

SLOVENSKI STANDARD
SIST EN 61076-1:2002/A1:2002
01-september-2002

Connectors with assessed quality, for use in d.c., low frequency analogue and digital high-speed data applications - Part 1: Generic specification - Capability approval - Amendment A1 (IEC 61076-1:1995/A1:1996)

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

Steckverbinder mit bewerteter Qualität für Gleichspannungs- und Niederfrequenzanwendungen sowie digitale Anwendungen mit hoher Übertragungsrate - Teil 1: Fachgrundspezifikation - (Befähigungsanerkennung)

Connecteurs sous assurance de la qualité, pour utilisation dans le cadre d'applications analogiques en courant continu et à basse fréquence et dans le cadre d'applications numériques utilisant des débits élevés pour le transfert des données -- Partie 1: Spécification générique - Agrément de savoir-faire

Ta slovenski standard je istoveten z: EN 61076-1:1995/A1:1996

ICS:

31.220.10 Xcã ãñ Ácã } ã^É[] ^\ d !lä Plug-and-socket devices.
Connectors

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61076-1/A1

CLC/TC 485

August 1996

ICS 31.220.10

Descriptors: Connectors under quality assessment, generic specification

English version

**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
(IEC 1076-1:1995/A1:1996)**

Connecteurs sous assurance de la
qualité, pour utilisation dans le cadre
d'applications analogiques en courant
continu et à basse fréquence et dans
le cadre d'applications numériques
utilisant des débits élevés pour le
transfert des données

Partie 1: Spécification générique

Agrément de savoir-faire
(CEI 1076-1:1995/A1:1996)

Gütebestätigte Steckverbinder für
Gleichspannungs- und
Niederfrequenzanwendungen sowie
digitale Anwendungen mit hoher
Übertragungsrate

Teil 1: Fachgrundspezifikation
Befähigungsanerkennung

(IEC 1076-1:1995/A1:1996)

ET EN 61076-1:2002/A1:2002
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6804ac23d/sist-en-61076-1-2002-a1-2002

This amendment A1 modifies the European Standard EN 61076-1:1995; it was approved by CENELEC on 1996-07-02. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, 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/479/FDIS, future amendment 1 to IEC 1076-1:1995, 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 amendment A1 to EN 61076-1:1995 on 1996-07-02.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1997-04-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 1997-04-01

Endorsement notice

The text of amendment 1:1996 to the International Standard IEC 1076-1:1995 was approved by CENELEC as an amendment to the European Standard without any modification.

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
1076-1

QC 480000

1995

AMENDEMENT 1
AMENDMENT 1

1996-06

Amendement 1

Connecteurs sous assurance de la qualité, pour utilisation dans le cadre d'applications analogiques en courant continu et à basse fréquence et dans le cadre d'applications numériques utilisant des débits élevés pour le transfert des données –

Partie 1: 1076-1:2002/A1:2002

Spécification générique – Agrément de savoir-faire

Amendment 1

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

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

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

FOREWORD

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

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

FDIS	Report on voting
48B/479/FDIS	48B/504/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

Amend the title of this standard on the cover page, the title page and on pages 7 and 11 as follows:

**CONNECTORS WITH ASSESSED QUALITY, FOR USE IN DC,
LOW FREQUENCY ANALOGUE AND IN DIGITAL
HIGH SPEED DATA APPLICATIONS –**
(standards.iteh.ai)

Part 1: Generic specification – Capability approval

[SIST EN 61076-1:2002/A1:2002](https://standards.iteh.ai/catalog/standards/sist/e1326a31-bd38-4a1c-acd2-1af0804ac23d/sist-en-61076-1-2002-a1-2002)

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Page 11

1.1 Scope

Add, at the end of 1.1, the following new paragraph:

The quality assessment procedures are divided into qualification approval (QA) and capability approval (CA) procedures, of which quality conformance inspection forms a part.

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3.1 Quality assessment definitions

Insert the following new definitions:

capability: The natural variation of a process due to common causes. In statistical process control (SPC), the demonstration of the capability is based on a statistical approach which allows the estimation of the ability of a product or a process to be in accordance with the specifications.

end-process parameter: Parameter that characterizes the process at the finished process stage. This may be a parameter of a process for piece parts, subassemblies and/or assemblies.

parameter: A measurable characteristic of a product or a process.

process: The combination of people, equipment, materials, methods and environment that produces output of product or service. A repeatable sequence of activities with measurable inputs and outputs. Design as well as manufacturing are considered to be a process.

process parameter: A measurable characteristic of a process that impacts the product performances but may not be measured at the product.

product: The output of a process.

CQC: The Capability Qualifying Component (CQC) is a specimen produced by the process to be approved and which is used for verifying capability. The CQC may be designed for this purpose, or taken from production.

capability approval: The demonstration that the manufacturer has the capable structure and organization to establish, to control, to monitor and to make continuous improvements of processes to ensure that the product will meet the requirements of the specification.

TRB: The Technology Review Board is the primary organization to control, stabilize, monitor and improve the qualified processes. The TRB should include the following, as applicable:

- process design management;
- senior project leaders;
- representatives of other tasks as appropriate to the declared scope.

3.1.1 Primary stage of manufacture

Replace, in the third paragraph, the terms "manufacturer's Chief Inspector" by "manufacturer". This is also applicable throughout the specification.

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3.4 Capability approval (CA)

Replace the existing subclauses 3.4, 3.4.1 and 3.4.2 by the following new subclauses:

3.4 Capability approval

3.4.1 Capability documentation

The description of the capability (which may be in the form of a capability manual) shall include the following, either directly, or by reference to the manufacturer's internal documents:

- definitions in accordance with relevant specifications of capability for which the manufacturer is seeking approval;
- a description of the main design features of the family of connectors to be included in the capability approval;
- flow chart(s) and process lists with confidential processes identified;
- a list of specifications for the CQCs and the materials and parts used;
- a list of specifications for the inspection to be carried out during the manufacturing process;
- a list of test methods for use during capability approval and maintenance of capability;
- the test schedules for use during capability approval and maintenance of capability;
- a description of how modifications are noted;
- other documents that may be necessary to describe the capability.

The following may be used as a guide to the contents of the capability documentation:

- scope of capability approval;
- technology/range of connectors;
- subcontracting;
- limits of capability;
- description of capability;
- manufacturer-to-customer interface;
- design rules;
- materials list;
- manufacturing processes;
- procedures in the event of CQC or product failure;
- permitted rework procedures;
- test programme for capability approval;
- maintenance of capability approval;
- modifications to the capability approval;
- test methods and inspection;
- register of product specifications covered by the capability approval.

The National Supervising Inspectorate (NSI) shall treat the capability documentation as confidential.

3.4.2 *Capability assessment procedures*

3.4.2.1 *Eligibility for capability approval*

Capability approval should only be granted to a manufacturer who has satisfied the requirements of ISO 9001 for the relevant scope.

3.4.2.2 *Primary stage of production*

See 3.1.1.

3.4.2.3 *Subcontracting*

The subcontracting of any stage of manufacture in particular connector technology, including design, may be undertaken, provided that the manufacturer is able to demonstrate to the NSI that the technology concerned is subcontracted to an approved source. Where the manufacturer subcontracts to a non-approved source, the manufacturer shall demonstrate that the requirements of the specification are fulfilled.

NOTE – An approved source for subcontracting is at minimum an ISO 9002 approved source.

3.4.2.4 *Incorporated electronic components*

If a connector released under capability approval incorporates electronic components, these incorporated electronic components shall be covered by an IECQ detail specification.

NOTE – The distinction between incorporated electronic components and piece parts is that incorporated electronic components have a definite electronic function in an electronic circuit.

3.4.2.5 *Rework*

If need for rework is indicated, due to any process deviation, the rework must be done with the approval of, and under the supervision of, the Technology Review Board (TRB).

Permitted rework procedures must be included in the capability documentation.

3.4.3 *Description of capability*

[SIST EN 61076-1:2002/A1:2002](https://standards.iteh.ai/catalog/standards/sist/e1326a31-bd38-4a1c-acd2-1af0804ac23d/sist-en-61076-1-2002-a1-2002)

3.4.3.1 *Materials list*

<https://standards.iteh.ai/catalog/standards/sist/e1326a31-bd38-4a1c-acd2-1af0804ac23d/sist-en-61076-1-2002-a1-2002>

The manufacturer must create and maintain a list of materials, piece parts and components used in the product(s), as well as a list of materials used in the process(es). The list must contain, directly or by reference to internal documents, specifications, approved suppliers, incoming test procedures and supplier audit and performance documents.

3.4.3.2 *Release for delivery*

Deliveries of connectors covered by the capability documentation can take place only after the capability approval has been granted by the NSI.

3.4.3.3 *Test methods*

3.4.3.3.1 *Introduction*

Capability approval tests and maintenance of capability approval shall be performed according to the relevant detail specification. The test procedures shall be in accordance with the relevant IEC publication.

The capability documentation shall refer to the manufacturer's process and test documentation. The capability documentation shall address the process testing and monitoring, for example: