
Jedrske elektrarne - Merilni, nadzorni in elektroenergetski sistemi - Zahteve za preskušanje elektromagnetne združljivosti (IEC 62003:2020)

Nuclear power plants - Instrumentation, control and electrical power systems - Requirements for electromagnetic compatibility testing (IEC 62003:2020)

Kernkraftwerke - Elektro- und leittechnische Systeme mit sicherheitstechnischer Bedeutung - Anforderungen für die Prüfung der Elektromagnetischen Verträglichkeit (IEC 62003:2020)

Centrales nucléaires de puissance - Systèmes d'instrumentation, de contrôle-commande et d'alimentation électrique - Exigences relatives aux essais de compatibilité électromagnétique (IEC 62003:2020)

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EUROPEAN STANDARD
NORME EUROPÉENNE
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**Nuclear power plants - Instrumentation, control and electrical
power systems - Requirements for electromagnetic compatibility
testing
(IEC 62003:2020)**

Centrales nucléaires de puissance - Systèmes
d'instrumentation, de contrôle-commande et d'alimentation
électrique - Exigences relatives aux essais de compatibilité
électromagnétique
(IEC 62003:2020)

Kernkraftwerke - Elektro- und leittechnische Systeme mit
sicherheitstechnischer Bedeutung - Anforderungen für die
Prüfung der Elektromagnetischen Verträglichkeit
(IEC 62003:2020)

This draft European Standard is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2020-08-06.

The text of this draft consists of the text of IEC 62003:2020.

If this draft becomes a European Standard, 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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Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (prEN IEC 62003:2020) consists of the text of document IEC 62003:2020, prepared by IEC/SC 45A "Instrumentation, control and electrical power systems of nuclear facilities"

This document is currently submitted to the CENELEC Enquiry.

The following dates are fixed:

- latest date by which the existence of this document (doa) dor + 6 months
has to be announced at national level
- latest date by which this document has to be (dop) dor + 12 months
implemented at national level by publication of an
identical national standard or by endorsement
- latest date by which the national standards (dow) dor + 36 months
conflicting with this document have to be withdrawn (to be confirmed or
modified when voting)

As stated in the nuclear safety directive 2009/71/EURATOM, Chapter 1, Article 2, item 2, Member States are not prevented from taking more stringent safety measures in the subject-matter covered by the Directive, in compliance with Community law.

In a similar manner, this European standard does not prevent Member States from taking more stringent nuclear safety and/or security measures in the subject-matter covered by this standard.

Bibliography

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

CISPR 11	NOTE	Harmonized as EN 55011
IEC 61000-2-2	NOTE	Harmonized as EN 61000-2-2
IEC 61000-4-25	NOTE	Harmonized as EN 61000-4-25
IEC 61000-6-2	NOTE	Harmonized as EN IEC 61000-6-2
IEC 61513	NOTE	Harmonized as EN 61513
IEC 61800-3	NOTE	Harmonized as EN IEC 61800-3

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 When 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 61000-4-2	-	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	EN 61000-4-2	-
IEC 61000-4-3	-	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques - Radiated, radio-frequency, electromagnetic field immunity test	-	-
IEC 61000-4-4	-	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	EN 61000-4-4	-
IEC 61000-4-5	-	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	-
IEC 61000-4-6	-	Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6	-
IEC 61000-4-8	-	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test	EN 61000-4-8	-
IEC 61000-4-9	-	Electromagnetic compatibility (EMC) - Part 4-9: Testing and measurement techniques - Impulse magnetic field immunity test	EN 61000-4-9	-
IEC 61000-4-10	-	Electromagnetic compatibility (EMC) - Part 4-10: Testing and measurement techniques - Damped oscillatory magnetic field immunity test	EN 61000-4-10	-
IEC 61000-4-11	-	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	-
IEC 61000-4-12	-	Electromagnetic Compatibility (EMC) - Part 4-12: Testing and measurement techniques - Ring wave immunity test	EN 61000-4-12	-

prEN IEC 62003:2020 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61000-4-13	-	Electromagnetic compatibility (EMC) - Part 4-13: Testing and measurement techniques - Harmonics and interharmonics including mains signalling at a.c. power port, low frequency immunity tests	EN 61000-4-13	-
IEC 61000-4-14	-	Electromagnetic compatibility (EMC) - Part 4-14: Testing and measurement techniques - Voltage fluctuation immunity test	EN 61000-4-14	-
IEC 61000-4-16	-	Electromagnetic compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	EN 61000-4-16	-
IEC 61000-4-17	-	Electromagnetic compatibility (EMC) - Part 4-17: Testing and measurement techniques - Ripple on d.c. input power port immunity test	-	-
IEC 61000-4-18	-	Electromagnetic compatibility (EMC) - Part 4-18: Testing and measurement techniques - Damped oscillatory wave immunity test	EN IEC 61000-4-18	-
IEC 61000-4-20	-	Electromagnetic compatibility (EMC) - Part 4-20: Testing and measurement techniques - Emission and immunity testing in transverse electromagnetic (TEM) waveguides	EN 61000-4-20	-
IEC 61000-4-28	-	Electromagnetic compatibility (EMC) - Part 4-28: Testing and measurement techniques - Variation of power frequency, immunity test	EN 61000-4-28	-
IEC 61000-4-29	-	Electromagnetic compatibility (EMC) - Part 4-29: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations on d.c. input power port immunity tests	EN 61000-4-29	-
IEC 61000-4-34	-	Electromagnetic compatibility (EMC) - Part 4-34: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current more than 16 A per phase	EN 61000-4-34	-
IEC 61000-6-4	-	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments	EN IEC 61000-6-4	-
IEC 61000-6-5	-	Electromagnetic compatibility (EMC) - Part 6-5: Generic standards - Immunity for equipment used in power station and substation environment	EN 61000-6-5	-
IEC 61000-6-7	-	Electromagnetic compatibility (EMC) - Part 6-7: Generic standards - Immunity requirements for equipment intended to perform functions in a safety-related system (functional safety) in industrial locations	EN 61000-6-7	-
IEC 61226	-	Nuclear power plants - Instrumentation and control important to safety - Classification of instrumentation and control functions	EN 61226	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC/TR 61000-1-6	-	Electromagnetic compatibility (EMC) - Part - 1-6: General - Guide to the assessment of measurement uncertainty		-
IEC/TR 61000-2-5	-	Electromagnetic compatibility (EMC) - Part - 2-5: Environment ¿ Description and classification of electromagnetic environments		-
IEC/IEEE 60780- 323	-	Nuclear facilities - Electrical equipment important to safety - Qualification	EN 60780-323	-

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**Nuclear power plants – Instrumentation, control and electrical power systems –
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**Centrales nucléaires de puissance – Systèmes d'instrumentation, de contrôle-
commande et d'alimentation électrique – Exigences relatives aux essais de
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

NUCLEAR POWER PLANTS – INSTRUMENTATION, CONTROL AND ELECTRICAL POWER SYSTEMS – REQUIREMENTS FOR ELECTROMAGNETIC COMPATIBILITY TESTING

FOREWORD

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This second edition cancels and replaces the first edition published in 2009. This edition constitutes a technical revision.

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

- a) title modified.
- b) expand the scope to encompass Electromagnetic Magnetic Compatibility (EMC) considerations for electrical equipment.
- c) provide guidance for addressing the use of wireless technology.
- d) enhance the description of the electromagnetic environment to provide clarification when selecting custom test levels or for test exemptions.