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Australian Standard® 3148—1987

APPROVAL AND TEST SPECIFICATION— ELECTRIC BED-WARMERS



**PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
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- Australian Chamber of Commerce
- Australian Consumers Association
- Australian Electrical and Electronic Manufacturers Association
- Confederation of Australian Industry
- Consumer Electronics Suppliers Association
- Electrical Apparatus Approvals Authorities
- Electrical Supply Association of Australia
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STANDARDS AUSTRALIA

Amendment No 1

to

AS 3148—1987

**Approval and test specification—
Electric bed-warmers**

REVISED TEXT

The 1987 edition of AS 3148 is amended as follows; the amendment(s) should be inserted in the appropriate place.

SUMMARY: This Amendment applies to Clauses 1.2.2 and 13.5.

Published on 6 November 1989.

PREFACE

This standard was prepared by Committee EL/2, Electrical Approvals Standards. It is one of a series of approval and test specifications issued by the Association. These specifications are accompanied by a general specification AS 3100, containing definitions and general requirements for electrical materials and equipment. The purpose of these specifications is to outline conditions which must be met to secure approval for the sale and use of electrical equipment in Australia. Only safety matters and related conditions are covered.

This edition has been published to include requirements for heaters designed especially for water beds. Also the title has been changed to remove the term 'non-flexible' and many of the requirements of AS 3148—1982 have been modified to clarify their intent.

This specification supersedes AS 3148—1982 on date of publication.

The Association desires to call attention to the fact that this specification does not purport to include all the necessary conditions of a contract.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

APPROVAL AND TEST SPECIFICATION—

ELECTRIC BED-WARMERS

This specification shall be read in conjunction with AS 3100. (See also Clause 3, below.)

1 SCOPE AND REFERENCED DOCUMENTS.

1.1 Scope. This specification applies to bed-warmers intended for connection, either directly or indirectly, to a low voltage supply.

The specification deals also with any transformer or control device supplied with the bed-warmer for the purpose of enabling connection to a low voltage supply.

It does not apply to the following:

- (a) Heaters incorporated in a water-bed mattress.
- (b) Heaters of the heat pump type.
- (c) Electric blankets covered by AS 3164.

1.2 Referenced documents. The following documents are referred to in this standard:

1.2.1 Standards.

AS 1939 Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment.

1.2.2 Approval and test specifications.

AS 3100 Definitions and General Requirements for Electrical Material and Equipment

AS 3108 Isolating Transformers and Safety Isolating Transformers

AS 3109 Appliance Couplers for Household and Similar General Purposes

AS 3126 ~~Extra-low Voltage Transformers~~
SEE AMENDMENT 1

AS 3161 Thermostats and Energy Regulators

AS 3164 Electric Blankets

AS 3191 Electric Flexible Cords.

2 DEFINITIONS. For the purpose of this specification, the following definitions apply:

2.1 Electric bed-warmer—water-bed type—a bed warmer which is heated by means of an electric heating element contained within an enclosure or envelope, and intended for use beneath a water-bed mattress.

The heating element may or may not be controlled by a thermostat or a temperature limiter.

2.2 Electric bed-warmer—stored-heat type—a bed-warmer which, after connection to electricity supply mains for the purpose of heating it, is intended to be disconnected before it is placed in a bed.

2.3 Heating element—the actual electrical conducting medium which is heated by an electric current.

3 COMPLIANCE WITH SPECIFICATIONS.

3.1 General requirements of AS 3100. This specification shall be read in conjunction with AS 3100

and the appropriate provisions of AS 3100 shall apply to the construction of the bed-warmer and the insulation and/or safeguarding of parts which normally carry current.

3.2 Specific requirements of this specification. A bed-warmer shall be deemed to comply with this specification only if it complies with all the requirements of this specification and passes the tests specified herein.

3.3 Requirements of other specifications. Equipment and components incorporated in a bed-warmer which are depended upon for safety shall comply with the appropriate requirements of any relevant approval and test specification unless such requirements are varied herein.

4 TRANSFORMERS. Any transformer supplied with a bed-warmer shall comply with the appropriate requirements of AS 3108.

5 ENCLOSURE.

5.1 General. The material of the enclosure or envelope of a bed-warmer shall be strong, durable and satisfy the requirements of Clause 13.7. The envelope shall form a complete enclosure for all live parts of the bed-warmer and shall have no openings for ventilation or for any other purpose. The design of the bed-warmer shall be such that seams will not be subject to undue stress in actual service.

All joints and the flexible cord entry shall be sealed to prevent the entry of moisture.

5.2 Water-bed types. The heating element and other live parts shall be contained in a non-detachable enclosure which satisfies the requirements of Clause 13.7.

The maximum operating temperature of the enclosure material shall not exceed 50°C. If a material suitable for a lower temperature is used its operating temperature shall be marked (see Clause 11).

5.3 Stored-heat types. A detachable textile cover shall not be regarded as electrical insulation.

6 HEATING ELEMENT. The heating element shall be held securely in position.

7 THERMOSTATS. Thermostats shall comply with the requirements of AS 3161.

8 THERMAL CUTOUTS. If a thermal cutout is required to allow the bed-warmer to satisfy the requirements of Clause 13.5, it shall be a non-self-resetting thermal cutout.

NOTE: This requirement does not preclude the use of a self-resetting thermal cutout in addition to the non-self-resetting thermal cutout.