



**NSAI**  
Standards

Irish Standard  
I.S. EN 61837-2:2011&A1:2014

# Surface mounted piezoelectric devices for frequency control and selection - Standard outlines and terminal lead connections -- Part 2: Ceramic enclosures

**I.S. EN 61837-2:2011&A1:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

EN 61837-2:2011/A1:2014

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61837-2:2011/A1**

May 2014

ICS 31.140

English Version

Surface mounted piezoelectric devices for frequency control and  
selection - Standard outlines and terminal lead connections -  
Part 2: Ceramic enclosures  
(IEC 61837-2:2011/A1:2014)

Dispositifs piézoélectriques à montage en surface pour la  
commande et le choix de la fréquence - Encombrements  
normalisés et connexions des sorties - Partie 2: Enveloppes  
en céramique  
(CEI 61837-2:2011/A1:2014)

Oberflächenmontierbare piezoelektrische Bauteile zur  
Frequenzstabilisierung und -selektion - Norm-  
Gehäusemaße und Anschlüsse - Teil 2: Keramikgehäuse  
(IEC 61837-2:2011/A1:2014)

This amendment A1 modifies the European Standard EN 61837-2:2011; it was approved by CENELEC on 2014-04-18. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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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**

## **Foreword**

The text of document 49/1078/CDV, future edition 2 of IEC 61837-2:2011/A1, 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 61837-2:2011/A1:2014.

The following dates are fixed:

- latest date by which the document has to be (dop) 2015-01-18  
implemented at national level by  
publication of an identical national  
standard or by endorsement
- latest date by which the national (dow) 2017-04-18  
standards conflicting with the  
document have to be withdrawn

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## **Endorsement notice**

The text of the International Standard IEC 61837-2:2011/A1:2014 was approved by CENELEC as a European Standard without any modification.

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 61837-2**

July 2011

ICS 31.140

Supersedes EN 61837-2:2000

English version

**Surface mounted piezoelectric devices for frequency control and  
selection -  
Standard outlines and terminal lead connections -  
Part 2: Ceramic enclosures  
(IEC 61837-2:2011)**

Dispositifs piézoélectriques à montage en  
surface pour la commande et le choix de  
la fréquence -  
Encombrements normalisés et connexions  
des sorties -  
Partie 2: Enveloppes en céramique  
(CEI 61837-2:2011)

Oberflächenmontierbare piezoelektrische  
Bauteile zur Frequenzstabilisierung und -  
selektion -  
Norm-Gehäusemaße und Anschlüsse -  
Teil 2: Keramikgehäuse  
(IEC 61837-2:2011)

This European Standard was approved by CENELEC on 2011-07-01. 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.

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

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

## Foreword

The text of document 49/884/CDV, future edition 2 of IEC 61837-2, 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 was approved by CENELEC as EN 61837-2 on 2011-07-01.

This European Standard supersedes EN 61837-2:2000.

In EN 61837-2:2011, types of enclosures are renamed to express their features in their names for better understanding. The relative comparison of new types with old ones is listed in Table 1. New names of enclosures express configuration type, terminal lead numbers, sizes and arrangement of terminal pads. The details of definition are shown in Clause 3: Configuration of enclosures, and Clause 4: Designation of types.

Enclosures in EN 61837-2:2011 are based on EN 61240. In EN 61837-2:2011, 27 enclosures are added to EN 61837-2:2000, as follows:

QCC-12/1407A, DCC-2/1206A, QCC-10/9272A, DCC-4/9070A, DCC-2-8045B, DCC-6/7834B,  
DCC-6/7050A, QCC-10/7050A, DCC-4/6035C, DCC-2/6035C, QCC-8/5045A, DCC-4/5032A,  
DCC-4/5032C, DCC-2/4818C, DCC-2/4115C, QCC-8/3838A, DCC-6/3838A, DCC-4/3225C,  
DCC-2/3215C, QCC-8/3030B, DCC-6/3030A, DCC-6/2520A, DCC-4/2520C, DCC-4/2020C,  
DCC-4/2016C, DCC-4/1612C, DCC-2/1612C.

As a result, EN 61837-2:2011 contains a total of 38 enclosure types, which are listed in Table 1 – Designation of ceramic enclosures.

This standard is to be read in conjunction with EN 61240.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) 2012-04-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2014-07-01

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 61837-2:2011 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 60122-3:2010	NOTE	Harmonized as EN 60122-3:2010 (not modified).
IEC 60191-6:2009	NOTE	Harmonized as EN 60191-6:2009 (not modified).
IEC 60368-1:2000	NOTE	Harmonized as EN 60368-1:2000 (not modified).
IEC 60368-2-2:1996	NOTE	Harmonized as EN 60368-2-2:1999 (not modified).
IEC 60368-3:2001	NOTE	Harmonized as EN 60368-3:2001 (not modified).
IEC 60679-1:2007	NOTE	Harmonized as EN 60679-1:2007 (not modified).
IEC 60679-3:2001	NOTE	Harmonized as EN 60679-3:2001 (not modified).
IEC 60862-1:2003	NOTE	Harmonized as EN 60862-1:2003 (not modified).
IEC 60862-2:2002	NOTE	Harmonized as EN 60862-2:2002 (not modified).
IEC 60862-3:2003	NOTE	Harmonized as EN 60862-3:2003 (not modified).
IEC 61019-1:2004	NOTE	Harmonized as EN 61019-1:2005 (not modified).
IEC 61016-2:2005	NOTE	Harmonized as EN 61016-2:2005 (not modified).
ISO 1101:2004	NOTE	Harmonized as EN ISO 1101:2005 (not modified).

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## **Annex ZA** (normative)

### **Normative references to international publications with their corresponding European publications**

The following referenced documents are indispensable for the application 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 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 61240	-	Piezoelectric devices - Preparation of outline drawings of surface-mounted devices (SMD) for frequency control and selection - General rules	EN 61240	-





**IEC 61837-2**

Edition 2.0 2011-05

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

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**Surface mounted piezoelectric devices for frequency control and selection –  
Standard outlines and terminal lead connections –  
Part 2: Ceramic enclosures**

**Dispositifs piézoélectriques à montage en surface pour la commande et le choix  
de la fréquence – Encombrements normalisés et connexions des sorties –  
Partie 2: Enveloppes en céramique**



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**IEC 61837-2**

Edition 2.0 2011-05

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

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**Surface mounted piezoelectric devices for frequency control and selection –  
Standard outlines and terminal lead connections –  
Part 2: Ceramic enclosures**

**Dispositifs piézoélectriques à montage en surface pour la commande et le choix  
de la fréquence – Encombrements normalisés et connexions des sorties –  
Partie 2: Enveloppes en céramique**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **SURFACE MOUNTED PIEZOELECTRIC DEVICES FOR FREQUENCY CONTROL AND SELECTION – STANDARD OUTLINES AND TERMINAL LEAD CONNECTIONS –**

#### **Part 2: Ceramic enclosures**

#### **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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International Standard IEC 61837-2 has been prepared by IEC technical committee 49: Piezoelectric, dielectric and electrostatic devices and associated materials for frequency control, selection and detection.

This second edition cancels and replaces the first edition published in 2000. It constitutes a technical revision.

In this edition, types of enclosures are renamed to express their features in their names for better understanding. The relative comparison of new types with old ones is listed in Table 1. New names of enclosures express configuration type, terminal lead numbers, sizes and arrangement of terminal pads. The details of definition are shown in Clause 3: Configuration of enclosures, and Clause 4: Designation of types.

Enclosures in this new edition are based on IEC 61240. In this standard, 27 enclosures are added to the first edition of IEC 61837-2, as follows:

QCC-12/1407A, DCC-2/1206A, QCC-10/9272A, DCC-4/9070A, DCC-2-8045B, DCC-6/7834B, DCC-6/7050A, QCC-10/7050A, DCC-4/6035C, DCC-2/6035C, QCC-8/5045A, DCC-4/5032A, DCC-4/5032C, DCC-2/4818C, DCC-2/4115C, QCC-8/3838A, DCC-6/3838A, DCC-4/3225C, DCC-2/3215C, QCC-8/3030B, DCC-6/3030A, DCC-6/2520A, DCC-4/2520C, DCC-4/2020C, DCC-4/2016C, DCC-4/1612C, DCC-2/1612C.

As a result, the new version (the second edition) contains a total of 38 enclosure types, which are listed in Table 1 – Designation of ceramic enclosures.

This standard is to be read in conjunction with IEC 61240.

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

CDV	Report on Voting
49/884/CDV	49/908/RVC

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.

A list of all parts of the IEC 61837 series, published under the general title: *Surface mounted piezoelectric devices for frequency control and selection – Standard outlines and terminal lead connections*, can be found on the IEC website.

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

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

# **SURFACE MOUNTED PIEZOELECTRIC DEVICES FOR FREQUENCY CONTROL AND SELECTION – STANDARD OUTLINES AND TERMINAL LEAD CONNECTIONS –**

## **Part 2: Ceramic enclosures**

### **1 Scope**

This part of IEC 61837 deals with standard outlines and terminal lead connections as they apply to surface-mounted devices (SMD) for frequency control and selection in ceramic enclosures, and is based on IEC 61240.

### **2 Normative references**

The following referenced documents are indispensable for the application 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 61240, *Piezoelectric devices – Preparation of outline drawings of surface-mounted devices (SMD) for frequency control and selection – General rules*

### **3 Configuration of enclosures**

The enclosures of the surface-mounted devices are made of ceramic materials with the terminals of deposited metal film (leadless type) based on descriptive designation system for semiconductors – devices package.

The configuration symbols are shown as follows:

- DCC (dual chip carrier);
- QCC (quad chip carrier).

### **4 Designation of types**

The designation of types is shown on four parts as follows:



A: Configuration symbol of enclosures:

- DCC (dual chip carrier);
- QCC (quad chip carrier).

B: Structure of terminal leads: leadless type has no mark.

C: Number of terminal leads

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