
Connectors with assessed quality, for use in d.c., low frequency analogue and digital high-speed data applications - Part 3-100: Rectangular connectors with assessed quality - Detail specification for a range of shielded connectors with trapezoidal-shaped shells and non-removable ribbon contacts on a 1.27 mm double row (IEC 61076-3-100:1999)

Connectors for use in d.c., low-frequency analogue and digital high speed data applications -- Part 3-100: Rectangular connectors with assessed quality - Detail specification for a range of shielded connectors with trapezoidal-shaped shells and non-removable ribbon contacts on a 1,27 mm double row

Steckverbinder für Gleichspannungs- und Niederfrequenzanwendungen sowie digitale Anwendungen mit hoher Übertragungsrate -- Teil 3-100: Rechteckige Steckverbinder mit bewerteter Qualität - Bauartspezifikation für eine Reihe von geschirmten Steckverbindern mit trapezförmigen Kragen und nicht auswechselbaren Streifenkontakten in einem Raster von 1,27 mm, doppelreihig

Connecteurs pour applications analogiques en courant continu et à basse fréquence et pour applications numériques utilisant des débits élevés pour le transfert des données -- Partie 3-100: Connecteurs rectangulaires sous assurance de la qualité - Spécification particulière pour une famille de connecteurs blindés à boîtiers trapézoïdaux, deux rangées au pas de 1,27 mm et contacts à lame, non démontables

Ta slovenski standard je istoveten z: EN 61076-3-100:2000

ICS:

31.220.10	Vtiľ i in vtiľ nice, konektorji	Plug-and-socket devices. Connectors
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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 61076-3-100

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English version

**Connectors for use in d.c., low-frequency analogue and
digital high speed data applications
Part 3-100: Rectangular connectors with assessed quality
Detail specification for a range of shielded connectors with
trapezoidal-shaped shells and non-removable ribbon contacts
on a 1,27 mm double row
(IEC 61076-3-100:1999)**

Connecteurs pour applications
analogiques en courant continu et à
basse fréquence et pour applications
numériques utilisant des débits élevés
pour le transfert des données
Partie 3-100: Connecteurs
rectangulaires sous assurance de
la qualité
Spécification particulière pour une
famille de connecteurs blindés à boîtiers
trapézoïdaux, deux rangées au pas de
1,27 mm et contacts à lame, non
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(CEI 61076-3-100:1999)

Steckverbinder für Gleichspannungs-
und Niederfrequenzanwendungen sowie
digitale Anwendungen mit hoher
Übertragungsrate
Teil 3-100: Rechteckige Steckverbinder
mit bewerteter Qualität
Bauartspezifikation für eine Reihe von
geschirmten Steckverbindern mit
trapezförmigen Kragen und nicht
auswechselbaren Streifenkontakten in
einem Raster von 1,27 mm, doppelreihig
(IEC 61076-3-100:1999)

This European Standard was approved by CENELEC on 1999-12-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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/787/FDIS, future edition 1 of IEC 61076-3-100, 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 61076-3-100 on 1999-12-01.

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) 2000-10-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-01-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61076-3-100:1999 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**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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	1978	International Electrotechnical Vocabulary (IEV) - Chapter 581: Electromechanical components for electronic equipment	-	-
IEC 60068-1	1988	Environmental testing		
+ corr. October	1988	Part 1: General and guidance		
A1	1992		EN 60068-1	1994
IEC 60352-4	1994	Solderless connections	EN 60352-4	1994
		Part 4: Solderless non-accessible insulation displacement connections - General requirements, test methods and practical guidance		
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 60512-1	1994	Electromechanical components for electronic equipment - Basic testing procedures and measuring methods Part 1: General	EN 60512-1	1994
IEC 60512-2	1985	Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests	-	-
A1	1994		-	-
IEC 60512-3	1976	Part 3: Current-carrying capacity tests	-	-
IEC 60512-4	1976	Part 4: Dynamic stress tests	-	-
IEC 60512-5	1992	Part 5: Impact tests (free components), static load tests (fixed components), endurance tests and overload tests	-	-
IEC 60512-6	1984	Part 6: Climatic tests and soldering tests	-	-
IEC 60512-7	1993	Part 7: Mechanical operating tests and sealing tests	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60512-8	1993	Part 8: Connector tests (mechanical) and mechanical tests on contacts and terminations	-	-
IEC 60512-9	1992	Part 9: Miscellaneous tests	-	-
IEC 60512-11-1	1995	Part 11: Climatic tests Section 1: Test 11a - Climatic sequence	EN 60512-11-1	1999
IEC 61076-1	1995	Connectors with assessed quality, for use in d.c., low frequency analogue and in digital high-speed data applications Part 1: Generic specification - Capability approval	EN 61076-1	1995
IEC 61076-3	1999	Part 3: Rectangular connectors with assessed quality - Sectional specification	EN 61076-3	2000

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTORS FOR USE IN DC, LOW-FREQUENCY ANALOGUE
AND DIGITAL HIGH SPEED DATA APPLICATIONS –****Part 3-100: Rectangular connectors with assessed quality –
Detail specification for a range of shielded connectors with
trapezoidal-shaped shells and non-removable ribbon contacts
on a 1,27 mm double row**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61076-3-100 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

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

FDIS	Report on voting
48B/787/FDIS	48B/817/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 3.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

The committee has decided that this publication remains valid until 2003. At this date, in accordance with the committee's decision, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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CONNECTORS FOR USE IN DC, LOW-FREQUENCY ANALOGUE AND DIGITAL HIGH SPEED DATA APPLICATIONS –

Part 3-100: Rectangular connectors with assessed quality – Detail specification for a range of shielded connectors with trapezoidal-shaped shells and non-removable ribbon contacts on a 1,27 mm double row

1 General data

1.1 Recommended method of mounting

A complete connector consists of a fixed connector mounted vertically or at a right angle to the printed circuit board or panel mounted. The free connector is terminated to a cable consisting of 14 to 110 conductors.

1.1.1 Minimum and maximum number of contacts

The fixed and free connectors have a range of 14 to 110 contacts. The shape of the shell prevents mismatching.

Examples of contact arrangements are shown in figure 2.

1.2 Rating and characteristics

Working voltage:	250 V a.c.
Current rating:	0,5 A (0,005 mm), 1 A (0,09 mm)
Insulation resistance:	500 M Ω minimum (initial)
Climatic category:	PL1: 55/085/21 PL2: 55/085/0
Printed board thickness:	0,8 mm 1,0 mm 1,2 mm 1,6 mm 2,4 mm
Contact spacing:	
Mating side:	1,27 mm pitch (double rows)
Printed board side:	2,54 mm pitch $\times$ 1,905 mm (four rows)

1.3 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050(581):1978, *International Electrotechnical Vocabulary (IEV) – Chapter 581: Electro-mechanical components for electronic equipment*

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*
Amendment 1 (1992)

IEC 60352-4:1994, *Solderless connections – Part 4: Solderless non-accessible insulation displacement connections – General requirements, test methods and practical guidance*

IEC 60410:1973, *Sampling plans and procedures for inspection by attributes*

IEC 60512-1:1994, *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 1: General*

IEC 60512-2:1985, *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 2: General examination, electrical continuity and contact resistance tests, insulation tests and voltage stress tests*
Amendment 1 (1994)

IEC 60512-3:1976, *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 3: Current-carrying capacity tests*

IEC 60512-4:1976, *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 4: Dynamic stress tests*

IEC 60512-5:1992, *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 5: Impact tests (free components), static load tests (fixed components), endurance tests and overload tests*

IEC 60512-6:1984, *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 6: Climatic tests and soldering tests*

IEC 60512-7:1993, *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 7: Mechanical operating tests and sealing tests*

IEC 60512-8:1993, *Electromechanical components for electronic equipment – Basic testing procedures and measuring methods – Part 8: Connector tests (mechanical) and mechanical tests on contacts and terminations*