



BSI Standards Publication

Low-voltage switchgear and controlgear

Part 5-4: Control circuit devices and switching elements -
Method of assessing the performance of low-energy contacts -
Special tests

National foreword

This British Standard is the UK implementation of EN 60947-5-4:2003+A1:2019. It is identical to IEC 60947-5-4:2002, incorporating amendment 1:2019. It supersedes BS EN 60947-5-4:2003, which is withdrawn.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 to Technical Committee PEL/121/1, Low voltage switchgear and controlgear.

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

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Amendments/corrigenda issued since publication

Date	Text affected
31 August 2019	Implementation of IEC amendment 1:2019 with CENELEC endorsement A1:2019

Low-voltage switchgear and controlgear
Part 5-4: Control circuit devices and switching elements -
Method of assessing the performance of low-energy contacts -
Special tests
(IEC 60947-5-4:2002)

Appareillage à basse tension
Partie 5-4: Appareils et éléments
de commutation pour circuits
de commande -
Méthode d'évaluation des performances
des contacts à basse énergie -
Essais spéciaux
(CEI 60947-5-4:2002)

Niederspannungsschaltgeräte
Teil 5-4: Steuergeräte und Schaltelemente -
Verfahren zur Abschätzung
der Leistungsfähigkeit
von Schwachstromkontakten -
Besondere Prüfungen
(IEC 60947-5-4:2002)

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CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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

European foreword

The text of the International Standard IEC 60947-5-4:2002, prepared by SC 17B, Low-voltage switchgear and controlgear, of IEC TC 17, Switchgear and controlgear, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 60947-5-4 on 2003-12-01.

This European Standard supersedes EN 60947-5-4:1997.

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) 2004-12-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2006-12-01

Annexes designated "normative" are part of the body of the standard.

In this standard, Annexes A and ZA are normative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60947-5-4:2002 was approved by CENELEC as a European Standard without any modification.

Foreword to amendment A1

The text of document 121A/284/FDIS, future IEC 60947-5-4/A1, 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 60947-5-4:2003/A1:2019.

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) 2020-03-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-06-26

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.

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 60947-5-4:2002/A1:2019 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 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 60068-1	2013	Environmental testing - Part 1: General and guidance	EN 60068-1	2014
IEC 60068-2	series	Environmental testing - Part 2: Tests	EN 60068-2	series
IEC 60605-6	2007	Equipment reliability testing - Part 6: Tests for the validity and estimation of the constant failure rate and constant failure intensity	-	-
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 60947-5-1	2016	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices	EN 60947-5-1	2017

Annex ZZ (informative)

Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered

This European standard has been prepared under a Commission's standardisation request relating to harmonised standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits [2014 OJ L96].

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding safety objectives of that Directive, and associated EFTA regulations.

**Table ZZ.1 — Correspondence between this European standard and Annex I of
Directive 2014/35/EU [2014 OJ L96]**

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks/note
1 a)	1, 2, 3, Annex A	
1 b)	1, 2, 3, Annex A	
1 c)	1, 2, 3, 5, 6 Also refer to 2 a) to 2 d) and 3 a) to 3 c) in this table	
2 a)	-	This standard does not cover any of the essential requirements 2 a) to 3 c), while functional safety is excluded in this standard
2 b)	-	This standard does not cover any of the essential requirements 2 a) to 3 c), while functional safety is excluded in this standard
2 c)	-	This standard does not cover any of the essential requirements 2 a) to 3 c), while functional safety is excluded in this standard
2 d)	-	This standard does not cover any of the essential requirements 2 a) to 3 c), while functional safety is excluded in this standard
3 a)	-	This standard does not cover any of the essential requirements 2 a) to 3 c), while functional safety is excluded in this standard
3 b)	-	This standard does not cover any of the essential requirements 2 a) to 3 c), while functional safety is excluded in this standard

Safety objectives of Directive 2014/35/EU	Clause(s) / sub-clause(s) of this EN	Remarks/note
3 c)	-	This standard does not cover any of the essential requirements 2 a) to 3 c), while functional safety is excluded in this standard

WARNING 1: Presumption of conformity stays valid only as long as a reference to this European standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2: Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 5-4: Control circuit devices and switching elements – Method of assessing the performance of low-energy contacts – Special tests

FOREWORD

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International Standard IEC 60947-5-4 has been prepared by subcommittee 17B: Low-voltage switchgear and controlgear, of IEC technical committee 17: Switchgear and controlgear.

This second edition has the status of an International Standard.

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

Some slight modifications, mainly of an editorial nature, have been introduced since the first edition.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.