

Australian Standard™

**Rotating electrical machines—
General requirements**

Part 109: Noise limits

[IEC title: Rotating electrical machines, Part 9: Noise limits]

This Australian Standard was prepared by Committee EL/9, Rotating Electrical Machinery. It was approved on behalf of the Council of Standards Australia on 18 March 1998 and published on 5 June 1998.

The following interests are represented on Committee EL/9:

Australian British Chamber of Commerce
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Bureau of Steel Manufacturers of Australia
Department of Defence
Electricity Supply Association of Australia
Institution of Engineers Australia

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PREFACE

This Standard was prepared by the Standards Australia Committee EL/9, Rotating Electrical Machinery, to supersede AS 1359.51—1986, *General requirements for rotating electrical machines, Part 51: Noise level limits*. It is identical to and has been reproduced from IEC 60034-9:1997, *Rotating electrical machines, Part 9: Noise limits*.

This Standard is a Part of the AS 1359 series listed in AS 1359.0, *Rotating electrical machines—General requirements, Part 0: Introduction and list of Parts*.

The objective of this Standard is to provide the rotating electrical machine industry with standard noise level limits for rotating electrical machines.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
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<i>Reference to International Standard</i>	<i>Australian Standard</i>
IEC	AS
60034 Rotating electrical machines	1359 Rotating electrical machines—General requirements
60034-1 Part 1: Rating and performance	1359.101 Part 101: Rating and performance
60034-5 Part 5: Classification of degrees of protection provided by enclosures of rotating electrical machines (IP Code)	1359.20 Part 20: Classification of types of enclosures
60034-6 Part 6: Methods of cooling (IC Code)	1359.106 Part 106: Methods of cooling (IC Code)
60034-17 Part 17: Guide for the application of cage induction motors when fed from converters	—
ISO	—
3741 Acoustics—Determination of sound power levels of noise sources using sound pressure—Precision methods for reverberation rooms	—
3743 Acoustics—Determination of sound power levels of noise sources—Engineering methods for small, movable sources in reverberant fields	—
3743-1 Part 1: Comparison methods in hard-walled test rooms	—
3743-2 Part 2: Method for special reverberation test rooms	—

ISO		AS	
3744	Acoustics—Determination of sound power levels of noise sources using sound pressure—Engineering method in an essentially free field over a reflecting plane	—	
3745	Acoustics—Determination of sound power levels of noise sources—Precision methods for anechoic and semi-anechoic rooms	1217 1217.6	Acoustics—Determination of sound power levels of noise sources Part 6: Precision methods for anechoic and semi-anechoic rooms
3746	Acoustics—Determination of sound power levels of noise sources using sound pressure—Survey method using an enveloping measurement surface over a reflecting plane	—	
3747	Acoustics—Determination of sound power levels of noise sources—Survey method using a reference sound source	—	
9614	Acoustics—Determination of sound power levels of noise sources using sound intensity	—	
9614-1	Part 1: Measurement at discrete points	—	
9614-2	Part 2: Measurement by scanning	—	

An appendix is included to give guidance on calculation of mean sound pressure levels at a distance from the machine, as may be required in some applications (see Appendix AA).

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

For the purpose of this Australian Standard, the second sentence of Clause 5.2a) concerning accuracy has the following meaning:

These shall be measured with instruments with errors not more than 1,0%.

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