

Australian Standard™

**Semiconductor converters**

**Part 1.1: General requirements and line  
commutated converters—Specifications  
of basic requirements**

This Australian Standard was prepared by Committee EL-027, Power Electronics. It was approved on behalf of the Council of Standards Australia on 4 June 2002 and published on 4 July 2002.

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The following are represented on Committee EL-027:

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## Semiconductor converters

### Part 1.1: General requirements and line commutated converters—Specifications of basic requirements

Originated as part of AS 1955.1—1977.  
Revised and redesignated in part as AS 60146.1.1—2002.

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## PREFACE

This Standard was prepared by the Standards Australia Committee EL-027, Power Electronics to partially supersede AS 1955.1—1977, *Semiconductor converters*, Part 1: *General* six months after publication.

The objective of this Standard is to provide system designers, manufacturers and users with performance requirements for all electronic power converters and switches.

This Standard is the first part of a three part Standard; the parts of which are as follows:

AS 60146	Semiconductor converters
AS 60146.1.1	Part 1.1: General requirements and line commutated converters—Specifications of basic requirements (this Standard)
AS 60146.1.2	Part 1.2: General requirements and line commutated converters—Application guide
AS 60146.1.3	Part 1.3: General requirements and line commutated converters—Transformers and reactors

This Standard is technically identical with, and has been reproduced from, IEC 60146-1-1:1991, *Semiconductor converters*, Part 1-1: *General requirements and line commutated converters—Specifications of basic requirements*, including Corrigendum:1993 and Amendment 1:1996 (marked with a marginal bar in the right hand margin). Minor editorial changes have been made to the text such as the use of the word ‘converter’ throughout the document (to standardize spelling across this series of Standards).

A reference to an International Standard identified in the Normative References Clause by strikethrough (~~example~~) is replaced by a reference to the Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (example). Where the struck-through referenced document and the referenced Australian or Australian/New Zealand Standard are identical, this is indicated in parenthesis after the title of the latter.

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

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