

**High-voltage switchgear and controlgear - Part 201: AC solid-insulation enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

|                                                                                                                     |                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| See Eesti standard EVS-EN 62271-201:2014 sisaldab Euroopa standardi EN 62271-201:2014 ingliskeelset teksti.         | This Estonian standard EVS-EN 62271-201:2014 consists of the English text of the European standard EN 62271-201:2014.              |
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| Standard on kättesaadav Eesti Standardikeskusest.                                                                   | The standard is available from the Estonian Centre for Standardisation.                                                            |

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English Version

**High-voltage switchgear and controlgear - Part 201: AC solid-insulation enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV  
(IEC 62271-201:2014)**

Appareillage à haute tension - Partie 201: Appareillage sous enveloppe isolante solide pour courant alternatif de tensions assignées supérieures à 1 kV et inférieures ou égales à 52 kV  
(CEI 62271-201:2014)

Hochspannungs-Schaltgeräte und -Schaltanlagen - Teil 201: Isolierstoffgekapselte Wechselstrom-Schaltanlagen für Bemessungsspannungen über 1 kV bis einschließlich 52 kV  
(IEC 62271-201:2014)

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

The text of document 17C/594/FDIS, future edition 2 of IEC 62271-201, 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 approved by CENELEC as EN 62271-201:2014.

The following dates are fixed:

- latest date by which the document has to be (dop) 2015-02-01  
implemented at national level by  
publication of an identical national  
standard or by endorsement
- latest date by which the national (dow) 2017-05-01  
standards conflicting with the  
document have to be withdrawn

This document supersedes EN 62271-201:2006.

EN 62271-201:2014 includes the following significant technical changes with respect to EN 62271-201:2006:

- a) apart from updating with the second edition of EN 62271-200:2012, definitions, classifications and testing procedures have been specified more precisely;
- b) access to the solid-insulation enclosed switchgear and controlgear is now restricted to authorized personnel only. This implies that "accessibility class B" (public access) has been deleted throughout the document;
- c) the term "protection category" has been introduced to replace the term "protection grade" (PA, PB1 and PB2)

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## Endorsement notice

The text of the International Standard IEC 62271-201:2014 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 60059:1999        | NOTE | Harmonized as EN 60059:1999.         |
| IEC 60243-1:2013      | NOTE | Harmonized as EN 60243-1:2013.       |
| IEC 60507:1991        | NOTE | Harmonized as EN 60507:1993.         |
| IEC 60909-0:2001      | NOTE | Harmonized as EN 60909-0:2001.       |
| IEC 61936-1:2010      | NOTE | Harmonized as EN 61936-1:2010.       |
| IEC 62271-200:2011    | NOTE | Harmonized as EN 62271-200:2012.     |
| IEC 62271-4:2013      | NOTE | Harmonized as EN 62271-4:2013.       |
| IEC/TS 62271-304:2008 | NOTE | Harmonized as CLC/TS 62271-304:2008. |

## 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 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu)

| <u>Publication</u> | <u>Year</u> | <u>Title</u>                                                                                                                                              | <u>EN/HD</u>                             | <u>Year</u> |
|--------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------|
| IEC 60050          | series      | International Electrotechnical Vocabulary -                                                                                                               | -                                        | series      |
|                    |             | Part 103: Mathematics - Functions                                                                                                                         |                                          |             |
| IEC 60060-1        | 2010        | High-voltage test techniques -- Part 1: General definitions and test requirements                                                                         | EN 60060-1                               | 2010        |
| IEC 60270          | 2000        | High-voltage test techniques - Partial discharge measurements                                                                                             | EN 60270                                 | 2001        |
| IEC 60529          | 1989        | Degrees of protection provided by enclosures (IP Code)                                                                                                    | EN 60529                                 | 1991        |
|                    |             |                                                                                                                                                           | +EN 60529:1991/corrigendum May 1993      | 1993        |
| IEC 62262          | 2002        | Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)                                       | EN 62262                                 | 2002        |
| IEC 62271-1        | 2007        | High-voltage switchgear and controlgear -- Part 1: Common specifications                                                                                  | EN 62271-1                               | 2008        |
| IEC 62271-100      | 2008        | High-voltage switchgear and controlgear -- Part 100: Alternating current circuit-breakers                                                                 | EN 62271-100                             | 2009        |
| IEC 62271-102      | 2001        | High-voltage switchgear and controlgear -- Part 102: Alternating current disconnectors and earthing switches                                              | EN 62271-102                             | 2002        |
|                    |             |                                                                                                                                                           | +EN 62271-102:2002/corrigendum Jul. 2008 | 2008        |
|                    |             |                                                                                                                                                           | +EN 62271-102:2002/corrigendum Mar. 2005 | 2005        |
| +A1                | 2011        |                                                                                                                                                           | +A1                                      | 2011        |
| +A2                | 2013        |                                                                                                                                                           | +A2                                      | 2013        |
| IEC 62271-103      | 2011        | High-voltage switchgear and controlgear -- Part 103: Switches for rated voltages above 1 kV up to and including 52 kV                                     | EN 62271-103                             | 2011        |
| IEC 62271-105      | 2012        | High-voltage switchgear and controlgear -- Part 105: Alternating current switch-fuse combinations for rated voltages above 1 kV up to and including 52 kV | EN 62271-105                             | 2012        |
| IEC 62271-106      | 2011        | High-voltage switchgear and controlgear -- Part 106: Alternating current contactors, contactor-based controllers and motor-starters                       | EN 62271-106                             | 2011        |
| ISO/IEC Guide 51   | 1999        | Safety aspects - Guidelines for their inclusion in standards                                                                                              | -                                        | -           |

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## HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

### Part 201: AC solid-insulation enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV

#### 1 General

##### 1.1 Scope

This part of IEC 62271 specifies requirements for prefabricated solid-insulation enclosed switchgear and controlgear for alternating current of rated voltages above 1 kV and up to and including 52 kV for indoor installation and for service frequencies up to and including 60 Hz.

Access to the switchgear and controlgear is restricted to authorized personnel.

NOTE 1 For the use of this document high-voltage (IEC 60050-601:1985, 601-01-27) is the rated voltage above 1 000 V. However, medium voltage (IEC 60050-601:1985, 601-01-28) is commonly used for distribution systems with voltages above 1 kV and generally applied up to and including 52 kV; refer to [1] of Bibliography.

NOTE 2 Although primarily dedicated to three-phase systems, this standard can also be applied to single-phase or two-phase systems.

Enclosures may include fixed and removable components and may be filled with fluid (liquid or gas) to provide an extra insulation. For switchgear and controlgear containing gas-filled compartments, the design pressure is limited to a maximum of 300 kPa (relative pressure).

Solid-insulation enclosed switchgear and controlgear complying with this standard can be safely touched when energised.

Solid-insulation enclosed switchgear and controlgear for special use, for example, in flammable atmospheres, in mines or on board ships, may be subject to additional requirements.

Components contained in solid-insulation enclosed switchgear and controlgear are designed and tested in accordance with their various relevant standards. This standard supplements the standards for the individual components regarding their installation in switchgear and controlgear assemblies.

This standard does not preclude that other equipment may be included in the same enclosure. In such a case, any possible influence of that equipment on the switchgear and controlgear should be taken into account.

NOTE 3 Switchgear and controlgear assemblies having a metal enclosure are covered by IEC 62271-200 refer to [9] of Bibliography.

##### 1.2 Normative references

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.

IEC 60050 (all parts), *International Electrotechnical Vocabulary (IEV)* (available at [www.electropedia.org](http://www.electropedia.org))