
Varnostne zahteve za električno opremo za meritve, nadzorovanje in laboratorijsko uporabo - 2-091. del: Posebne zahteve za rentgenske sisteme v ohišjih

Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-091: Particular requirements for cabinet X-ray systems

Sicherheitsbestimmungen für elektrische Mess-, Steuer-, Regel- und Laborgeräte - Teil 2-091: Besondere Anforderungen für Röntgengeräteschränke

Exigences de sécurité pour appareils électriques de mesurage, de régulation et de laboratoire - Partie 2-091: Exigences particulières pour les équipements à rayons X montés en armoire

Ta slovenski standard je istoveten z: FprEN IEC 61010-2-091:2018/prAA

ICS:

19.080	Električno in elektronsko preskušanje	Electrical and electronic testing
71.040.10	Kemijski laboratoriji. Laboratorijska oprema	Chemical laboratories. Laboratory equipment

SIST FprEN IEC 61010-2-091:2019/oprAA:2021

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Full standard:
<https://standards.iteh.ai/catalog/standards/sist/44f57dce-b90c-466a-8074-72f39b465493/sist-fpren-iec-61010-2-091-2019-opr-aa-2021>

EUROPEAN STANDARD
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EUROPÄISCHE NORM

DRAFT
**FprEN IEC 61010-2-
091:2018**

prAA

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ICS 19.080; 71.040.10

English Version

Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-091: Particular requirements for cabinet X-ray systems

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This draft amendment prAA, if approved, will modify the European Standard FprEN IEC 61010-2-091:2018; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2021-02-19.

It has been drawn up by CLC/TC 66X.

If this draft becomes an amendment, 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.

This draft amendment was established by CENELEC 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

FprEN 61010-2-091:2018/AA:2020 (E)**1 European foreword**

2 This document (FprEN 61010-2-091:2018/prAA:2020) has been prepared by CLC/TC 66X "Safety of
3 measuring, control, and laboratory equipment".

4 This document is currently submitted to the Enquiry.

5 The following dates are proposed:

- latest date by which the existence of this (doa) dor + 6 months
document 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)

6 This document amends FprEN 61010-2-091:2018.

7 This document has been prepared under a mandate given to CENELEC by the European Commission
8 and the European Free Trade Association, and supports essential requirements of EU Directive(s).

9 For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this
10 document.

11 **1 Modification to 15.1, "General"**

12 *Replace 15.1 with the following:*

13 "Replace the existing text and conformity statement with the following new text:

14 INTERLOCKS used to protect OPERATORS or bystanders both against X-radiation HAZARDS and
15 other HAZARDS shall meet the requirements of 15.2, 15.3, and 15.101.

16 INTERLOCKS used only to protect OPERATORS or bystanders against X-radiation HAZARDS shall
17 meet the requirements of 15.101.

18 INTERLOCKS used only to protect OPERATORS or bystanders against other HAZARDS shall meet
19 the requirements of 15.2 and 15.3.

20 *Conformity is checked by inspection and as specified in 15.2, 15.3, and 15.101, as applicable."*

21 **2 Addition of Annex ZA, "Normative references to international publications 22 with their corresponding European publications"**

23 *Add the following Annex ZA:*

24 "

25 **Annex ZA** 26 **(normative)**

27 **Normative references to international publications** 28 **with their corresponding European publications** 29

30 The following documents, in whole or in part, are normatively referenced in this document and are
31 indispensable for its application. For dated references, only the edition cited applies. For undated
32 references, the latest edition of the referenced document (including any amendments) applies.

33 NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod),
34 the relevant EN/HD applies.

35 NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is
36 available here: www.cenelec.eu.

37 ***Annex ZA of EN 61010-1:2010/A1:2019 is applicable, except as follows:***

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD and EN/ISO</u>	<u>Year</u>
IEC 62061	-	Safety of machinery – Functional safety of safety-related electrical, electronic and programmable electronic control systems	EN 62061	2005 2013 2015
ISO 13849-1	-	Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design	EN ISO 13849-1	2015

38 "

FprEN 61010-2-091:2018/AA:2020 (E)

39 **3 Addition of Annex ZZ, “Relationship between this European standard and**
 40 **the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be**
 41 **covered”**

42 *Add the following Annex ZZ:*

43 “

44 **Annex ZZ**
 45 **(informative)**

46
 47 **Relationship between this European standard and the safety**
 48 **objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be**
 49 **covered**

50 This European Standard has been prepared under a Commission's standardization request relating to
 51 harmonized standards in the field of the Low Voltage Directive, M/511, to provide one voluntary means
 52 of conforming to safety objectives of Directive 2014/35/EU of the European Parliament and of the
 53 Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the
 54 making available on the market of electrical equipment designed for use within certain voltage limits
 55 [2014 OJ L96].

56 Once this standard is cited in the Official Journal of the European Union under that Directive,
 57 compliance with the normative clauses of this standard given in Table ZZ.1 confers, within the limits of
 58 the scope of this standard, a presumption of conformity with the corresponding safety objectives of
 59 that Directive, and associated EFTA regulations.

60 **Table ZZ.1 — Correspondence between this European standard and Annex I of Directive**
 61 **2014/35/EU [2014 OJ L96]**

Safety objectives of Directive 2014/35/EU (Annex I)	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
1. General conditions		
1 (a) the essential characteristics, the recognition and observance of which will ensure that electrical equipment will be used safely and in applications for which it was made, shall be marked on the electrical equipment, or, if this is not possible, on an accompanying document	5.1 5.2 5.3 5.4	
1 (b) the electrical equipment, together with its component parts, shall be made in such a way as to ensure that it can be safely and properly assembled and connected	5.4, 6.6 6.10 6.11 Annex F	

Safety objectives of Directive 2014/35/EU (Annex I)	Clause(s) / sub-clause(s) of this EN	Remarks / Notes
1 (c) the electrical equipment shall be so designed and manufactured as to ensure that protection against the hazards set out in points 2 and 3 is assured, providing that the equipment is used in applications for which it was made and is adequately maintained	5.4 Annex F, 17 (for hazards not covered by Clauses 6–16) See also the details in points 2 and 3	
2. Protection against hazards arising from the electrical equipment Measures of a technical nature shall be laid down in accordance with point 1, in order to ensure that:		
2 (a) persons and domestic animals are adequately protected against the danger of physical injury or other harm which might be caused by direct or indirect contact	4, 6.1 – 6.11, 9.6, 11.6, 14.4 Annex D, Annex F, Annex K	
2 (b) temperatures, arcs or radiation which would cause a danger, are not produced	4, 4.4.4.2, 6.3.1.b) 2), 6.3.2 b) 2), 9.5, 9.6, 10.1 – 10.5, 12	
2 (c) persons, domestic animals and property are adequately protected against non-electrical dangers caused by the electrical equipment which are revealed by experience	4, 4.4, 7.2– 7.7, 9, 12.3, 12.5, 12.6, 13.1, 13.2, 16.2, 14.101, 14.102	
2 (d) the insulation is suitable for foreseeable conditions	4, 6.7, Annex K	
3. Protection against hazards which may be caused by external influences on the electrical equipment Technical measures shall be laid down in accordance with point 1, in order to ensure that the electrical equipment:		
3 (a) meets the expected mechanical requirements in such a way that persons, domestic animals and property are not endangered	4, 7, 8	
3 (b) is resistant to non-mechanical influences in expected environmental conditions, in such a way that persons, domestic animals and property are not endangered	1.4, 4, 6.7.2.2.1, 10.5, 11.6, 14.3, 14.8, 14.101, 14.102, 15	
3 (c) does not endanger persons, domestic animals and property in foreseeable conditions of overload	4, 9, 14, 16.1	

62 **WARNING 1** — Presumption of conformity stays valid only as long as a reference to this European
63 standard is maintained in the list published in the Official Journal of the European Union. Users of this
64 standard should consult frequently the latest list published in the Official Journal of the European
65 Union.