
Mehanske strukture za elektronsko opremo - Preskušanje za IEC 60917 in IEC 60297 - 1. del: Okoljevarstvene zahteve in preskusi, varnostni vidiki za ohišja, stojala, okvire in šasije

Mechanical structures for electronic equipment - Tests for IEC 60917 and IEC 60297 - Part 1: Environmental requirements and tests, safety aspects for cabinets, racks, subracks and chassis

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Mechanische Bauweisen für elektronische Einrichtungen - Prüfungen für IEC 60917 und IEC 60297 - Teil 1: Umweltrelevante Anforderungen und Prüfungen, Sicherheitsaspekte für Schränke, Gestelle, Baugruppenträger und Einschübe

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Structures mécaniques pour équipement électronique - Essais pour la CEI 60917 et la CEI 60297 - Partie 1: Essais climatiques, mécaniques et aspects de la sécurité des baies, bâtis, bacs à cartes et châssis

Ta slovenski standard je istoveten z: EN 61587-1:2012

ICS:

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

EN 61587-1

March 2012

ICS 31.240

Supersedes EN 61587-1:2007

English version

**Mechanical structures for electronic equipment -
Tests for IEC 60917 and IEC 60297 series -
Part 1: Environmental requirements, test set-up and safety aspects for
cabinets, racks, subracks and chassis under indoor conditions
(IEC 61587-1:2011)**

Structures mécaniques pour équipement
électronique -
Essais pour les séries CEI 60917 et CEI
60297 -
Partie 1: Exigences environnementales,
montage d'essai et aspects de la sécurité
des baies, bâtis, bacs à cartes et châssis
dans des conditions d'intérieur
(CEI 61587-1:2011)

Mechanische Bauweisen für elektronische
Einrichtungen - Prüfungen für IEC 60917
und IEC 60297 -
Teil 1: Umgebungsanforderungen,
Prüfaufbau und Sicherheitsaspekte für
Schränke, Gestelle, Baugruppenträger
und Einschübe bei Bedingungen in
Innenräumen
(IEC 61587-1:2011)

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

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Foreword

The text of document 48D/481/FDIS, future edition 3 of IEC 61587-1, 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 61587-1:2012.

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) 2012-09-13
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2014-12-13

This document supersedes EN 61587-1:2007.

EN 61587-1:2012 includes the following significant technical changes with respect to EN 61587-1:2007:

- 1) Rephrasing "performance level" by "classification".
- 2) Reference to fire hazard testing according to EN 60695-11-10 in 8.2.1.
- 3) Intended applications replaced by application examples.
- 4) Static load test, distributed dummy load locations for ETSI and 19" removed.
- 5) Table "Static load distribution within the cabinet" EN 60297-2 changed to EN 60297-3-100.
- 6) EN 60917 subrack 625 mm wide has been removed, as it is not a common width.
- 7) Parts of the document relevant to outdoors have been removed (reference to EN 61969 series).

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.

Endorsement notice

The text of the International Standard IEC 61587-1:2011 was approved by CENELEC as a European Standard without any modification.

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 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 60068-2-1	-	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	-
IEC 60068-2-2	-	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	-
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-11	-	Environmental testing - Part 2: Tests - Test Ka: Salt mist	EN 60068-2-11	-
IEC 60068-2-27	-	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	-
IEC 60068-2-30	-	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	-
IEC 60068-2-42	-	Environmental testing - Part 2-42: Tests - Test Kc: Sulphur dioxide test for contacts and connections	EN 60068-2-42	-
IEC 60068-2-43	-	Environmental testing - Part 2-43: Tests - Test Kd: Hydrogen sulphide test for contacts and connections	EN 60068-2-43	-
IEC 60068-2-49	-	Environmental testing - Part 2: Tests - Guidance to Test Kc: Sulphur dioxide test for contacts and connections	-	-
IEC 60068-2-52	-	Environmental testing - Part 2: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution)	EN 60068-2-52	-
IEC 60068-2-75	-	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	-
IEC 60297	Series	Dimensions of mechanical structures of the 482,6 mm (19 in) series	EN 60297	Series
IEC 60512-1-1	-	Connectors for electronic equipment - Tests and measurements - Part 1-1: General examination - Test 1a: Visual examination	EN 60512-1-1	-
IEC 60529	-	Degrees of protection provided by enclosures - (IP Code)	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60654-4	-	Operating conditions for industrial-process measurement and control equipment - Part 4: Corrosive and erosive influences	EN 60654-4	-
IEC 60695-11-10	-	Fire hazard testing - Part 11-10: Test flames - 50 W horizontal and vertical flame test methods	EN 60695-11-10	-
IEC 60721-3-3	-	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 3: Stationary use at weatherprotected locations	EN 60721-3-3	-
IEC 60917	Series	Modular order for the development of mechanical structures for electronic equipment practices	EN 60917	Series
IEC 60950-1	-	Information technology equipment - Safety - Part 1: General requirements	EN 60950-1	-
IEC 61010-1	-	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements	EN 61010-1	-
IEC 61587-2	-	Mechanical structures for electronic equipment - Tests for IEC 60917 and IEC 60297 - Part 2: Seismic tests for cabinets and racks	EN 61587-2	-
IEC 61587-3	2006	Mechanical structures for electronic equipment - Tests for IEC 60917 and IEC 60297 - Part 3: Electromagnetic shielding performance tests for cabinets, racks and subracks	EN 61587-3	2006
IEC 62262	-	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	-

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IEC 61587-1

Edition 3.0 2011-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Mechanical structures for electronic equipment – Tests for IEC 60917 and IEC 60297 series –
Part 1: Environmental requirements, test set-up and safety aspects for cabinets, racks, subracks and chassis under indoor conditions**

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Structures mécaniques pour équipement électronique – Essais pour les séries CEI 60917 et CEI 60297 –

Partie 1: Exigences environnementales, montage d'essai et aspects de la sécurité des baies, bâtis, bacs à cartes et châssis dans des conditions d'intérieur

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

T

ICS 31.240

ISBN 978-2-88912-746-7

CONTENTS

FOREWORD.....	4
1 Scope and object.....	6
2 Normative references	6
3 Terms and definitions	7
4 Classification of environmental conditions	7
5 General	8
6 Climatic tests.....	9
6.1 General.....	9
6.2 Cold, dry heat and damp heat (cyclic)	9
6.3 Industrial atmosphere.....	10
7 Mechanical tests.....	11
7.1 General.....	11
7.2 Static and dynamic mechanical load tests for subracks	11
7.2.1 Static mechanical load tests	11
7.2.2 Vibration and shock tests.....	14
7.3 Static and dynamic mechanical load tests for cabinets and racks	17
7.3.1 Lifting tests.....	17
7.3.2 Stiffness tests.....	18
7.3.3 Vibration and shock tests.....	19
7.3.4 Impact tests.....	21
8 Safety aspects.....	22
8.1 General.....	22
8.2 Earth bond	22
8.2.1 General	22
8.2.2 Test procedure	22
8.3 Flammability.....	22
8.4 Degrees of protection provided by enclosures (IP Code)	22
Figure 1 – Test set up for subracks for the static load test	11
Figure 2 – Static load test, single force for subracks IEC 60297 series	12
Figure 3 – Static load test, single force for subracks IEC 60917 series	13
Figure 4 – Test set up for subracks for vibration and shock tests	14
Figure 5 – Lifting test for cabinets and racks.....	17
Figure 6 – Stiffness test for cabinets and racks.....	18
Figure 7 – Test set up for a cabinet for vibration and shock tests	19
Table 1 – Examples showing references to tests.....	8
Table 2 – Classifications for cold, dry heat and damp heat.....	9
Table 3 – Classifications for industrial atmosphere	10
Table 4 – Static mechanical load classifications for subracks of the IEC 60917 series	13
Table 5 – Test set-up for subracks according to the IEC 60297 series	15
Table 6 – Test set-up for subracks according to the IEC 60917 series	15
Table 7 – Vibration and shock classifications for subracks	16
Table 8 – Classifications levels for lifting and stiffness.....	18

Table 9 – Static load distribution within the cabinet.....	19
Table 10 – Vibration and shock classifications for cabinets.....	20
Table 11 – Impact classifications for cabinets.....	21
Table 12 – Degrees of protection provided by enclosures (IP Code)	23

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MECHANICAL STRUCTURES FOR ELECTRONIC EQUIPMENT –
TESTS FOR IEC 60917 AND IEC 60297 SERIES –****Part 1: Environmental requirements, test set-up
and safety aspects for cabinets, racks, subracks
and chassis under indoor conditions**

FOREWORD

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International Standard IEC 61587-1 has been prepared by IEC sub-committee 48D: Mechanical structures for electronic equipment, of IEC technical committee 48: Electromechanical components and mechanical structures for electronic equipment.

This third edition cancels and replaces the second edition published in 2007. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- 1) Rephrasing "performance level" by "classification".
- 2) Reference to fire hazard testing according to IEC 60695-11-10 in 8.2.1.
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The text of this standard is based on the following documents:

FDIS	Report on voting
48D/481/FDIS	48D/495/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 the IEC 61587 series, under the general title *Mechanical structures for electronic equipment – Tests for IEC 60917 and IEC 60297 series*, 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 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

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