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Konektorji za električno in elektronsko opremo - Zahteve za izdelek - 1. del:
Splošna specifikacija

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

Connecteurs pour équipements électroniques - Exigences de produit - Partie 1:
Spécification générique

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ICS:

31.220.10	Vtiči in vtičnice, konektorji	Plug-and-socket devices. Connectors
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48B/3210/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER: IEC 61076-1 ED3	
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SECRETARIAT: United States of America	SECRETARY: Mr Jeffrey Toran
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL FUNCTION(S):
ASPECTS CONCERNED:	
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TITLE:

Connectors for electrical and electronic equipment – Product requirements – Part 1: Generic specification

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**Connectors for electrical and electronic equipment – Product requirements –
Part 1: Generic specification****FOREWORD**

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IEC 61076-1 has been prepared by subcommittee 48B: Electrical connectors, of IEC technical committee 48: Electrical connectors and mechanical structures for electrical and electronic equipment. It is an International Standard.

This third edition cancels and replaces the second edition published in 2006 and Amendment 1:2019. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) revision of Scope moving former subclauses 1.2.1, 1.2.2 and 1.2.3, respectively providing requirements for sectional product specifications, blank detail specifications and detail product specification to more specific relevant subclauses;
- b) alignment with most recent IEC template concerning mandatory first [Clause 1](#), [Clause 2](#), [Clause 3](#);
- c) updated Introduction, removing duplicated text;
- d) updated and expanded normative references, as well as [Bibliography](#);
- e) added several useful cross-references in the text;
- f) alignment of clause numbering with the new edition under development of some sectional product specifications.

The text of this International Standard is based on the following documents:

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts of the IEC 61076 series, published under the general title *Connectors for electrical and electronic equipment - Product requirements*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

The objective of the third Edition of this document is to review and update the connector specifications containing product requirements.

The objective of its first edition was to update the quality assessment procedures of the connector specifications to the state-of-the-art industrial procedures at that time. At its 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 were related to the *lot-by-lot* tests with different inspection levels and acceptance quality level, and to the periodic tests with permitted number of defects.

To update the document to reflect more modern practices, it was then felt necessary to introduce the *capability* and the *technology approval*, together with the basic design parameters of *statistical process control*, as a feedback system to have a continuous control of the quality during the various steps of manufacture.

It was also then felt appropriate to split the documentation structure, at that moment used, into two separate structures of documents which, in the day-to-day use of specifications, could satisfy most users, see [Figure 2](#).

This offered the user the option to acquire products with and without certification. It is obvious that the industry needs to get separate information on dimensions, performance requirements and basic design parameters.

The documentation system has been then split into two parts:

Product requirements

Quality assessment requirements

The structure for the connector *detail product specification* contains characteristics, dimensions, performance requirements (electrical, environmental, mechanical) and test schedules. The relevant document is this document, together with the applicable sectional specification.

The structure for the connector *quality assessment specification* contains the requirements to obtain qualification approval (QA) for a given performance level (per environmental 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 were intended to replace lot-by-lot and periodic tests. The relevant document is:

IEC 62197-1:2006, *Connectors for electrical and electronic equipment - Quality assessment requirements - Part 1: Generic specification*

To specify a fully certifiable product, a combination of the two structures had to be selected by the user, keeping in mind that in the statistical process control, key characteristics would have to 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.