
Piezoelectric filters of assessed quality - Part 1: Generic specification (IEC 60368-1:2000)

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English version

Piezoelectric filters of assessed quality
Part 1: Generic specification
(IEC 60368-1:2000)

Filtres piézoélectriques sous assurance de
la qualité
Partie 1: Spécification générique
(CEI 60368-1:2000)

Piezoelektrische Filter mit bewerteter
Qualität
Teil 1: Fachgrundspezifikation
(IEC 60368-1:2000)

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This European Standard was approved by CENELEC on 2000-04-01. 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.

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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 49/448/FDIS, future edition 1 of IEC 60368-1, 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 60368-1 on 2000-04-01.

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) 2001-01-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-04-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60368-1:2000 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60617 [SIST EN 60368-1:2002](https://standards.iteh.ai/catalog/standards/sist/fa988f20-dc90-44ef-b8c8-5dc3c6308b63/sist-en-60368-1-2002)
NOTE: Harmonized in the series EN 60617 (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	-	-
IEC 60050-561	1991	International electrotechnical vocabulary - Chapter 561: Piezoelectric devices for frequency control and selection	-	-
IEC 60068-1	1988	Environmental testing Part 1: General and guidance	EN 60068-1 ¹⁾	1994
IEC 60068-2-1	1990	Part 2: Tests - Tests A: Cold	EN 60068-2-1	1993
IEC 60068-2-2	1974	Part 2: Tests - Test B: Dry heat	EN 60068-2-2 ²⁾	1993
IEC 60068-2-3	1969	Part 2: Tests - Test Ca: Damp heat, steady state	HD 323.2.3 S2 ³⁾	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	1983	Part 2: Tests - Test Ga and guidance: Acceleration, steady state	EN 60068-2-7 ⁴⁾	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	EN 60068-2-13	1999

1) EN 60068-1 includes the corrigendum October 1988 + A1:1992 to IEC 60068-1.

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

3) HD 323.2.3 S2 includes A1:1984 to IEC 60068-2-3.

4) EN 60068-2-7 includes A1:1986 to IEC 60068-2-7.

<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	EN 60068-2-14 ⁵⁾	1999
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	HD 323.2.20 S3 ⁶⁾	1988
IEC 60068-2-21	1999	Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN 60068-2-21	1999
IEC 60068-2-27	1987	Part 2: Tests - Test Ea and guidance: Shock	EN 60068-2-27	1993
IEC 60068-2-29 + corrigendum	1987	Part 2: Tests - Test Eb and guidance: Bump	EN 60068-2-29	1993
IEC 60068-2-30	1980	Part 2: Tests - Test Db and guidance: Damp heat, cyclic (12 + 12 hour cycle)	EN 60068-2-30 ⁷⁾	1999
IEC 60068-2-32	1975	Part 2: Tests - Test Ed: Free fall	EN 60068-2-32 ⁸⁾	1993
IEC 60068-2-45	1980	Part 2: Tests - Test Xa and guidance: Immersion in cleaning solvents	EN 60068-2-45	1992
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	1999	Part 2-58: Tests - Test Td: Test methods for solderability, resistance to dissolution of metallization and to soldering heat of surface mounting devices (SMD)	EN 60068-2-58	1999
IEC 60068-2-64 + corr. October	1993 1993	Part 2: Test methods - Test Fh: Vibration, broad-band random (digital control) and guidance	EN 60068-2-64	1994
IEC 60368-4	⁹⁾	Piezoelectric filters of assessed quality Part 4: Sectional specification - Capability approval	-	-
IEC 60642	1979	Piezoelectric ceramic resonators and resonator units for frequency control and selection. Chapter I: Standard values and conditions. Chapter II: Measuring and test conditions	-	-

5) EN 60068-2-14 includes A1:1986 to IEC 60068-2-14.

6) HD 323.2.20 S3 includes A2:1987 to IEC 60068-2-20.

7) EN 60068-2-30 includes A1:1985 to IEC 60068-2-30.

8) EN 60068-2-32 includes A2:1990 to IEC 60068-2-32.

9) To be published.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-2	1995	Electromagnetic compatibility (EMC) Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	1995
A1	1998		A1	1998
IEC 61178-1	1993	Quartz crystal units - A specification in the IEC Quality Assessment System for electronic Components (IECQ) Part 1: Generic specification	-	-
IEC QC 001002-2	1998	IEC Quality Assessment System for Electronic Components (IECQ) - Basic rules Part 2: Documents	-	-
IEC QC 001002-3	1998	Part 3: Approval procedures	-	-
ISO 1000	1992	SI units and recommendations for the use of their multiples and of certain other units	-	-

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CEI
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60368-1

QC 640000

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Filtres piézoélectriques sous assurance
de la qualité –

Partie 1:
Spécification générique

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Piezoelectric filters of assessed quality –

Part 1: [SIST EN 60368-1:2002](https://standards.iteh.ai/catalog/standards/sist/fa988f20-dc90-44ef-b8c8-1033-60368-1-2002)

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Generic specification

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PIEZOELECTRIC FILTERS 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.
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- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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International Standard IEC 60368-1 has been prepared by IEC technical committee 49: Piezoelectric and dielectric devices for frequency control and selection.

This fourth edition of IEC 60368-1 cancels and replaces the third edition published in 1992 and constitutes a technical revision.

International Standard IEC 60368-1 is the first part of a new edition of the IEC standard series for piezoelectric filters, updated to include the test requirements of the IECQ System.

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

FDIS	Report on voting
49/448/FDIS	49/450/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

IEC 60368 consists of the following parts under the general title: Piezoelectric filters of assessed quality:

- Part 1: Generic specification (IEC 60368-1)
- Part 2: Guide to the use of piezoelectric filters –
Part 2-1: Quartz crystal filters (IEC 60368-2-1)
Part 2-2: Piezoelectric ceramic filters (IEC 60368-2-2)
- Part 3: Standard outlines (IEC 60368-3, under consideration)
- Part 4: Sectional specification – Capability approval (IEC 60368-4, to be published)
Part 4-1: Blank detail specification – Capability approval (IEC 60368-4-1, to be published)
- Part 5: Sectional specification – Qualification approval (IEC 60368-5, under consideration)
Part 5-1: Blank detail specification – Qualification approval (IEC 60368-5-1, under consideration)

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

The committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

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

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