

BS EN 61969-1:2012



BSI Standards Publication

Mechanical structures for electronic equipment — Outdoor enclosures

Part 1: Design guidelines

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National foreword

This British Standard is the UK implementation of EN 61969-1:2012. It is identical to IEC 61969-1:2011. It supersedes BS EN 61969-1:2000 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/48, Electromechanical components and mechanical structures for electronic equipment.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Amendments issued since publication

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61969-1

February 2012

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Supersedes EN 61969-1:2000

English version

**Mechanical structures for electronic equipment -
Outdoor enclosures -
Part 1: Design guidelines
(IEC 61969-1:2011)**

Structures mécaniques pour équipement
électronique -
Enveloppes de plein air -
Partie 1: Lignes directrices pour la
conception
(CEI 61969-1:2011)

Mechanische Bauweisen für elektronische
Einrichtungen -
Außengehäuse -
Teil 1: Konstruktionsleitfaden
(IEC 61969-1:2011)

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CENELEC

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/488/FDIS, future edition 2 of IEC 61969-1, 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 61969-1:2012.

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) 2012-09-22
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2014-12-22

This document supersedes EN 61969-1:2000.

EN 61969-1:2012 includes the following significant technical changes with respect to EN 61969-1:2000:

a) Addition of design guidance for thermal management and noise suppression as thermal/noise management is often considered a basic requirement of an empty outdoor enclosure. If thermal management components are included in the product, the environmental impact may become the responsibility of the empty outdoor enclosure manufacturer. Therefore the acoustic limitations shall be observed.

Typically, the user of the empty outdoor enclosure follows the local regulatory acoustic requirements (sound power and/or sound pressure). Acoustic measurements may be performed on the empty outdoor enclosure fitted with thermal management components only or, if agreed between manufacturer and user at the final stage of the application specific installation.

b) Historically, EN 61969-1:2000 intended to create a market for standardized empty outdoor enclosures offered by multiple vendors. Detail standards such as EN 61969-2-1:2000 and EN 61969-2-2:2000 were issued to guide users to preferred and available solutions.

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 61969-1:2011 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 60050-581	-	International Electrotechnical Vocabulary - Part 581: Electromechanical components for electronic equipment	-	-
IEC 60068	Series	Environmental testing	EN 60068-2-1	Series
IEC 60297-3-101	-	Mechanical structures for electronic equipment - Dimensions of mechanical structures of the 482,6 mm (19 in) series - Part 3-101: Subracks and associated plug-in units	EN 60297-3-101	-
IEC 60417	Data-base	Graphical symbols for use on equipment	-	-
IEC 60529	-	Degrees of protection provided by enclosures - (IP Code)	-	-
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	Series	Classification of environmental conditions	EN 60721-1	Series
IEC 60825-1	-	Safety of laser products - Part 1: Equipment classification and requirements	EN 60825-1	-
IEC 60917	Series	Modular order for the development of mechanical structures for electronic equipment practices - Part 1: Generic standard	EN 60917	Series
IEC 60950	Series	Information technology equipment - Safety	EN 60950	Series
IEC 61010-1	-	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements	EN 61010-1	-
IEC 61140	-	Protection against electric shock - Common aspects for installation and equipment	EN 61140	-
IEC 61439-5	-	Low-voltage switchgear and controlgear assemblies - Part 5: Assemblies for power distribution in public networks	EN 61439-5	-
IEC 61587-1	-	Mechanical structures for electronic equipment - Tests for IEC 60917 and IEC 60297 - Part 1: Climatic, mechanical tests and safety aspects for cabinets, racks, subracks and chassis	EN 61587-1	-