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**Mechanical structures for electronic equipment - Dimensions of mechanical structures of the 482,6 mm (19 in) series - Part 5-107: Subracks and associated plug-in units - Rear mounted plug-in units (IEC 60297-5-107:2001)**

Mechanical structures for electronic equipment - Dimensions of mechanical structures of the 482,6 mm (19 in) series -- Part 5-107: Subracks and associated plug-in units - Rear mounted plug-in units

Bauweisen für elektronische Einrichtungen - Maße der 482,6-mm-(19-in-)Bauweise -- Teil 5-107: Baugruppenträger und zugehörige Baugruppen - Rückseitig zu steckende Baugruppen

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Structures mécaniques pour équipement électronique - Dimensions des structures mécaniques de la série de 482,6 mm (19 in) -- Partie 5-107: Bacs et blocs enfichables associés - Blocs enfichables à montage arrière

**Ta slovenski standard je istoveten z: EN 60297-5-107:2001**

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EUROPEAN STANDARD

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**Mechanical structures for electronic equipment -  
Dimensions of mechanical structures of the 482,6 mm (19 in) series  
Part 5-107: Subracks and associated plug-in units -  
Rear mounted plug-in units  
(IEC 60297-5-107:2001)**

Structures mécaniques pour équipement  
électronique -  
Dimensions des structures mécaniques  
de la série de 482,6 mm (19 in)  
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arrière  
(CEI 60297-5-107:2001)

Bauweisen für elektronische  
Einrichtungen -  
Maße der 482,6-mm-(19-in-)Bauweise  
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# 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/244/FDIS, future edition 1 of IEC 60297-5-107, 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 60297-5-107 on 2001-03-01.

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) 2001-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-03-01

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.

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## Endorsement notice

The text of the International Standard IEC 60297-5-107:2001 was approved by CENELEC as a European Standard without any modification.

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## INTRODUCTION

This part of IEC 60297 is based on IEC 60297-3 (1984), its Amendment 1 (1992), and IEC 60297-4 (1995). It contains detail dimensions which ensure dimensional interchangeability of subracks with front mounted plug-in units per IEC 60297-4 requiring additional rear mounted plug-in units as defined in this standard. Front and/or rear subrack mounted plug-in units are mechanically identical (not electrically), however, the rear subrack mounted plug-in unit is mounted in a mirror image position to the front subrack mounted plug-in unit. The component side 1 (printed board reference plane) of the front mounted plug-in unit and the component side 1 of the rear mounted plug-in unit (printed board reference plane) are thus "in line". The first front mounted plug-in unit refers to the first printed board position on the left side of the subrack, viewed from the front. The first rear mounted plug-in unit refers to the first rear mounted plug-in unit position on the right side of the subrack, viewed from the rear.

Like many of the IEC 60297-3 and IEC 60297-4 subracks and associated plug-in unit basic dimensions, this standard also refers to the IEC 60603-2 connector series for its basic dimensional relationship.

This standard applies only to the mechanical structures for electronic equipment practices according to the IEC 60297 series.

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

## Part 5-107: Subracks and associated plug-in units – Rear mounted plug-in units

### 1 Scope and object

This part of IEC 60297 covers extended features of subrack rear mounted plug-in units added to (front mounted) plug-in units and subracks according to IEC 60297-3 and IEC 60297-4. By implementing this extended feature to the subrack and plug-in units, a new subrack and plug-in unit type (incompatible with IEC 60297-3 and IEC 60297-4) is created.

The purpose of this standard is to specify dimensions which will ensure dimensional interchangeability of subracks and associated plug-in units using the extended function of rear subrack mounted plug-in units added to IEC 60297-3 and IEC 60297-4.

For mechanical and climatic tests refer to IEC 61587-1.

For electromagnetic shielding performance tests refer to IEC/TS 61587-3.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60297. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60297 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 60297-3, *Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 3: Subracks and associated plug-in units*

IEC 60297-4, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 4: Subracks and associated plug-in units – Additional dimensions*<sup>1</sup>

IEC 60297-5-100, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 5-100: Subracks and associated plug-in units – Design overview*

IEC 60297-5-101, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 5-101: Subracks and associated plug-in units – Injector/extractor handle*

IEC 60297-5-105, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 5-105: Subracks and associated plug-in units – Alignment and /or earth pin*

IEC 60603-2, *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*

<sup>1</sup> There is a consolidated edition 1.1 (1999) that includes IEC 60297-4 (1995) and its amendment 1 (1999).

IEC 60917-1, *Modular order for the development of mechanical structures for electronic equipment practices – Part 1: Generic standard*

IEC 61076-2, *Connectors for use in d.c., low-frequency analogue and digital high speed data applications – Part 2: Circular connectors with assessed quality – Sectional specification*

IEC 61076-4-101, *Connectors with assessed quality, for use in d.c. low-frequency analogue and in digital high speed data applications – Part 4: Printed board connectors – Section 101: Detail specification for two-part connector modules having a basic grid of 2,0 mm for printed boards and backplanes in accordance with IEC 917*

IEC 61076-4-113, *Detail specification for two-part connectors having 5 rows with a grid of 2,54 mm for printed boards and backplanes in bus applications<sup>2</sup>*

IEC 61587-1, *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*

IEC/TS 61587-3, *Mechanical structures for electronic equipment – Tests for IEC 60917 and IEC 60297 – Part 3: Electromagnetic shielding performance tests for cabinets, racks and subracks*

### 3 Definitions

For the purpose of this part of IEC 60297, the definitions of IEC 60917-1 apply.

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### 4 Extended feature added to IEC 60297-3 and IEC 60297-4 as described in IEC 60297-5-100

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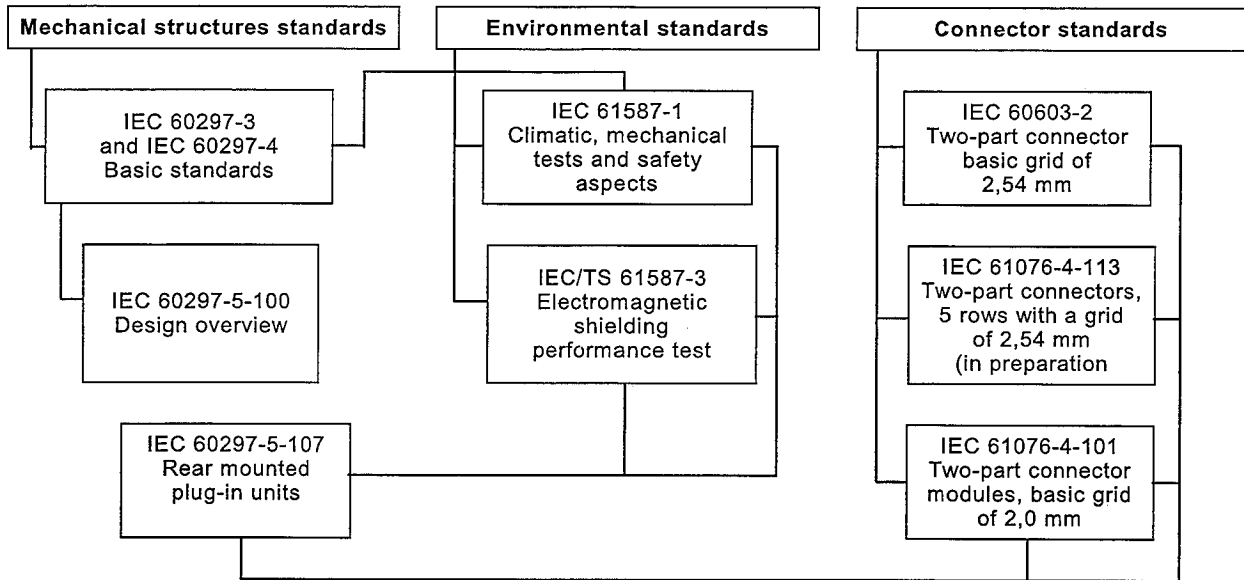
This standard gives dimensions only where they differ from or supplement those to be found in IEC 60297-3 and 60297-4. The dimensions used in this standard shall take precedence over those of IEC 60297-3 and 60297-4 when conformance to this standard is claimed. Dimensions shown in brackets are for reference only and are found in the stated standards.

The drawings in this standard are not intended to indicate product design.

Extended feature	Basic standards	Extended standards	Environmental standard(s)
Rear mounted plug-in units	IEC 60297-3 IEC 60297-4	IEC 60297-5-107	IEC 61587-1 IEC/TS 61587-3

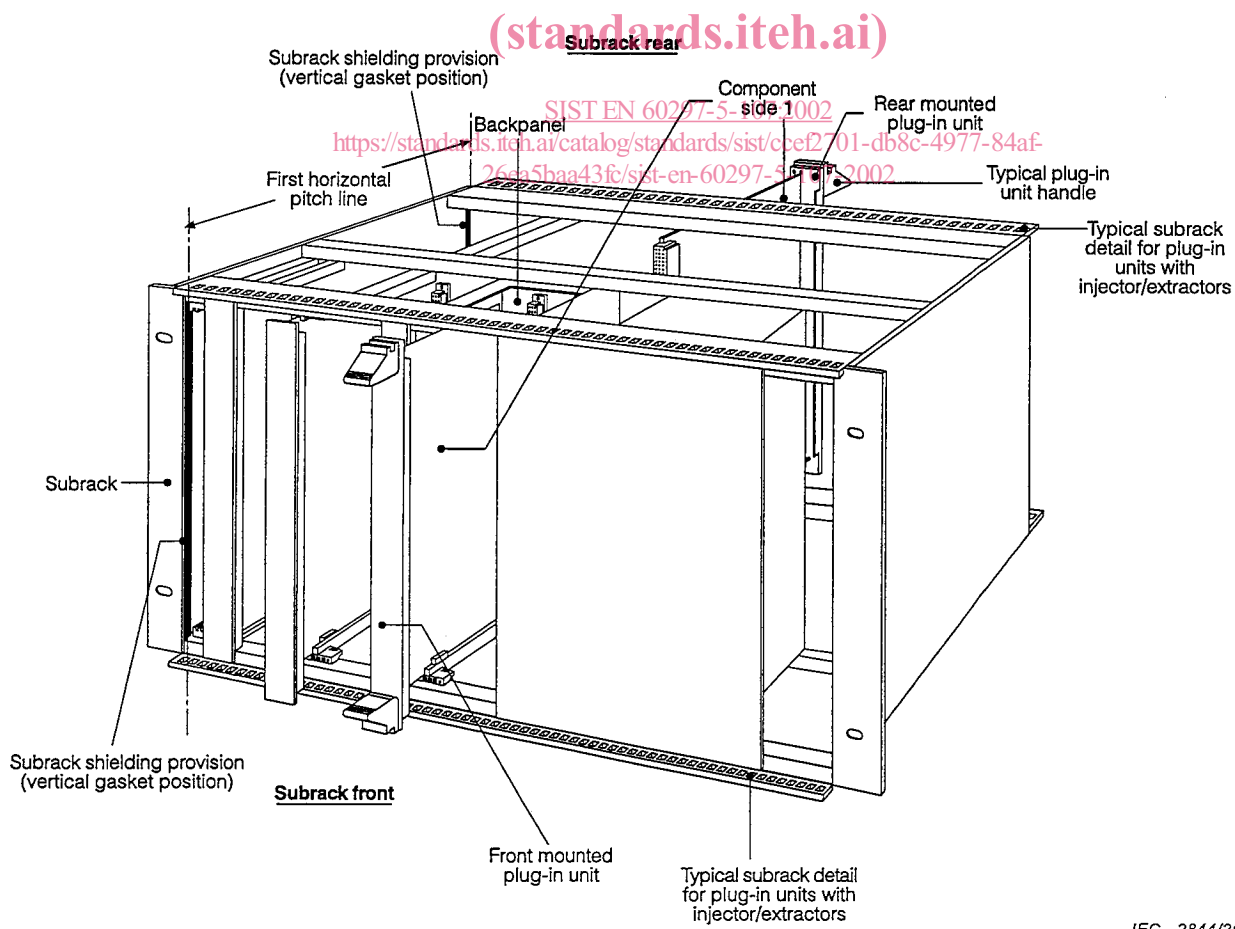
<sup>2</sup> To be published.





## 5 General equipment arrangement

Generally, these are subracks featuring front and/or rear subrack mounted plug-in units.



IEC 2844/2000

Figure 1 – General equipment arrangement – Typical 6U subrack with front and rear mounted plug-in units