
Mehanske konstrukcije elektronske opreme – Mere mehanskih konstrukcij v seriji 482,6 mm (19 in) – 3-101. del: Podokviri in pripadajoče vtične enote (IEC 60297-3-101:2004)

Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 3-101: Subracks and associated plug-in units (IEC 60297-3-101:2004)

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EUROPEAN STANDARD

EN 60297-3-101

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2004

ICS 31.240

Supersedes HD 493.3 S2:1993, EN 60297-4:1995 + A1:1999, EN 60297-5-100:2001,
EN 60297-5-102:2001, EN 60297-5-103:2001 & EN 60297-5-107:2001

English version

**Mechanical structures for electronic equipment -
Dimensions of mechanical structures of the 482,6 mm (19 in) series
Part 3-101: Subracks and associated plug-in units
(IEC 60297-3-101:2004)**

Structures mécaniques
pour équipement électronique -
Dimensions des structures mécaniques
de la série de 482,6 mm (19 in)
Partie 3-101: Bacs et blocs enfichables
associés
(CEI 60297-3-101:2004)

Bauweisen für elektronische
Einrichtungen -
Maße der 482,6-mm-(19-in-)Bauweise
Teil 3-101: Baugruppenträger
und Baugruppen
(IEC 60297-3-101:2004)

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This European Standard was approved by CENELEC on 2004-09-01. 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 members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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 48D/299/FDIS, future edition 1 of IEC 60297-3-101, prepared by SC 48D, Mechanical structures for electronic equipment, 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 60297-3-101 on 2004-09-01.

This European Standard supersedes HD 493.3 S2:1993, EN 60297-4:1995 + A1:1999, EN 60297-5-100:2001, EN 60297-5-102:2001 + corrigendum July 2001, EN 60297-5-103:2001 and EN 60297-5-107:2001.

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) 2005-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-09-01

Annex ZA has been added by CENELEC.

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The text of the International Standard IEC 60297-3-101:2004 was approved by CENELEC as a European Standard without any modification.
<https://standards.iteh.ai/standards/sist/66706fc7-1ecc-489a-9bd3-e31d8fc6889a/sist-en-60297-3-101-2005>

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 Where 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 60249-2-1	- ¹⁾	Base materials for printed circuits Part 2: Specifications - Specification No. 1: Phenolic cellulose paper copper- clad laminated sheet, high electrical quality	EN 60249-2-1	1994 ²⁾
IEC 60297-1	1986	Dimensions of mechanical structures of the 482,6 mm (19 in) series Part 1: Panels and racks	HD 493.1 S1	1988
IEC 60297-2	1982	Part 2: Cabinets and pitches of rack structures	HD 493.2 S1	1988
IEC 60603-2	1995	Connectors for frequencies below 3 MHz for use with printed boards Part 2: Detail specification for two-part connectors with assessed quality, for printed boards, for basic grid of 2,54 mm (0,1 in) with common mounting features	EN 60603-2	1998
IEC 60917-1	1998	Modular order for the development of mechanical structures for electronic equipment practices Part 1: Generic standard	EN 60917-1	1998
IEC 61076-4-101	2001	Connectors for electronic equipment Part 4-101: Printed board connectors with assessed quality - Detail specification for two-part connector modules, having a basic grid of 2,0 mm for printed boards and backplanes in accordance with IEC 60917	EN 61076-4-101	2001
IEC 61076-4-113	2002	Part 4-113: Detail specification for two- part connectors having 5 rows with a grid of 2,54 mm for printed boards and backplanes in bus applications	EN 61076-4-113	2003

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 61587-1	1999	Mechanical structures for electronic equipment - Tests for IEC 60917 and IEC 60297 Part 1: Climatic, mechanical tests and safety aspects for cabinets, racks, subracks and chassis	EN 61587-1	1999
IEC 61587-3	1999	Part 3: Electromagnetic shielding performance tests for cabinets, racks and subracks	-	-

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INTERNATIONAL STANDARD

IEC 60297-3-101

First edition
2004-08

Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series –

Part 3-101: Subracks and associated plug-in units (standards.iteh.ai)

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[https://standards.iteh.ai/catalog/standards/sist/66706fc7-1ecc-489a-9bd3-
e31d8fc68f9a/sist-en-60297-3-101-2005](https://standards.iteh.ai/catalog/standards/sist/66706fc7-1ecc-489a-9bd3-e31d8fc68f9a/sist-en-60297-3-101-2005)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MECHANICAL STRUCTURES FOR ELECTRONIC EQUIPMENT –
DIMENSIONS OF MECHANICAL STRUCTURES OF THE
482,6 mm (19 in) SERIES –**

Part 3-101: Subracks and associated plug-in units

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 60297-3-101 has been prepared by subcommittee 48D: Mechanical structures for electronic equipment, of IEC technical committee 48: Electro-mechanical components and mechanical structures for electronic equipment.

This standard cancels and replaces IEC 60297-3, IEC 60297-4, IEC 60297-5-100, IEC 60297-5-102, IEC 60297-5-103, IEC 60297-5-107.

The text of this standard is based on following documents:

FDIS	Report on voting
48D/299/FDIS	48D/306/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 IEC 60297-3 series consists of the following parts, under the general title *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series*

Part 3-101: Subracks and associated plug-in units

Part 3-102: Injector/extractor handle

Part 3-103: Keying and alignment pin

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.

A bilingual edition of this standard may be issued at a later date.

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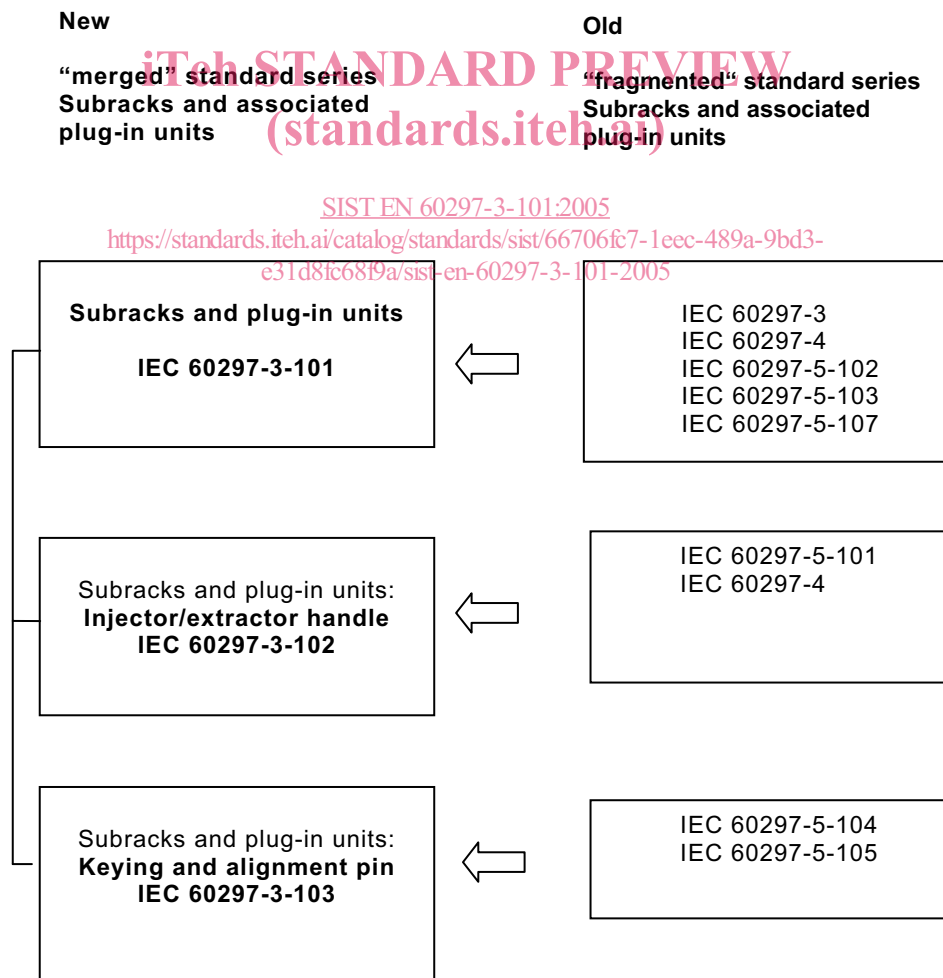
INTRODUCTION

The “Dimensions of mechanical structures of the 482,6 mm (19 in) standards are defined in IEC 60297. To the original IEC 60297-3:1988 publication was added Amendment 1:1995. The additional requirements were published in IEC 60297-4:1995 with Amendment 1:1999.

The extended requirements were published in the IEC 60297-5-1XX series (2001). Responding to market requirements and for more clarity it became necessary to merge and technically enhance these standard “parts” into 3 “new” standards for subracks and associated plug-in units. This “merged” standard series now defined as IEC 60297-3-101, IEC 60297-3-102 and IEC 60297-3-103 explains its relationship to the previous “fragmented” IEC 60297-X standards, see Figure 1.

The nomenclature of these new standards has been revised. The relationship to IEC 60297-1 (Part 1: Panels and Racks) has been maintained. The relationship to IEC 60297-2 (Part 2: Cabinets and pitches of rack structures) has been maintained. The relationship to IEC 61587-1 (Part 1: Climatic, mechanical tests and safety aspects for cabinets, racks, subracks and chassis) and IEC TS 61587-3 (Part 3: Electromagnetic shielding performance tests for cabinets, racks and subracks) has been added.

The IEC 60297-3-101 standard defines the interfaces of the basic 482,6 mm (19 in) subrack and associated plug-in units.



IEC 1089/04

Figure 1 – Relationship between the new IEC 60297-3 series and the old IEC 60297 series