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**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 (IEC 60297-4:1995)**

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

Bauweisen für elektronische Einrichtungen - Maße der 482,6-mm-(19 in)-Bauweise -- Teil 4: Baugruppenträger und Baugruppen - Zusätzliche Maße

Structures mécaniques pour équipement électronique - Dimensions des structures mécaniques de la série de 482,6 mm (19 in) -- Partie 4: Bacs et blocs enfichables associés - Dimensions supplémentaires

**Ta slovenski standard je istoveten z: EN 60297-4:1995**

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**ICS:**

31.240	Mehanske konstrukcije za elektronsko opremo	Mechanical structures for electronic equipment
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**SIST EN 60297-4:2002****en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 60297-4**

April 1995

ICS 31.240

Descriptors: Subracks and associated plug-in units, dimensions, 19 in series

English version

**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**  
**(IEC 297-4:1995)**

Structures mécaniques pour équipement  
électronique  
Dimensions des structures mécaniques  
de la série de 482,6 mm (19 in)  
Partie 4: Bacs et blocs enfichables  
associés - Dimensions supplémentaires  
(CEI 297-4:1995)

Bauweisen für elektronische  
Einrichtungen  
Maße der 482,6-mm-(19 in)-Bauweise  
Teil 4: Baugruppenträger und  
Baugruppen - Zusätzliche Maße  
(IEC 297-4:1995)

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This European Standard was approved by CENELEC on 1995-03-06. 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.

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, 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(CO)42, future edition 1 of IEC 297-4, 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 60297-4 on 1995-03-06.

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) 1996-03-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1996-03-01

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.

This part 4 of EN 60297 shall be used in conjunction with the following standards:

EN 60249	series	Base materials for printed circuits (IEC 249, series)
HD 493.1 S1	1988	Dimensions of mechanical structures of the 482,6 mm (19 in) series Part 1: Panels and racks (IEC 297-1:1986)
HD 493.2 S1	1988	Part 2: Cabinets and pitches of rack structures (IEC 297-2:1982)
HD 493.3 S2	1993	Part 3: Subracks and associated plug-in units (IEC 297-3:1984 + A1:1992)
HD 550 S1	1989	Mechanical structures for electronic equipment - Terminology (IEC 916:1988)
IEC 603-1	1991	Connectors for frequencies below 3 Mhz for use with printed boards
A1	1992	Part 1: Generic specification - General requirements and guide for the preparation of detail specifications, with assessed quality
IEC 603-2	1988	Part 2: Two-part connectors for printed boards, for basic grid of 2,54 mm (0,1 in), with common mounting features

### Endorsement notice

The text of the International Standard IEC 297-4:1995 was approved by CENELEC as a European Standard without any modification.

**Annex ZA (normative)****Normative references to international publications  
with their corresponding European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When 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 297-3	1984	Dimensions of mechanical structures of the 482,6 mm (19 in) series Part 3: Subracks and associated plug-in units	HD 493.3 S2 <sup>1)</sup>	1993
IEC 603-2	1988	Connectors for frequencies below 3 Mhz for use with printed boards Part 2: Two-part connectors for printed boards, for basic grid of 2,54 mm (0,1 in), with common mounting features		-

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1) HD 493.3 S2 includes A1:1992 to IEC 297-3.

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
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**CEI  
IEC  
297-4**

Première édition  
First edition  
1995-02

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**Structures mécaniques pour équipement  
électronique – Dimensions des structures  
mécaniques de la série de 482,6 mm (19 in) –**

**Partie 4:  
Bacs et blocs enfichables associés –  
Dimensions supplémentaires**

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**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**

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International Electrotechnical Commission  
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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 4: Subracks and associated plug-in units –  
 Additional dimensions**

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

International Standard IEC 297-4 has been prepared by sub-committee 48D: Mechanical structures for electronic equipment, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

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

DIS	Report on voting
48D(CO)42	48D/84/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 part of IEC 297 shall be used in conjunction with the following standards:

IEC 249: *Base materials for printed circuits*

IEC 297-1: 1986, *Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 1: Panels and racks*

IEC 297-2: 1982, *Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 2: Cabinets and pitches of rack structures*

IEC 297-3: 1984, *Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 3: Subracks and associated plug-in units*

IEC 603-1: 1991, *Connectors for frequencies below 3 MHz for use with printed boards – Part 1: Generic specification – General requirements and guide for the preparation of detail specifications, with assessed quality*  
Amendment No. 1 (1992)

IEC 603-2: 1988, *Connectors for frequencies below 3 MHz for use with printed boards – Part 2: Two-part connectors for printed boards, for basic grid of 2,54 mm (0,1 in), with common mounting features*

IEC 916: 1988, *Mechanical structures for electronic equipment – Terminology*

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## INTRODUCTION

This standard is based on the American National Standard ANSI/IEEE 1101.1-1991 which, in turn, was based on IEC 297-3. Contained in this standard are the specific dimensions for an injector extractor and connector-related dimensions for two-part connector types according to IEC 603-2.

This standard only gives dimensions where they differ from or supplement those to be found in IEC 297-3.

The dimensions used in this standard shall take precedence over those of IEC 297-3 when conformance to this standard is claimed.

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