SLOVENSKI STANDARD
SIST EN ISO 8528-13:2026

01-junij-2026

Agregati za proizvodnjo izmeničnega toka, gnani z batnim motorjem z notranjim zgorevanjem - 13. del: Varnost (ISO 8528-13:2026)

Reciprocating internal combustion engine driven alternating current generating sets - Part 13: Safety (ISO 8528-13:2026)

Stromerzeugungsaggregate mit Hubkolben-Verbrennungsmotor - Teil 13: Sicherheit (ISO 8528-13:2026)

Groupes électrogènes à courant alternatif entraînés par moteurs alternatifs à combustion interne - Partie 13: Sécurité (ISO 8528-13:2026)

Ta slovenski standard je istoveten z: **EN ISO 8528-13:2026**

ICS:

27.020	Motorji z notranjim zgorevanjem	Internal combustion engines
29.160.40	Električni agregati	Generating sets

SIST EN ISO 8528-13:2026 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 8528-13

April 2026

ICS 27.020; 29.160.40

Supersedes EN ISO 8528-13:2016

English Version

Reciprocating internal combustion engine driven alternating current generating sets - Part 13: Safety (ISO 8528-13:2026)

Groupes électrogènes à courant alternatif entraînés par moteurs alternatifs à combustion interne - Partie 13: Sécurité (ISO 8528-13:2026)

Stromerzeugungsaggregate mit Hubkolben-Verbrennungsmotor - Teil 13: Sicherheit (ISO 8528-13:2026)

This European Standard was approved by CEN on 2 March 2026.

CEN 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 CEN 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO 8528-13:2026 E

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European foreword

This document (EN ISO 8528-13:2026) has been prepared by Technical Committee ISO/TC 70 "Internal combustion engines" in collaboration with Technical Committee CEN/TC 270 “Internal combustion engines” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2026, and conflicting national standards shall be withdrawn at the latest by October 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 8528-13:2016.

This document has been prepared under a standardization request addressed to CEN 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 ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 8528-13:2026 has been approved by CEN as EN ISO 8528-13:2026 without any modification.

Annex ZA
(informative)

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

This document 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 document is cited in the Official Journal of the European Union under that Directive, conformance with the normative clauses of this document given in Table ZA.1 confers, within the limits of the scope of this document, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZA.1 — Correspondence between this document and Annex I of Directive 2006/42/EC

The relevant Essential Requirements of Directive 2006/42/EC	Clause(s)/subclause(s) of this document	Remarks/Notes
1.2.3	4.2	
1.2.4	4.3	
1.2.4.3	4.4	
1.2.5	4.5	
3.6	4.6	
3.6	4.7	
1.5.5	4.8	
4.1.2	4.8	
4.1.2.1	4.9	
1.1.4	4.10	
1.1.5	4.11	
1.7.3	4.11	
4.1.2.3	4.12	
4.3.2	4.12	
4.4.1	4.12	
1.5.6	4.13	
3.5.2	4.13	
1.6.2	4.14	
3.4.2	4.14	

The relevant Essential Requirements of Directive 2006/42/EC	Clause(s)/subclause(s) of this document	Remarks/Notes
1.5.1	4.15	
1.5.3	4.15	
1.5.8	4.16	
3.4.5	4.17	
1.6.2	4.18	
3.4.5	4.18	
1.1.7	4.19	
1.1.3	4.20	
1.1.2	5.1	
1.7.4	5.1	
4.3	5.2	
1.7.3	5.3	

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this document is maintained in the list published in the Official Journal of the European Union. Users of this document 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 document.

International Standard

ISO 8528-13

Reciprocating internal combustion engine driven alternating current generating sets —

Part 13: Safety

Groupes électrogènes à courant alternatif entraînés par moteurs alternatifs à combustion interne —

Partie 13: Sécurité

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights. Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 70, *Internal combustion engines*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 270, *Internal combustion engines,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 8528-13:2016), which has been technically revised.

The main changes are as follows:

— scope has been modified;

— normative references have been updated;

— definition of «high voltage electrical equipment» has been added;

— Clause 6 has been renumbered to Clause 4;

— Annex C has been updated and renumbered as Annex D ;

— new Annex C has been added.

A list of all parts in the ISO 8528 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is a type-C standard as stated in ISO 12100:2010.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

— machine manufacturers (small, medium and large enterprises);

— health and safety bodies (regulators, accident prevention organisations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

— machine users/employers (small, medium and large enterprises);

— machine users/employees (e.g. trade unions, organizations for people with special needs);

— service providers, e.g. for maintenance (small, medium and large enterprises);

— consumers (in the case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or -B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

Reciprocating internal combustion engine driven alternating current generating sets —

Part 13: Safety

1 Scope

This document specifies the safety requirements for reciprocating internal combustion (RIC) engine driven generating sets up to 1 000 V alternating current (AC) or 1 500 V direct current (DC) and voltages above 1 000 V (AC) and not exceeding 36 kV consisting of an RIC engine, an AC generator including the additional equipment required for operating, e.g. controlgear, switchgear, auxiliary equipment.

This document is applicable to generating sets for land and marine use (domestic, recreational and industrial application). This document is not applicable to generating sets used on board of seagoing vessels and mobile offshore units as well as on aircraft or to propel road vehicles and locomotives.

This document is not applicable to gensets and components manufactured before the date of its publication.

NOTE This document does not apply to arc welding equipment (IEC 60974 series).

This document does not specify the special requirements needed to cover operation in potentially explosive atmospheres and is not applicable for such environments.

The hazards relevant to RIC engine driven generating sets are identified in Table A.1.

This document deals with the special requirements of test and safety design which are observed in addition to the definitions and requirements in ISO 8528-1:2018, ISO 8528-2:2018, ISO 8528-3:2020, ISO 8528-4:2025, ISO 8528-5:2025, ISO 8528-6:2023 and ISO 8528-10:2022, where applicable. This document specifies safety requirements in order to protect the user from danger.

2 Normative references

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.

ISO 2261:1994, *Reciprocating internal combustion engines — Hand-operated control devices — Standard direction of motion*

ISO 6826:2022, *Reciprocating internal combustion engines — Fire protection*

ISO 8528-1:2018, *Reciprocating internal combustion engine driven alternating current generating sets — Part 1: Application, ratings and performance*

ISO 8528-4:2025, *Reciprocating internal combustion engine driven alternating current generating sets — Part 4: Controlgear and switchgear*

ISO 8528-5:2025, *Reciprocating internal combustion engine driven alternating current generating sets — Part 5: Generating sets*

ISO 8528-10:2022, *Reciprocating internal combustion engine driven alternating current generating sets — Part 10: Measurement of airborne noise*