



BSI Standards Publication

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

Part 2-5: Sectional specification —
Interface co-ordination dimensions
for the 25 mm equipment practice —
Cabinet interface dimensions for
miscellaneous equipment

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National foreword

This British Standard is the UK implementation of EN 60917-2-5:2012. It is identical to IEC 60917-2-5:2012.

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A list of organizations represented on this committee can be obtained on request to its secretary.

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English version

**Modular order for the development of mechanical structures for electronic equipment practices -
Part 2-5: Sectional specification -
Interface co-ordination dimensions for the 25 mm equipment practice -
Cabinet interface dimensions for miscellaneous equipment
(IEC 60917-2-5:2012)**

Ordre modulaire pour le développement
des structures mécaniques pour les
infrastructures électroniques -
Partie 2-5: Spécification intermédiaire -
Dimensions de coordination pour les
interfaces des infrastructures au pas de
25 mm -
Dimensions pour les interfaces des baies
pour équipements divers
(CEI 60917-2-5:2012)

Modulordnung für die Entwicklung von
Bauweisen für elektronische
Einrichtungen -
Teil 2-5: Strukturnorm -
Schnittstellen-Koordinationsmaße für die
25-mm-Bauweise -
Schrank-Schnittstellenmaße für sonstige
Einrichtungen
(IEC 60917-2-5:2012)

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Foreword

The text of document 48D/509/FDIS, future edition 1 of IEC 60917-2-5, 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 approved by CENELEC as EN 60917-2-5:2012.

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

- | | | |
|------------------|------|--------------------------------|
| IEC 60297 series | NOTE | Harmonized in EN 60297 series. |
| IEC 60917 series | NOTE | Harmonized in EN 60917 series. |

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

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

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 60297-3-100	-	Mechanical structures for electronic equipment - Dimensions of mechanical structures of the 482,6 mm (19 in) series - Part 3-100: Basic dimensions of front panels, subracks, chassis, racks and cabinets	EN 60297-3-100	-
IEC 60917-1	-	Modular order for the development of mechanical structures for electronic equipment practices - Part 1: Generic standard	EN 60917-1	-
IEC 60917-2-1	-	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	EN 60917-2-1	-

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INTRODUCTION

The standards IEC 60297-3-100 and IEC 60917-2-1 for electronic cabinets have been established for systematically defined external dimensions and for the internal mounting dimensions of subracks and chassis considered as the most common mechanical designs of electronic equipment.

Comparing the above two mentioned standards it becomes obvious that both follow the same metric footprint but differ with respect to the mounting dimensions for the installed equipment.

Furthermore, there are no definitions in either standards for the interface dimensions of any other miscellaneous equipment. This kind of equipment is primarily not designed to standardized mounting dimensions insofar as it is meant for subracks or chassis. The installation of such non-standard equipment into cabinets used to be accomplished by supporting shelves or special mounting devices.

In addition to the above mentioned lack of dimensional definitions there are many accessories for special applications where a definition of interface dimensions could facilitate the adaptation to a cabinet, e.g. internally or externally mounted cooling device and other miscellaneous devices.

It seems worthwhile to create a standard for modular cabinets with the definition of interface mounting planes and mounting points for internally and externally mounted miscellaneous devices.

Such an attempt could fulfil the dimensional preconditions for an environmentally optimised modular structure, such as:

- definition of a frame-based cabinet structure for the individual combination of piece parts e.g. doors, side covers, top covers;
- interfaces for miscellaneous devices by definition of mounting planes with mounting points on the cabinet frame structure;
- mounting of equipment of the IEC 60297 and IEC 60917 series within the same cabinet with associated mounting uprights;
- modularity of the frame-based structure supporting shipment in the form of kits in order to maximize logistics efficiency and to minimize costs.

Legacy cabinets complying with IEC 60917-2-1 and IEC 60297-3-100 may be considered in conjunction with cabinets of IEC 60917-2-5 without significant technical modifications due to the fact that all follow the same coordination dimensions. Whilst the internal mounting points for mounting standardized equipment are defined in IEC 60297-3-100 and IEC 60917-2-1 in case of IEC 60917-2-5 additional mounting planes and mounting points are defined to be used for attaching miscellaneous equipment or accessories.

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

Part 2-5: Sectional specification – Interface co-ordination dimensions for the 25 mm equipment practice – Cabinet interface dimensions for miscellaneous equipment

1 Scope

This part of the IEC 60917 series applies to a frame-based cabinet structure with the specification of interface dimensions for the installation of miscellaneous equipment. The frame structure provides the mounting planes with mounting points for the assembly of internal and external accessories. Unlike the existing standards IEC 60917-2-1 and IEC 60297-3-100, this standard allows cover parts like top covers and front/rear doors to exceed the cabinet's external coordination dimensions.

2 Normative references

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

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

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

IEC 60917-2-1, *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*