

Connectors for electronic equipment -- Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60603-7-1:2009 sisaldab Euroopa standardi EN 60603-7-1:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.12.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 19.11.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60603-7-1:2009 consists of the English text of the European standard EN 60603-7-1:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.12.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 19.11.2009.

The standard is available from Estonian standardisation organisation.

ICS 31.220.10

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English version

**Connectors for electronic equipment -
Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors
(IEC 60603-7-1:2009)**

Connecteurs pour équipements
électroniques -
Partie 7-1: Spécification particulière
pour les fiches et les embases blindées
à 8 voies
(CEI 60603-7-1:2009)

Steckverbinder für elektronische
Einrichtungen -
Teil 7-1: Bauartspezifikation
für geschirmte freie und feste
Steckverbinder, 8polig
(IEC 60603-7-1:2009)

This European Standard was approved by CENELEC on 2009-09-01. 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.

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, 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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 48B/2004/FDIS, future edition 2 of IEC 60603-7-1, 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 60603-7-1 on 2009-09-01

This European Standard supersedes EN 60603-7-1:2002.

EN 60603-7-1:2009 includes the following significant technical changes with respect to EN 60603-7-1:2002:

- the basic connector dimensions were removed from EN 60603-7-1:2002 and referenced to EN 60603-7;
- several other subclauses were removed (e.g. 4.1, 5, 6.1, 6.2) from EN 60603-7-1:2002 and referenced to EN 60603-7;
- the electrical characteristics, Subclause 6.4, were revised;
- the test schedules were revised.

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) 2010-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-09-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60603-7-1:2009 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>
-	-	Communication cables - Specifications for test methods - Part 1-14: Electrical test methods - Coupling attenuation or screening attenuation of connecting hardware	EN 50289-1-14	- ¹⁾
IEC 60068-2-38	- ¹⁾	Environmental testing - Part 2-38: Tests - Test Z/AD: Composite temperature/humidity cyclic test	EN 60068-2-38	2009
IEC 60512	Series	Connectors for electronic equipment - Tests and measurements	EN 60512	Series
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 60603-7	Series	Connectors for electronic equipment - Part 7: Detail specifications for 8-way free and fixed connectors	EN 60603-7	Series
IEC 60603-7	2008	Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors	EN 60603-7	2009
IEC 60664-1	- ¹⁾	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2007 ²⁾
IEC 61156-5	- ¹⁾	Multicore and symmetrical pair/quad cables for digital communications - Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1 000 MHz - Horizontal floor wiring - Sectional specification	-	-
ISO 1302	- ¹⁾	Geometrical Product Specifications (GPS) - Indication of surface texture in technical product documentation	EN ISO 1302	2002 ²⁾

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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INTRODUCTION

Applications have emerged which require the use of the interface described in IEC 60603-7 with certain performance specifications at higher frequencies. Therefore, a series of detail specifications have been issued the past few years in support of these new applications. In order to improve readability and ease of maintenance, IEC Subcommittee 48B (SC 48B) decided to rearrange and restructure these existing documents.

This part of IEC 60603-7 contains only the necessary information regarding the shield of the connection and is designed to be used as a base document for all shielded connectors in the IEC 60603-7 series.

For further information regarding the IEC 60603-7 style connection, reference to the unshielded base document IEC 60603-7 is made.

IEC 60603-7 is the base specification of the whole series. Subsequent specifications do not duplicate information given in the base document, but list only additional requirements. For a complete specification regarding a component of a higher number document, all lower numbered documents are also to be considered.

The following illustration shows the IEC 60603-7 document structure:

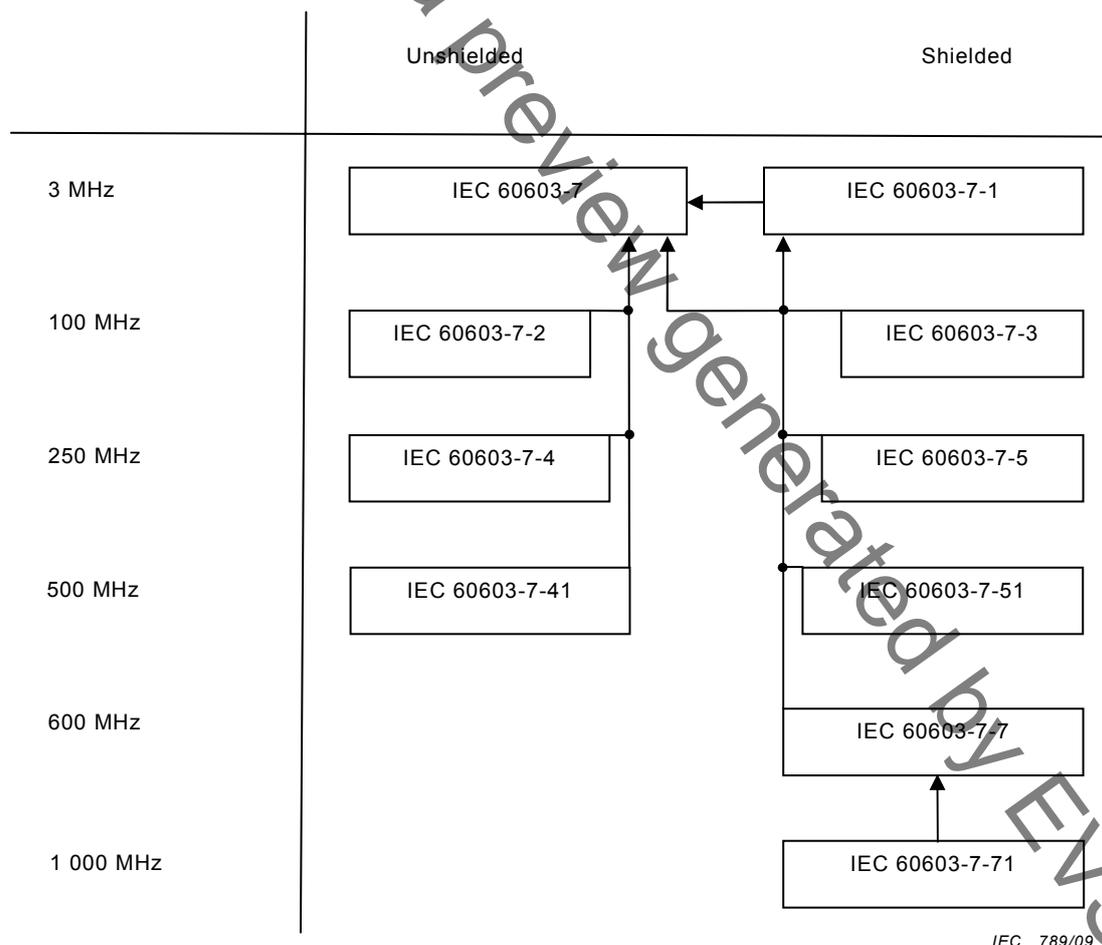


Figure 1 – IEC 60603-7 document structure

CONNECTORS FOR ELECTRONIC EQUIPMENT –

Part 7-1: Detail specification for 8-way, shielded, free and fixed connectors

1 General

1.1 Scope

This part of IEC 60603-7 covers 8-way shielded free and fixed connectors. It specifies the dimensions, mechanical, electrical and environmental characteristics and tests, in relation to the shield, additional to those in IEC 60603-7.

These connectors are intermateable and interoperable with other IEC 60603-7 series connectors as defined in 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 60068-2-38, *Environmental testing – Part 2-38: Tests – Test Z/AD: Composite temperature/ humidity cyclic test*

IEC 60512 (all parts), *Connectors for electronic equipment – Tests and measurements*

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

IEC 60603-7 (all parts), *Connectors for electronic equipment*

IEC 60603-7:2008, *Connectors for electronic equipment – Part 7: Detail specification for 8-way, unshielded, free and fixed connectors*

IEC 60664-1, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 61156-5, *Multicore and symmetrical pair/quad cables for digital communications – Part 5: Symmetrical pair/quad cables with transmission characteristics up to 600 MHz – Horizontal floor wiring – Sectional specification*

ISO 1302, *Geometrical Product Specifications (GPS) – Indication of surface texture in technical product documentation*

EN 50289-1-14, *Communication cables – Specification for test methods – Part 1-14: Electrical test methods – Coupling attenuation or screening attenuation of connecting hardware*

2 Terms and definitions

See IEC 60603-7 Clause 2 for terms and definitions.