

Australian/New Zealand Standard™

Electrical installations—Generating sets

AS/NZS 3010:2005

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-001, Wiring Rules. It was approved on behalf of the Council of Standards Australia on 11 May 2005 and on behalf of the Council of Standards New Zealand on 20 May 2005. This Standard was published on 27 June 2005.

The following are represented on Committee EL-001:

Association of Consulting Engineers Australia
Australian Building Codes Board
Australian Electrical and Electronic Manufacturers Association
Canterbury Manufacturers Association New Zealand
Communications, Electrical Plumbing Union
Consumers' Federation of Australia
Electrical and Communications Association, Queensland
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PREFACE

This Standard was prepared by the joint Standards Australia/Standards New Zealand Committee EL-001, Wiring rules, to supersede AS 3010.1—1987.

The objective of the Standard is to establish safety requirements for the use of generating sets for the supply of electricity at voltages normally exceeding 50 V a.c. or 120 V d.c.

Major changes to AS 3010.1—1987 are as follows:

- (a) The Standard has become a single Standard (i.e. without parts) as some types of generators listed in the previous preface such as—
 - (i) rotary converters;
 - (ii) static invertors;
 - (iii) hydro and wind driven generators; and
 - (iv) photovoltaic arraysmay be covered by other publications.
- (b) Switching of the normal supply neutral is not allowed for MEN earthing systems.
- (c) The inclusion of guidance connection drawings.
- (d) Changes of terminology to align with AS/NZS 3000.
- (e) It is published as a joint Australian/New Zealand Standard.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out the minimum safety requirements related to the use of generating sets for the supply of electricity at voltages normally exceeding 50 V a.c. or 120 V d.c.

The Standard applies to electricity generating sets that are driven by internal combustion engines, and which are used for the supply of electrical installations in buildings or items of electrical equipment.

This Standard does not—

- (a) set out performance and constructional requirements for generating sets; or
- (b) specifically apply to specialized automatic sources of supply, e.g. no-break systems or generating sets operated by Electricity Generating entities or Electricity Distributors; or
- (c) apply to uninterruptible power supplies; or
- (d) apply to other generation systems; such as:
 - (i) Inverters.
 - (ii) Photovoltaic arrays.
 - (iii) Water or wind driven.

NOTES:

- 1 While not intended to be applied to other than generating sets driven by internal combustion engines, the electrical principles could be applied to generating sets with other types of energy sources.
- 2 Requirements for the performance and construction of transportable generating sets up to 25 kW are given in AS 2790.
- 3 Requirements for the design, installation and operation of emergency power supplies in hospitals are given in AS/NZS 3009.
- 4 Requirements for the design, installation and operation of uninterruptible power supplies are given in the AS 62040 series of Standards.
- 5 Attention is drawn to the fact that some Regulatory Authorities have requirements for limitation of noise levels and pollution emissions.

1.2 APPLICATION

In addition to complying with this Standard, the generating set installation may be required to comply with requirements of Electricity Distributors and other relevant Regulatory Authorities. It is, therefore, recommended that these Authorities be consulted prior to the installation of equipment.

Section 2 outlines general requirements for the installation of generating sets. Sections 3 and 4 introduce additional requirements for permanently connected and plug and socket-outlet connected generating sets respectively.



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