

Seguridad de las máquinas. Seguridad funcional de sistemas de mando relativos a la seguridad. (Ratificada por la Asociación Española de Normalización en septiembre de 2021.)

UNE-EN IEC 62061:2021

Seguridad de las máquinas. Seguridad funcional de sistemas de mando relativos a la seguridad. (Ratificada por la Asociación Española de Normalización en septiembre de 2021.)

Safety of machinery - Functional safety of safety-related control systems (Endorsed by Asociación Española de Normalización in September of 2021.)

Sécurité des machines - Sécurité fonctionnelle des systèmes de commande relatifs à la sécurité (Entérinée par l'Asociación Española de Normalización en septembre 2021.)

En cumplimiento del punto 11.2.5.4 de las Reglas Internas de CEN/CENELEC Parte 2, se ha otorgado el rango de documento normativo español UNE al documento normativo europeo EN IEC 62061:2021 (Fecha de disponibilidad 2021-07-23)

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English Version

**Safety of machinery - Functional safety of safety-related control
systems
(IEC 62061:2021)**

Sécurité des machines - Sécurité fonctionnelle des
systèmes de commande relatifs à la sécurité
(IEC 62061:2021)

Sicherheit von Maschinen - Funktionale Sicherheit
sicherheitsbezogener Steuerungssysteme
(IEC 62061:2021)

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European foreword

The text of document 44/885/FDIS, future edition 2 of IEC 62061, prepared by IEC/TC 44 "Safety of machinery - Electrotechnical aspects" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62061:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-01-26 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-04-26 document have to be withdrawn

This document supersedes EN 62061:2005 and all of its amendments and corrigenda (if any).

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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 Directive(s) 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.

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The text of the International Standard IEC 62061:2021 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 standards indicated:

IEC 60068 (series)	NOTE	Harmonized as EN 60068 (series)
IEC 60364-4-41:2005	NOTE	Harmonized as HD 60364-4-41:2017
IEC 60529	NOTE	Harmonized as EN 60529
IEC 60721 (series)	NOTE	Harmonized as EN 60721-3-9:1993/A1 (series)
IEC 60812	NOTE	Harmonized as EN IEC 60812
IEC 60947-4-1:2018	NOTE	Harmonized as EN IEC 60947-4-1:2019 (not modified)
IEC 60947-5-1	NOTE	Harmonized as EN 60947-5-1
IEC 60947-5-3	NOTE	Harmonized as EN 60947-5-3
IEC 60947-5-5	NOTE	Harmonized as EN 60947-5-5
IEC 60947-5-8	NOTE	Harmonized as EN IEC 60947-5-8
IEC 61000-6-7	NOTE	Harmonized as EN 61000-6-7
IEC 61025:2006	NOTE	Harmonized as EN 61025:2007 (not modified)
IEC 61131-2:2017	NOTE	Harmonized as EN 61131-2:2017 (not modified) to be published
IEC 61131-6:2012	NOTE	Harmonized as EN 61131-6:2012 (not modified)

IEC 61140:2016	NOTE	Harmonized as EN 61140:2016 (not modified)
IEC 61165	NOTE	Harmonized as EN 61165
IEC 61204-7:2016	NOTE	Harmonized as EN IEC 61204-7:2018 (not modified)
IEC 61310 (series)	NOTE	Harmonized as EN 61310 (series)
IEC 61326-3-1	NOTE	Harmonized as EN 61326-3-1
IEC 61496 (series)	NOTE	Harmonized as EN IEC 61496 (series)
IEC 61508-1:2010	NOTE	Harmonized as EN 61508-1:2010 (not modified)
IEC 61508-4:2010	NOTE	Harmonized as EN 61508-4:2010 (not modified)
IEC 61508-5:2010	NOTE	Harmonized as EN 61508-5:2010 (not modified)
IEC 61508-6:2010	NOTE	Harmonized as EN 61508-6:2010 (not modified)
IEC 61508-7:2010	NOTE	Harmonized as EN 61508-7:2010 (not modified)
IEC 61511 (series)	NOTE	Harmonized as EN 61511 (series)
IEC 61511-1:2016	NOTE	Harmonized as EN 61511-1:2017 (not modified)
IEC 61511-1:2016/A1:2017	NOTE	Harmonized as EN 61511-1:2017/A1:2017 (not modified)
IEC 61511-3:2016	NOTE	Harmonized as EN 61511-3:2017 (not modified)
IEC 61649	NOTE	Harmonized as EN 61649
IEC 61709:2017	NOTE	Harmonized as EN 61709:2017 (not modified)
IEC 61784-3 (series)	NOTE	Harmonized as EN 61784-3 (series)
IEC 61784-3:2016	NOTE	Harmonized as EN 61784-3:2016 (not modified)
IEC 61800-5-2	NOTE	Harmonized as EN 61800-5-2
IEC 61810 (series)	NOTE	Harmonized as EN 61810 (series)
IEC 62443 (series)	NOTE	Harmonized as EN IEC 62443 (series)
IEC 62477 (series)	NOTE	Harmonized as EN IEC 62477 (series)
IEC 62502	NOTE	Harmonized as EN 62502
ISO/IEC 27001:2013	NOTE	Harmonized as EN ISO/IEC 27001:2017 (not modified)
ISO 4413:2010	NOTE	Harmonized as EN ISO 4413:2010 (not modified)
ISO 4414:2010	NOTE	Harmonized as EN ISO 4414:2010 (not modified)
ISO 11161:2007	NOTE	Harmonized as EN ISO 11161:2007 (not modified)
ISO 13850:2015	NOTE	Harmonized as EN ISO 13850:2015 (not modified)
ISO 13851:2019	NOTE	Harmonized as EN ISO 13851:2019 (not modified)
ISO 13855:2010	NOTE	Harmonized as EN ISO 13855:2010 (not modified)
ISO 14118:2017	NOTE	Harmonized as EN ISO 14118:2018 (not modified)
ISO 14119:2013	NOTE	Harmonized as EN ISO 14119:2013 (not modified)
ISO/TR 22100-4:2018	NOTE	Harmonized as CEN ISO/TR 22100-4:2020 (not modified)

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 60204-1 (mod)	2016	Safety of machinery - Electrical equipment of machines - Part 1: General requirements	EN 60204-1	2018
IEC 61000-1-2	2016	Electromagnetic compatibility (EMC) - Part 1-2: General - Methodology for the achievement of functional safety of electrical and electronic systems including equipment with regard to electromagnetic phenomena	EN 61000-1-2	2016
IEC 61508	series	Functional safety of electrical/electronic/programmable electronic safety-related systems	EN 61508	series
IEC 61508-2	2010	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 2: Requirements for electrical/electronic/programmable electronic safety-related systems	EN 61508-2	2010
IEC 61508-3	2010	Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 3: Software requirements	EN 61508-3	2010
ISO 12100	2010	Safety of machinery - General principles for design - Risk assessment and risk reduction	EN ISO 12100	2010
ISO 13849	series	Safety of machinery - Safety-related parts of control systems	EN ISO 13849	series
ISO 13849-1	2015	Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design	EN ISO 13849-1	2015
ISO 13849-2	2012	Safety of machinery - Safety-related parts of control systems - Part 2: Validation	EN ISO 13849-2	2012

Annex ZZ (informative)

Relationship between this European standard and the essential requirements of Directive 2006/42/EC [2006 OJ L 157] aimed to be covered

This European standard has been prepared under a Commission's standardisation request "M/396" to provide one voluntary means of conforming to *essential* requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast) [2006 OJ L 157].

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 essential requirements of that Directive, and associated EFTA regulations.

Table ZZ.1 — Correspondence between this European standard and Annex 1 of Directive] 2006/42/EC [2006 OJ L 157]

The relevant Essential Requirements of Directive 2006/42/EC	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
1.2.1	Clauses 4, 5, 6, 7, 8, 9.	
1.7.4.2 (e, g, i, r, s)	10.3	This subclause only deals with the instruction for safety functions

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



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Edition 2.0 2021-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Safety of machinery – Functional safety of safety-related control systems

Sécurité des machines – Sécurité fonctionnelle des systèmes de commande relatifs à la sécurité

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