AS 61330—2005
IEC 61330 Ed.1.0 (1995)

AS 61330—2005

Australian Standard™

High-voltage/low-voltage prefabricated substations

This Australian Standard was prepared by Committee EL-007, Power Switchgear. It was approved on behalf of the Council of Standards Australia on 11 April 2005. This Standard was published on 15 July 2005.

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Australian British Chamber of Commerce
Australian Electrical and Electronic Manufacturers Association
Energy Networks Association
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This Standard was issued in draft form for comment as DR 05011.

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High-voltage/low-voltage prefabricated substations

First published as AS 61330—2005.

Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 6744 3

PREFACE

This Standard was prepared by the Standards Australia Committee EL-007, Power Switchgear.

The objective of this Standard is to ensure that prefabricated substations meet the needs of users in the areas of high-voltage and Low-voltage.

This Standard is identical with, and has been reproduced from, IEC 61330 Ed. 1.0 (1995), *High-voltage/low-voltage prefabricated substations*.

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'.

(c) A full point should be substituted for a comma when referring to a decimal marker.

(d) Any French text on figures should be ignored.

The terms 'normative' and 'informative' are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

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INTRODUCTION

Prefabricated substations are defined as type-tested equipment comprising transformer, low-voltage and high-voltage switchgear, connections and auxiliary equipment in an enclosure to supply low-voltage energy from a high-voltage system. These substations are in locations accessible to the public and should ensure safety for persons according to the specified service conditions.

This means that in addition to specified characteristics, ratings and relevant test procedures, particular attention has been paid to specifications concerning the protection of persons. This protection is ensured by use of type-tested components and suitable design and construction of the enclosure.

NOTES

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High-voltage/low-voltage prefabricated substations

1 General

1.1 Scope

This International Standard specifies the service conditions, rated characteristics, general structural requirements and test methods of prefabricated substations, which are cable connected, to be operated from inside or outside for alternating current of primary rated voltages above 1 kV and up to and including 52 kV*, and for a transformer of maximum power 1 600 kVA, for service frequencies up to and including 60 Hz for outdoor installation in locations with public accessibility.

Prefabricated substations can be situated at ground level or partially or completely below ground level.

As no basic generally accepted IEC or ISO Standards are available concerning ageing or corrosion, requirements covering these aspects are not included in this Standard.

1.2 Normative references

The following normative documents contain provisions which, through reference in the text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

References to international standards that are struck through in this clause are replaced by references to Australian Standards that are listed immediately thereafter and identified by shading. Any Australian Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60050-151:2001, *International Electrotechnical Vocabulary - Part 151: Electrical and magnetic devices*~~

AS 1852.151, *International Electrotechnical Vocabulary* Part 151: *Electrical and magnetic devices*

~~IEC 60050-441:1984, *International Electrotechnical Vocabulary (IEV) – Chapter 441: Switchgear, controlgear and fuses*~~

AS 1852.441, *International Electrotechnical Vocabulary (IEV),* Part 441*: Switchgear, controlgear and fuses* (identical to IEC 60050-441:1984)

~~IEC 60060-1:1989, *High-voltage test techniques – Part 1: General definitions and test requirements*~~

* The rated voltage on the secondary side should not exceed 1 kV.