

Australian Standard[®]

**Approval and test specification—
Electric water heaters**

This Australian Standard was prepared by Committee EL/2, Electrical Approvals Standards. It was approved on behalf of the Council of Standards Australia on 12 September 1994 and published on 14 November 1994.

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Association of Certification Bodies
Association of New Zealand Electrical Appliance Distributors
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Consumer Electronics Suppliers Association, Australia
Electrical regulatory authorities
Electrical Supply Association of Australia
Electrical test laboratories
Electricity Supply Association, New Zealand
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/2 on Electrical Approvals Standards as an Australian Standard to supersede AS 3142—1986.

This Standard is the result of consensus among Australian and New Zealand representatives on the joint Committee to produce it as an Australian Standard as presently New Zealand has different requirements for electric water heaters.

This Standard is one of a series of Approval and Test Specifications issued by Standards Australia and Standards New Zealand. In Australia, these Standards are to be read in conjunction with AS 3100, *Approval and test specification—General requirements for electrical equipment*. The objective of these Standards is to outline the conditions which must be met to secure approval for sale and use of electrical equipment. Only safety matters and related conditions are covered.

This Standard was revised to incorporate Amendments Nos 1, 2 and 3 to AS 3142—1986 and to effect change to Clause 1.3 for referenced documents and Clause 6.2 for additional marking requirements.

Where there is a published Australian/New Zealand harmonized or IEC Standard referenced in this Standard, the New Zealand Standard number is given in parenthesis following the Australian Standard number.

This Standard supersedes AS 3142—1986 from date of publication with the exception of parts of Clauses 1.3 and 6.2 which come into effect six months from the date of publication.

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STANDARDS AUSTRALIA

Australian Standard

Approval and test specification—Electric water heaters

SECTION 1 SCOPE, APPLICATION,
REFERENCED DOCUMENTS AND
DEFINITIONS

1.1 SCOPE This Standard applies to electric water heaters designed for electrical operation by direct or alternating current at low or medium voltages, including storage and instantaneous water heaters, wash boilers, instantaneous bath heaters and similar appliances, and to electric urns having a capacity exceeding 10 L. The appropriate requirements of the Standard also apply to water heaters where the heating means is partly electrical.

This Standard does not apply to the following:

- (a) Electric steam generators.
- (b) Electric sterilizers.
- (c) Electric water heaters specially designed for industrial applications.
- (d) Electric washing machines.
- (e) Electric kettles or electric jugs.

For the purpose of this Standard an electric water heater is called a water heater.

1.2 APPLICATION

1.2.1 General requirements of AS 3100 This Standard shall be read in conjunction with AS 3100, and the appropriate provisions of AS 3100 shall apply to the construction of the water heater, and to the insulation or earthing of parts, or both, which normally carry current.

1.2.2 Specific requirements of this Standard A water heater shall be deemed to comply with this Standard only if it complies with the relevant requirements of this Standard applicable to the type, and passes the relevant tests specified herein for the individual type.

1.2.3 Requirements of other Standards Equipment and components incorporated in a water heater upon which safety depends shall comply with the appropriate requirements of any relevant Approval and Test Specification unless such requirements are varied herein.

1.3 REFERENCED DOCUMENTS The following documents are referred to in this Standard.

STANDARDS

AS	
1056	Storage water heaters
1056.1	General requirements
1357	Water supply—Valves for use with unvented water heaters
1357.1	Part 1: Protection valves
1795	Sheets and boards for electrical purposes
1795.1	Part 1: Classification and general requirements
3000	SAA Wiring Rules