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En cumplimiento del punto 11.2.6.4 de las Reglas Internas de CEN/CENELEC Parte 2, se ha otorgado el rango de norma española al Documento Europeo siguiente:

Documento Europeo	Título	Fecha de Disponibilidad
EN 60099-5:2013	Pararrayos. Parte 5: Recomendaciones para la selección y utilización. (Ratificada por AENOR en noviembre de 2013.)	2013-08-16

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 60099-5

August 2013

ICS 29.120.50; 29.240.10

Supersedes EN 60099-5:1996 + A1:1999

English version

# Surge arresters Part 5: Selection and application recommendations (IEC 60099-5:2013)

Parafoudres -Partie 5: Recommandations pour le choix et l'utilisation (CEI 60099-5:2013) Überspannungsableiter -Teil 5: Anleitung für die Auswahl und die Anwendung (IEC 60099-5:2013)

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European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

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Ref. No. EN 60099-5:2013 E

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#### **Foreword**

The text of document 37/405/FDIS, future edition 2 of IEC 60099-5, prepared by IEC/TC 37 "Surge arresters" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60099-5:2013.

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

 latest date by which the national standards conflicting with the document have to be withdrawn
 (dow) 2016-06-26

This document supersedes EN 60099-5:1996 + A1:1999.

EN 60099-5:2013 includes the following significant technical changes with respect to EN 60099-5:1996 + A1:1999:

- a) Expanded discussion of different types of arresters and their application, including additions of discussion on
  - transmission of line arresters,
  - arresters for shunt capacitor switching,
  - arresters for series capacitor protection,
  - application of arresters between phases,
  - connecting arresters in parallel.
- b) Addition of section on asset management, including
  - managing surge arresters in the power grid,
  - arrester maintenance,
  - significantly expanded discussion of performance diagnostic tools,
  - end-of-life considerations.
- c) New annexes dealing with
  - arrester modelling for system studies,
  - example of data needed for specifying arresters.

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### **Endorsement notice**

The text of the International Standard IEC 60099-5:2013 was approved by CENELEC as a European Standard without any modification.

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## 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 60071-1	2006	Insulation co-ordination - Part 1: Definitions, principles and rules	EN 60071-1	2006
IEC 60071-2	1996	Insulation co-ordination - Part 2: Application guide	EN 60071-2	1997
IEC/TR 60071-4	-	Insulation co-ordination - Part 4: Computational guide to insulation co- ordination and modelling of electrical networks	- -	-
IEC 60099-4 (mod) + A1 + A2	2004 2006 2009	Surge arresters - Part 4: Metal-oxide surge arresters without gaps for a.c. systems	EN 60099-4 + A1 + A2	2004 2006 2009
IEC 60099-6	2002	Surge arresters - Part 6: Surge arresters containing both series and parallel gapped structures - Rate 52 kV and less	- d	-
IEC 60099-8	2011	Surge arresters - Part 8: Metal-oxide surge arresters with external series gap (EGLA) for overhead transmission and distribution lines of a.c. systems above 1 kV	EN 60099-8	2011
IEC 60507	-	Artificial pollution tests on high-voltage insulators to be used on a.c. systems	EN 60507	-
IEC/TS 60815-1	-	Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 1: Definitions, information and general principles	-	-
IEC/TS 60815-2	-	Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 2: Ceramic and glass insulators for a.c. systems		-
IEC/TS 60815-3	-	Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 3: Polymer insulators for a.c. systems	-	-
IEC 62271-1	-	High-voltage switchgear and controlgear - Part 1: Common specifications	EN 62271-1	-

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
IEC 62271-200	-	High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear an controlgear for rated voltages above 1 kV and up to and including 52 kV	EN 62271-200 d	-
IEC 62271-203	-	High-voltage switchgear and controlgear - Part 203: Gas-insulated metal-enclosed switchgear for rated voltages above 52 kV	EN 62271-203	-

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### SURGE ARRESTERS -

## Part 5: Selection and application recommendations

### **FOREWORD**

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International Standard IEC 60099-5 has been prepared by committee 37: Surge arresters.

This second edition cancels and replaces the first edition published in 1996 and its amendment 1 published in 1999. This edition constitutes a technical revision.

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

- a) Expanded discussion of different types of arresters and their application, including additions of discussion on:
  - transmission of line arresters
  - arresters for shunt capacitor switching
  - arresters for series capacitor protection
  - application of arresters between phases
  - connecting arresters in parallel
- b) Addition of section on asset management, including:

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