



NSAI
Standards

Irish Standard
I.S. EN 61076-3-114:2009

Connectors for electronic equipment -
Product requirements -- Part 3-114:
Rectangular connectors - Detail specification
for protective housings for use with 8-way
shielded and unshielded connectors for
frequencies up to 600 MHz for industrial
environments incorporating the IEC 60603-7
series interface - Variant 11 related to IEC
61076-3-106 - Bayonet coupling type (IEC
61076-3-114:2009 (EQV))

I.S. EN 61076-3-114:2009

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61076-3-114

August 2009

ICS 31.220.10

English version

**Connectors for electronic equipment -
Product requirements -
Part 3-114: Rectangular connectors -
Detail specification for protective housings for use with 8-way shielded
and unshielded connectors for frequencies up to 600 MHz for industrial environments
incorporating the IEC 60603-7 series interface -
Variant 11 related to IEC 61076-3-106 -
Bayonet coupling type
(IEC 61076-3-114:2009)**

Connecteurs
pour équipement électroniques -
Exigences de produits -
Partie 3-114: Connecteurs rectangulaires -
Spécification particulière pour boîtiers
de protection utilisés avec
des connecteurs blindés et non blindés
à 8 voies pour des fréquences
inférieures ou égales à 600 MHz dans des
environnements industriels incorporant
l'interface série CEI 60603-7 -
Variante 11 liée à la CEI 61076-3-106 -
Type d'accouplement à baïonnette
(CEI 61076-3-114:2009)

Steckverbinder
für elektronische Einrichtungen -
Produktanforderungen -
Teil 3-114: Rechteckige Steckverbinder -
Bauartspezifikation für Schutzgehäuse
für die Anwendung mit 8-poligen geschirmten
und ungeschirmten Steckverbindern
für Frequenzen bis 600 MHz für industrielle
Umgebungen zur Aufnahme der Schnittstelle
der Reihe IEC 60603-7 -
Ausführung 11 zu IEC 61076-3-106 -
Bajonettausführung
(IEC 61076-3-114:2009)

This European Standard was approved by CENELEC on 2009-07-01. 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.

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.

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CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

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Foreword

The text of document 48B/1995/FDIS, future edition 1 of IEC 61076-3-114, 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 61076-3-114 on 2009-07-01.

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) 2010-04-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-07-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61076-3-114:2009 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 60050-581	2008	International Electrotechnical Vocabulary (IEV) - Part 581: Electromechanical components for electronic equipment	-	-
IEC 60068-1	- ¹⁾	Environmental testing - Part 1: General and guidance	EN 60068-1	1994 ²⁾
IEC 60068-2-14	- ¹⁾	Environmental testing - Part 2-14: Tests - Test N: Change of temperature	EN 60068-2-14	2009 ²⁾
IEC 60068-2-30	- ¹⁾	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	2005 ²⁾
IEC 60512-1	- ¹⁾	Connectors for electronic equipment - Tests and measurements - Part 1: General	EN 60512-1	2001 ²⁾
IEC 60512-1-100	- ¹⁾	Connectors for electronic equipment - Tests and measurements - Part 1-100: General - Applicable publications	EN 60512-1-100	2006 ²⁾
IEC 60529	- ¹⁾	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 ²⁾ 1993
IEC 60603-7	- ¹⁾	Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors	-	-
IEC 60603-7-2	- ¹⁾	Connectors for electronic equipment - Part 7-2: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 100 MHz	-	-
IEC 60603-7-3	- ¹⁾	Connectors for electronic equipment - Part 7-3: Detail specification for 8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 100 MHz	-	-
IEC 60603-7-4	- ¹⁾	Connectors for electronic equipment - Part 7-4: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz	EN 60603-7-4	2005 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60603-7-5	- ¹⁾	Connectors for electronic equipment - Part 7-5: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz	-	-
IEC 60603-7-7	- ¹⁾	Connectors for electronic equipment - Part 7-7: Detail specification for 8-way, shielded, free and fixed connectors for data transmission with frequencies up to 600 MHz	EN 60603-7-7	2006 ²⁾
IEC 60664-1	- ¹⁾	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2007 ²⁾
IEC 61076-1	2006	Connectors for electronic equipment - Product requirements - Part 1: Generic specification	EN 61076-1	2006
IEC 61156	Series	Multicore and symmetrical pair/quad cables for digital communications	-	-
IEC 61156-2	- ¹⁾	Multicore and symmetrical pair/quad cables for digital communications - Part 2: Horizontal floor wiring - Sectional specification	-	-
IEC 61156-3	- ¹⁾	Multicore and symmetrical pair/quad cables for digital communications - Part 3: Work area cable - Sectional specification	-	-
IEC 61156-4	- ¹⁾	Multicore and symmetrical pair/quad cables for digital communications - Part 4: Riser cables - Sectional specification	-	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRONIC EQUIPMENT –
PRODUCT REQUIREMENTS –**

**Part 3-114: Rectangular connectors – Detail specification for protective
housings for use with 8-way shielded and unshielded connectors
for frequencies up to 600 MHz for industrial environments
incorporating the IEC 60603-7 series interface –
Variant 11 related to IEC 61076-3-106 –
Bayonet coupling type**

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 61076-3-114 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This International Standard cancels and replaces IEC/PAS 61076-3-114 (2005).

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

FDIS	Report on voting
48B/1995/FDIS	48B/2013/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.

A list of all parts of IEC 61076 series, under the general title *Connectors for electronic equipment – Product requirements*, can be found on the IEC website.

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

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

INTRODUCTION

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

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CONNECTORS FOR ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 3-114: Rectangular connectors – Detail specification for protective housings for use with 8-way shielded and unshielded connectors for frequencies up to 600 MHz for industrial environments incorporating the IEC 60603-7 series interface – Variant 11 related to IEC 61076-3-106 – Bayonet coupling type

1 General data

1.1 Scope

This part of IEC 61076 covers protective housings for upgrading existing 8-way shielded and unshielded connectors utilizing the interface described in IEC 60603-7-2, IEC 60603-7-3, IEC 60603-7-4, IEC 60603-7-5, and IEC 60603-7-7 to IP65 and IP67 ratings, according to IEC 60529, for use in industrial environments.

The housings cover a variety of different locking mechanisms and a variety of different mounting configurations and termination types which are detailed in IEC 60603-7.

Common mating configurations for all variants are defined in IEC 60603-7. The mating dimensions for the housings under Clause 3 allow the mating conditions according to IEC 60603-7 to be fulfilled.

The fully assembled variants (connectors) described in this standard incorporate fixed and free connectors which are fully compliant with IEC 60603-7.

1.2 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 60050-581:2008, *International Electrotechnical Vocabulary (IEV) – Part 581: Electromechanical components for electronic equipment*

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60068-2-14, *Environmental testing – Part 2-14: Tests – Test N: Change of temperature*

IEC 60068-2-30, *Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12 h + 12 h cycle)*

IEC 60512-1, *Connectors for electronic equipment – Tests and measurements – Part 1: General*

IEC 60512-1-100, *Connectors for electronic equipment – Tests and measurements – Part 1-100: General – Applicable publications*²

² The various parts of IEC 60512 are listed in IEC 60512-1-100.

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