



# SLOVENSKI STANDARD

## SIST HD 493.2 S1:2004

01-januar-2004

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**[Not translated]**

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

Maße der 482,6-mm-Bauweise (19-Zoll-Bauweise) - Teil 2: Schränke und Gestellreihen

Dimensions des structures mécaniques de la série de 482,6 mm (19 in) - Partie 2: Armoires et pas des structures (standards.iteh.ai)

Ta slovenski standard je istoveten z: <sup>SIST HD 493.2 S1:2004</sup>**HD 493.2 S1:1988**  
<https://standards.iteh.ai/catalog/standards/sist/4657675f-640d-4c1e-9a04-c4f90271165d/sist-hd-493-2-s1-2004>

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**ICS:**

31.240	Mehanske konstrukcije za elektronsko opremo	Mechanical structures for electronic equipment
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**SIST HD 493.2 S1:2004**

**en**

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KEY WORDS: Mounting of electronic equipment on a vertical plane;  
 panels, racks, cabinets; dimensions

DIMENSIONS OF MECHANICAL STRUCTURES OF THE 482.6  
 MM (19 IN) SERIES  
 PART 2: CABINETS AND PITCHES OF RACK STRUCTURES

Dimensions des structures  
 mécaniques de la série de 482,6  
 mm (19 in)  
 Deuxième partie: Armoires et pas  
 des structures

Maße der  
 482,6-mm-Bauweise  
 (19-Zoll-Bauweise)  
 Teil 2: Schränke und  
 Gestellreihen

BODY OF THE HD

The Harmonization Document consists of:

- IEC 297-2 (1982) ed 1; IEC/SC 480, not appended

This Harmonization Document was approved by CENELEC on 1987-12-02.

[https://standards.iteh.ai/catalog/standards/sist/4637b73f-640d-4c1e-9a04-](https://standards.iteh.ai/catalog/standards/sist/4637b73f-640d-4c1e-9a04-4992711658/sist-hd-493.2-s1-2004)

The English and French versions of this Harmonization Document are provided by the text of the IEC publication and the German version is the official translation of the IEC text. The German translation is available.

According to the CENELEC Internal Regulations the CENELEC member National Committees are bound:

to announce the existence of this Harmonization Document at national level by or before 1988-06-01

to publish their new harmonized national standard by or before 1988-12-01

to withdraw all conflicting national standards by or before 1988-12-01.

Harmonized national standards are listed on the HD information sheet, which is available from the CENELEC National Committees or from the CENELEC Central Secretariat.

The CENELEC National Committees are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC  
297-2**

Première édition  
First edition  
1982

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**Dimensions des structures mécaniques  
de la série de 482,6 mm (19 in)**

**Deuxième partie:  
Armoires et pas des structures**

**Dimensions of mechanical structures  
of the 482,6 mm (19 in) series**

**Part 2:  
Cabinets and pitches of rack structures**

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Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DIMENSIONS OF MECHANICAL STRUCTURES  
OF THE 482.6 mm (19 in) SERIES**
**Part 2: Cabinets and pitches of rack structures**

## FOREWORD

- 1) 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.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

## PREFACE

This standard has been prepared by Sub-Committee 48D: Mechanical Structures for Electronic Equipment, of IEC Technical Committee No. 48: Electromechanical Components for Electronic Equipment.

A first draft document was circulated to the National Committees in May 1977. At the meeting held in Zurich in 1977, it was found necessary to prepare a second draft. This second draft was circulated to the National Committees under the Accelerated Procedure in March 1979.

As a result, Document 48D(Central Office)3 was submitted to the National Committees for approval under the Six Months' Rule in March 1980.

The National Committees of the following countries voted explicitly in favour of publication:

Australia	Italy
Austria	Netherlands
Belgium	New Zealand
Cuba (Republic of)	Norway
Czechoslovakia	South Africa (Republic of)
Egypt	Spain
Finland	Sweden
Germany	Switzerland
German Democratic Republic	Turkey
Hungary	

This Part 2 should be read in conjunction with IEC Publication 297 (Second edition, 1975).

## DIMENSIONS OF MECHANICAL STRUCTURES OF THE 482.6 mm (19 in) SERIES

### Part 2: Cabinets and pitches of rack structures

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#### 1. Scope

This standard covers the basic dimensions of free-standing cabinets and fixed rack structures used in 482.6 mm (19 in) rack and panel electronic equipment practice.

#### 2. Cabinet – Description

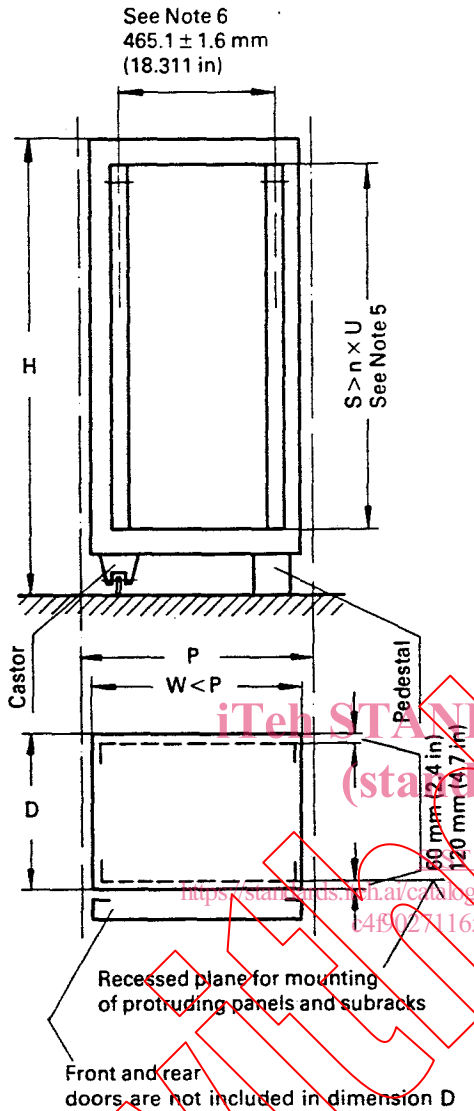
For the purpose of this standard, a *cabinet* is defined as a free-standing and self-supporting enclosure for electronic equipment capable of being used alone or in combination with other cabinets to form a suite. A *cabinet* may or may not have a plinth, feet, rollers, castors, etc., depending on the load-carrying and mobility requirements of the user.

It may be fitted with doors and/or side panels on one or more sides to suit the application.

A cabinet will house or incorporate vertical members to which can be attached panels, etc., in accordance with IEC Publication 297-1.

A *rack* is a metallic structure without doors or coverings.

3. Cabinet – Basic dimensions



The millimetre sizes are the original sizes

Notes

1. The values for height H and depth D are overall cabinet dimensions to which normal production tolerances apply. The height includes any castors and pedestals.
2. For height, an increment of 200 mm (7.97 in) is chosen ( $2 \times 200 \text{ mm} = 9 \text{ U}$ ).
3. The pitch P is the theoretical distance between datum lines for the mounting of cabinets in a row. The width  $W < P$  shall be chosen and toleranced so that a suite of cabinets can be installed with the required pitch. Where in special cases other pitch dimensions are required, these shall be in increments of 100 mm.
4. For depth, an increment of 200 mm (7.97 in) is chosen. The intermediate size of 450 mm (17.71 in) is a recommended value in the International Telephone and Telegraph Consultative Committee (C.C.I.T.T.).
5. S designates the vertical apertures for the mounting of panels and subracks and is a typical dimension only. U is the vertical increment 44.45 mm (1.75 in) according to IEC Publication 297.
6. For fixing dimensions see IEC Publication 297-1.

Height	mm	800	1000	1200	1400	1600	1800	2000	2200
H	in	31.49	39.37	47.24	55.11	62.99	70.86	78.74	86.61
S	n × U	13 × U	18 × U	22 × U	27 × U	31 × U	36 × U	40 × U	45 × U

Pitch P	mm	550*	600	700*	800	900			
W < P	in	21.65	23.62	27.55	31.49	35.43			

Depth	mm	400	450**	600	650**	800	900		
D	in	15.74	17.71	23.62	25.59	31.49	35.43		

\* P 550 For applications where space is restricted to less than 600 mm and side cabling within the cabinet is minimal.

P 700 Principally for applications involving swinging racks.

\*\* D 450 The basic depth of 450 mm is in accordance with C.C.I.T.T. Recommendation C.231 which allows the addition of maintenance controls, cooling fins and covers at the front and rear to increase the overall depth to 520 mm.

D 650 Not recommended for future applications.