



NSAI
Standards

Irish Standard
I.S. EN 60512-9-3:2011

Connectors for electronic equipment -
Tests and measurements -- Part 9-3:
Endurance tests - Test 9c: Mechanical
operation (engaging/separating) with
electrical load (IEC 60512-9-3:2011
(EQV))

I.S. EN 60512-9-3:2011

Incorporating amendments/corrigenda issued since publication:

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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EUROPEAN STANDARD
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EUROPÄISCHE NORM

EN 60512-9-3

July 2011

ICS 31.220.01

Supersedes EN 60512-9-3:2006 + corr. Dec.2006

English version

**Connectors for electronic equipment -
Tests and measurements -
Part 9-3: Endurance tests -
Test 9c: Mechanical operation (engaging/separating) with electrical load
(IEC 60512-9-3:2011)**

Connecteurs pour équipements
électroniques -
Essais et mesures -
Partie 9-3: Essais d'endurance -
Essai 9c: Fonctionnement mécanique
(d'accouplement et de désaccouplement)
avec charge électrique
(CEI 60512-9-3:2011)

Steckverbinder für elektronische
Einrichtungen – Mess- und Prüfverfahren -
Teil 9-3: Dauerprüfungen -
Prüfung 9c: Mechanische Lebensdauer
(Stecken und Ziehen) mit elektrischer
Belastung
(IEC 60512-9-3:2011)

This European Standard was approved by CENELEC on 2011-07-27. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

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Foreword

The text of document (48B/2238/FDIS), future edition 2 of IEC 60512-9-3, prepared by SC 48B, Connectors, of IEC TC 48, Electromechanical components and mechanical structures for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60512-9-3 on 2011-07-27.

This European Standard supersedes EN 60512-9-3:2006 + corr. Dec.2006.

The main technical changes with regard to EN 60512-9-3:2006 + corr. Dec.2006 are as follows:

- An additional requirement to 4.1 stating that if more than one electrical circuit is wired for testing, the wiring shall be carried out in a parallel electrical circuit.
- Subclauses 4.3 through 4.7 were removed and replaced by 4.2 through 4.4.

This standard is to be read in conjunction with EN 60512-1 and EN 60512-1-100, which explains the structure of the EN 60512 series.

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) | 2012-04-27 |
| – latest date by which the national standards conflicting
with the EN have to be withdrawn | (dow) | 2014-07-27 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60512-9-3:2011 was approved by CENELEC as a European Standard without any modification.

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 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 60068-2-13	-	Environmental testing - Part 2: Tests - Test M: Low air pressure	EN 60068-2-13	-
IEC 60512-1	-	Connectors for electronic equipment - Tests and measurements - Part 1: General	EN 60512-1	-
IEC 60512-1-1	-	Connectors for electronic equipment - Tests and measurements - Part 1-1: General examination - Test 1a: Visual examination	EN 60512-1-1	-
IEC 60512-1-100	-	Connectors for electronic equipment - Tests and measurements - Part 1-100: General - Applicable publications	EN 60512-1-100	-
IEC 60512-2-1	-	Connectors for electronic equipment - Tests and measurements - Part 2-1: Electrical continuity and contact resistance tests - Test 2a: Contact resistance - Millivolt level method	EN 60512-2-1	-
IEC 60512-2-2	-	Connectors for electronic equipment - Tests and measurements - Part 2-2: Electrical continuity and contact resistance tests - Test 2b: Contact resistance - Specified test current method	EN 60512-2-2	-
IEC 60512-3-1	-	Connectors for electronic equipment - Tests and measurements - Part 3-1: Insulation tests - Test 3a: Insulation resistance	EN 60512-3-1	-
IEC 60512-4-1	-	Connectors for electronic equipment - Tests and measurements - Part 4-1: Voltage stress tests - Test 4a: Voltage proof	EN 60512-4-1	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTORS FOR ELECTRONIC EQUIPMENT – TESTS AND MEASUREMENTS –

Part 9-3: Endurance tests – Test 9c: Mechanical operation (engaging and separating) with electrical load

FOREWORD

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International Standard IEC 60512-9-3 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This second edition cancels and replaces the first edition, published in 2006, and constitutes a technical revision.

The main technical changes with regard to the previous edition are as follows:

- An additional requirement to 4.1 stating that if more than one electrical circuit is wired for testing, the wiring shall be carried out in a parallel electrical circuit.
- Subclauses 4.3 through 4.7 were removed and replaced by 4.2 through 4.4.

This standard is to be read in conjunction with IEC 60512-1 and IEC 60512-1-100, which explains the structure of the IEC 60512 series.

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

FDIS	Report on voting
48B/2238/FDIS	48B/2244/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 60512 series, under the general title *Connectors for electronic equipment – Tests and measurements*, 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

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