

SLOVENSKI STANDARD
SIST EN 61076-3-110:2008**01-junij-2008**

Konektorji za elektronsko opremo - Zahteve za izdelek - 3-110. del: Pravokotni konektorji - Podrobna specifikacija za zaslonjene, proste in fiksne konektorje za prenos podatkov s frekvencami do 1 000 MHz (IEC 61076-3-110:2007)

Connectors for electronic equipment - Product requirements - Part 3-110: Rectangular connectors - Detail specification for shielded, free and fixed connectors for data transmission with frequencies up to 1 000 MHz (IEC 61076-3-110:2007)

Steckverbinder für elektronische Einrichtungen - Produkthanforderungen - Teil 3-110: Rechteckige Steckverbinder - Bauartspezifikation für geschirmte freie und feste Steckverbinder für Datenübertragungen bis 1 000 MHz (IEC 61076-3-110:2007)

[SIST EN 61076-3-110:2008](https://standards.iteh.ai/catalog/standards/sist/096dcda4-28b5-4492-8333-306601000000/61076-3-110:2008)

Connecteurs pour équipements électroniques - Exigences de produit - Partie 3-110: Connecteurs rectangulaires - Spécification particulière pour les fiches et les embases écrantées pour la transmission de données a des fréquences jusqu'a 1 000 MHz (CEI 61076-3-110:2007)

Ta slovenski standard je istoveten z: EN 61076-3-110:2008

ICS:

31.220.10 Xa žā Ącā } & E [] ^ \ q !ā Plug-and-socket devices.
Connectors

SIST EN 61076-3-110:2008**en,fr**

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English version

**Connectors for electronic equipment -
Product requirements -
Part 3-110: Rectangular connectors -
Detail specification for shielded, free and fixed connectors
for data transmission with frequencies up to 1 000 MHz
(IEC 61076-3-110:2007)**

Connecteurs pour équipements
électroniques -

Exigences de produit -

Partie 3-110: Connecteurs rectangulaires -

Spécification particulière pour les fiches

et les embases écrantées
pour la transmission de données

à des fréquences jusqu'à 1 000 MHz

(CEI 61076-3-110:2007)

Steckverbinder für elektronische
Einrichtungen -

Produktanforderungen -

Teil 3-110: Rechteckige Steckverbinder -

Bauartspezifikation für geschirmte freie
und feste Steckverbinder

für Datenübertragungen bis 1 000 MHz

(IEC 61076-3-110:2007)

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This European Standard was approved by CENELEC on 2008-03-01. 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: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 48B/1796/FDIS, future edition 1 of IEC 61076-3-110, 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 61076-3-110 on 2008-03-01.

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) 2008-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-03-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61076-3-110:2007 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> |
|--------------------|-----------------|--|---------------|--------------------|
| - | - | 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 60068-1 | - ¹⁾ | Environmental testing - Part 1: General and guidance | EN 60068-1 | 1994 ²⁾ |
| IEC 60068-2-38 | - ¹⁾ | Environmental testing - Part 2: Tests - Test Z/AD: Composite temperature/humidity cyclic test | EN 60068-2-38 | 1999 ²⁾ |
| IEC 60352 | Series | Solderless connections | EN 60352 | Series |
| IEC 60352-2 | - ¹⁾ | Solderless connections - Part 2: Crimped connections - General requirements, test methods and practical guidance | EN 60352-2 | 2006 ²⁾ |
| IEC 60352-3 | - ¹⁾ | Solderless connections - Part 3: Solderless accessible insulation displacement connections - General requirements, test methods and practical guidance | EN 60352-3 | 1994 ²⁾ |
| IEC 60352-4 | - ¹⁾ | Solderless connections - Part 4: Solderless non-accessible insulation displacement connections - General requirements, test methods and practical guidance | EN 60352-4 | 1994 ²⁾ |
| IEC 60352-5 | - ¹⁾ | Solderless connections - Part 5: Press-in connections - General requirements, test methods and practical guidance | EN 60352-5 | 2008 ²⁾ |
| IEC 60352-6 | - ¹⁾ | Solderless connections - Part 6: Insulation piercing connections - General requirements, test methods and practical guidance | EN 60352-6 | 1997 ²⁾ |
| IEC 60352-7 | - ¹⁾ | Solderless connections - Part 7: Spring clamp connections - General requirements, test methods and practical guidance | EN 60352-7 | 2002 ²⁾ |

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|---------------------------|--------------------|--|----------------|--------------------|
| 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 specification for 8-way, shielded free and fixed connectors with common mating features, with assessed quality | EN 60603-7 | Series |
| 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 61076-3 | 200X ³⁾ | Connectors for electronic equipment - Product requirements - Part 3: Rectangular connectors - Sectional specification | EN 61076-3 | 200X ³⁾ |
| 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 wiring - Sectional specification | - | - |
| IEC 61156-4 | - ¹⁾ | Multicore and symmetrical pair/quad cables for digital communications - Part 4: Riser cables - Sectional specification | - | - |
| IEC 61156-5 | - ¹⁾ | 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 | - | - |
| IEC 61156-6 | - ¹⁾ | Multicore and symmetrical pair/quad cables for digital communications - Part 6: Symmetrical pair/quad cables with transmission characteristics up to 600 MHz - Work area wiring - Sectional specification | - | - |
| ISO/IEC 11801 | 2002 | Information technology - Generic cabling for customer premises | - | - |
| ISO 1302 | - ¹⁾ | Geometrical Product Specifications (GPS) - Indication of surface texture in technical product documentation | EN ISO 1302 | 2002 ²⁾ |
| ITU-T Recommendation K.20 | - ¹⁾ | Resistibility of telecommunication equipment installed in a telecommunications centre to overvoltages and overcurrents | - | - |

³⁾ At draft stage.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|---------------------------------|-------------|---|--------------|-------------|
| ITU-T Recommendation K.44 | 2000 | Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents - Basic Recommendation | - | - |

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Connectors for electronic equipment – Product requirements –
Part 3-110: Rectangular connectors – Detail specification for shielded, free and
fixed connectors for data transmission with frequencies up to 1 000 MHz**

**Connecteurs pour équipements électroniques – Exigences de produit –
Partie 3-110: Connecteurs rectangulaires – Spécification particulière pour les
fiches et les embases écrantées pour la transmission de données à des
fréquences jusqu'à 1 000 MHz**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR ELECTRONIC EQUIPMENT –
PRODUCT REQUIREMENTS –****Part 3-110: Rectangular connectors – Detail specification for shielded,
free and fixed connectors for data transmission
with frequencies up to 1 000 MHz**

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 61076-3-110 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 61076-3-110 (2002).

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

| FDIS | Report on voting |
|---------------|------------------|
| 48B/1796/FDIS | 48B/1827/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.

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.

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INTRODUCTION

This part of IEC 61076 describes connectors according to IEC 61076-3 series connectors requirements.

The connectors are similar to and compatible with IEC 60603-7 series connectors.

The IEC 61076-3-110 free connector can be used in data communication cabling systems with the IEC 60603-7-7 and IEC 60603-7-71 fixed connector.

The IEC 61076-3-110 connector includes up to 12 contacts, including up to 8 contacts (1,2,3,4,5,6,7,8) that are similar to a standard IEC 60603-7 series connector. In addition, the IEC 61076-3-110 connector includes up to 4 additional contacts (6',3',4',5') located on the opposite side from the original contact positions of a basic IEC 60603-7 series connector.

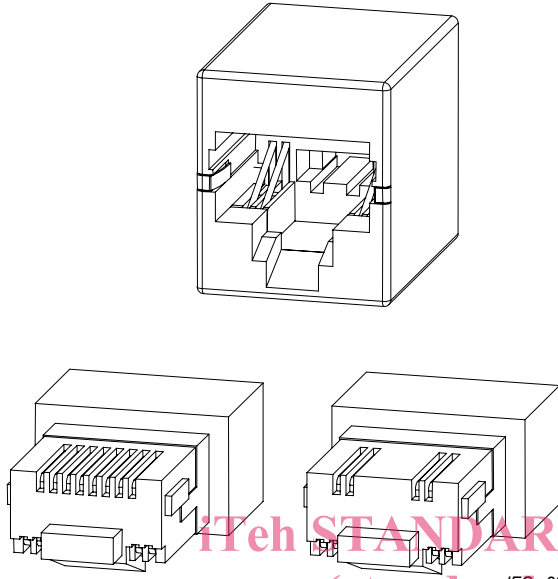
For use in high speed communications cabling systems, IEC 60603-7-7 and IEC 60603-7-71 fixed connectors include a switch or other means to engage these two different sets of four contacts to enable backward compatibility for transmission performance. In this application the IEC 61076-3-110 free connector simply uses 8 contacts (1,2,3',4',5',6',7,8) and no switch.

The IEC 61076-3-110 fixed connector includes a board mounted style in addition to the cable mounted style.

The complete requirements for the connectors described in this specification correspond to this detail specification and the current issues of IEC 61076-3 and IEC 60603-7 series, which are referenced herein accordingly. (standards.iteh.ai)

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| IEC SC 48B: CONNECTORS Specification available from: IEC Central Office or from the addresses shown on the inside cover | IEC 61076-3-110 |
|--|--|
|  | Detail specification for two-part connector used in: <ul style="list-style-type: none"> - high speed communications applications up to 1 000 MHz - up to 6 balanced contact pairs (up to 12 contacts) - compatible with IEC 60603-7 series connectors 4 balanced contact pairs (1,2,3,4,5,6,7,8) up to 500 MHz and 4 balanced contact pairs (1,2,3',4',5',6',7,8) of IEC 60603-7-7 up to 600 MHz and IEC 60603-7-71 up to 1 000 MHz - intended for inside-building cabling systems Fixed connector: cable mount or for mounting on printed boards Free connector: cable mount only Performance level(s): 1, 2 Assessment level(s): not specified Reference data: not available |

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