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Standards

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I.S. EN 61587-4:2012

Mechanical structures for electronic equipment - Tests for IEC 60917 and IEC 60297 series -- Part 4: Combination of performance levels for modular cabinets (IEC 61587-4:2012 (EQV))

I.S. EN 61587-4:2012

Incorporating amendments/corrigenda issued since publication:

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EUROPEAN STANDARD
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EN 61587-4

October 2012

ICS 31.240

English version

**Mechanical structures for electronic equipment -
Tests for IEC 60917 and IEC 60297 series -
Part 4: Combination of performance levels for modular cabinets
(IEC 61587-4:2012)**

Structures mécaniques pour équipement
électronique -
Essais pour les séries CEI 60917
et CEI 60297 -
Partie 4: Combinaison des niveaux de
performance pour les baies modulaires
(CEI 61587-4:2012)

Mechanische Bauweisen für elektronische
Einrichtungen -
Prüfungen für die Normenreihen
IEC 60917 und IEC 60297 -
Teil 4: Kombination von
Anforderungsstufen für modulare
Schränke
(IEC 61587-4:2012)

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 48D/514/FDIS, future edition 1 of IEC 61587-4, 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 approved by CENELEC as EN 61587-4:2012.

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) 2013-06-17
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-09-17

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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	Harmonised as EN 60297 Series (not modified).
IEC 60917 Series	NOTE	Harmonised as EN 60917 Series (not modified).
IEC 60950-1	NOTE	Harmonised as EN 60950-1.

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 60529	-	Degrees of protection provided by enclosures (IP Code)	EN 60529	-
IEC 61587-1	-	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	EN 61587-1	-
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	-	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	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MECHANICAL STRUCTURES FOR ELECTRONIC EQUIPMENT –
TESTS FOR IEC 60917 AND IEC 60297 SERIES –****Part 4: Combination of performance levels for modular cabinets**

FOREWORD

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International Standard IEC 61587-4 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/514/FDIS	48D/518/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.

A list of all parts of 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.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

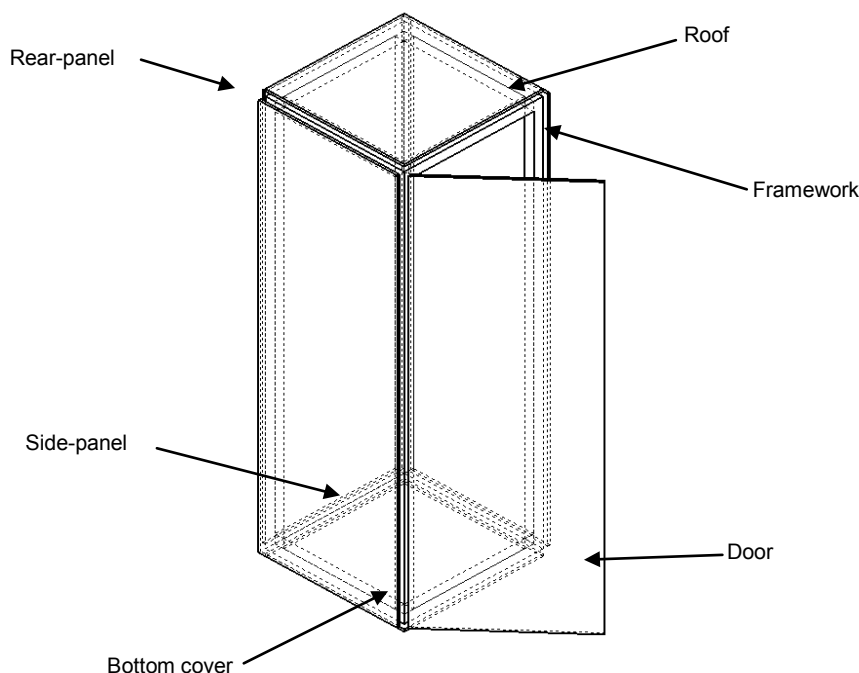
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- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

Requirements for application specific cabinet systems vary considerably. Typically, applications such as industrial, power distribution, IT, communications, data centres, multimedia, traffic control, etc., require differing features.

These differing features are hardly common and many range from static load to dynamic load, including seismic test, protection (IP), electromagnetic shielding (EMC) provision, and many other detailed requirements. It is unrealistic and uneconomical to expect from an economical system to offer an all compliant cabinet from multiple sources.



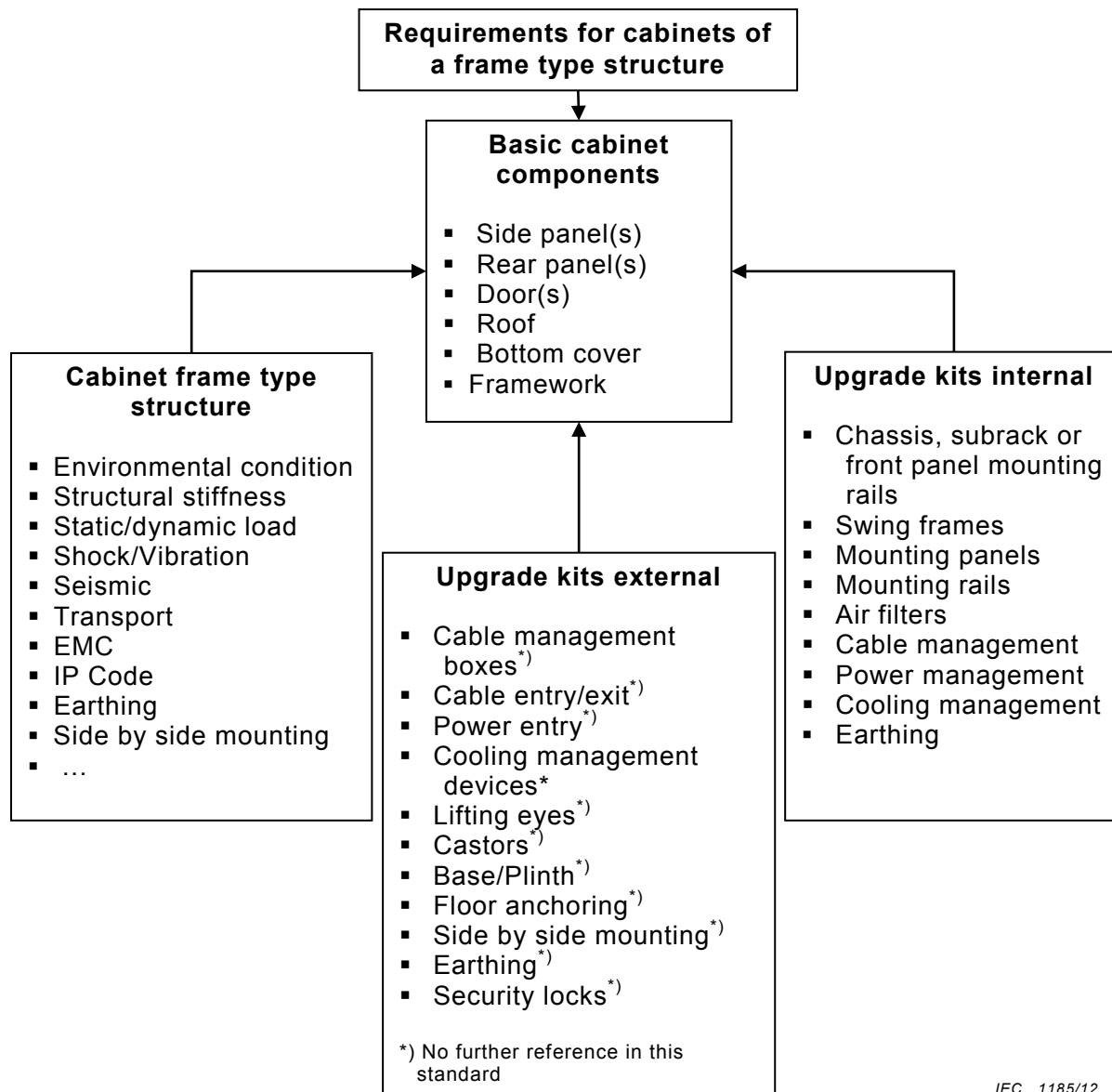
IEC 1184/12

Figure 1 – Arrangement overview of a modular cabinet system

This design guide describes an economically optimal solution for a cabinet system consisting of a modular frame type structure design enhanced by basic cabinet components, such as a door(s), a bottom cover, a roof and side and rear panels. See Figure 1. To fulfil the specific application requirements the user can choose external and/or internal upgrade kits. See Figure 2.

Based on this optimal economical solution for a cabinet system, this guide helps the user to select a cabinet matching the performance level of the application.

Based on this economical optimal solution for a cabinet system, this guide helps to provide for a modular cabinet economical system supported by multiple vendors.



IEC 1185/12

Figure 2 – Basic modular cabinet

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