

SLOVENSKI STANDARD
SIST EN 60297-5-100:2002
01-september-2002

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 and overview (IEC 60297-5-100:2001)

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

Bauweisen für elektronische Einrichtungen - Maße der 482,6-mm-(19-in-)Bauweise -- Teil 5-100: Baugruppenträger und zugehörige Baugruppen - Konstruktionsübersicht

Structures mécaniques pour équipement électronique - Dimensions des structures mécaniques de la série de 482,6 mm (19 in) -- Partie 5-100: Bacs et blocs enfichables associés - Vue d'ensemble de la conception

Ta slovenski standard je istoveten z: EN 60297-5-100:2001

ICS:

31.240	Mehanske konstrukcije za elektronsko opremo	Mechanical structures for electronic equipment
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EUROPEAN STANDARD

EN 60297-5-100

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English version

**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 60297-5-100:2001)**

Structures mécaniques pour équipement
électronique -
Dimensions des structures mécaniques
de la série de 482,6 mm (19 in)
Partie 5-100: Bacs et blocs enfichables
associés -
Vue d'ensemble de la conception
(CEI 60297-5-100:2001)

Bauweisen für elektronische
Einrichtungen -
Maße der 482,6-mm-(19-in-)Bauweise
Teil 5-100: Baugruppenträger und
zugehörige Baugruppen -
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(IEC 60297-5-100:2001)

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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, Czech Republic, 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 48D/238/FDIS, future edition 1 of IEC 60297-5-100, 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 60297-5-100 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.

Endorsement notice

The text of the International Standard IEC 60297-5-100:2001 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 60297-1 (1986), IEC 60297-3 (1984), its Amendment 1 (1992), and IEC 60297-4 (1995). Contained in this design overview are references to related detail standards which ensure dimensional interchangeability of subracks and plug-in units requiring plug-in unit injector/extractors, electromagnetic shielding provision, electrostatic discharge (ESD) protection, keying, a multi-purpose alignment pin and subrack rear mounted plug-in units. The dimensional relationship of IEC 60297-3 and IEC 60297-4 is based upon the IEC 60603-2 connector series

This standard, in whole or in part, 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 5-100: Subracks and associated plug-in units – Design overview

1 Scope and object

This part of IEC 60297 covers extended features added to subracks and compatible printed boards and plug-in units according to IEC 60297-3 and IEC 60297-4. By implementing these extended features to the subracks and plug-in units, a new subrack and plug-in unit (incompatible with IEC 60297-3 and IEC 60297-4) type is created.

The purpose of this standard is to give a design overview of the related detail standards which will ensure dimensional interchangeability of subracks and associated plug-in units. The extended features contained in this standard may be referred to and/or implemented independently. 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 60297-1, *Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 1: Panels and racks*

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*¹

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 60297-5-102, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 5-102: Subracks and associated plug-in units – Electromagnetic shielding provision*

IEC 60297-5-103, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 5-103: Subracks and associated plug-in units –*

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

IEC 60297-5-104, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 5-104: Subracks and associated plug-in units – Keying*

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 60297-5-107, *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 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*

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

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 60917*

IEC 61076-4-113, *Connectors with assessed quality, for use in d.c. low-frequency analogue and in digital high speed data applications – Part 4-113: Printed board connectors – Detail specification for two-part connectors having 5 rows with a grid of 2,54 mm for printed boards and backplanes in bus applications²*

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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.

4 Extended features added to IEC 60297-3 and IEC 60297-4

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.

² To be published.

Extended feature	Basic standards	Extended standards	Environmental standards	Connector standards
Injector/extractor handle	IEC 60297-1 IEC 60297-3 IEC 60297-4	IEC 60297-5-101 IEC 60297-5-107	IEC 61587-1	
Electromagnetic shielding provision		IEC 60297-5-102 IEC 60297-5-105 IEC 60297-5-107	IEC 61587-1 IEC/TS 61587-3	
Electrostatic discharge protection		IEC 60297-5-103 IEC 60297-5-107	IEC 61587-1	
Keying		IEC 60297-5-104 IEC 60297-5-107	IEC 61587-1	
Alignment and/or earth pin		IEC 60297-5-102 IEC 60297-5-105 IEC 60297-5-107	IEC 61587-1 IEC/TS 61587-3	
Rear mounted plug-in units		IEC 60297-5-107	IEC 61587-1 IEC/TS 61587-3	IEC 60603-2 IEC 61076-4-113 IEC 61076-4-101

Application of extended features for IEC 60297-3 and IEC 60297-4

