

SLOVENSKI STANDARD SIST EN 60917-2-5:2013

01-marec-2013

Razpored modulov za razvoj mehanske zgradbe elektronske opreme - 2-5. del: Področna specifikacija - Usklajevalne mere vmesnika za 25-milimetrsko elektronsko opremo - Mere vmesnika omarice za različno opremo

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

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 SIST EN 60917-2-5:2013

https://standards.iteh.ai/catalog/standards/sist/a9de0b01-60e7-4664-9bb5-

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

Ta slovenski standard je istoveten z: EN 60917-2-5:2012

ICS:

31.240 Mehanske konstrukcije za elektronsko opremo

Mechanical structures for electronic equipment

SIST EN 60917-2-5:2013

en

SIST EN 60917-2-5:2013

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60917-2-5:2013</u> https://standards.iteh.ai/catalog/standards/sist/a9de0b01-60e7-4664-9bb5-5d3fc2d0ed08/sist-en-60917-2-5-2013

SIST EN 60917-2-5:2013

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 RD

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

<u>SIST EN 60917-2-5:2013</u> https://standards.iteh.ai/catalog/standards/sist/a9de0b01-60e7-4664-9bb5-5d252d0ad02/sist an 60017-2-5-2013

5d3fc2d0ed08/sist-en-60917-2-5-2013 This European Standard was approved by CENELEC on 2012-08-28. 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.

(standards.iteh.a) (IEC 60917-2-5:2012)

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

© 2012 CENELEC - All rights of exploitation in any form and by any means reserved worldwide for CENELEC members.

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

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

iTeh ST Endorsement notice VIEW

The text of the International Standard IEC 60917 2-5:2012 was approved by CENELEC as a European Standard without any modification.

SIST EN 60917-2-5:2013

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

IEC 60297 series	NOTE	5d3fc2d0ed08/sist_en_60917-2-5-2013 Harmonized in EN 60297 series.
IEC 60917 series	NOTE	Harmonized in EN 60917 series.

- 3 -

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.

Publication	Year	<u>Title</u>	<u>EN/HD</u>	Year
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	iTe	Modular order for the development of 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	-

SIST EN 60917-2-5:2013

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60917-2-5:2013</u> https://standards.iteh.ai/catalog/standards/sist/a9de0b01-60e7-4664-9bb5-5d3fc2d0ed08/sist-en-60917-2-5-2013



IEC 60917-2-5

Edition 1.0 2012-07

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Modular order for the development of mechanical structures for electronic equipment practices – (standards.iteh.ai) Part 2-5: Sectional specification – Interface co-ordination dimensions for the 25 mm equipment practice – Cabinet interface dimensions for miscellaneous equipment https://standards.iteh.ai/catalog/standards/sist/a9de0b01-60e7-4664-9bb5-5d3fc2d0ed08/sist-en-60917-2-5-2013

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

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE CODE PRIX



ICS 31.240

ISBN 978-2-83220-152-7

Warning! Make sure that you obtained this publication from an authorized distributor. Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.

 Registered trademark of the International Electrotechnical Commission Marque déposée de la Commission Electrotechnique Internationale

CONTENTS

FO	REWO	RD	3
INT	RODU	CTION	5
1	Scope	9	6
2	Norma	ative references	6
3	Terms	s and definitions	7
4	Arran	gement overview of a frame based cabinet structure	8
5	Exteri	nal coordination dimensions of a cabinet	9
	5.1	General	9
	5.2	Cabinet frame mounting points	9
6	Modu	lar frame type cabinet structure	. 11
	6.1	General	. 11
		Modular frame type "M"	
		Modular frame type "N"	
		informative) Illustrative figures	
Bib	liograp	hy	. 19
Fig	ure 1 -	Arrangement overview of a frame/based cabinet structure W.	8
-		- External coordination dimensions of cabinet h. a.i.)	
Fig	ure 3 -	- Frame mounting points of a modular cabinet	. 10
Fia	ure 5 -	- Modular frame type "M" 600 mm <u>6600 mm²013</u> https://standards.iteh.ai/catalog/standards/sist/a9de0b01-60e7-4664-9bb5- - Modular frame type "N ₃₃ 602000008/sist-60-60917-2-5-2013	.13
Fig	ure A.1	I – Illustrative figures for coordination dimensions of cabinet	. 15
		2 – Examples of arrangements of miscellaneous equipment	
-		B – Cabinet mounting uprights mounted on "M" type frame 600 mm \times 600 mm	
-		I – Cabinet mounting uprights mounted on "N" type frame 600 mm \times 600 mm	
5			
Tab	ole 1 –	External coordination dimensions of cabinet	. 14

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

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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. 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 IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees. A DARD PREVE W
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in other national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

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.

- 4 -

60917-2-5 © IEC:2012

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.

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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60917-2-5:2013</u> https://standards.iteh.ai/catalog/standards/sist/a9de0b01-60e7-4664-9bb5-5d3fc2d0ed08/sist-en-60917-2-5-2013

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. **The STANDARD PREVIEW**

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, alog/standards/sist/a9de0b01-60e7-4664-9bb5-
- 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.