
Modular order for the development of mechanical structures for electronic equipment practices - Part 2: Sectional specification - Interface co-ordination dimensions for the 25 mm equipment practice - Section 2: Detail specification - Dimensions for subracks, chassis, backplanes, front panels and plug-in units (IEC 60917-2-2:1994)

Modular order for the development of mechanical structures for electronic equipment practices -- Part 2: Sectional specification - Interface co-ordination dimensions for the 25 mm equipment practice -- Section 2: Detail specification - Dimensions for subracks, chassis, backplanes, front panels and plug-in units

Modulordnung für die Entwicklung von Bauweisen für elektronische Einrichtungen -- Teil 2: Strukturnorm - Schnittstellen-Koordinationsmaße für die 25-mm-Bauweise -- Hauptabschnitt 2: Maßnorm - Maße für Baugruppenträger, Einschübe, Rückplatten, Frontplatten und steckbare Baugruppen

Ordre modulaire pour le développement des structures mécaniques pour les infrastructures électroniques -- Partie 2: Spécification intermédiaire - Dimensions de coordination pour les interfaces des infrastructures au pas de 25 mm -- Section 2: Spécification particulière - Dimensions pour bacs, châssis, fonds de paniers, faces avant et unités enfichables

Ta slovenski standard je istoveten z: EN 60917-2-2:1996

ICS:

31.240	Mehanske konstrukcije za elektronsko opremo	Mechanical structures for electronic equipment
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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60917-2-2

January 1996

ICS 31.240

Descriptors: Interface co-ordination dimensions, 25 mm equipment practice, subracks, chassis, backplanes, front panels and plug-in units

English version

Modular order for the development of mechanical structures for electronic equipment practices
Part 2: Sectional specification - Interface co-ordination dimensions for the 25 mm equipment practice
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Modulordnung für die Entwicklung von Bauweisen für elektronische Einrichtungen
Teil 2: Strukturnorm
Schnittstellen-Koordinationsmaße für die 25-mm-Bauweise
Hauptabschnitt 2: Maßnorm
Maße für Baugruppenträger, Einschübe, Rückplatten, Frontplatten und steckbare Baugruppen
(IEC 917-2-2:1994)

This European Standard was approved by CENELEC on 1995-11-28. 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

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 the International Standard IEC 917-2-2:1994, 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 formal vote and was approved by CENELEC as EN 60917-2-2 on 1995-11-28 without any modification.

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) 1996-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1996-12-01

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 917-2-2:1994 was approved by CENELEC as a European Standard without any modification.

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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 249-2	1970	Base materials for printed circuits Part 2: Specifications	-	-
IEC 916	1988	Mechanical structures for electronic equipment Terminology	HD 550 S1	1989
IEC 917	1988	Modular order for the development of mechanical structures for electronic equipment practices	EN 60917	1990
A1	1993	https://standards.iteh.ai/catalog/standards/sist/ca17e0c-2fac-49f5-b5fe-a26a133b04d1/sist-en-60917-2-2-2002	A1	1994
IEC 917-0	1989	Modular order for the development of mechanical structures for electronic equipment practices Part 0: Guide for the users of Publication 917	EN 60917-0	1992
IEC 917-2	1992	Part 2: Sectional specification - Interface co-ordination dimensions for the 25 mm equipment practice	EN 60917-2	1994
IEC 917-2-1	1993	Section 1: Detail specification - Dimensions for cabinets and racks	EN 60917-2-1	1995
IEC 1076-X	-	Connector standards related to this 25 mm equipment practice (in preparation)	-	-

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**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC
917-2-2**

Première édition
First edition
1994-04

**Ordre modulaire pour le développement
des structures mécaniques pour
les infrastructures électroniques –**

Partie 2:

Spécification intermédiaire –

Dimensions de coordination pour les interfaces
des infrastructures au pas de 25 mm –

Section 2: Spécification particulière –

Dimensions pour bacs, châssis, fonds de panier,
faces avant et unités enfichables

**Modular order for the development
of mechanical structures for electronic
equipment practices –**

Part 2:

Sectional specification –

Interface co-ordination dimensions for
the 25 mm equipment practice –

Section 2: Detail specification –

Dimensions for subracks, chassis, backplanes,
front panels and plug-in units

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MODULAR ORDER FOR THE DEVELOPMENT
OF MECHANICAL STRUCTURES
FOR ELECTRONIC EQUIPMENT PRACTICES –**

**Part 2: Sectional specification – Interface co-ordination dimensions
for the 25 mm equipment practice –**

**Section 2: Detail specification – Dimensions for subracks, chassis,
backplanes, front panels and plug-in units**

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 917-2-2 has been prepared by subcommittee 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)32	48D(CO)35

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

**MODULAR ORDER FOR THE DEVELOPMENT
OF MECHANICAL STRUCTURES
FOR ELECTRONIC EQUIPMENT PRACTICES –**

**Part 2: Sectional specification – Interface co-ordination dimensions
for the 25 mm equipment practice -
Section 2: Detail specification – Dimensions for subracks, chassis,
backplanes, front panels and plug-in units**

1 Scope

This section of IEC 917-2 is a detail specification which is to be used in whole or in part in all fields of electronics where devices and systems are designed according to the sectional specification IEC 917-2.

The purpose of this publication is the specification of dimensions which will ensure mechanical interchangeability of subracks, chassis, plug-in units, backplanes and front panels.

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The sectional specification IEC 917-2 has embodied within it a number of subrack systems based on 25 mm three-dimensional modularity and the binary additive principle for subrack heights.

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The dimensions in the tables of this detail specification are based on one of the subrack systems taken from the sectional specification IEC 917-2. However, all subrack systems within the sectional specification are valid in this detail specification, provided the relationship between the dimensions is maintained, i.e. the dimensional difference between the co-ordination dimensions H_S , W_S and D_S and dimensions H_{S0} , etc.; W_{S0} , etc., and D_{S0} , etc., shown in tables 1, 2 and 3 are to be maintained.

The subrack dimensions are related to certain cabinet/rack dimensions, see IEC 917-2-1.

The front panel dimensions are related to the mounting dimensions of certain cabinets and racks, see IEC 917-2-1.

Plug-in units are mounted in subracks. They serve as supports for electrical, electronic and mechanical components. The electrical connection between plug-in units and subracks is based on the use of connectors.

All dimensions are given in millimetres and the drawings are first angle projections.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this section of IEC 917-2. At the time of publication, the editions indicated were valid. All normative documents are subject to revision and parties to agreements based on this section of IEC 917-2 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 249-2, *Base materials for printed circuits – Part 2: Specifications*

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

IEC 917: 1988, *Modular order for the development of mechanical structures for electronic equipment practices*
Amendment 1: 1993.

IEC 917-0: 1989, *Modular order for the development of mechanical structures for electronic equipment practices – Part 0: Guide for the users of IEC Publication 917*

IEC 917-2: 1992, *Modular order for the development of mechanical structures for electronic equipment practices – Part 2: Sectional specification – Interface co-ordination dimensions for the 25 mm equipment practice*

IEC 917-2-1: 1993, *Modular order for the development of mechanical structures for electronic equipment practices – Part 2: Sectional specification – Interface co-ordination dimensions for the 25 mm equipment practice – Section 1: Detail specification – Dimensions for cabinets and racks*

IEC 1076, *Connector standards related to this 25 mm equipment practice* (in preparation)

3 Terminology

For the purposes of this section of IEC 917-2, the following terminology applies.

3.1 **aperture dimensions:** Dimensions used to define space between structural parts.

3.2 **co-ordination dimension:** Reference dimension used to co-ordinate mechanical interfaces, see IEC 917.

3.3 **mounting pitch:** Pitch used to arrange parts or assemblies in a given space.

3.3.1 **mounting pitch for cabinets/racks and subracks:** mp1 = 25 mm

3.3.2 **mounting pitch for subracks and plug-in units** mp2 = 5 mm

3.3.3 **mounting pitch for subracks and plug-in units:** mp3 = 2,5 mm