
Nizkonapetostne stikalne in krmilne naprave - 9-1. del: Aktivni sistemi za blažitev učinkov okvarnega obloka - Naprave za gašenje obloka (IEC 60947-9-1:2019)

Low-voltage switchgear and controlgear - Active arc-fault mitigation systems - Part 9-1: Arc quenching devices (IEC 60947-9-1:2019)

Niederspannungsschaltgeräte - Aktive Systeme zur Verringerung von Lichtbogenfehlern - Teil 9-1: Lichtbogenlöschgeräte (IEC 60947-9-1:2019)

Appareillage à basse tension - Partie 9-1. Systèmes actifs de limitation des défauts d'arc - Dispositifs d'extinction d'arc (IEC 60947-9-1:2019)

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Ta slovenski standard je istoveten z: EN IEC 60947-9-1:2019

ICS:

29.130.20	Nizkonapetostne stikalne in krmilne naprave	Low voltage switchgear and controlgear
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SIST EN IEC 60947-9-1:2019**en**

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EUROPEAN STANDARD

EN IEC 60947-9-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2019

ICS 29.120.40; 29.130.20

English Version

**Low-voltage switchgear and controlgear - Part 9-1: Active arc-fault mitigation systems - Arc quenching devices
(IEC 60947-9-1:2019)**

Appareillage à basse tension - Partie 9-1: Systèmes actifs de limitation des défauts d'arc - Dispositifs d'extinction d'arc
(IEC 60947-9-1:2019)

Niederspannungsschaltgeräte - Aktive Systeme zur Verringerung von Lichtbogenfehlern - Teil 9-1: Lichtbogenlöschgeräte
(IEC 60947-9-1:2019)

This European Standard was approved by CENELEC on 2019-02-20. 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.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

SIST EN IEC 60947-9-1:2019

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 60947-9-1:2019 (E)**European foreword**

The text of document 121A/254/FDIS, future edition 1 of IEC 60947-9-1, 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 IEC 60947-9-1:2019.

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) 2019-11-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-05-24

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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 Directives and the standardization requests see informative Annex ZZA and Annex ZZB, which are integral parts of this document.

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Endorsement notice

The text of the International Standard IEC 60947-9-1:2019 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 60068-2-30	2005	Environmental testing -- Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)	EN 60068-2-30	2005
IEC 60417	Data-base	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 61439 series		Low-voltage switchgear and controlgear assemblies	EN 61439 series	series
CISPR 11 (mod)	2015	Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement	EN 55011	2016
+ A1	2016		+ A1	2017

EN IEC 60947-9-1:2019 (E)

Annex ZZA (informative)

Relationship between this European standard and the essential requirements of Directive 2014/30/EU [2014 OJ L96] aimed to be covered

This European standard has been prepared under the European Commission standardisation request C(2016) 7641 final of 30.11.2016¹, ('M/552'), as regards harmonised standards in support of Directive 2014/30/EU relating to electromagnetic compatibility, to provide one voluntary means of conforming to essential requirements of Directive 2014/30/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 electromagnetic compatibility [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 ZZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZZA.1 – Correspondence between this European standard and Annex I of Directive 2014/30/EU [2014 OJ L96]

Essential requirements of Directive 2014/30/EU	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
Annex I. 1(a) (electromagnetic disturbances)	8.3, 9.3.2.2	
Annex I. 1(b) (electromagnetic immunity)	8.3, 9.3.2.1	

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.

¹ COMMISSION IMPLEMENTING DECISION C(2016) 7641 final of 30.11.2016 on a standardisation request to the European Committee for Standardisation, to the European Committee for Electrotechnical Standardisation and to the European Telecommunications Standards Institute as regards harmonised standards in support of Directive 2014/30/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 electromagnetic compatibility.

Annex ZZB (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 ZZB.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 ZZB.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/Notes
1 a)	6	
1 b)	6	
1 c)	1, 3, 4, 5, and 6.3	
2 a)	8.1, 8.2, 9.3	
2 b)	8.1, 9.3	
2 c)	6.2, 6.3, 8.1, 9.3, 9.4	
2 d)	8.1, 8.2, 9.3	
3 a)	6.3, 8.1, 9.3, 9.4	
3 b)	8.1, 9.3	
3 c)	-	No hazard identified for products falling under the scope of 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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IEC 60947-9-1

Edition 1.0 2019-01

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Part 9-1: Active arc-fault mitigation systems – Arc quenching devices**

**Appareillage à basse tension –
Partie 9-1: Systèmes actifs de limitation des défauts d'arc – Dispositifs
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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.120.40; 29.130.20

ISBN 978-2-8322-6404-1

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