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High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches (IEC 62271-102:2018)

Hochspannungs-Schaltgeräte und Schaltanlagen - Teil 102: Wechselstrom-Trennschalter und -Erdungsschalter (IEC 62271-102:2018)

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EUROPEAN STANDARD

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High-voltage switchgear and controlgear -
Part 102: Alternating current disconnectors and earthing
switches
(IEC 62271-102:2018)

Appareillage à haute tension -
Partie 102: Sectionneurs et sectionneurs de terre à courant
alternatif
(IEC 62271-102:2018)

Hochspannungs-Schaltgeräte und -Schaltanlagen -
Teil 102: Wechselstrom-Trennschalter und -
Erdungsschalter
(IEC 62271-102:2018)

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 62271-102:2018**European foreword**

The text of document 17A/1173/FDIS, future edition 2 of IEC 62271-102, prepared by SC 17A "Switching devices" of IEC/TC 17 "High-voltage switchgear and controlgear" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62271-102:2018.

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-03-19
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-06-19

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The text of the International Standard IEC 62271-102:2018 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 60507:2013	NOTE	Harmonized as EN 60507:2014 (not modified).
IEC 60447:2004	NOTE	Harmonized as EN 60447:2004 (not modified).
IEC 60060-1:2010	NOTE	Harmonized as EN 60060-1:2010 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-151	-	International Electrotechnical Vocabulary - - Part 151: Electrical and magnetic devices	-	-
IEC 60050-441	-	International Electrotechnical Vocabulary - - (IEV) - Chapter 441: Switchgear, controlgear and fuses	-	-
IEC 60050-471	-	International Electrotechnical Vocabulary - - Part 471: Insulators	-	-
IEC 60050-614	-	International electrotechnical vocabulary - - Part 614: Generation, transmission and distribution of electricity - Operation	-	-
IEC 60071-2	-	Insulation co-ordination - Part 2: Application guidelines	EN IEC 60071-2	-
IEC 60137	-	Insulated bushings for alternating voltages above 1000 V	EN 60137	-
IEC 60270	-	High-voltage test techniques - Partial discharge measurements	EN 60270	-
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 corr. May	1991 1993
+A1	1999		+A1	2000
+A2	2013		+A2	2013
IEC 60865-1	-	Short-circuit currents - Calculation of effects - Part 1: Definitions and calculation methods	EN 60865-1	-
IEC 62262	2002	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	2002
IEC 62271-1	2017	High-voltage switchgear and controlgear - Part 1: Common specifications for alternating current switchgear and controlgear	EN 62271-1	2017

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62271-100 +A1 +A2	2008 2012 2017	High-voltage switchgear and controlgear - Part 100: Alternating current circuit- breakers	EN 62271-100 +A1 +A2	2009 2012 2017
IEC 62271-101 +A1	2012 2017	High-voltage switchgear and controlgear - Part 101: Synthetic testing	EN 62271-101 -	2013 -
IEC 62271-200	2011	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	2012
IEC 62271-201	2014	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	EN 62271-201	2014
IEC 62271-203	2011	High-voltage switchgear and controlgear - Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	EN 62271-203	2012
IEC/TR 62271-305	-	High-voltage switchgear and controlgear - Part 305: Capacitive current switching capability of air-insulated disconnectors for rated voltages above 52 kV	-	-
ISO 2768-1	-	General tolerances - Part 1: Tolerances for linear and angular dimensions without individual tolerance indications	EN 22768-1	-

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NORME INTERNATIONALE



High-voltage switchgear and controlgear –
Part 102: Alternating current disconnectors and earthing switches
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Appareillage à haute tension –
Partie 102: Sectionneurs et sectionneurs de terre à courant alternatif

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 102: Alternating current disconnectors and earthing switches

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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International Standard IEC 62271-102 has been prepared by subcommittee 17A: Switching devices, of IEC technical committee 17: High-voltage switchgear and controlgear.

This second edition cancels and replaces the first edition published in 2001, Amendment 1:2011 and Amendment 2:2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) new numbering according to IEC 17/1025/RQ to harmonize with ISO/IEC Directives, Part 2, and IEEE Std. C37.100.1;
- b) clause numbering has been aligned with IEC 62271-1:2017;
- c) the Scope has been extended to cover all indoor and outdoor installations. Consideration of switching devices having disconnecting and/or earthing switch functionalities, apart from other functions, are also covered by this document;