

Irish Standard I.S. EN 60917-2-5:2012

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

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**EUROPEAN STANDARD** 

EN 60917-2-5

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

October 2012

ICS 31.240

**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.

The following dates are fixed:

•	latest date by which the document has	(dop)	2013-05-28
	to be implemented at national level by		
	publication of an identical national		
	standard or by endorsement		
•	latest date by which the national	(dow)	2015-08-28
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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.

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## 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>	EN/HD	<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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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### 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

### **FOREWORD**

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International Standard IEC 60917-2-5 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/509/FDIS	48D/516/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 publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

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

The committee has decided that the contents of this publication will remain unchanged until the stability date 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.

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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.

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### 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



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