



NSAI
Standards

Irish Standard
I.S. EN 60917-2-4:2010

Modular order for the development of mechanical structures for electronic equipment practices -- Part 2-4: Sectional specification - Interface coordination dimensions for the 25 mm equipment practice - Adaptation dimensions for subracks or chassis applicable in cabinets or racks in accordance with IEC 60297-3-100 (19 in) (IEC 60917-2-4:2010 (EQV))

I.S. EN 60917-2-4:2010

Incorporating amendments/corrigenda issued since publication:

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EUROPEAN STANDARD

EN 60917-2-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2010

ICS 31.240

English version

**Modular order for the development of mechanical structures for electronic equipment practices -
Part 2-4: Sectional specification -
Interface coordination dimensions for the 25 mm equipment practice -
Adaptation dimensions for subracks or chassis applicable in cabinets or racks in accordance with IEC 60297-3-100 (19 in)
(IEC 60917-2-4:2010)**

Ordre modulaire pour le développement des structures mécaniques pour les infrastructures électroniques -
Partie 2-4: Spécification intermédiaire -
Dimensions de coordination pour les interfaces des infrastructures au pas de 25 mm - Dimensions d'adaptation des bacs ou des châssis, applicables dans les baies ou les bâtis, conformément à la CEI 60297-3-100 (19 pouces)
(CEI 60917-2-4:2010)

Modulordnung für die Entwicklung von Bauweisen für elektronische Einrichtungen -
Teil 2-4: Strukturnorm -
Schnittstellen-Koordinationsmaße für die 25-mm-Bauweise - Adaptionsmaße für Baugruppenträger oder Einschübe, anwendbar in Schränken oder Gestellen nach IEC 60297-3-100 (19-Zoll)
(IEC 60917-2-4:2010)

This European Standard was approved by CENELEC on 2010-04-01. 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.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 48D/420/FDIS, future edition 1 of IEC 60917-2-4, 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 60917-2-4 on 2010-04-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) 2011-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-04-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60917-2-4:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60297-3-101	NOTE	Harmonized as EN 60297-3-101.
IEC 60917-1	NOTE	Harmonized as EN 60917-1.
IEC 60917-2-1	NOTE	Harmonized as EN 60917-2-1.
IEC 61587-1	NOTE	Harmonized as EN 61587-1.
IEC 61587-2	NOTE	Harmonized as EN 61587-2.
IEC 61587-3	NOTE	Harmonized as EN 61587-3.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

**Part 2-4: Sectional specification –
Interface co-ordination dimensions for the 25 mm equipment practice –
Adaptation dimensions for subracks or chassis applicable in cabinets
or racks in accordance with IEC 60297-3-100 (19 in)**

FOREWORD

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International Standard IEC 60917-2-4 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:

FDIS	Report on voting
48D/420/FDIS	48D/424/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.

A list of all parts of IEC 60917 series, under the general title *Modular order for the development of mechanical structures for electronic equipment practices*, can be found on the IEC website.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

The IEC 60917 series of standards provides definitions of mechanical structure and dimensions for metric cabinets, racks, subracks, chassis and plug-in units based on metric modular ordered dimensions. The later developed IEC 60917 series of standards, compared to IEC 60297, provides more logical design practices based on metric dimensioning.

The IEC 60297 series of standards also define structures and interface dimensions for 19 in cabinets, racks and their compatible subracks and chassis. Because of the longer history of the IEC 60297 series of standards and their applications, the combination of 19 in based cabinets, racks, subracks and chassis are broadly applied for all industrial electronic fields in the world.

Requests for combined applications with both mechanical structures, the IEC 60917 series (metric standard) and the IEC 60297 series (19 in standard), resulted in requirements to mount metric subracks or chassis into 19 in standard cabinets or racks and, vice versa, 19 in subracks or chassis into metric cabinets or racks.

To cope with the requirements and needs, it is required to develop definitions for appropriate adaptation dimensions of flanges for metric or 19 in subracks or chassis to mount them into cabinets or racks in accordance with 19 in or metric standard. And the definitions of adaptation dimensions bring economical solutions for installations of electronic equipment into existing cabinets or racks. Further, they provide guidance to electro-mechanical designers to develop systems suitable to be mounted into both IEC standard series flexibly.

To meet such market needs, this standard defines adaptation dimensions for metric subracks or chassis applicable for 19 in cabinets or racks. (Dimensions for the applications, where 19 in subracks or chassis are mounted on metric cabinets or racks, are defined in a separate standard, i.e. IEC 60297-3-106.)

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

Part 2-4: Sectional specification – Interface co-ordination dimensions for the 25 mm equipment practice – Adaptation dimensions for subracks or chassis applicable in cabinets or racks in accordance with IEC 60297-3-100 (19 in)

1 Scope and object

This part of IEC 60917 specifies dimensions for mounting flanges of metric subracks or chassis that are to be mounted into 19 in cabinets or racks.

Additional dimensions for subracks or chassis are according to the IEC 60917 series, and for 19 in cabinets or racks to the IEC 60297 series.

EMC, seismic climatic and environmental requirements and tests, are defined in the IEC 61587 series.

The drawings used in this standard are not intended to indicate product design, only the specific dimensions that shall be used.

The terminology used complies with IEC 60917-1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60297 (all parts), *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series*

IEC 60297-3-100, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19in) series – Part 3-100: Basic dimensions of front panels, subracks, chassis, racks and cabinets*

IEC 60297-3-106, *Mechanical structures for electronic equipment – Dimensions of mechanical structures of the 482,6 mm (19 in) series – Part 3-106: Adaptation dimensions for subracks and chassis applicable to metric cabinets or racks in accordance with IEC 60917-2-1*

IEC 60917 (all parts), *Modular order for the development of mechanical structures for electronic equipment practice*

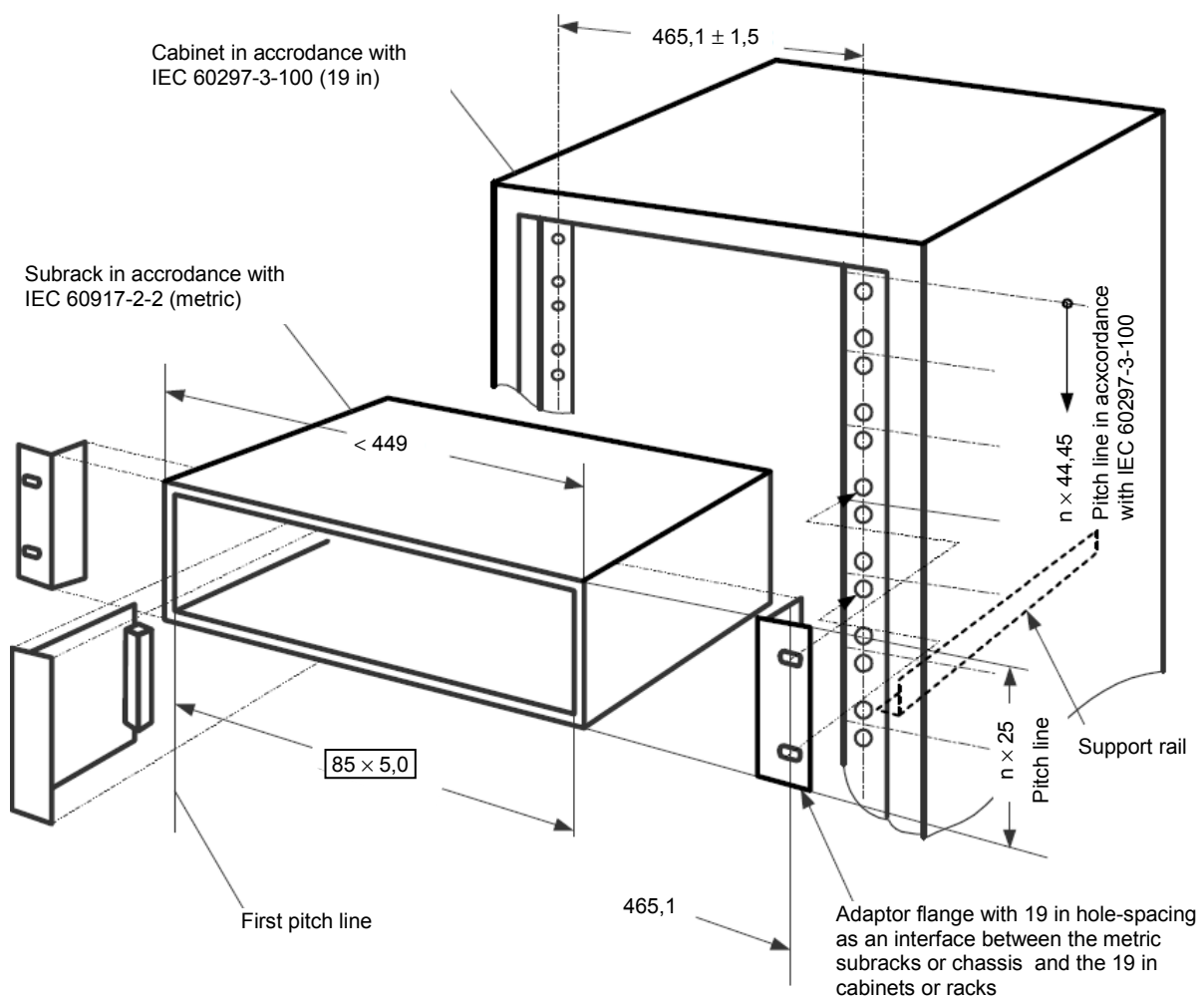
IEC 60917-2-2, *Modular order for the development of mechanical structures for electronic equipment practices – Part 2: Sectional specification – Interface co-ordination dimensions for the 25 mm equipment practice – Section 2: Detail specification – Dimensions for subracks, chassis, backplanes, front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

3 Arrangement overview (Figure 1) and definitions

This standard defines dimensions for adaptor flanges suitable for metric subracks or chassis (aperture width for plug-in units: $W_{S1} = 425 \text{ mm}$, $85 \times 5,0 \text{ mm}$) that are applicable for mounting into 19 in cabinets or racks.

Dimensions for applications where 19 in subracks or chassis are to be mounted into metric cabinets or racks are defined in a separate standard (IEC 60297-3-106).

All other dimensions are in compliance with the IEC 60917 series (metric standard) and IEC 60297 series (19 in standard).



IEC 458/10

Dimensions in mm

**Figure 1 – Arrangement overview –
Adaptation of specific subracks (aperture width for plug-in units:
 $W_{S1} = 425 \text{ mm}$, $85 \times 5,0 \text{ mm}$) of IEC 60917-2-4 into cabinets of IEC 60297-3-100**

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