

# **SLOVENSKI STANDARD**

## **SIST EN ISO 8528-13:2016**

**01-september-2016**

**Nadomešča:**  
**SIST EN 12601:2011**

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**Agregati za proizvodnjo izmeničnega toka, gnani z batnim motorjem z notranjim zgorevanjem - 13. del: Varnost (ISO 8528-13:2016)**

Reciprocating internal combustion engine driven alternating current generating sets - Part 13: Safety (ISO 8528-13:2016)

Groupes électrogènes à courant alternatif entraînés par moteurs alternatifs à combustion interne - Partie 13: Sécurité (ISO 8528-13:2016)

**Ta slovenski standard je istoveten z: EN ISO 8528-13:2016**

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**ICS:**

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

**SIST EN ISO 8528-13:2016**

**en,fr,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 8528-13**

June 2016

ICS 27.020; 29.160.40

Supersedes EN 12601:2010

English Version

**Reciprocating internal combustion engine driven  
alternating current generating sets - Part 13: Safety (ISO  
8528-13:2016)**

Groupes électrogènes à courant alternatif entraînés par  
moteurs alternatifs à combustion interne - Partie 13:  
Sécurité (ISO 8528-13:2016)

Stromerzeugungsaggregate mit Hubkolben-  
Verbrennungsmotor - Teil 13: Sicherheit (ISO 8528-  
13:2016)

This European Standard was approved by CEN on 23 January 2016.

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.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN ISO 8528-13:2016) 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 December 2016, and conflicting national standards shall be withdrawn at the latest by June 2017.

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

This document supersedes EN 12601:2010.

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

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

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Endorsement notice

The text of ISO 8528-13:2016 has been approved by CEN as EN ISO 8528-13:2016 without any modification.

**Annexe ZA**  
(informative)  
**Relationship between this European Standard and the Essential  
Requirements of EU Directive 2006/42/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard, with the exclusion of all references to ISO 8528-13 confers, within the limits of the scope of this standard, a presumption of conformity with the Essential Requirements of that Directive and associated EFTA regulations.

**WARNING** — Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

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**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](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword – Supplementary information](#)

The committee responsible for this document is ISO/TC 70, *Internal combustion engines*.

ISO 8528 consists of the following parts, under the general title *Reciprocating internal combustion engine driven alternating current generating sets*:

- *Part 1: Application, ratings and performance*
- *Part 2: Engines*
- *Part 3: Alternating current generators for generating sets*
- *Part 4: Controlgear and switchgear*
- *Part 5: Generating sets*
- *Part 6: Test methods*
- *Part 7: Technical declarations for specification and design*
- *Part 8: Requirements and tests for low-power generating sets*
- *Part 9: Measurement and evaluation of mechanical vibrations*
- *Part 10: Measurement of airborne noise by the enveloping surface method*
- *Part 12: Emergency power supply to safety services*
- *Part 13: Safety*

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# Reciprocating internal combustion engine driven alternating current generating sets —

## Part 13: Safety

### 1 Scope

This part of ISO 8528 specifies the safety requirements for reciprocating internal combustion (RIC) engine driven generating sets up to 1 000 V consisting of an RIC engine, an alternating current (AC) generator including the additional equipment required for operating, e.g. controlgear, switchgear, auxiliary equipment.

It is applicable to generating sets for land and marine use (domestic, recreational and industrial application). It 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.

NOTE This part of ISO 8528 does not apply to arc welding equipment (IEC 60974 series).

The special requirements needed to cover operation in potentially explosive atmospheres are not covered in this part of ISO 8528.

The hazards relevant to RIC engine driven generating sets are identified in [Annex A](#).

This part of ISO 8528 deals with the special requirements of test and safety design which should be observed in addition to the definitions and requirements in ISO 8528-1, ISO 8528-2, ISO 8528-3, ISO 8528-4, ISO 8528-5 and ISO 8528-6, where applicable. It specifies safety requirements in order to protect the user from danger.

### 2 Normative references

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

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

ISO 2710-1, *Reciprocating internal combustion engines — Vocabulary — Part 1: Terms for engine design and operation*

ISO 2710-2, *Reciprocating internal combustion engines — Vocabulary — Part 2: Terms for engine maintenance*

ISO 3046-1, *Reciprocating internal combustion engines — Performance — Part 1: Declarations of power, fuel and lubricating oil consumptions, and test methods — Additional requirements for engines for general use*

ISO 3046-6, *Reciprocating internal combustion engines — Performance — Part 6: Overspeed protection*

ISO 4871, *Acoustics — Declaration and verification of noise emission values of machinery and equipment*

ISO 6826:1997, *Reciprocating internal combustion engines — Fire protection*

ISO 7967-1, *Reciprocating internal combustion engines — Vocabulary of components and systems — Part 1: Structure and external covers*