

PÖÖRLEVAD ELEKTRISEADMED. OSA 14: TEATAVATE
56 MM JA KÕRGEMA VÕLLIKÕRGUSEGA MASINATE
MEHAANILINE VIBRATSIOON. VIBRATSIOONI
MÕÕTMINE, HINDAMINE JA PIIRVÄÄRUSED

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 60034-14:2018 sisaldab Euroopa standardi EN IEC 60034-14:2018 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 60034-14:2018 consists of the English text of the European standard EN IEC 60034-14:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.10.2018.	Date of Availability of the European standard is 26.10.2018.
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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)

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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

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-09-21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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Endorsement notice

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.

<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 ¹	-
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	-	-

¹Under preparation. Stage at the time of publication: FprEN 60034-1:2017.

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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
- amended.