SLOVENSKI STANDARD

SIST EN 61076-1:2006

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Konektorji za elektronsko opremo – Zahteve za izdelek – 1. del: Rodovna specifikacija (IEC 61076-1:2006)

Connectors for electronic equipment – Product requirements – Part 1: Generic specification (IEC 61076-1:2006)

ICS 31.220.10

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EN 61076-1

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Supersedes EN 61076-1:1995 + A1:1996 + A2:2001

English version

Connectors for electronic equipment - Product requirements Part 1: Generic specification

(IEC 61076-1:2006)

Connecteurs pour équipements électroniques - Exigences de produit Partie 1: Spécification générique (CEI 61076-1:2006)

Steckverbinder für elektronische Einrichtungen - Produktanforderungen Teil 1: Fachgrundspezifikation (IEC 61076-1:2006)

This European Standard was approved by CENELEC on 2006-05-01. 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, 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: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 61076-1:2006 E

Foreword

The text of document 48B/1621/FDIS, future edition 2 of IEC 61076-1, 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 61076-1 on 2006-05-01.

This European Standard supersedes EN 61076-1:1995 + A1:1996 + A2:2001.

This Standard is to be used in conjunction with EN 62197-1:2006.

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)	2007-02-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2009-05-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61076-1:2006 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.

Publication	Year	Title	EN/HD	Year
IEC 60050-581	1978	International Electrotechnical Vocabulary (IEV) - Chapter 581: Electromechanical components for electronic equipment	-	-
IEC 60068-1 + corr. October	1988 1988	Environmental testing - Part 1: General and guidance	EN 60068-1[1)]	1994
IEC 60512	Series	Connectors for electronic equipment - Tests and measurements	EN 60512	Series
IEC 60664-1 (mod) + A1 + A2	1992 2000 2002	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	EN 60664-1	2003
IEC 62197-1	2006	Connectors for electronic equipment - Quality assessment requirements - Part 1: Generic specification	EN 62197-1	2006
IEC/TR 62225	2001	Guidance on terms for connectors and mechanical structures in electronic equipment	-	-
IEC Guide 109	2003	Environmental aspects - Inclusion in electrotechnical product standards	-	-
ISO 129-1	2004	Technical drawings - Indication of dimensions and tolerances - Part 1: General principles	-	-
ISO 286-1	1988	ISO system of limits and fits - Part 1: Bases of tolerances, deviations and fits	EN 20286-1	1993
ISO 286-2	1988	ISO system of limits and fits - Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts	EN 20286-2	1993
ISO 1000	1992	SI units and recommendations for the use of their multiples and of certain other units	-	-
ISO 1101	2004	Geometrical Product Specifications (GPS) -- Geometrical tolerancing -- Tolerances of form, orientation, location and run-out	EN ISO 1101	2005

[1)] EN 60068-1 includes A1 to IEC 60068-1

Publication	Year	Title	EN/HD	Year
ISO 1302	2002	Geometrical Product Specifications (GPS) - Indication of surface texture in technical product documentation	EN ISO 1302	2002

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
61076-1

Deuxième édition
Second edition
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Connecteurs pour équipements électroniques – Exigences de produit –

Partie 1: Spécification générique

Connectors for electronic equipment – Product requirements –

Part 1: Generic specification

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Международная Электротехническая Комиссия

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Pour prix, voir catalogue en vigueur
For price, see current catalogue

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONNECTORS FOR ELECTRONIC EQUIPMENT – PRODUCT REQUIREMENTS –

Part 1: Generic specification

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 61076-1 has been prepared by subcommittee 48B: Connectors, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This second edition cancels and replaces the first edition issued in 1995, its amendment 1 (1996) and its amendment 2 (2001) and constitutes a technical revision. Modifications with respect to the previous edition are described in the introduction.

This standard is to be used in conjunction with IEC 62197-1:2006.

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

FDIS	Report on voting
48B/1621/FDIS	48B/1671/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.

INTRODUCTION

The objective of this work is to update the quality assessment procedures of the connector specifications to the current state of the art industrial procedures.

At the time of publication, all the connector detail specifications dealt with by subcommittee 48B of the International Electrotechnical Commission were built as described in Figure 1 with 5 major chapters.

The most significant out of date procedures relate to the lot-by-lot tests with different inspection levels and acceptance quality level and to the periodic tests with permitted number of defectives.

It was felt necessary to introduce the capability and the technology approval together with the basic design parameters of statistical process control as a feed back system to have a continuous control of the quality during the various steps of manufacture.

It was also felt appropriate to split the current documentation structure into two separate structures of documents which, in the day to day use of specifications, satisfy most users, see Figure 2.

The documentation system will be split into two parts:

- Product requirements
- Quality assessment requirements

The structure for the Product Specification contains characteristics, dimensions, performance requirements and test schedules.

The structure for the quality assessment specification contains the requirements to obtain Qualification Approval (QA) for a given performance level (per environment category), Capability Approval (CA) per family of connectors or Technology Approval (TA) comprising all relevant technologies for connector production.

Capability Approval or Technology Approval combined with statistical process control parameters are intended to replace lot-by-lot and periodic tests.

To fully certify a product, a combination of the two structures will have to be selected by the user, keeping in mind that in the statistical process control, key characteristics shall be agreed between manufacturer and user.

A generic product specification with a 4 level structure consists of a generic, a sectional, a blank detail and a detail specification.

From this, it can be concluded that two generic specifications are being circulated, one document for the product aspects and a second one for the quality aspects.

The sectional specifications will be presented at the product level per family of connectors, for example printed board connectors, circular connectors, rectangular connectors, etc.