

Australian Standard[®]

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

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The following interests are represented on Committee EL/2:

Australian Electrical and Electronic Manufacturers Association
Confederation of Australian Industry
Consumer Electronics Suppliers Association
Electrical Testing Laboratories
Electricity Supply Association of Australia
Institution of Engineers Australia
Metal Trades Industry Association of Australia
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PREFACE

This Specification was prepared by the Standards Australia Committee on Electrical Approvals Standards to supersede AS 3148—1987, *Electric bed-warmers*.

It is one of a series of Approval and Test Specifications issued by Standards Australia. These Specifications are accompanied by a general specification AS 3100, containing definitions and general requirements for electrical 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 was published to incorporate Amendment No. 1 to the 3rd edition and to affect changes to Clauses 4, 7, 12, 14.4.2, 14.5, 14.9 and Table 1 with regard to rigid electric bed-warmers, elements, marking requirements, abnormal operations and a test for rigid electric bed-warmers.

This Specification supersedes AS 3148—1987 from date of publication.

Standards Australia 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 AUSTRALIA

Australian Standard
Approval and test specification—
Electric bed-warmers

1 SCOPE This Specification specifies essential safety requirements for electric 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.

This Specification 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.

2 APPLICATION

2.1 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 safeguarding of parts which normally carry current.

2.2 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.

2.3 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.

3 REFERENCED DOCUMENTS The following documents are referred to in this Specification.

STANDARDS

AS

1939 Classification of degrees of protection provided by enclosures for electrical equipment

APPROVAL AND TEST SPECIFICATIONS

AS

3100 General requirements for electrical equipment
 3108 Isolating transformers and safety isolating transformers
 3109 Appliance couplers for household and similar general purposes
 3109.1 General requirements
 3161 Thermostats and energy regulators
 3164 Electric blankets
 3191 Electric flexible cords

4 DEFINITIONS For the purpose of this Specification, the definitions below apply:

4.1 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.

4.2 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.

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

4.4 Rigid electric bed-warmer—a bed-warmer having as an integral part of its construction a flat rigid medium with stiffness not less than that capable of complying with the test described in Clause 14.9.

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

6 ENCLOSURE

6.1 General The material of the enclosure or envelope of a bed-warmer shall be strong, durable and able to satisfy the requirements of Clause 14.7. The envelope shall form a complete enclosure for all live parts of the bed-warmer and shall have no openings. The design of the bed-warmer shall be such that seams will not be subject to undue stress in actual service.