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Irish Standard  
I.S. EN 61169-41:2011

# Radio-frequency connectors -- Part 41: Sectional specification for CQA series quick lock R.F. coaxial connectors (IEC 61169-41:2011 (EQV))

## I.S. EN 61169-41:2011

*Incorporating amendments/corrigenda issued since publication:*

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**EN 61169-41**

April 2011

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English version

**Radio-frequency connectors -  
Part 41: Sectional specification for CQA series quick lock R.F. coaxial  
connectors  
(IEC 61169-41:2011)**

Connecteurs pour fréquences  
radioélectriques -  
Partie 41: Spécification intermédiaire pour  
connecteurs coaxiaux R.F. à verrouillage  
rapide, série CQA  
(CEI 61169-41:2011)

Hochfrequenz-Steckverbinder -  
Teil 41: Rahmenspezifikation für koaxiale  
HF-Steckverbinder der CQA-Serie mit  
Schnellverriegelung  
(IEC 61169-41:2011)

This European Standard was approved by CENELEC on 2011-03-30. 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.

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

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**I.S. EN 61169-41:2011**

EN 61169-41:2011

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**Foreword**

The text of document 46F/140/CDV, future edition 1 of IEC 61169-41, prepared by SC 46F, R.F. and microwave passive components, of IEC TC 46, Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61169-41 on 2011-03-30.

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) 2011-12-30
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2014-03-30

Annex ZA has been added by CENELEC.

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**Endorsement notice**

The text of the International Standard IEC 61169-41:2011 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**

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 61169-1	1992	Radio-frequency connectors -	EN 61169-1	1994
+ A1	1996	Part 1: Generic specification - General	+ A1	1996
+ A2	1997	requirements and measuring methods	+ A2	1997

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RADIO-FREQUENCY CONNECTORS –****Part 41: Sectional specification for CQA series  
quick lock R.F. coaxial connectors**

## FOREWORD

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- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.

International Standard IEC 61169-41 has been prepared by subcommittee 46F: R.F. and microwave passive components, of IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

This first edition cancels and replaces IEC/PAS 61169-41, published in 2009, of which it constitutes a minor revision. The only change is that the PAS has been changed into and International Standard.

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

CDV	Report on voting
46F/140/CDV	46F/164/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.

The French version of this standard has not been voted upon.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61169 series, published under the general title *Radio-frequency connectors*, 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.

**IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.**

## INTRODUCTION

The International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning

- “high frequency self-lock connector” given in patent No. ZL 200610104844.6;
- “lock setup of a high frequency self-lock connector” given in patent No. ZL 200620136072.X.

IEC takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured the IEC that he/she is willing to negotiate licences free of charge with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with IEC. Information may be obtained from:

Xi'an forstar S&T CO., LTD.

No.71 JinYE Road Hi-tech Zone Xi'an R.P China.

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ISO ([www.iso.org/patents](http://www.iso.org/patents)) and IEC (<http://patents.iec.ch>) maintain on-line data bases of patents relevant to their standards. Users are encouraged to consult the data bases for the most up to date information concerning patents.

## RADIO-FREQUENCY CONNECTORS –

### Part 41: Sectional specification for CQA series quick lock R.F. coaxial connectors

#### 1 Scope

CQA series quick lock connectors with characteristic impedance 50  $\Omega$  are used in microwave, telecommunication, wireless and other fields, connecting with RF cables or micro-strips. The operating frequency limit is up to 18 GHz.

This sectional specification provides information and rules for preparation of detail specification of CQA series quick lock R.F. coaxial connectors together with the pro-forma blank detail specification.

It also prescribes mating face dimensions for general connectors - grade 2, dimensional detail of standard test connectors - grade 0, gauging information and tests selected from IEC 61169-1 applicable to all detail specifications relating to CQA series RF connectors.

This specification indicates recommended performance characteristics to be considered when writing a detail specification and it covers test schedules and inspection requirements for assessment levels M and H.

CQA series connector with pin-centre contact can mate with SMA series connector with socket-centre contact, when mating with SMA series connector, an adjunct is required; the adjunct should meet the requirement of Annex A.

#### 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 61169-1:1992, *Radio-frequency connectors – Part 1: Generic specification – General requirements and measuring methods*<sup>1</sup>

Amendment 1 (1996)

Amendment 2 (1997)

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<sup>1</sup> There exists a consolidated edition 1.2 (1998) that comprises IEC 61169-1:1992, its Amendment 1:1996 and its Amendment 2:1997.

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