

High-voltage switchgear and controlgear - Part 215:
Phase comparator used with VDIS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 62271-215:2021 sisaldab Euroopa standardi EN IEC 62271-215:2021 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 62271-215:2021 consists of the English text of the European standard EN IEC 62271-215:2021.
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English Version

**High-voltage switchgear and controlgear - Part 215: Phase
comparator used with VDIS
(IEC 62271-215:2021)**

Appareillage à haute tension - Partie 215: Comparateur de
phase utilisé avec un VDIS
(IEC 62271-215:2021)

Hochspannungs-Schaltgeräte und -Schaltanlagen - Teil
215: Phasenvergleich in Kombination mit einem
Spannungsprüf- und -anzeigegerät
(IEC 62271-215:2021)

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European foreword

The text of document 17C/788/FDIS, future edition 1 of IEC 62271-215, 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 62271-215:2021.

The following dates are fixed:

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- latest date by which the national standards conflicting with the (dow) 2024-08-03 document have to be withdrawn

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61481-1:2014 NOTE Harmonized as EN 61481-1:2014 (not modified)

IEC 61481-2:2014 NOTE Harmonized as EN 61481-2:2014 (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 60060-1	-	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	-
IEC 60068-2-1	2007	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	2007
IEC 60068-2-2	2007	Environmental testing - Part 2-2: Tests - Test B: Dry heat	EN 60068-2-2	2007
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-31	-	Environmental testing - Part 2-31: Tests - Test Ec: Rough handling shocks, primarily for equipment-type specimens	EN 60068-2-31	-
IEC 60068-2-38	-	Environmental testing - Part 2-38: Tests - Test Z/AD: Composite temperature/humidity cyclic test	EN IEC 60068-2-38	-
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) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	-
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN IEC 61000-4-3	-
IEC 61000-4-5	-	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	-
IEC 62262	-	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	-

IEC 62271-1	-	High-voltage switchgear and controlgear - EN 62271-1 Part 1: Common specifications	-
IEC 62271-213	-	High-voltage switchgear and controlgear - Part 213: Voltage detecting and indicating system	-

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**High-voltage switchgear and controlgear –
Part 215: Phase comparator used with VDIS**

**Appareillage à haute tension –
Partie 215: Comparateur de phase utilisé avec un VDIS**



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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**High-voltage switchgear and controlgear –
Part 215: Phase comparator used with VDIS**

**Appareillage à haute tension –
Partie 215: Comparateur de phase utilisé avec un VDIS**

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HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 215: Phase comparator used with VDIS

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International Standard IEC 62271-215 has been prepared by sub-committee SC17C: Assemblies, of IEC technical committee 17: High-voltage switchgear and controlgear in liaison with IEC TC 78: Live working.

This first edition cancels and replaces the first edition of IEC 61243-5 published in 1997 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) the document does not include the specific *phase comparators* (SPCs) as defined in IEC 61243-5, which was specific to manufacturers, and takes back the technical principles of the universal phase comparator (UPC) for VDIS of all manufacturers;
- b) the phase comparator for sequential connected operation is introduced to facilitate the operation of phase comparison of large MV panels.

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

FDIS	Report on voting
17C/788/FDIS	17C/795/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 is to be used in conjunction with IEC 62271-13:2021.

In this document, the following print types are used:

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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

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INTRODUCTION

This part of IEC 62271 has been prepared based on IEC 62271-1 and is linked to IEC 62271-213 for its functionality.

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.

The product covered by this document can have an impact on the environment during some or all stages of its life cycle. These impacts can range from slight to significant, be of short-term or long-term duration, and occur at the global, regional or local level.

The principle of phase comparison is compatible with the one developed by IEC TC 78 in the standard IEC 61481-1.