



# SLOVENSKI STANDARD SIST EN IEC 60825-4:2025

01-marec-2025

Nadomešča:  
SIST EN 60825-4:2008

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## Varnost laserskih izdelkov - 4. del: Zaščitna oprema za laserje

Safety of laser products - Part 4: Laser guards

Sicherheit von Lasereinrichtungen - Teil 4: Laserschutzwände

Sécurité des appareils à laser - Partie 4: Protecteurs pour lasers

Ta slovenski standard je istoveten z: **EN IEC 60825-4:2024**

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**ICS:**  
31.260      Optoelektronika, laserska oprema      Optoelectronics. Laser equipment

**SIST EN IEC 60825-4:2025**      en



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN IEC 60825-4**

December 2024

ICS 31.260

Supersedes EN 60825-4:2006; EN 60825-4:2006/A1:2008; EN 60825-4:2006/A2:2011

English Version

**Safety of laser products - Part 4: Laser guards  
(IEC 60825-4:2022)**

Sécurité des appareils à laser - Partie 4: Protecteurs pour  
lasers  
(IEC 60825-4:2022)

Sicherheit von Lasereinrichtungen - Teil 4:  
Laserschutzwände  
(IEC 60825-4:2022)

This European Standard was approved by CENELEC on 2022-08-26. 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.

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 European Standard 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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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**

**EN IEC 60825-4:2024 (E)****European foreword**

The text of document 76/704/FDIS, future edition 3 of IEC 60825-4, prepared by TC 76 "Optical radiation safety and laser equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60825-4:2024.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2025-12-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2027-12-31 document have to be withdrawn

This document supersedes EN 60825-4:2006 and all of its amendments and corrigenda (if any).

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.

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, 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.

**Endorsement notice**

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The text of the International Standard IEC 60825-4:2022 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 60204-1	NOTE Approved as EN 60204-1
IEC 61310-3	NOTE Approved as EN 61310-3
IEC 61496-2	NOTE Approved as EN IEC 61496-2
ISO/TR 7250-2	NOTE Approved as CEN ISO/TR 7250-2
ISO 10218-1	NOTE Approved as EN ISO 10218-1
ISO 14120	NOTE Approved as EN ISO 14120

## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60825-1	2014	Safety of laser products – Part 1: Equipment classification and requirements	EN 60825-1	2014
IEC 61508	series	Functional safety of electrical/electronic/programmable electronic safety-related systems	EN 61508-1:2010 EN 61508-2:2010 EN 61508-3:2010 EN 61508-4:2010 EN 61508-5:2010 EN 61508-6:2010 EN 61508-7:2010	2010 2010 2010 2010 2010 2010 2010
ISO 11553-1	-	Safety of machinery – Laser processing machines – Safety requirements	EN ISO 11553-1:2020 + A11	2020 2020
ISO 12100	-	Safety of machinery - General principles for design - Risk assessment and risk reduction	EN ISO 12100	2010
ISO 13849-1	-	Safety of machinery – Safety-related parts of control systems – Part 1: General principles for design	EN ISO 13849-1	2023

## Annex ZZ (informative)

### Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/396 Mandate to CEN and CENELEC for Standardisation in the field of machinery" 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)

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 I of Directive 2006/42/EC**

The relevant Essential Requirements of Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1.5.12	Clause 4.1	General design requirements
1.5.12	Clause 4.2	General performance requirements
1.5.12	Clause 4.3	Validation
1.5.12	Clause 4.4	User information
1.5.12	Clause 5.1	Special design requirements
1.5.12	Clause 5.2	Special performance requirements
1.5.12	Clause 5.3	Specification requirements
1.5.12	Clause 5.4	Testing and evaluation requirements
1.5.12	Clause 5.5	Labelling requirements
1.5.12	Clause 5.6	Additional user documentation
1.5.12	Appendix D (normative)	Test specifications

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

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



IEC 60825-4

Edition 3.0 2022-07

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Safety of laser products –  
Part 4: Laser guards**

**Sécurité des appareils à laser –  
Partie 4: Protecteurs pour laser**

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