIONALE

CEI
IEC

INTERNATIONAL
STANDARD

60679-1
QC 690000

Deuxième édition
Second edition
1997-12

**Oscillateurs pilotés par quartz sous assurance
de la qualité –**

**Partie 1:
Spécification générique**

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**Quartz crystal controlled oscillators
of assessed quality –**

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**Part 1:
Generic specification**

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE **XC**

Pour prix, voir catalogue en vigueur
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**QUARTZ CRYSTAL CONTROLLED OSCILLATORS
OF ASSESSED QUALITY –**
Part 1: Generic specification

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The 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 49: Piezoelectric and dielectric devices for frequency control and selection.

The second edition cancels and replaces the first edition published in 1980 and constitutes a technical revision.

International Standard IEC 60679-1 is the first part of a new edition of IEC series 60679 updated to include the test requirements of the IECQ system, and this edition is based on the relevant IEC standards.

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

FDIS	Report on voting
49/385/FDIS	49/389/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.

IEC 60679 consists of the following parts under the general title: *Quartz crystal controlled oscillators of assessed quality*:

Part 1: Generic specification (IEC 60679-1)

Part 2: Guide to the use of quartz crystal controlled oscillators (IEC 60679-2)

Part 3: Standard outlines and lead connections (IEC 60679-3)

Part 4: Sectional specification – Capability approval (IEC 60679-4)

Part 4-1: Blank detail specification – Capability approval (IEC 60679-4-1)

Part 5: Sectional specification – Qualification approval (IEC 60679-5)

Part 5-1: Blank detail specification – Qualification approval (IEC 60679-5-1)

The QC number which appears on the front cover of this publication in the specification number is the IEC Quality Assessment System for Electronic Components (IECQ).

Annex A forms an integral part of the standard.

Annex B is for information only.

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QUARTZ CRYSTAL CONTROLLED OSCILLATORS OF ASSESSED QUALITY –

Part 1: Generic specification

1 General

1.1 Scope

This part of IEC 60679 specifies the methods of test and general requirements for quartz crystal controlled oscillators of assessed quality using either capability approval or qualification approval procedures.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60679. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 60679 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

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IEC 60027, *Letter symbols to be used in electrical technology*

IEC 60050-561:1991, *International Electrotechnical Vocabulary (IEV) – Part 561: Piezoelectric devices for frequency control and selection*

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IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*
Amendment 1 (1992)

IEC 60068-2-1:1990, *Environmental testing – Part 2: Tests – Tests A: Cold*
Amendment 1 (1993)
Amendment 2 (1994)

IEC 60068-2-2:1974, *Environmental testing – Part 2: Tests – Tests B: Dry heat*
Amendment 1 (1993)
Amendment 2 (1994)

IEC 60068-2-3:1985, *Environmental testing – Part 2: Tests – Test Ca: Damp heat, steady state*

IEC 60068-2-6:1995, *Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-7:1983, *Environmental testing – Part 2: Tests – Test Ga and guidance: Acceleration, steady state*
Amendment 1 (1986)

IEC 60068-2-10:1988, *Environmental testing – Part 2: Tests – Test J and guidance: Mould growth*

IEC 60068-2-13:1983, *Environmental testing – Part 2: Tests – Test M: Low air pressure*