

Maskinsikkerhed – Maskiners elektriske materiel – Del 1: Generelle krav

Safety of machinery – Electrical equipment of machines – Part 1: General requirements

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EUROPÄISCHE NORM

April 2025

ICS 13.110; 29.020

English Version

Safety of machinery - Electrical equipment of machines -
Part 1: General requirements
(IEC 60204-1:2016/AMD1:2021)

Sécurité des machines - Équipement électrique des
machines - Partie 1: Exigences générales
(IEC 60204-1:2016/AMD1:2021)

Sicherheit von Maschinen - Elektrische Ausrüstung von
Maschinen - Teil 1: Allgemeine Anforderungen
(IEC 60204-1:2016/AMD1:2021)

This amendment A1 modifies the European Standard EN 60204-1:2018; it was approved by CENELEC on 2024-10-16. 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.

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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

European foreword

The text of document 44/884/CDV, future edition 6 of IEC 60204-1/AMD1, prepared by TC 44 "Safety of machinery - Electrotechnical aspects" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60204-1:2018/A1:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-04-30 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-04-30 document have to be withdrawn

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.

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 60204-1:2016/AMD1:2021 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 60034-1	NOTE	Approved as EN 60034-1
IEC 60204-11:2018	NOTE	Approved as EN IEC 60204-11:2019 (not modified)
IEC 60909-0:2016	NOTE	Approved as EN 60909-0:2016 (not modified)
IEC 60947-5-2:2019	NOTE	Approved as EN IEC 60947-5-2:2020 (not modified) + A11:2022
IEC 61000-6-1:2016	NOTE	Approved as EN IEC 61000-6-1:2019 (not modified)
IEC 61000-6-2:2016	NOTE	Approved as EN IEC 61000-6-2:2019 (not modified)
IEC 61000-6-4:2018	NOTE	Approved as EN IEC 61000-6-4:2019 (not modified)
IEC 61180	NOTE	Approved as EN 61180
IEC 61496-1:2020	NOTE	Approved as EN IEC 61496-1:2020 (not modified)
IEC 62745	NOTE	Approved as EN 62745
IEC 81346-2:2019	NOTE	Approved as EN IEC 81346-2:2019 (not modified)
ISO 13851:2019	NOTE	Approved as EN ISO 13851:2019 (not modified)
ISO 14118:2017	NOTE	Approved as EN ISO 14118:2018 (not modified)
ISO 14119	NOTE	Approved as EN ISO 14119
ISO 14122-1:2016	NOTE	Approved as EN ISO 14122-1:2016 (not modified)

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ISO 14122-3:2016 NOTE Approved as EN ISO 14122-3:2016 (not modified)

(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.

Delete the following reference:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60034-1 (mod)	2010	Rotating electrical machines - Part 1: Rating and performance	EN 60034-1	2010
			+ corr. October	2010

Replace the following references:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60364-4-41 (mod)	2005	Low-voltage electrical installations - Part 4-41: Protection for safety - Protection against electric shock	HD 60364-4-41	2017
+ A1	2017		-	-
-	-		+ A11	2017
-	-		+ A12	2019
IEC 60364-5-53	2019	Low-voltage electrical installations -- Part 5-53: Selection and erection of electrical equipment - Protection, isolation, switching, control and monitoring	-	-

Add the following reference:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60364-6	2016	Low voltage electrical installations - Part 6: Verification	HD 60364-6	2016
-	-		+ A11	2017
-	-		+ A12	2017

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60445	2017	Basic and safety principles for man-machine interface, marking and identification - Identification of equipment terminals, conductor terminations and conductors	-	-
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
IEC 61558-1	2017	Safety of transformers, reactors, power supply units and combinations thereof - Part 1: General requirements and tests	EN IEC 61558-1	2019
ISO 7010	2019	Graphical symbols - Safety colours and safety signs - Registered safety signs	-	-
+ A1	2020		+ A1	2020
ISO 13850	2015	Safety of machinery - Emergency stop function - Principles for design	EN ISO 13850	2015

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

**Safety of machinery –
Part 1: General requirements**

**Sécurité des machines –
Partie 1: Exigences générales**



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SAFETY OF MACHINERY –

Part 1: General requirements

AMENDMENT 1

FOREWORD

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Amendment 1 to IEC 60204-1:2016 has been prepared by IEC technical committee 44: Safety of machinery – Electrotechnical aspects.

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

Draft	Report on voting
44/884/CDV	44/913/RVC

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.

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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/standardsdev/publications/.

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

FOREWORD

Replace the 7th item under the 8th paragraph with:

6.3.3 b): The use of residual current protective devices with a rated residual operating current which is coordinated with the earth electrode resistance is mandatory in TT systems as a means for fault protection by automatic disconnection of supply (Italy).

Replace the 8th item under the 8th paragraph with:

7.2.3: Disconnection of the neutral conductor is mandatory in a TN-S system (France).

Add the following new item after the 8th item under the 8th paragraph with:

7.2.3: Disconnection of the neutral conductor is mandatory in TN-systems (Norway).

2 Normative References

Delete the existing reference to IEC 60034-1.

Replace the existing reference to IEC 60364-4-41 with the following new reference:

IEC 60364-4-41:2005, *Low-voltage electrical installations – Part 4-41: Protection for safety – Protection against electric shock*
IEC 60364-4-41:2005/AMD1:2017

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Replace the existing reference to IEC 60364-5-53 with the following new reference:

IEC 60364-5-53:2019, *Low-voltage electrical installations – Part 5-53: Selection and erection of electrical equipment – Devices for protection for safety, isolation, switching, control and monitoring*

Add the following new reference:

IEC 60364-6:2016, *Low-voltage electrical installations – Part 6: Verification*

Replace the existing reference to IEC 60445 with the following new reference:

IEC 60445:2017, *Basic and safety principles for man-machine interface, marking and identification – Identification of equipment terminals, conductor terminations and conductors*

Replace the existing reference to IEC 60947-5-1 with the following new reference:

IEC 60947-5-1:2016, *Low-voltage switchgear and controlgear – Part 5-1: Control circuit devices and switching elements – Electromechanical control circuit devices*

Replace the existing reference to IEC 61558-1 with the following new reference:

IEC 61558-1:2017, *Safety of transformers, reactors, power supply units and combinations thereof – Part 1: General requirements and tests*

Replace the existing reference to ISO 7010 with the following new reference:

ISO 7010:2019, *Graphical symbols – Safety colours and safety signs – Registered safety signs*
ISO 7010:2019/AMD1:2020

Replace the existing reference to ISO 13850 with the following new reference:

ISO 13850:2015, *Safety of machinery – Emergency stop function – Principles for design*