

SLOVENSKI STANDARD

SIST-TS CLC/TS 62271-304:2009

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Visokonapetostne stikalne naprave - 304. del: Konstrukcijski razredi stikalnih in krmilnih naprav v zaprtih ohišjih za napetosti od 1 kV do vključno 52 kV, namenjenih za uporabo v ostrih podnebnih razmerah (IEC/TS 62271-304:2008)

High-voltage switchgear and controlgear - Part 304: Design classes for indoor enclosed switchgear and controlgear for rated voltages above 1 kV up to and including 52 kV to be used in severe climatic conditions (IEC/TS 62271-304:2008)

Hochspannungs-Schaltgeräte und -Schaltanlagen - Teil 304: Auslegungsklassen für gekapselte Schaltgerätekombinationen und Hochspannungsschaltanlagen von 1 kV bis einschließlich 52 kV für den Einsatz unter erschwerten klimatischen Bedingungen V

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Appareillage à haute tension - Partie 304: Classes de construction pour l'appareillage d'intérieur sous enveloppe pour tensions assignées à partir de 1 kV jusqu'à 52 kV inclus pour usage sous conditions climatiques sévères (CEI/TS 62271-304:2008)

Ta slovenski standard je istoveten z: CLC/TS 62271-304:2008

ICS:

29.130.10	Visokonapetostne stikalne in krmilne naprave	High voltage switchgear and controlgear
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TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CLC/TS 62271-304

November 2008

ICS 29.130.10

English version

**High-voltage switchgear and controlgear -
Part 304: Design classes for indoor enclosed switchgear and controlgear
for rated voltages above 1 kV up to and including 52 kV
to be used in severe climatic conditions
(IEC/TS 62271-304:2008)**

Appareillage à haute tension -
Partie 304: Classes de construction
pour l'appareillage d'intérieur
sous enveloppe pour tensions assignées
à partir de 1 kV jusqu'à 52 kV inclus
pour usage sous conditions
climatiques sévères
(CEI/TS 62271-304:2008)

Hochspannungs-Schaltgeräte und -
Schaltanlagen -
Teil 304: Auslegungsklassen
für gekapselte Schaltgerätekombinationen
und Hochspannungsschaltanlagen
von 1 kV bis einschließlich 52 kV
für den Einsatz unter erschwerten
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(IEC/TS 62271-304:2008)

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This Technical Specification was approved by CENELEC on 2008-10-01.

CENELEC members are required to announce the existence of this TS in the same way as for an EN and to make the TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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 document 17C/402/CDV, future edition 1 of IEC/TS 62271-304, prepared by SC 17C, High-voltage switchgear and controlgear assemblies, of IEC TC 17, Switchgear and controlgear, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as CLC/TS 62271-304 on 2008-10-01.

The following date was fixed:

- latest date by which the existence of the CLC/TS
has to be announced at national level (doa) 2009-01-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the Technical Specification IEC/TS 62271-304:2008 was approved by CENELEC as a Technical Specification without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

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 60060-1	- ¹⁾	High-voltage test techniques - Part 1: General definitions and test requirements	HD 588.1 S1	1991 ²⁾
IEC 60068-1	Series	Environmental testing	EN 60068	Series
IEC 62271-1	2007	High-voltage switchgear and controlgear - Part 1: Common specifications	EN 62271-1	2008
IEC 62271-200	- ¹⁾	High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV	EN 62271-200	2004 ²⁾
IEC 62271-201	- ¹⁾	High-voltage switchgear and controlgear - Part 201: AC insulation-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV	EN 62271-201 + corr. November	2006 ²⁾ 2006

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¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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IEC/TS 62271-304

Edition 1.0 2008-05

TECHNICAL SPECIFICATION

SPÉCIFICATION TECHNIQUE

High-voltage switchgear and controlgear –

Part 304: Design classes for indoor enclosed switchgear and controlgear for rated voltages above 1 kV up to and including 52 kV to be used in severe climatic conditions

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Appareillage à haute tension –

Partie 304: Classes de construction pour l'appareillage d'intérieur sous enveloppe pour tensions assignées à partir de 1 kV jusqu'à 52 kV inclus pour usage sous conditions climatiques sévères

INTERNATIONAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

**Part 304: Design classes for indoor enclosed
switchgear and controlgear for rated voltages above 1 kV up to and
including 52 kV to be used in severe climatic conditions**

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.
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The main task of IEC technical committees is to prepare International Standards. In exceptional circumstances, a technical committee may propose the publication of a technical specification when

- the required support cannot be obtained for the publication of an International Standard, despite repeated efforts, or
- the subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC 62771-304, which is a technical specification, has been prepared by subcommittee 17C: High-voltage switchgear and controlgear assemblies, of IEC technical committee 17: Switchgear and controlgear.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
17C/402/DTS	17C/422A/RVC

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

This first edition of IEC/TS 62271-304 cancels and replaces the first edition of IEC/TR 60932, published in 1988, and constitutes a technical revision.

This revised document has been basically changed to be updated to today's use of high-voltage switchgear and controlgear up to 52 kV.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 62271 series, under the general title *High-voltage switchgear and controlgear*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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

- transformed into an International standard,
 - reconfirmed,
 - withdrawn,
 - replaced by a revised edition, or
 - amended.
- <http://standards.iteh.ai/catalog/standards/sist/83503594-7795-4357-8a94-60fcb25510bd/sist-ts-clc-ts-62271-304-2009>

HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 304: Design classes for indoor enclosed switchgear and controlgear for rated voltages above 1 kV up to and including 52 kV to be used in severe climatic conditions

1 Scope and object

This part of IEC 62271 applies to indoor enclosed switchgear and controlgear complying with IEC 62271-200 and IEC 62271-201, intended to be used in service conditions more severe with respect to condensation and pollution than the normal service conditions specified in IEC 62271-1.

This technical specification covers equipment where any of the insulation is exposed to indoor climatic conditions.

The test detailed in this technical specification has been designed primarily to investigate the behaviour of electrical insulation and not corrosion on equipments. Nevertheless, the performance of mechanical components, such as mechanisms, interlocks and enclosures may also be recorded.

This technical specification proposes definitions for two degrees of severe service conditions with respect to condensation and pollution. It also proposes test procedures for assessing the performance of enclosed switchgear and controlgear under specified conditions so that conclusions may be drawn concerning their suitability for service under those severe service conditions.

In this technical specification, the term "equipment" is used in accordance with the scope for an "enclosed assembly of switchgear and controlgear" (see IEC 60050-441, definition 441-12-02).

NOTE The testing procedures described in this technical specification may also be applied to internal insulation of outdoor equipment.

2 Normative references

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 60060-1: *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60068 (all parts), *Environmental testing*

IEC 62271-1:2007, *High-voltage switchgear and controlgear – Part 1: Common specifications*