ICS 29.120.40, 29.130.20 SLOVENSKÁ TECHNICKÁ NORMA November 2025

STN	**Nízkonapäťové spínacie a riadiace zariadenia Časť 3: Spínače, odpájače, odpínače a poistkové kombinácie Zmena A1**	**STN EN IEC 60947-3/A1** 35 4101

Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/25

STN EN IEC 60947-3 z mája 2021 sa bez tejto zmeny A1 môže používať do 30. 6. 2028.

Obsahuje: EN IEC 60947-3:2021/A1:2025, IEC 60947-3:2020/AMD1:2025

141274

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60947-3:2021/A1

June 2025

ICS 29.120.40; 29.130.20

English Version

Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units (IEC 60947-3:2020/AMD1:2025)

Appareillage à basse tension - Partie 3: Interrupteurs, sectionneurs, interrupteurs-sectionneurs et combinés-fusibles
(IEC 60947-3:2020/AMD1:2025)

Niederspannungsschaltgeräte - Teil 3: Lastschalter, Trennschalter, Lasttrennschalter und Schalter-Sicherungs-Einheiten
(IEC 60947-3:2020/AMD1:2025)

This amendment A1 modifies the European Standard EN IEC 60947-3:2021; it was approved by CENELEC on 2025-05-30. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 CEN-CENELEC Management Centre or to any CENELEC member.

This amendment 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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

Ref. No. EN IEC 60947-3:2021/A1:2025 E

European foreword

The text of document 121A/645/FDIS, future edition 4 of IEC 60947-3/AMD1, 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 60947-3:2021/A1:2025.

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)	2026-06-30
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2028-06-30

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 standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZZ, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

Endorsement notice

The text of the International Standard IEC 60947-3:2020/AMD1:2025 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.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60050-441	-	Electrotechnical Vocabulary – Switchgear, controlgear and fuses	-	-
IEC 60034-12	2016	Rotating electrical machines - Part 12: Starting performance of single-speed three-phase cage induction motors	EN IEC 60034-12	2024
IEC 60034-30-1	2014	Rotating electrical machines - Part 30-1: Efficiency classes of line operated AC motors (IE code)	EN 60034-30-1	2014
IEC 60068-2-14	2023	Environmental testing – Part 2-14: Tests – Test N: Change of temperature	EN IEC 60068-2-14	2023
IEC 60228	2004	Conductors of insulated cables	EN IEC 60228	2024
IEC 60269-1	-	Low-voltage fuses – Part 1: General requirements	EN 60269-1	2007
+ A1	-		+ A1	2009
+ A2	-		+ A2	2014
IEC 60269-3	-	Low-voltage fuses - Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications)	HD 60269-3	2010
+ A1	-		+ A1	2013
			+ A2	2022
IEC 60269-4	-	Low-voltage fuses - Supplementary requirements for fuse-links for the protection of semiconductor devices	EN 60269-4	2009
+ A1	-		+ A1	2012
+ A2	-		+ A2	2016

EN IEC 60947-3:2021/A1:2025 (E)

Publication	Year	Title	EN/HD	Year
IEC 60269-6	-	Low-voltage fuses - Supplementary requirements for fuse-links for the protection of photovoltaic energy systems	EN 60269-6	2011
			+ A1	2023
IEC 60269-7	-	Low-voltage fuse - Part 7. Fuse links for the protection of batteries	EN IEC 60269-7	2024
IEC 60417	-	Graphical symbols for use on equipment	-	-
IEC 60695-2-11	2014	Fire hazard testing - Part 2-11: Glowing/hot-wire based test methods - Glow-wire flammability test method for end-products (GWEPT)	EN IEC 60695-2-11	2021
IEC 60947-1	2020	Low-voltage switchgear and controlgear - Part 1: General rules	EN IEC 60947-1	2021
			+ AC	2023-01
			+ AC	2024-05
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
+ CORR 1	2016			
			+ AC	2020-05
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 IEC 61000-4-3	2020
+ A1	2007			
+ 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
+ A1	2017		+ A1	2017
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 IEC 61000-4-6	2023

Publication	Year	Title	EN/HD	Year
IEC 61238-1-1	-	Compression and mechanical connectors for power cables - Part 1-1: Test methods and requirements for compression and mechanical connectors for power cables for rated voltages up to 1 kV (Um = 1,2 kV) tested on non-insulated conductors	EN IEC 61238-1-1	2019
IEC 61545	1996	Connecting devices - Devices for the connection of aluminium conductors in clamping units of any material and copper conductors in aluminium bodied clamping units	-	-
IEC 62208	2023	Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements	EN IEC 62208	2023
IEC 62475	2010	High-current test techniques - Definitions and requirements for test currents and measuring systems	EN 62475	2010
ISO 2859-1	1999	Sampling procedures for inspection by attributes - Part 1: Sampling 551 schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection	-	-
+ A1	2011			
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
CISPR 32	2015	Electromagnetic compatibility of multimedia equipment - Emission requirements	EN 55032	2015
			+ AC	2016-07
+ A1	2019		+ A1	2020
			+ A11	2020

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)	6.2, 6.3, Annex D, Annex E, Annex G	
1 b)	6.2, 6.3, Annex C, Annex D, Annex E, Annex G	
1 c)	5, 6, 7, A.1, A.2, C.1, D.1, D.2, E.1, E.6.3	Also refer to 2 a) to 2 d) and 3 a) to 3 c) in this table
2 a)	8.1, 8.2, 9.1, 9.3, 9.5, Annex A, Annex C, Annex D, Annex G.	
2 b)	5, 8.1, 8.2.2, 9.3, Annex A, Annex C, Annex D, Annex E, Annex G.	
2 c)	6, 8.1, 8.2, 8.3, 9.1, 9.2, 9.3, Annex A, Annex C, Annex D, Annex E, Annex G.	
2 d)	4.3, 5, 6.2, 6.3, 8.1, 8.2, 9.1, 9.2, 9.3, 9.5, Annex A, Annex C, Annex D, Annex E, Annex G	
3 a)	5, 6, 8.2, 8.3, 9.1, 9.2, 9.3, 9.5, Annex A, Annex C, Annex D, Annex E, Annex G	
3 b)	6.2, 6.3, 7, Annex D, Annex G	
3 c)	6.3, 8.3, 9.3, Annex D, Annex E, Annex G.	

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.

IEC 60947-3

Edition 4.0 2025-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse combination units

Appareillage à basse tension – Partie 3: Interrupteurs, sectionneurs, interrupteurs-sectionneurs et combinés-fusibles

IEC 60947-3:2020-04/AMD1:2025-04(en-fr)

IEC 60947-3

Edition 4.0 2025-04

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LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

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

AMENDMENT 1

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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Amendment 1 to IEC 60947-3 ED4 has been prepared by subcommittee 121A: Low-voltage switchgear and controlgear, of IEC technical committee 121: Switchgear and controlgear and their assemblies for low voltage.

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

– addition of remotely operated devices;
– addition of a new Annex G defining the requirements for DC disconnectors, switch-disconnectors and fuse combination units for use in Battery Power Supplies (BPS) that are used in battery energy storage systems (BESS);

– addition of test requirements for short circuit making of single-phase operated switches and switch-disconnectors;

– switches for photovoltaic applications with utilisation categories DC-PV1 and DC-PV2 can, subject to marking, be suitable for current flow in one or both directions;

– more clarity in Annex F on the measurement of power loss in devices incorporating electronics and different pole configurations in DC devices.

The text of this Amendment is based on the following documents:

Draft	Report on voting
121A/645/FDIS	121A/675/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications/.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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2 Normative references

Add the following new references:

IEC 60068-2-14:2023, *Environmental testing – Part 2-14: Tests – Test N: Change of temperature*

IEC 62208:2023, *Empty enclosures for low-voltage switchgear and controlgear assemblies – General requirements*