

# SLOVENSKI STANDARD

## SIST EN IEC 60034-14:2019

01-februar-2019

Nadomešča:

SIST EN 60034-14:2004

SIST EN 60034-14:2004/A1:2007

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**Električni rotacijski stroji - 14. del: Mehanske vibracije nekaterih strojev za višino gredi 56 mm in več - Meritve, vrednotenje in mejne vrednosti stopenj jakosti (IEC 60034-14:2018)**

Rotating electrical machines - Part 14: Mechanical vibration of certain machines with shaft heights 56 mm and higher - Measurement, evaluation and limits of vibration severity (IEC 60034-14:2018)

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Drehende elektrische Maschinen - Teil 14: Mechanische Schwingungen von bestimmten Maschinen mit einer Achshöhe von 56 mm und höher - Messung, Bewertung und Grenzwerte der Schwingstärke (IEC 60034-14:2018)

Machines électriques tournantes - Partie 14: Vibrations mécaniques de certaines machines de hauteur d'axe supérieure ou égale à 56 mm - Mesurage, évaluation et limites de l'intensité vibratoire (IEC 60034-14:2018)

**Ta slovenski standard je istoveten z: EN IEC 60034-14:2018**

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**ICS:**

17.160	Vibracije, meritve udarcev in vibracij	Vibrations, shock and vibration measurements
29.160.01	Rotacijski stroji na splošno	Rotating machinery in general

**SIST EN IEC 60034-14:2019**

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EUROPEAN STANDARD

**EN IEC 60034-14**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2018

ICS 29.160.01

Supersedes EN 60034-14:2004

English Version

**Rotating electrical machines - Part 14: Mechanical vibration of  
certain machines with shaft heights 56 mm and higher -  
Measurement, evaluation and limits of vibration severity  
(IEC 60034-14:2018)**

Machines électriques tournantes - Partie 14: Vibrations  
mécaniques de certaines machines de hauteur d'axe  
supérieure ou égale à 56 mm - Mesurage, évaluation et  
limites de l'intensité vibratoire  
(IEC 60034-14:2018)

Drehende elektrische Maschinen - Teil 14: Mechanische  
Schwingungen von bestimmten Maschinen mit einer  
Achshöhe von 56 mm und höher - Messung, Bewertung  
und Grenzwerte der Schwingstärke  
(IEC 60034-14:2018)

This European Standard was approved by CENELEC on 2018-09-21. 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.

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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 60034-14:2018 (E)****European foreword**

The text of document 2/1906/FDIS, future edition 4 of IEC 60034-14, prepared by IEC/TC 2 "Rotating machinery" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60034-14:2018.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-06-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-09-21

This document supersedes EN 60034-14:2004.

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The text of the International Standard IEC 60034-14:2018 was approved by CENELEC as a European Standard without any modification.

## 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 60034-1	-	Rotating electrical machines - Part 1: Rating and performance	EN 60034-1 <sup>1</sup>	-
IEC 60034-7	-	Rotating electrical machines - Part 7: Classification of types of constructions and mounting arrangements (IM Code)	EN 60034-7	-
ISO 2954	-	Mechanical vibration of rotating and reciprocating machinery; Requirements for instruments for measuring vibration severity	-	-
ISO 10817-1	-	Rotating shaft vibration measuring systems - Part 1: Relative and absolute sensing of radial vibration	-	-
ISO 20816-1	-	Mechanical vibration - Measurement and evaluation of machine vibration - Part 1: General guidelines	-	-
ISO 21940-32	-	Mechanical vibration - Rotor balancing - Part 32: Shaft and fitment key convention	-	-

<sup>1</sup>Under preparation. Stage at the time of publication: FprEN 60034-1:2017.

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# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Rotating electrical machines –  
Part 14: Mechanical vibration of certain machines with shaft heights 56 mm  
and higher – Measurement, evaluation and limits of vibration severity**

**Machines électriques tournantes –  
Partie 14: Vibrations mécaniques de certaines machines de hauteur d'axe  
supérieure ou égale à 56 mm – Mesurage, évaluation et limites de l'intensité  
vibratoire**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 29.160.01

ISBN 978-2-8322-5902-3

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ROTATING ELECTRICAL MACHINES –

**Part 14: Mechanical vibration of certain machines  
with shaft heights 56 mm and higher – Measurement,  
evaluation and limits of vibration severity**

## FOREWORD

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International Standard IEC 60034-14 has been prepared by IEC technical committee 2: Rotating machinery.

This fourth edition cancels and replaces the third edition, published in 2003, and its amendment 1, published in 2007. It constitutes a technical revision.

The significant technical changes with respect to the previous edition are:

- a) 6.2 is significantly changed to better explain the definition "free suspension".
- b) 6.3: a second method of rigid mount is added since the first method is not always possible on the test floor.
- c) 7.1: an improved option for shaft key is defined.

- d) Clause 8: considerable effort to harmonize with NEMA MG 1 and IEEE 841 and API 541, and also establish levels which are achievable and more in line with best practices. Table 1 is reduced to two shaft-height range sections.
- e) 8.2: definition of twice line frequency simplified along with Figure 7 added.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
2/1906/FDIS	2/1914/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60034 series, published under the general title *Rotating electrical machines*, can be found on the IEC website.

NOTE For A table of cross-references of all IEC TC 2 publications can be found in the IEC TC 2 dashboard on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or [SIST EN IEC 60034-14:2019](https://standards.iteh.ai/catalog/standards/sist/ec005e59-d495-46aa-8353-b358da6b9f10/sist-en-iec-60034-14-2019)
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