SVENSK STANDARD SS-EN 61643-11

Fastställd	Utgåva	Sida	Ingår i
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Svenska Elektriska Kommissionen, SEK

Överspänningsskydd för lågspänning – Del 11: Överspänningsskydd anslutna till lågspänningsnät – Prestanda och provningsmetoder

Low-voltage surge protective devices – Part 11: Surge protective devices connected to low-voltage power systems – Requirements and tests

Som svensk standard gäller europastandarden EN 61643-11:2002. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61643-11:2002.

Nationellt förord

Europastandarden EN 61643-11:2002

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 61643-1, First edition, 1998**[*)] **- Surge protective devices connected to low-voltage power distribution systems - Part 1: Performance requirements and testing methods**

utarbetad inom International Electrotechnical Commission, IEC.

[*)] Corrigendum, December 1998, till IEC 61643-1:1998, är inarbetat i texten.

ICS 29.240.10

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Postadress: SEK, Box 1284, 164 29 KISTA
Telefon: 08 - 444 14 00. *Telefax*: 08 - 444 14 30
E-post: sek@sekom.se. *Internet*: www.sekom.se

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164 29 Kista
Tel 08-444 14 00
www.sekom.se

EUROPEAN STANDARD **EN 61643-11**

NORME EUROPÉENNE

EUROPÄISCHE NORM May 2002

ICS 29.240.10

English version

Low-voltage surge protective devices
Part 11: Surge protective devices connected to low-voltage power systems - Requirements and tests
(IEC 61643-1:1998 + corr. 1998, modified)

Parafoudres basse-tension
Partie 11: Parafoudres connectés aux systèmes de distribution basse tension - Prescriptions et essais
(CEI 61643-1:1998 + corr. 1998, modifiée)

Überspannungsschutzgeräte für Niederspannung
Teil 11: Überspannungsschutzgeräte für den Einsatz in Niederspannungsanlagen - Anforderungen und Prüfungen
(IEC 61643-1:1998 + Corr. 1998, modifiziert)

This European Standard was approved by CENELEC on 2001-10-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 61643-11:2002 E

Foreword

The text of the International Standard IEC 61643-1:1998 and its corrigendum December 1998, prepared by SC 37A, Low-voltage surge protective devices, of IEC TC 37, Surge arresters, together with the common modifications prepared by CLC/SR 37A was submitted to the Unique Acceptance Procedure.

The combined text was approved by CENELEC as EN 61643-11 on 2001-10-01.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2002-12-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2004-10-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annexes A, B and ZA are normative.
Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 61643-1:1999 with its corrigendum December 1998 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

Annex ZA
(normative)

Normative references to international publications
With their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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

Publication	Year	Title	EN/HD	Year
IEC 60060-1 + corr. March	1989 1990	High-voltage test techniques - Part 1: General definitions and test requirements	HD 588.1 S1	1991
IEC 60112	1979	Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions	HD 214 S2	1980
IEC 60227 (mod)	Series	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V	- HD 21[1)]	Series
IEC 60245 (mod)	Series	Rubber insulated cables of rated voltages up to and including 450/750 V	- HD 22[2)]	Series
IEC 60364-4-442	1993	Electrical installations of buildings - Part 4: Protection for safety - Chapter 44: Protection against overvoltages - Section 442: Protection of low-voltage installations against faults between high-voltage systems and earth	-	-
IEC 60364-5-534	1997	Part 5: Selection and erection of electrical equipment – Section 534: Devices for protection against overvoltages	-	-
IEC 60529	1989	Degrees of protection provided by enclosures (IP Code)	EN 60529 + corr. May	1991 1993
IEC 60664-1 (mod)	1992	Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests	HD 625.1 S1 + corr. Nov.	1996 1996
IEC 60695-2-1/1	1994	Fire hazard testing - Part 2: Test methods - Section 1/sheet 1: Glow-wire end-product test and guidance	EN 60695-2-1/1[3)]	1996
IEC 60884-1	1994	Plugs and socket-outlets for household and similar purposes - Part 1: General requirements	-	-
A1	1994		-	-

1) The HD 21 series is related to but not equivalent to the IEC 60227 series.

2) The HD 22 series is related to but not equivalent to the IEC 60245 series.

3) EN 60695-2-1/1 is superseded by EN 60695-2-11:2001 (IEC 60695-2-11:2000).

Publication	Year	Title	EN/HD	Year
IEC 60947-1 (mod)	1996	Low-voltage switchgear and controlgear - Part 1: General rules	EN 60947-1	1997[4)]
IEC 60947-5-1	1990	Part 5: Control circuit devices and switching elements - Section 1: Electromechanical control circuit devices	EN 60947-5-1	1991[5)]
IEC 60999 (mod)	Series	Connecting devices - Safety requirements for screw-type and screwless-type clamping units for electrical copper conductors	EN 60999	Series
IEC 61180-1	1992	High-voltage test techniques for low-voltage equipment - Part 1: Definitions, test and procedure requirements	EN 61180-1	1994
IEC 61643-12	2002	Surge protective devices connected to low-voltage power distribution systems - Part 12: Selection and application principles	-	-

-

4) EN 60947-1:1999 is based on IEC 60947-1:1999, mod.

5) EN 60947-5-1:1997 is based on IEC 60947-5-1:1997.

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SURGE PROTECTIVE DEVICES CONNECTED TO LOW-VOLTAGE POWER DISTRIBUTION SYSTEMS –

Part 1: Performance requirements and testing methods

1 General

1.1 Scope

This part of IEC 61643 is applicable to devices for surge protection against indirect and direct effects of lightning or other transient overvoltages. These devices are packaged to be connected to 50/60 Hz a.c. and d.c. power circuits, and equipment rated up to 1 000 V r.m.s. or 1 500 V d.c. Performance characteristics, standard methods for testing, and ratings are established for these devices that contain at least one nonlinear component that is intended to limit surge voltages and divert surge currents.

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61643. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 61643 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60060-1:1989, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60112:1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*

IEC 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

IEC 60245 (all parts), *Rubber insulated cables – Rated voltages up to and including 450/750 V*

IEC 60364-4-442:1993, *Electrical installations of buildings – Part 4-442: Protection for safety – Protection against overvoltages – Protection of low-voltage installations against faults between high-voltage systems and earth*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP code)*

IEC 60664-1:1992, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60695-2-1/1:1994, *Fire hazard testing – Part 2-1/1: Test methods – Sheet 1: Glow wire end-product test and guidance*