SLOVENSKI STANDARD
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Visokonapetostne stikalne in krmilne naprave - 212. del: Kompaktni sestavi opreme za distribucijske podpostaje (CEADS) za napetosti AC do 52 kV (IEC 62271 -212:2022)

High-voltage switchgear and controlgear - Part 212: Compact Equipment Assembly for Distribution Substation (CEADS) for AC voltages up to 52 kV (IEC 62271-212:2022)

Hochspannungs-Schaltgeräte und -Schaltanlagen - Teil 212: Kompakte Gerätekombinationen für Verteilstationen (CEADS) (IEC 62271-212:2022)

Appareillage à haute tension - Partie 212: Ensemble compact d'équipement pour poste de distribution (ECEPD) pour les tensions alternatives inférieures ou égales à 52 kV (IEC 62271-212:2022)

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29.130.10	Visokonapetostne stikalne in krmilne naprave	High voltage switchgear and controlgear

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Hochspannungs-Schaltgeräte und -Schaltanlagen - Teil 212: Kompakte Gerätekombinationen für Verteilstationen (CEADS) (IEC 62271-212:2022)

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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

European foreword

The text of document 17C/845/FDIS, future edition 2 of IEC 62271-212, prepared by SC 17C "Assemblies" of IEC/TC 17 "High-voltage switchgear and controlgear" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62271-212:2022.

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) 2023-05-03
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-08-03

This document supersedes EN 62271-212:2017 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 62271-212:2022 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 (not modified)
IEC 62271-4:2013	NOTE	Harmonized as EN 62271-4:2013 (not modified)
IEC 61936-1:2021	NOTE	Harmonized as EN IEC 61936-1:2021 (not modified)
IEC 62262:2002	NOTE	Harmonized as EN 62262:2002 (not modified)
IEC/TR 62271-307:2015	NOTE	Harmonized as CLC IEC/TR 62271-307:2019 (not modified)
IEC 60076-13:2006	NOTE	Harmonized as EN 60076-13:2006 (not modified)
IEC/TR 62271-208:2009	NOTE	Harmonized as CLC/TR 62271-208:2010 (not modified)
IEC 62271-200:2011	NOTE	Harmonized as EN 62271-200:2012 (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.

Publication	Year	Title	EN/HD	Year
IEC 60050-441	-	International Electrotechnical Vocabulary. Switchgear, controlgear and fuses	-	-
IEC 60050-461	-	International Electrotechnical Vocabulary - Part 461: Electric cables	-	-
IEC 60076	series	Power transformers	EN 60076	series
IEC 60076-1	2011	Power transformers - Part 1: General	EN 60076-1	2011
IEC 60076-2	2011	Power transformers - Part 2: Temperature rise for liquid-immersed transformers	EN 60076-2	2011
IEC 60076-3	2013	Power transformers - Part 3: Insulation levels, dielectric tests and external clearances in air	EN 60076-3	2013
+ A1	2018		+ A1	2018
IEC 60076-5	2006	Power transformers - Part 5: Ability to withstand short circuit	EN 60076-5	2006
IEC 60076-7	2018	Power transformers - Part 7: Loading guide for mineral-oil-immersed power transformers	-	-
IEC 60076-10	2016	Power transformers - Part 10: Determination of sound levels	EN 60076-10	2016
IEC 60076-11	2018	Power transformers - Part 11: Dry-type transformers	EN IEC 60076-11	2018
IEC 60076-12	2008	Power transformers - Part 12: Loading guide for dry-type power transformers	-	-
IEC 60076-15	2015	Power transformers - Part 15: Gas-filled power transformers	-	-
IEC 60243-1	2013	Electric strength of insulating materials - Test methods - Part 1: Tests at power frequencies	EN 60243-1	2013

Publication	Year	Title	EN/HD	Year
IEC 60364-4-41 (mod)	2005	Low-voltage electrical installations - Part 4-41: Protection for safety - Protection against electric shock		
+ A1	2017		HD 60364-4-41	2017
-	-		+ A11	2017
-	-		+ A12	2019
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529	1991
-	-		+ corrigendum May	1993
+ A1	1999		+ A1	2000
+ A2	2013		+ A2	2013
IEC 60721-1	1990	Classification of environmental conditions - Part 1: Environmental parameters and their severities	EN 60721-1	1995
+ A1	1992		-	-
+ A2	1995		+ A2	1995
IEC 60721-2-2	2012	Classification of environmental conditions - Part 2-2: Environmental conditions appearing in nature - Precipitation and wind	EN 60721-2-2	2013
IEC 60721-2-4	2018	Classification of environmental conditions - Part 2-4: Environmental conditions appearing in nature - Solar radiation and temperature	EN IEC 60721-2-4	2018
-	-		+ AC	2018-12
IEC/TS 60815	series	Selection and dimensioning of high-voltage insulators intended for use in polluted conditions	-	series
IEC 60947-1	2020	Low-voltage switchgear and controlgear - Part 1: General rules	EN IEC 60947-1	2021
IEC 61439	series[1]	Low-voltage switchgear and controlgear assemblies	EN IEC 61439	series
IEC 61439-1	2020	Low-voltage switchgear and controlgear assemblies - Part 1: General rules	EN IEC 61439-1	2021
IEC 62271-1	2017	High-voltage switchgear and controlgear - Part 1: Common specifications for alternating current switchgear and controlgear	EN 62271-1	2017
IEC 62271-200	2021	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 IEC 62271-200	2021

[1] This series supersedes some parts of IEC 60439 series.

Publication	Year	Title	EN/HD	Year
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 62271-202	2022	High-voltage switchgear and controlgear - Part 202: AC prefabricated substations for rated voltages above 1 kV and up to and including 52 kV	-	-

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High-voltage switchgear and controlgear – Part 212: Compact Equipment Assembly for Distribution Substation (CEADS) for AC voltages up to 52 kV

Appareillage à haute tension – Partie 212: Ensemble compact d'équipement pour poste de distribution (ECEPD) pour les tensions alternatives inférieures ou égales à 52 kV

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 212: Compact Equipment Assembly for Distribution Substation (CEADS) for AC voltages up to 52 kV

FOREWORD

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IEC 62271-212 has been prepared by subcommittee 17C: Assemblies, of IEC technical committee 17: High-voltage switchgear and controlgear. It is an International Standard.

This second edition cancels and replaces the first edition published in 2016. This edition constitutes a technical revision.

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

a) clause numbering aligned with IEC 62271-1:2017,
b) rewording of title and scope of the document,
c) implement changes on internal arc definition and testing following the evolution of prefabricated substation concept according to IEC 62271-202,
d) general review of main test procedures such as temperature rise or dielectric test on interconnections, considering control equipment, communication, smart grid devices and integration of components,

e) general review of installation, operation, safety and maintenance requirements.

The text of this International Standard is based on the following documents:

Draft	Report on voting
17C/845/FDIS	17C/850/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

This International Standard should be read in conjunction with IEC 62271-1:2017, to which it refers and which is applicable unless otherwise specified. In order to simplify the indication of corresponding requirements, the same numbering of clauses and subclauses is used as in IEC 62271-1:2017. Amendments to these clauses and subclauses are given under the same numbering, whilst additional subclauses, are numbered from 101.

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

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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

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