

Australian Standard™

**Rotating electrical machines—
General requirements**

Part 0: Introduction and list of Parts

This Australian Standard was prepared by Committee EL/9, Rotating Electrical Machinery. It was approved on behalf of the Council of Standards Australia on 2 July 1998 and published on 5 September 1998.

The following interests are represented on Committee EL/9:

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

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Part 0: Introduction and list of Parts

Originated as AS 1359.0—1989.
Second edition 1998.

PREFACE

This Standard was prepared by the Standards Australia Committee EL/9, Rotating Electrical Machinery, to supersede AS 1359.0—1989.

The objective of this Standard is to provide the rotating electrical machine industry and other interested parties with a list of Parts of AS 1359 and of other Standards relevant to rotating electrical machines. The list includes a synopsis for each reference.

The objective of this edition is to update the 1989 edition.

Requirements for rotating electrical machinery were first issued in 1927 by the then Australian Commonwealth Engineering Standards Association, with the publication of the following four Tentative Standard Specifications:

AS

C34—1927 Electrical performance of industrial electric motors and generators with Class A insulation

C35—1927 Electrical performance of large electric generators and motors (excluding alternators of the steam turbine driven type)
Rating permitting overloads

C36—1927 Electrical performance of large electric generators and motors (excluding alternators of the steam turbine driven type)
Continuous maximum rating

C38—1927 Electrical performance of alternators of the steam turbine driven type

In September 1932 these tentative specifications were endorsed by SAA as Australian Standard Specifications with amendment.

In 1943 AS C34—1932 was superseded by AS C34—1943, which was BS 168: 1932 endorsed without amendment.

In 1956 all the above Standards were replaced by AS C319—1956, which was an endorsement without amendment of BS 2613: 1955, *Electrical performance of rotating electrical machinery*. This was in turn superseded by AS C319—1958, which was an endorsement without amendment of BS 2613: 1957.

In 1974 AS C319—1958 was superseded by the following Parts of AS 1359, *General requirements for rotating electrical machines*:

AS

1359.1—1974 Part 1: Definitions

1359.4—1974 Part 4: Rating plate markings

1359.21—1974 Part 21: Classification of methods of cooling

1359.22—1974 Part 22: Classification of mounting arrangements and types of construction

1359.30—1974 Part 30: Duty and rating

1359.31—1974 Part 31: Service and operating conditions

1359.32—1974 Part 32: Temperature limits and measurements of temperature

1359.40—1974 Part 40: Characteristics of synchronous generators

1359.41—1974 Part 41: General characteristics

1359.60—1974 Part 60: Tests

1359.69—1974 Part 69: Tolerances

Since 1974 many of the aforementioned Parts of AS 1359 have been revised or withdrawn and other Parts have been added.

In the preparation of the AS 1359 series of Standards, account was taken of IEC 60034, *Rotating electrical machines*, and BS 4999, *General requirements for rotating electrical machines*, and acknowledgment is made of the assistance received therefrom.

NOTE: See Appendix B concerning the new numbering system for IEC publications.

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.

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STANDARDS AUSTRALIA

Australian Standard

Rotating electrical machines—General requirements

Part 0: Introduction and list of Parts

1 INTRODUCTION The AS 1359 series of Standards includes requirements applicable to rotating electrical machines in general without limitation of output or voltage.

No machine can comply with all the requirements of AS 1359 since some Parts are not applicable to every type of machine and other Parts provide a choice of features or characteristics from which a selection has to be made. Requirements for certain types of machine incorporating some such selections are specified in individual Parts of AS 1360.

NOTE: See Appendix A.

2 PARTS OF AS 1359 The following is the complete list of the Parts of AS 1359 at the date of publication. For the convenience of readers, a synopsis of each Part is given.

NOTES:

- 1 Other Standards relevant to rotating electrical machines are listed in Appendix A.
- 2 Part numbers 101 to 114 have been chosen to parallel Part numbers of IEC 60034. See Appendix B for details of IEC publication numbering.

Ref.	(date)	Publication title, part title and precis	Note
1359		Rotating electrical machines—General requirements	Main title
1359.0	(1998)	Part 0: Introduction and list of Parts Introduces the AS 1359 series and lists the Parts issued to date. Lists also other Australian and IEC Standards relating to the subject.	(This Part)
1359.2	(1981)	Part 2: Dimensional symbols Specifies letter symbols for the principal dimensions of machines and slide rails.	
1359.3	(1982)	Part 3: Direction of rotation and marking of terminals Defines the direction of rotation and specifies the marking of terminals and the relationship between the direction of rotation and the marking of terminals.	
1359.10	(1989)	Part 10: Designations and dimensions Specifies the international (IEC 60072) system of designations for machine parts (frames, mounting flanges, and shafts) and of the machines themselves, whether foot-mounted, flange-mounted, or both. Standardized dimensions are specified for machines with shaft heights from 56 mm to 400 mm, flanges from 55 mm to 1080 mm PCD, shafts of 7 mm to 150 mm diameter, and slide-rail mountings for machines with shaft heights from 80 mm to 315 mm. Appropriate flanges are specified for particular frame sizes.	

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