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High-voltage switchgear and controlgear - Part 107:
Alternating current fused circuit-switchers for rated
voltages above 1 kV up to and including 52 kV

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 62271-107:2019 sisaldab Euroopa standardi EN IEC 62271-107:2019 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 62271-107:2019 consists of the English text of the European standard EN IEC 62271-107:2019.
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.
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English Version

High-voltage switchgear and controlgear - Part 107: Alternating current fused circuit-switchers for rated voltages above 1 kV up to and including 52 kV
(IEC 62271-107:2019)

Appareillage à haute tension - Partie 107: Circuits-switchers à fusibles pour courant alternatif de tension assignée supérieure à 1 kV et jusqu'à 52 kV inclus
(IEC 62271-107:2019)

Hochspannungs-Schaltgeräte und -Schaltanlagen - Teil 107: Wechselstrom-Leistungsschalter-Sicherungs-Kombinationen für Bemessungsspannungen über 1 kV bis einschließlich 52 kV
(IEC 62271-107:2019)

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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 17A/1216/FDIS, future edition 3 of IEC 62271-107, 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 62271-107:2019.

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) 2020-04-02
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-07-02

This document supersedes EN 62271-107:2012 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 62271-107:2019 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 62271-102	NOTE	Harmonized as EN IEC 62271-102
IEC 62271-200	NOTE	Harmonized as EN 62271-200
IEC 62271-201	NOTE	Harmonized as EN 62271-201

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 60282-1	2009	High-voltage fuses - Part 1: Current-limiting fuses	EN 60282-1	2009
+ A1	2014		+ A1	2014
IEC 62271-1	2017	High-voltage switchgear and controlgear - Part 1: Common specifications for alternating current switchgear and controlgear	EN 62271-1	2017
IEC 62271-100	2008	High-voltage switchgear and controlgear - Part 100: Alternating current circuit-breakers	EN 62271-100	2009
+ A1	2012		+ A1	2012
+ A2	2017		+ A2	2017
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

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 107: Alternating current fused circuit-switchers for rated voltages above 1 kV up to and including 52 kV

FOREWORD

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International Standard IEC 62271-107 has been prepared by subcommittee 17A: Switching devices, of IEC technical committee 17: High-voltage switchgear and controlgear

This third edition cancels and replaces the second edition published in 2012. This edition constitutes a technical revision.

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

- a) technical changes introduced by the second edition of IEC 62271-1 are applied, where relevant;
- b) rated TRV is removed and TRV is now treated as a test parameter, as in IEC 62271-100;
- c) the term "thermal current" is no longer used; the rated continuous current is linked to the installed fuse-links, and values shall be provided by the manufacturer together with the list of the acceptable fuse-links; for tests purpose, the highest rated continuous current listed

is referred, where previously the wording was "rated maximum thermal current", for consistency with IEC 62271-105;

- d) making and breaking test duties are independent type tests (as some may be omitted if the switching device has been validated as a load-break switch). However, $TD_{I_{t0}}$ and $TD_{I_{low}}$ are kept as a sequence as they are linked to the same rated value (I_{t0});
- e) differentiation has been introduced between requirements expressed for fulfilling the function expected from a fused circuit-switcher, from requirements only relevant when the function is performed by a stand-alone device. The goal is to avoid duplication or conflicts of requirements with a standard dealing with assemblies, when the function is implemented within such an assembly.

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

FDIS	Report on voting
17A/1216/FDIS	17A/1227/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This International Standard is to 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. Amendments to these clauses and subclauses are given under the same numbering, whilst additional subclauses, are numbered from 101.

Particular conditions existing in certain countries are listed in Annex B.

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 "<http://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

Earthing switches forming an integral part of a circuit-switcher are covered by IEC 62271-102 [1]¹.

Installation in enclosure, if any, is covered either by IEC 62271-200 [2] or by IEC 62271-201 [3].

¹ Numbers in square brackets refer to the Bibliography.