



**NSAI**  
Standards

Irish Standard  
I.S. EN 61837-3:2015

# Surface mounted piezoelectric devices for frequency control and selection - Standard outlines and terminal lead connections - Part 3: Metal enclosures

**I.S. EN 61837-3:2015**

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

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*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

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EN 61837-3:2015

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NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

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## National Foreword

I.S. EN 61837-3:2015 is the adopted Irish version of the European Document EN 61837-3:2015, Surface mounted piezoelectric devices for frequency control and selection - Standard outlines and terminal lead connections - Part 3: Metal enclosures

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

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EUROPEAN STANDARD

**EN 61837-3**

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2015

ICS 31.140

Supersedes EN 61837-3:2000

English Version

**Surface mounted piezoelectric devices for frequency control and  
selection - Standard outlines and terminal lead connections -  
Part 3: Metal enclosures  
(IEC 61837-3:2015)**

Dispositifs piézoélectriques à montage en surface pour la  
commande et le choix de la fréquence - Encombrements  
normalisés et connexions des sorties - Partie 3: Enveloppes  
métalliques  
(IEC 61837-3:2015)

Oberflächenmontierbare piezoelektrische Bauteile zur  
Frequenzstabilisierung und -selektion - Norm-  
Gehäusemaße und Anschlüsse - Teil 3: Metallgehäuse  
(IEC 61837-3:2015)

This European Standard was approved by CENELEC on 2015-05-20. 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 CEN-CENELEC Management Centre or to any CENELEC member.

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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**

EN 61837-3:2015 (E)

## European foreword

The text of document 49/1118/FDIS, future edition 2 of IEC 61837-3, 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 61837-3:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-06-04
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-05-20

This document supersedes EN 61837-3:2000.

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

## Endorsement notice

The text of the International Standard IEC 61837-3:2015 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).
A1:2004	A1:2004
IEC 60368-2-2:1996	NOTE Harmonized as EN 60368-2-2:1999 (not modified).
IEC 60368-3:2010	NOTE Harmonized as EN 60368-3:2010 (not modified).
IEC 60679-1:2007	NOTE Harmonized as EN 60679-1:2007 (not modified).
IEC 60679-3:2012	NOTE Harmonized as EN 60679-3:2013 (not modified).
IEC 60862-1:2003	NOTE Harmonized as EN 60862-1:2003 (not modified).
IEC 60862-2:2012	NOTE Harmonized as EN 60862-2:2012 (not modified).
IEC 60862-3:2003	NOTE Harmonized as EN 60862-3:2003 (not modified).
ISO 1101:2012	NOTE Harmonized as EN ISO 1101:2013 (not modified).

## **Annex ZA**

(normative)

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

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61240	2012	Piezoelectric devices - Preparation of outline drawings of surface-mounted devices (SMD) for frequency control and selection - General rules	EN 61240	2012

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**IEC 61837-3**

Edition 2.0 2015-04

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

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**Surface mounted piezoelectric devices for frequency control and selection –  
Standard outlines and terminal lead connections –  
Part 3: Metal enclosures**

**Dispositifs piézoélectriques à montage en surface pour la commande et le choix  
de la fréquence – Encombrements normalisés et connexions des sorties –  
Partie 3: Enveloppes métalliques**



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
Fax: +41 22 919 03 00  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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**IEC 61837-3**

Edition 2.0 2015-04

# **INTERNATIONAL STANDARD**

## **NORME INTERNATIONALE**

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**Surface mounted piezoelectric devices for frequency control and selection –  
Standard outlines and terminal lead connections –  
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**Dispositifs piézoélectriques à montage en surface pour la commande et le choix  
de la fréquence – Encombrements normalisés et connexions des sorties –  
Partie 3: Enveloppes métalliques**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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ELECTROTECHNIQUE  
INTERNATIONALE

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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 3: Metal enclosures**

#### **FOREWORD**

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International Standard IEC 61837-3 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.

This International Standard is to be read in conjunction with IEC 61240:2012.

This edition includes the following significant technical changes with respect to the previous edition:

- The outline drawing is defined as one set of drawings consisting of four views, which are the view from above, the front view, the view from the right, and the view from below; the view from the right was drawn optionally in the previous edition.

- The height of package ( $G_1$ ) is eliminated, instead total height is expressed by the symbol letter  $G$  or with a subscript number.
- The dimensions of terminal lead spacing are shown by the centre position of the terminal leads and its basic value  $e$  is  $2.54 \times n$  mm ( $n$  is an integer) and  $1.27 \times n$  mm for package dimensions smaller than 6 mm (See IEC 61240:2012, 5.5). If the terminal lead spacing is not a multiple of the basic value, a subscript number such as  $e_1$ ,  $e_2$  is attached, e.g.  $e_1$ ,  $e_2$ , etc. If there are plural spacing values, the subscript number is followed by a hyphen and numbers such as  $e_{1-1}$ ,  $e_{1-2}$ , etc.
- In terminal land areas, the lengths of each terminal pad are now expressed with maximum values for consumer's convenience. They were expressed as minimum values in the previous edition of IEC 61837-3.
- If there are plural identical enclosures with different height, each enclosure was expressed by a dash (/) and a two-digit number after the basic type name. The identity references are given in the table of the sheet.
- The configurations of the enclosures were revised as shown in Table 1.

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

FDIS	Report on voting
49/1118/FDIS	49/1140/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 2.

A list of all parts in 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 website 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 3: Metal enclosures

### 1 Scope

This part of IEC 61837 deals with standard outlines and terminal lead connections as they apply to SMDs for frequency control and selection in metal enclosures and is based on IEC 61240 which standardized layout rules of outline drawings of the surface-mounted devices.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61240:2012, *Piezoelectric devices – Preparation of outline drawings of surface mounted devices (SMD) for frequency control and selection – General rules*

### 3 Configuration of enclosures

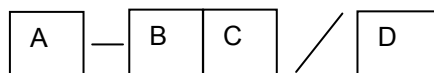
The enclosures of the surface-mounted devices are made of metal with the formed lead terminals based on the descriptive designation system for semiconductors – devices package.

All SMD enclosures described in this part of IEC 61837 are special surface mount types. Therefore, the following designator is used.

- SMS (Surface-Mounted, Special)

### 4 Designation of types

The type designator consists of four parts as follows:



A: Configuration symbol of enclosures:

- SMS (Surface-Mounted, Special).

B: Structure of terminal leads

- L: folded leads type;
- J: folded leads type.

If there is a leadless type, it will have no mark.

See Clause 3 of IEC 61240:2012, Classification of SMD.

C: Number of terminal leads

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