

BS EN 60947-3:2009+A2:2015

Incorporating corrigenda September 2012 and November 2013



BSI Standards Publication

Low-voltage switchgear and controlgear

Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units

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National foreword

This British Standard is the UK implementation of EN 60947-3:2009+A2:2015. It is identical to IEC 60947-3:2008, incorporating amendment 1:2012, amendment 2:2015 and corrigenda September 2012 and November 2013. It supersedes BS EN 60947-3:2009+A1:2012, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by A1 A1.

The UK participation in its preparation was entrusted by Technical Committee PEL/121, Switchgear and Controlgear and their assemblies for low voltage, to Subcommittee PEL/121/1, Low voltage switchgear and controlgear.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

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Amendments/corrigenda issued since publication

Date	Text affected
31 May 2012	Implementation of IEC amendment 1:2012 with CENELEC endorsement A1:2012
31 January 2013	Implementation of IEC corrigendum September 2012: 4.2.1, 4.2.2 and 4.2.3 deleted
30 April 2014	Implementation of IEC corrigendum November 2013: Updated reference and footnote for entry IEC 60947-1 in subclause 1.2
31 December 2015	Implementation of IEC amendment 2:2015 with CENELEC endorsement A2:2015: Annexes ZA and ZZ updated

**Low-voltage switchgear and controlgear -
Part 3: Switches, disconnectors, switch-disconnectors
and fuse-combination units
(IEC 60947-3:2008)**

Appareillage à basse tension -
Partie 3: Interrupteurs, sectionneurs,
interrupteurs-sectionneurs
et combinés-fusibles
(CEI 60947-3:2008)

Niederspannungsschaltgeräte -
Teil 3: Lastschalter, Trennschalter,
Lasttrennschalter
und Schalter-Sicherungs-Einheiten
(IEC 60947-3:2008)

This European Standard was approved by CENELEC on 2009-05-01. 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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 17B/1601/FDIS, future edition 3 of IEC 60947-3, prepared by SC 17B, Low-voltage switchgear and controlgear, of IEC TC 17, Switchgear and controlgear, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60947-3 on 2009-05-01.

This European Standard supersedes EN 60947-3:1999 + A1:2001 + A2:2005.

EN 60947-3:2009 includes the following significant technical changes with respect to EN 60947-3:1999:

- alignment with EN 60947-1:2007;
- a switching operation without current allowed between making and breaking operation (Table 3);
- increased number of operations for AC-23 allowed with agreement of the manufacturer (Table 3);
- simplified test procedure amended, f) added to 8.3.2.1.3;
- temperature rise test shall be made at the rated operational current I_e instead of the conventional enclosed thermal current I_{the} (8.3.3.1).

This part is to be used in conjunction with EN 60947-1. The numbering of the subclauses is sometimes not continuous because it is based on EN 60947-1.

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) 2010-02-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2012-05-01

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive EMC (2004/108/EC). See Annex ZZ.

Annexes ZA and ZZ have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60947-3:2008 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60447	NOTE	Harmonized as EN 60447:2004 (not modified).
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Foreword amendment A1

The text of document 17B/1758/FDIS, future A1 to IEC 60947-3:2008, prepared by SC 17B, "Low-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 60947-3:2009/A1:2012.

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) 2012-12-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-03-21

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

Endorsement notice

The text of the International Standard IEC 60947-3:2008/A1:2012 was approved by CENELEC as a European Standard without any modification.

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Foreword to amendment A2

The text of document 121A/42/FDIS, future IEC 60947-3:2008/A2, prepared by SC 121A "Low-voltage switchgear and controlgear" of IEC/TC 121 "Switchgear and controlgear and their assemblies for low voltage" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60947-3:2009/A2:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2016-05-31
national level by publication of an identical national
standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2018-08-31
the document have to be withdrawn

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This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Endorsement notice

The text of the International Standard IEC 60947-3:2008/A2:2015 was approved by CENELEC as a European Standard without any modification.

In the Bibliography of EN 60947-3:2009, the following notes have to be added for the standards indicated:

IEC 60364-7-712:2002	NOTE	Harmonized as HD 60364-7-712:2005 (not modified).
IEC 60664-1	NOTE	Harmonized as EN 60664-1.

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 1 When 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 60050-441	1984	International Electrotechnical Vocabulary (IEV) -	-	-
+ A1	2000	Chapter 441: Switchgear, controlgear and fuses	-	-
IEC 60269	series	Low-voltage fuses	EN 60269 HD 60269 CLC/TR 60269	series
IEC 60410	1973	Sampling plans and procedures for inspection by attributes	-	-
IEC 60417-DB	2002	Graphical symbols for use on equipment	-	-
IEC 60947-1	2007	Low-voltage switchgear and controlgear - Part 1: General rules	EN 60947-1	2007
+ A1	2010		+ A1	2011
+ A2	2014		+ A2	2014
IEC 60947-2	2006	Low-voltage switchgear and controlgear - Part 2: Circuit-breakers	EN 60947-2	2006
+ A1	2009		+ A1	2009
+ A2	2013		+ A2	2013
IEC 60947-4-1	2009	Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters	EN 60947-4-1	2010
+ A1	2012		+ A1	2012
IEC 60947-5-1	2003	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices	EN 60947-5-1	2004
-	-		+ corrigendum Nov.	2004
-	-		+ corrigendum Jul.	2005
+ A1	2009		+ A1	2009

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-2	2008	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	2009
IEC 61000-4-3	2006	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3	2006
+ A1	2007		+ A1	2008
-	-		+ IS	2009
+ A2	2010		+ A2	2010
IEC 61000-4-4	2012	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	2012
IEC 61000-4-5	2014	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2014
IEC 61000-4-6	2013	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	2014
CISPR 11 (mod)	2009	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	EN 55011	2009
+ A1	2010		+ A1	2010
CISPR 22 (mod)	2008	Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement	EN 55022	2010
-	-		+ AC	2011

Annex ZZ (informative)

Coverage of Essential Requirements of EC Directives

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers protection requirements of Annex I Article 1 of the EU Directive 2004/108/EC.

Compliance with this standard provides presumption of conformity with the specified essential requirements of the Directives concerned.

NOTE: Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

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