



SLOVENSKI STANDARD

SIST EN 62208:2004

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Nadomešča:

SIST EN 50289-1-1:2002

SIST EN 50298:2000

Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements

Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements

Leergehäuse für Niederspannungs-Schaltgerätekombinationen - Allgemeine Anforderungen

Enveloppes vides destinées aux ensembles d'appareillage à basse tension - Règles générales

Ta slovenski standard je istoveten z: EN 62208:2003

ICS:

29.130.20	Nizkonapetostne stikalne in krmilne naprave	Low voltage switchgear and controlgear
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SIST EN 62208:2004

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EUROPEAN STANDARD

EN 62208

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2003

ICS 29.130.20

Supersedes EN 50298:1998

English version

**Empty enclosures for low-voltage switchgear and controlgear assemblies –
General requirements
(IEC 62208:2002)**

Enveloppes vides destinées aux ensembles
d'appareillage à basse tension –
Règles générales
(CEI 62208:2002)

Leergehäuse für Niederspannungs-
Schaltgerätekombinationen –
Allgemeine Anforderungen
(IEC 62208:2002)

This European Standard was approved by CENELEC on 2003-12-01. 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.

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

<https://standards.iteh.ai/catalog/standards/sist/49a693d6-26e9-41af-89d5-1a042c49b018/iec-62208-2002>

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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 62208:2002, prepared by SC 17D, Low-voltage switchgear and controlgear assemblies, of IEC TC 17, Switchgear and controlgear, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 62208 on 2003-12-01 without any modification.

This European Standard supersedes EN 50298:1998.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-12-01

Annexes designated "normative" are part of the body of the standard.

In this standard, Annex ZA is normative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62208:2002 was approved by CENELEC as a European Standard without any modification.

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

IEC 60417 NOTE Harmonized in EN 60417 series (not modified).
 IEC 61000-5-7 NOTE Harmonized as EN 61000-5-7:2001 (not modified).

[SIST EN 62208:2004](https://standards.iteh.ai/catalog/standards/sist/49a693d6-26e9-41af-89d5-fab82fcdd581/sist-en-62208-2004)

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 60068-2-2	1974	Basic environmental testing procedures Part 2: Tests - Test B: Dry heat	EN 60068-2-2 ¹⁾	1993
A2	1994		A2	1994
IEC 60068-2-11	1981	Part 2: Tests - Test Ka: Salt mist	EN 60068-2-11	1999
IEC 60068-2-30	1980	Part 2: Tests - Test Db and guidance, Damp heat, cyclic (12 + 12 hour cycle)		
+ A1	1985		EN 60068-2-30	1999
IEC 60068-2-75	1997	Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	1997
IEC 60439	Series	Low-voltage switchgear and controlgear assemblies	EN 60439	Series
IEC 60439-1	1999	Low-voltage switchgear and controlgear assemblies Part 1: Type-tested and partially type- tested assemblies	EN 60439-1	1999
IEC 60439-5	1996	Part 5: Particular requirements for assemblies intended to be installed outdoors in public places - Cable distribution cabinets (CDCs) for power distribution in networks	EN 60439-5	1996
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
IEC 60695-2-10	2000	Fire hazard testing Part 2-10: Glowing/hot-wire based test methods - Glow-wire apparatus and common test procedure	EN 60695-2-10	2001

¹⁾ EN 60068-2-2 includes supplement A:1976 to IEC 60068-2-2.

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60695-2-11	2000	Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products	EN 60695-2-11	2001
IEC/TR3 60890 + corr. March + A1	1987 1988 1995	A method of temperature-rise assessment by extrapolation for partially type-tested assemblies (PTTA) of low-voltage switchgear and controlgear	- CLC/TR 60890	- 2002
IEC 62262	2002	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	2002
ISO 178	2001	Plastics - Determination of flexural properties	EN ISO 178	2003
ISO 179	Series	Plastics - Determination of Charpy impact properties	EN ISO 179	Series
ISO 2409	1992	Paints and varnishes - Cross-cut test	EN ISO 2409	1994
ISO 4628-3	1982	Paints and varnishes - Evaluation of degradation of paint coatings - Designation of intensity, quantity and size of common types of defect Part 3: Designation of degree of rusting	-	-
ISO 4892-2	1994	Plastics - Methods of exposure to laboratory light sources Part 2: Xenon arc sources	EN ISO 4892-2	1999
ISO 11469	2000	Plastics - Generic identification and marking of plastic products	EN ISO 11469	2000

NORME
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First edition
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**Enveloppes vides destinées aux ensembles
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Règles générales**

**Empty enclosures for low-voltage switchgear
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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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For price, see current catalogue*

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**EMPTY ENCLOSURES FOR LOW-VOLTAGE SWITCHGEAR
AND CONTROLGEAR ASSEMBLIES –
GENERAL REQUIREMENTS**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62208 has been prepared by subcommittee 17D: Low-voltage switchgear and controlgear assemblies, of IEC technical committee 17: Switchgear and controlgear.

The text of this standard is based on the following documents:

FDIS	Report on voting
17D/262/FDIS	17D/272/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.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

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

The United States of America (USA) uses enclosure "Type" designations instead of IP ratings. For these markets, replace "the degree of protection according to IEC 60529" with "the appropriate enclosure Type designation according to NEMA 250."

EMPTY ENCLOSURES FOR LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES – GENERAL REQUIREMENTS

1 Scope

This International Standard applies to empty enclosures, prior to the incorporation of switchgear and controlgear components by the user, as supplied by the enclosure manufacturer.

This standard specifies definitions, classifications, characteristics and test requirements of enclosures to be used as part of switchgear and controlgear assemblies in accordance with the IEC 60439 series, the rated voltage of which does not exceed 1 000 V a.c. at frequencies not exceeding 1 000 Hz, or 1 500 V d.c. and suitable for general use for either indoor or outdoor applications.

This standard does not apply to enclosures, which are covered by other specific products standards (e.g. IEC 60670).

Compliance with the safety requirements of the applicable product standard is the responsibility of the final assembly manufacturer.

NOTE This standard may serve as a basis for other technical committees.

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2 Normative references

[SIST EN 62208:2004](#)

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-2:1974, *Basic environmental testing procedures – Part 2: Tests – Tests B: Dry heat*
Amendment 2 (1994)

IEC 60068-2-11:1981, *Basic environmental testing procedures – Part 2: Tests – Test Ka: Salt mist*

IEC 60068-2-30:1980, *Basic environmental testing procedures – Part 2: Tests – Test Db and guidance: Damp heat, cyclic (12 + 12 hour cycle)*
Amendment 1 (1985)

IEC 60068-2-75:1997, *Environmental testing – Part 2: Tests – Test Eh: Hammer tests*

IEC 60439 (all parts), *Low-voltage switchgear and controlgear assemblies*

IEC 60439-1:1999, *Low-voltage switchgear and controlgear assemblies – Part 1: Type-tested and partially type-tested assemblies*

IEC 60439-5:1996, *Low-voltage switchgear and controlgear assemblies – Part 5: Particular requirements for assemblies intended to be installed outdoors in public places – Cable distribution cabinets (CDCs) for power distribution in networks*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP code)*

IEC 60695-2-10:2000, *Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure*

IEC 60695-2-11: 2000, *Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test methods for end-products*

IEC 60890:1987, *A method of temperature-rise assessment by extrapolation for partially type-tested assemblies (PTTA) of low-voltage switchgear and controlgear*
Amendment 1 (1995)

IEC 62262:2002, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)*

ISO 178:2001, *Plastics – Determination of flexural properties*

ISO 179 (all parts), *Plastics – Determination of Charpy impact strength*

ISO 2409:1992, *Paints and varnishes – Cross-cut test*

ISO 4628-3:1982, *Paints and varnishes – Evaluation of degradation of paint coatings – Designation of intensity, quantity and size of common types of defect – Part 3: Designation of degree of rusting*

ISO 4892-2:1994, *Plastics – Methods of exposure to laboratory light sources – Part 2: Xenon-arc sources*

ISO 11469:2000, *Plastics – Generic identification and marking of plastic products*

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3 Terms and definitions

[fab82fcdd581/sist-en-62208-2004](https://standards.iteh.ai/catalog/standards/sist/49a693d6-26e9-41af-89d5-fab82fcdd581/sist-en-62208-2004)

For the purposes of this International Standard, the following definitions apply.

3.1

empty enclosure

enclosure intended for support and installation of electrical equipment, whose internal space provides suitable protection against external influences as well as a specified degree of protection against approach to or contact with live parts and against contact with moving parts

NOTE Throughout this standard, the word enclosure is used for empty enclosure.

3.2

protected space

internal space or portion of the internal space of the enclosure as specified by the manufacturer intended for the mounting of switchgear and controlgear for which the specified protection is provided by the enclosure

3.3

cover

external part of the enclosure

3.4

door

hinged or sliding cover