



Generic Specification: Quartz crystal controlled oscillators

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 169000:2008 sisaldab Euroopa standardi EN 169000:1992 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 19.08.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.12.1992.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 169000:2008 consists of the English text of the European standard EN 169000:1992.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 19.08.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 15.12.1992.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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UDC

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English version

Generic Specification: Quartz crystal controlled oscillators

Spécification Générique:
Oscillateurs pilotes par quartz

Fachgrundspezifikation:
Quarzoszillatoren

This European Standard was approved by CENELEC Electronic Components Committee (CECC) on 3 December 1992. 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 CECC General Secretariat of the CECC 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 CECC General Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom. The membership of the CECC is identical, with the exception of the national electrotechnical committees of Greece, Iceland and Luxembourg.

CECC

CENELEC Electronic Components Committee
Comité des Composants Electroniques du CENELEC
CENELEC Komitee für Bauelemente der Elektronik

General Secretariat: Gartenstr. 179, D-6000 Frankfurt/Main 70

Foreword

This specification was prepared by CECC WG 17 'Piezoelectric devices for frequency control and selection'.

It is based, wherever possible, on the Publications of the International Electrotechnical Commission (IEC) and in particular on IEC 679-1 : *Quartz crystal controlled oscillators: Part 1 : General information, test conditions and methods*.

The CECC voting procedure for the conversion of publication CECC 69 000 Issue 1 : 1991 to EN has resulted in a positive vote.

The voting report [document CECC (Secretariat) 3253/11.92] has been submitted for formal approval and has been accepted. The reference document was approved by CECC as EN 169000 : 1992 on 3 December 1992.

The following dates were fixed:

- latest date of announcement of the EN at national level (doa) 1993-12-28
- latest date of publication of an identical national standard (dop) 1994-06-28
- latest date of declaration of national standards obsolescence 1994-06-28
- latest date of withdrawal of conflicting national standards (dow) 2003-12-28

Preface

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby acceptable in all member countries without further testing.

This specification has been formally approved by the CECC, and has been prepared for those countries taking part in the System who wish to issue national harmonized specifications for Quartz crystal controlled oscillators. It should be read in conjunction with the current regulations for the CECC System.

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FOREWORD

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby acceptable in all member countries without further testing.

This specification has been formally approved by the CECC, and has been prepared for those countries taking part in the System who wish to issue national harmonized specifications for QUARTZ CRYSTAL CONTROLLED OSCILLATORS. It should be read in conjunction with the current regulations for the CECC System.

At the date of printing of this specification, the member countries of the CECC are, Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

PREFACE

This specification was prepared by CECC WG 17 : Piezoelectric devices for frequency control and selection.

It is based, wherever possible, on the Publications of the International Electrotechnical Commission and in particular on IEC 679-1 : Quartz crystal controlled oscillators : Part 1 : General information, test conditions and methods.

The text of this specification was circulated to the CECC for voting in the document(s) indicated (listed) below and was ratified by the President of the CECC for printing as a CECC Specification.

<u>Document</u>	<u>Date of Voting</u>	<u>Report on the Voting</u>
CECC(Secretariat)2569	August 1990	CECC(Secretariat)2697
CECC(Secretariat)2714	February 1991	CECC(Secretariat)2775

SECTION 1 - SCOPE

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

SECTION 2 - GENERAL

2.1 Order of precedence

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

- the detail specification
- the sectional specification
- the generic specification
- the FEN internal regulations
- 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.

2.2 Related documents

ISO 1000	(1973)	SI units and recommendations for use of their multiples and of certain other units
IEC 27-1	(1971)	Letter symbols to be used in electrical technology : Part 1 : General
IEC 27-2	(1972)	Letter symbols to be used in electrical technology: Part 2 : Telecommunications and electronics
IEC 50	-	International Electrotechnical Vocabulary
IEC 50 (561)	-	International Electrotechnical Vocabulary Chapter 561: Piezoelectric devices for frequency control and selection
IEC 68	-	Basic environmental testing procedures
IEC 68-1	(1981)	Part 1 : General and guidance
IEC 68-2	-	Part 2 : Tests
IEC 68-2-1	(1974) (1983) (1976)	Tests A : Cold Amendment No.1 Supplement A

IEC 68-2-2	(1974) (1976)	Test B : Dry heat Supplement A
IEC 68-2-3	(1969) (1984)	Test Ca : Damp heat, steady state Amendment No. 1
IEC 68-2-6	(1982) (1983) (1985)	Test Fc and guidance : Vibration (sinusoidal) Amendment No.1 Amendment No.2
IEC 68-2-7	(1983) (1986)	Test Ga : Acceleration, steady state Amendment No.1
IEC 68-2-10	(1988)	Test J : Mould growth
IEC 68-2-13	(1983)	Test M : Low air pressure
IEC 68-2-14	(1984) (1986)	Test N : Change of temperature Amendment No.1
IEC 68-2-17	(1978) (1985)	Test Q : Sealing Amendment No.1
IEC 68-2-20	(1979) (1986)	Test T : Soldering Amendment No.1
IEC 68-2-21	(1983) (1985)	Test U : Robustness of terminations Amendment No.1
IEC 68-2-27	(1987)	Test Ea : Shock
IEC 68-2-29	(1987)	Test Eb : Bump
IEC 68-2-30	(1980) (1985)	Test Db : Damp heat cyclic Amendment No.1
IEC 68-2-32	(1975) (1982)	Test Ed : Free fall Amendment No.1
IEC 68-2-36	(1973) (1983)	Test Fdb : Random vibration wide band - reproducibility medium Amendment No. 1
IEC 68-2-45	(1980)	Test XA : Immersion in cleaning solvents.
IEC 68-2-52	(1984)	Test Kb : Salt mist, cyclic
IEC 68-2-58	(1989)	Solderability, resistance to dissolution of metallization and to soldering heat of Surface Mounting Devices.
IEC 122-1	(1976) (1983)	Quartz crystal units for frequency control and selection Part 1 : Standard values and test conditions. Amendment No. 1
IEC 410	(1973)	Sampling plans and procedures for inspection by attributes

IEC 617	-	Graphical symbols for diagrams
IEC 679-1	(1980)	Quartz crystal controlled oscillators Part 1 : General information, test conditions and methods
	(1985)	Amendment No.1
IEC 679-2	(1981)	Part 2 : Guide to the use of quartz crystal controlled oscillators
IEC 801-2	(1984)	Electromagnetic compatibility for industrial-process measurement and control equipment Part 2 : Electrostatic discharge requirements
	(1986)	FEN internal regulations
CECC 00 114/I	Issue 1 (1990)	Quality assessment procedures Part I : Approval of manufacturers and other organizations
CECC 00 114/II	Issue I (1991)	Quality assessment procedures Part II : Qualification approval of electronic components
CECC 00 114/III	Issue I (1989)	Quality assessment procedures Part III : Capability approval of an electronic component manufacturing activity
CECC 00 109	(1974)	Certified test records
CECC 00 111	(1980)	Specifications

2.3 Units, symbols and terminology

2.3.1 General

Units, graphical symbols, letter symbols and terminology shall, wherever possible, be taken from the following documents:

ISO 1000	SI units and recommendations for the use of multiples and of certain other units
IEC 27	Letter symbols to be used in electrical technology
IEC 50	International Electrotechnical Vocabulary
IEC 50 (561)	International Electrotechnical Vocabulary Chapter 561 : Piezoelectric devices for frequency control and selection.
IEC 679	Quartz crystal controlled oscillators

The following paragraphs contain additional terminology applicable to quartz crystal controlled oscillators and the latest IEC 561 definitions.