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Low-voltage switchgear and controlgear - Part 2: Circuit-breakers (IEC 60947-2:2024)

Niederspannungsschaltgeräte - Teil 2: Leistungsschalter (IEC 60947-2:2024)

Appareillage à basse tension - Partie 2: Disjoncteurs (IEC 60947-2:2024)

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**Low-voltage switchgear and controlgear - Part 2: Circuit-breakers
(IEC 60947-2:2024)**

Appareillage à basse tension - Partie 2: Disjoncteurs
(IEC 60947-2:2024)

Niederspannungsschaltgeräte - Teil 2: Leistungsschalter
(IEC 60947-2:2024)

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European Committee for Electrotechnical Standardization
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EN IEC 60947-2:2025 (E)**European foreword**

The text of document 121A/608/FDIS, future edition 6 of IEC 60947-2, 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 60947-2:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-02-28 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-02-29 document have to be withdrawn

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Document Preview

The text of the International Standard IEC 60947-2:2024 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standard indicated:

| | | |
|--------------------------|------|--|
| IEC 60051 series | NOTE | Approved as EN IEC 60051 series |
| IEC 60112 | NOTE | Approved as EN IEC 60112 |
| IEC 60269-1:2006 | NOTE | Approved as EN 60269-1:2007 (not modified) |
| IEC 60269-1:2006/A1:2009 | NOTE | Approved as EN 60269-1:2007/A1:2009 (not modified) |
| IEC 60269-1:2006/A2:2014 | NOTE | Approved as EN 60269-1:2007/A2:2014 (not modified) |
| IEC 60335-1:2020 | NOTE | Approved as EN IEC 60335-1:2023 (not modified) +A11:2023 |
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| IEC 60364-5-52 | NOTE | Approved as HD 60364-5-52 |
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| IEC 60898 series | NOTE | Approved as EN 60898 series |
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| IEC 60934 | NOTE | Approved as EN IEC 60934 |
| IEC 60947-3 | NOTE | Approved as EN IEC 60947-3 |

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| IEC 61000-3-2 | NOTE | Approved as EN IEC 61000-3-2 |
| IEC 61000-3-3 | NOTE | Approved as EN 61000-3-3 |
| IEC 61000-4-13 | NOTE | Approved as EN 61000-4-13 |
| IEC 61008-1:2010 | NOTE | Approved as EN 61008-1:2012 +A11:2015 |
| IEC 61008-1:2010/A1:2012 | NOTE | Approved as EN 61008-1:2012/A1:2014 |
| IEC 61008-1:2010/A2:2013 | NOTE | Approved as EN 61008-1:2012/A2:2014 |
| IEC 61009-1:2010 | NOTE | Approved as EN 61009-1:2012 +A11:2015 |
| IEC 61009-1:2010/A1:2012 | NOTE | Approved as EN 61009-1:2012/A1:2014 |
| IEC 61009-1:2010/A2:2013 | NOTE | Approved as EN 61009-1:2012/A2:2014 |
| IEC 61131-1:2003 | NOTE | Approved as EN 61131-1:2003 (not modified) |
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EN IEC 60947-2:2025 (E)

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.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|--|-------------------|-------------|
| IEC 60068-2-14 | - | Environmental testing - Part 2-14: Tests - Test N: Change of temperature | EN IEC 60068-2-14 | - |
| IEC 60068-2-30 | - | Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) | EN 60068-2-30 | - |
| IEC 60228 | - | Conductors of insulated cables | EN IEC 60228 | - |
| IEC 60664-1 | 2020 | Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests | EN IEC 60664-1 | 2020 |
| - | - | | +AC | 2020 |
| IEC 60947-1 | 2020 | Low-voltage switchgear and controlgear - Part 1: General rules | EN IEC 60947-1 | 2021 |
| IEC 60947-4-1 | - | Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters | EN IEC 60947-4-1 | - |
| 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 | 2020 | Electromagnetic compatibility (EMC) - Part 4-3 : Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test | EN IEC 61000-4-3 | 2020 |
| 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 |

EN IEC 60947-2:2025 (E)

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|---|-------------------|-------------|
| IEC 61000-4-6 | 2023 | 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 |
| IEC 61000-4-11 | 2020 | Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase | EN IEC 61000-4-11 | 2020 |
| - | - | | +AC | 2020 |
| - | - | | +AC | 2022 |
| IEC 61140 | 2016 | Protection against electric shock - Common aspects for installation and equipment | EN 61140 | 2016 |
| 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 62475 | 2010 | High-current test techniques - Definitions and requirements for test currents and measuring systems | EN 62475 | 2010 |
| 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 |
| - | - | | + A11 | 2020 |
| + A2 | 2019 | | + A2 | 2021 |
| CISPR 32 | 2015 | Electromagnetic compatibility of multimedia equipment - Emission requirements | EN 55032 | 2015 |
| - | - | | +AC | 2016 |
| - | - | | +A11 | 2020 |



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Low-voltage switchgear and controlgear –
Part 2: Circuit-breakers

Appareillage à basse tension –
Partie 2: Disjoncteurs

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