

Rotating electrical machines —

Part 9: Noise limits

The European Standard EN 60034-9:2005, incorporating amendment A1:2007, has the status of a British Standard

ICS 29.160

National foreword

This British Standard is the official UK implementation of EN 60034-9:2005, incorporating amendment A1:2007. It is identical with IEC 60034-9:2003, incorporating amendment 1:2007. It supersedes BS EN 60034-9:1998 which will be withdrawn on 1 March 2008.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated in the text by **A1** **A1**.

The CENELEC common modifications have been implemented at the appropriate places in the text and are indicated by tags (e.g. **C** **C**).

The UK participation in its preparation was entrusted to Technical Committee PEL/2, Rotating electrical machinery.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

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English version

Rotating electrical machines
Part 9: Noise limits
(IEC 60034-9:2003, modified)

Machines électriques tournantes
Partie 9: Limites de bruit
(CEI 60034-9:2003, modifiée)

Drehende elektrische Maschinen
Teil 9: Geräuschgrenzwerte
(IEC 60034-9:2003, modifiziert)

This European Standard was approved by CENELEC on 2005-03-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of the International Standard IEC 60034-9:2003, prepared by IEC TC 2, Rotating machinery, together with the common modifications prepared by the Technical Committee CENELEC TC 2, Rotating machinery, was submitted to the formal vote and was approved by CENELEC as EN 60034-9 on 2005-03-01.

This European Standard supersedes EN 60034-9:1997.

It includes the following significant technical changes:

- it reduces the no-load noise limits for single-speed, cage-induction motors according to Table 2;
- it provides informative guidance on
 - the measurement surface to be used during some tests,
 - a method for the determination of an average sound pressure level,
 - an indication of "uncertainty" based upon the category of test procedure.

The following dates were fixed:

- | | | |
|--|-------|------------|
| – latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2006-03-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2008-03-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60034-9:2003 was approved by CENELEC as a European Standard with agreed common modifications.

Foreword to amendment 1

The text of document 2/1383/CDV, future amendment 1 to IEC 60034-9:2003, prepared by IEC TC 2, Rotating machinery, was submitted to the IEC-CENELEC parallel Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to EN 60034-9:2005 on 2007-04-01.

The following dates were fixed:

- | | | |
|---|-------|------------|
| – latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2008-01-01 |
| – latest date by which the national standards conflicting with the amendment have to be withdrawn | (dow) | 2010-04-01 |

Endorsement notice

The text of amendment 1:2007 to the International Standard IEC 60034-9:2003 was approved by CENELEC as an amendment to the European Standard without any modification.

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INTRODUCTION

Acoustic quantities can be expressed in sound pressure terms or sound power terms. The use of a sound power level, which can be specified independently of the measurement surface and environmental conditions, avoids the complications associated with sound pressure levels, which require additional data to be specified. Sound power levels provide a measure of radiated energy and have advantages in acoustic analysis and design.