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Piezoelectric filters of assessed quality - Part 4: Sectional specification - Capability approval (IEC 60368-4:2000)

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**Piezoelectric filters of assessed quality  
Part 4: Sectional specification -  
Capability approval  
(IEC 60368-4:2000)**

Filtres piézoélectriques sous  
assurance de la qualité  
Partie 4: Spécification intermédiaire -  
Agrément de savoir-faire  
(CEI 60368-4:2000)

Piezelektrische Filter mit  
bewerteter Qualität  
Teil 4: Rahmenspezifikation -  
Befähigungsanerkennung  
(IEC 60368-4:2000)

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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 49/459/FDIS, future edition 1 of IEC 60368-4, 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 60368-4 on 2000-09-01.

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) 2001-06-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2003-09-01

Annexes designated "normative" are part of the body of the standard.  
In this standard, annexes A, B, C and ZA are normative.  
Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60368-4:2000 was approved by CENELEC as a European Standard without any modification.

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## 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 60368-1	2000	Piezoelectric filters of assessed quality Part 1: Generic specification	EN 60368-1	2000
IEC 60368-4-1	2000	Part 4-1: Blank detail specification - Capability approval	EN 60368-4-1	2000
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 001002-3	1998	IEC Quality Assessment System for Electronic Components (IECQ) - Basic rules Part 3: Approval procedures	-	-
IEC QC 001005		Register of firms, products and services approved under the IECQ System including ISO 9000	-	-

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Piezoelectric filters of assessed quality –

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Part 4:

Sectional specification –  
Capability approval

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International Electrotechnical Commission  
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Pour prix, voir catalogue en vigueur  
For price, see current catalogue

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## PIEZOELECTRIC FILTERS OF ASSESSED QUALITY –

Part 4: Sectional specification –  
Capability approval

## 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 specifications, 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 60368-4 has been prepared by IEC technical committee 49: Piezoelectric and dielectric devices for frequency control and selection.

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

FDIS	Report on voting
49/459/FDIS	49/470/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.

It forms part 4 of a series of standards for piezoelectric filters of assessed quality and constitutes the sectional specification – Capability approval.

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

- Part 1: Generic specification
- Part 2: Guide to the use of piezoelectric filters – Section One: Quartz crystal filters
- Part 2: Guide to the use of piezoelectric filters – Section 2: Piezoelectric ceramic filters
- Part 3: Standard outlines
- Part 4: Sectional specification – Capability approval
- Part 4-1: Blank detail specification – Capability approval

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).

Annexes A, B, and C form an integral part of this standard.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

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

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## PIEZOELECTRIC FILTERS OF ASSESSED QUALITY –

### Part 4: Sectional specification – Capability approval

#### 1 General

##### 1.1 Scope

This part of IEC 60368 applies to piezoelectric filters as custom-built products or as standard catalogue items whose quality is assessed on the basis of capability approval.

It prescribes the preferred ratings and characteristics, with appropriate tests and measuring methods contained in the generic specification, IEC 60368-1, and gives the general performance requirements to be used in detail specifications for piezoelectric filters.

The concept of preferred values is directly applicable to standard catalogue items, but does not necessarily apply to custom-built products.

##### 1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

<https://standards.iteh.ai/catalog/standards/sist/141112f0-abd1-4299-b3f9-7d6d3ca8276/sist-en-60368-4-2000>

IEC 60368-1:2000, *Piezoelectric filters of assessed quality – Part 1: Generic specification*

IEC 60368-4-1:2000, *Piezoelectric filters of assessed quality – Part 4-1: Blank detail specification – Capability approval*

IEC 61178-1:1993, *Quartz crystal units – Specification in the IEC Quality Assessment System for Electronic Components (IECQ) – Part 1: Generic specification*

IEC QC 001002-3:1998, *IEC Quality Assessment System for Electronic Components (IECQ) – Rules of Procedure – Part 3: Approval procedures*

IEC QC 001005, *Register of Firms, Products and Services approved under the IECQ System, including ISO 9000*