High-voltage switchgear and controlgear -- Part 112: Alternating current high-speed earthing switches for gn. tion Scholar Schol secondary arc extinction on transmission lines



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See Eesti standard EVS-EN 62271-112:2013	This Estonian standard EVS-EN 62271-112:2013
sisaldab Euroopa standardi EN 62271-112:2013	consists of the English text of the European standard
ingliskeelset teksti.	EN 62271-112:2013.
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avaldamisega EVS Teatajas.	published in the official bulletin of the Estonian Centre
	for Standardisation.
Euroopa standardimisorganisatsioonid on teinud	Date of Availability of the European standard is
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kättesaadavaks 04.10.2013.	04.10.2013.
National and 1.10.2010.	
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for
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ICS 29.130.10, 29.130.99

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# **EUROPEAN STANDARD**

# EN 62271-112

# NORME EUROPÉENNE EUROPÄISCHE NORM

October 2013

ICS 29.130.10; 29.130.99

English version

# High-voltage switchgear and controlgear Part 112: Alternating current high-speed earthing switches for secondary arc extinction on transmission lines

(IEC 62271-112:2013)

Appareillage à haute tension -Partie 112: Sectionneurs de terre rapides à courant alternatif pour l'extinction de l'arc secondaire sur les lignes de transport (CEI 62271-112:2013) Hochspannungs-Schaltgeräte und -Schaltanlagen -Teil 112: Schnellschaltende Wechselstrom-Erdungsschalter zum Löschen von sekundären Lichtbögen auf Freileitungen (IEC 62271-112:2013)

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CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

#### Foreword

The text of document 17A/1042/FDIS, future edition 1 of IEC 62271-112, prepared by subcommittee 17A, High-voltage switchgear and controlgear, of IEC/TC 17, "Switchgear and controlgear" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62271-112:2013.

The following dates are fixed:

- 2014-06-10 (dop) latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement
- (dow) 2016-09-10 latest date by which the national standards conflicting with the document have to be withdrawn

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# **Endorsement notice**

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271-112:20: The text of the International Standard IEC 62271-112:2013 was approved by CENELEC as a European Standard without any modification.

# Annex ZA (normative)

# Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 62271-1	2007	High-voltage switchgear and controlgear - Part 1: Common specifications	EN 62271-1	2008
IEC 62271-100	2008	High-voltage switchgear and controlgear - Part 100: Alternating current circuit-breaker	EN 62271-100	2009
IEC 62271-102 + corr. April + corr. February + corr. May	2001 2002 2005 2003	High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches	EN 62271-102 + corr. July + corr. March	2002 2008 2005
IEC 62271-203 + corr. July	2011 2013	High-voltage switchgear and controlgear - Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	EN 62271-203	2012
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## HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR -

# Part 112: Alternating current high-speed earthing switches for secondary arc extinction on transmission lines

#### 1 General

## 1.1 Scope

This part of IEC 62271 applies to a.c. high-speed earthing switches designed for indoor and outdoor installation and for operation at service frequencies of 50 Hz and 60 Hz on systems having voltages of 550 kV and above.

High-speed earthing switches described in this standard are intended to extinguish the secondary arc remaining after clearing faults on transmission lines by the circuit-breakers.

## 1.2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62271-1:2007, High-voltage switchgear and controlgear – Part 1: Common specifications

IEC 62271-100:2008, High-voltage switchgear and controlgear – Part 100: Alternating-current circuit-breakers

IEC 62271-102:2001, High-voltage switchgear and controlgear – Part 102: Alternating current disconnectors and earthing switches

IEC 62271-203:2011, High-voltage switchgear and controlgear – Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV

# 2 Normal and special service conditions

Clause 2 of IEC 62271-1:2007 is applicable.

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in Clause 3 of IEC 62271-1:2011, as well as the following apply.

# 3.1 General terms

#### 3.1.101

#### secondary arc

arc that remains at the faulted point after interruption of the short-circuit current fed by the network

Note 1 to entry: This secondary arc is supplied by electrostatic or electromagnetic induction from the adjacent healthy phases.