High-voltage switchgear and controlgear - Part 213: Voltage detecting and indicating system



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 62271-213:2021 sisaldab Euroopa standardi EN IEC 62271-213:2021 ingliskeelset teksti.

This Estonian standard EVS-EN IEC 62271-213:2021 consists of the English text of the European standard EN IEC 62271-213:2021.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.08.2021.

Date of Availability of the European standard is 13.08.2021.

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ICS 13.260, 29.130.10, 29.240.20

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN IEC 62271-213

August 2021

ICS 13.260; 29.130.10; 29.240.20

English Version

High-voltage switchgear and controlgear - Part 213: Voltage detecting and indicating system (IEC 62271-213:2021)

Appareillage à haute tension - Partie 213: Système détecteur et indicateur de tension (IEC 62271-213:2021) Hochspannungs-Schaltgeräte und -Schaltanlagen - Teil 213: Spannungsprüf- und -anzeigesysteme (IEC 62271-213:2021)

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

European foreword

The text of document 17C/787/FDIS, future edition 1 of IEC 62271-213, 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 62271-213:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022–04–29 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024–07–29 document have to be withdrawn

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The text of the International Standard IEC 62271-213:2021 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 60999-1 NOTE Harmonized as EN 60999-1

IEC 61243-5:1997 NOTE Harmonized as EN 61243-5:2001 (modified)

IEC 61243-1:2021 NOTE Harmonized as EN IEC 61243-1:2021 (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>	Title <u>EN/HD</u>	<u>Year</u>
IEC 60060-1	-	High-voltage test techniques - Part 1:EN 60060-1 General definitions and test requirements	-
IEC 60068-2-1	2007	Environmental testing - Part 2–1: Tests -EN 60068-2–1 Test A: Cold	2007
IEC 60068-2-2	2007	Environmental testing - Part 2–2: Tests -EN 60068-2–2 Test B: Dry heat	2007
IEC 60068-2-6	-	Environmental testing - Part 2–6: Tests -EN 60068-2–6 Test Fc: Vibration (sinusoidal)	-
IEC 60068-2-11	-	Environmental testing - Part 2–11: Tests -EN IEC 60068-2– Test Ka: Salt mist 11	-
IEC 60068-2-31	-	Environmental testing - Part 2–31: Tests -EN 60068-2–31 Test Ec: Rough handling shocks, primarily for equipment-type specimens	-
IEC 60068-2-38	-	Environmental testing - Part 2–38: Tests -EN IEC 60068-2– Test Z/AD: Composite38 temperature/humidity cyclic test	-
IEC 60068-2-78	-	Environmental testing - Part 2–78: Tests -EN 60068-2–78 Test Cab: Damp heat, steady-state	-
IEC 60352-1	-	Solderless connections - Part 1: WrappedEN 60352-1 connections - General requirements, test methods and practical guidance	-
IEC 60352-2	-	Solderless connections - Part 2: CrimpedEN 60352-2 connections - General requirements, test methods and practical guidance	-
IEC 60352-5	-	Solderless connections - Part 5: Press-inEN IEC 60352-5 connections - General requirements, test methods and practical guidance	
IEC 60417	-	Graphical symbols for use on equipment -	- ()
IEC 60529	-	Degrees of protection provided by- enclosures (IP Code)	-

IEC 61000-4-2	-	Electromagnetic compatibility (EMC) - PartEN 61000-4–2 4–2: Testing and measurement techniques - Electrostatic discharge immunity test	-
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - PartEN IEC 61000-4–3 4–3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	-
IEC 61010-031	2015	Safety requirements for electricalEN 61010-031 equipment for measurement, control and laboratory use - Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test	2015
+ A1	2018	+ FprA1	2018
IEC 61210	- 30	Connecting devices - Flat quick-connectEN 61210 terminations for electrical copper conductors - Safety requirements	-
IEC 62262	-	Degrees of protection provided byEN 62262 enclosures for electrical equipment against external mechanical impacts (IK code)	-
IEC 62271-1		High-voltage switchgear and controlgear -EN 62271-1 Part 1: Common specifications for alternating current switchgear and controlgear	



Edition 1.0 2021-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

High-voltage switchgear and controlgear – Part 213: Voltage detecting and indicating system

Appareillage à haute tension – Partie 213: Système détecteur et indicateur de tension





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Edition 1.0 2021-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

High-voltage switchgear and controlgear – Part 213: Voltage detecting and indicating system

Appareillage à haute tension – Partie 213: Système détecteur et indicateur de tension

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 13.260; 29.130.10; 29.240.20

ISBN 978-2-8322-9890-9

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR -

Part 213: Voltage detecting and indicating system

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International Standard IEC 62271-213 has been prepared by subcommittee 17C:Assemblies, of IEC technical committee 17: High-voltage switchgear and controlgear.

This first edition cancels and replaces the first edition of IEC 61243-5 published in1997 and the first edition of IEC 62271-206 published in 2011. This edition constitutes a merging of the content of IEC 61243-5 and IEC 62271-206.

This edition includes the following significant technical changes with respect to the previous editions of IEC 61243-5 and IEC 62271-206:

- a) an optional output signal is defined to be used for multipurpose use cases;
- b) only one interface is defined for voltage detecting and indicating system (VDIS);
- c) the measurement of the current carrying capacity of the *voltage limiting element* is considered as inaccurate and is not considered in this document. Experience shows that the probability of failure of the *coupling element* is negligible.

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

FDIS	Report on voting
17C/787/FDIS	17C/794/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.

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• Terms defined in Clause 3: in italic type.

The reader's attention is drawn to the fact that Annex B lists all of the "in-some-country" clauses on differing practices of a less permanent nature relating to the subject of this document.

A list of all parts in the IEC 62271 series, published 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 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.

INTRODUCTION

This part of IEC 62271 has been prepared in accordance with the requirements of IEC 62271-1.

The products designed and manufactured in accordance with this document contribute to the safety of the users, provided they are used by skilled or instructed persons, in accordance with safe methods of work and the instructions for use.

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the inless is are app. IEC 62271-213 does not cover the phase comparison function of IEC 61243-5 which is covered by the new IEC 62271-215. Unless IEC 62271-215 is not published, the relevant subclauses in IEC 61243-5 related to UPCs are applicable.