AS 3103

Superseded by AS INZS 3103! 1993 ends

2- march 1992 October 1992 June 1993 AS 3103-1990 3- October 4- June

anuary 1991

Australian Standard®

Approval and test specification— Electric room heaters

STANDARDS AUSTRALI

n



This Australian Standard was prepared by Committee EL/2, Electrical Approvals Standards. It was approved on behalf of the Council of Standards Australia on 16 March 1990 and published on 16 July 1990.

The following interests are represented on Committee EL/2:

Australian Consumers Association

Australian Electrical and Electronic Manufacturers Association

Confederation of Australian Industry

Consumer Electronics Suppliers Association

Electrical Apparatus Approvals Authorities

Electrical Testing Laboratories

Electricity Supply Association of Australia

Institution of Engineers, Australia

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up-to-date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

any amendments thereto. Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

AS 3103/Amdt 1/1991-01-25

.

STANDARDS AUSTRALIA

Amendment No 1 to AS 3103—1990 Approval and test specification— Electric room heaters

REVISED TEXT

The 1990 edition of AS 3103 is amended as follows; the amendment(s) should be inserted in the appropriate place. SUMMARY: This Amendment applies to Clauses 2.8, 3.5.4.3, 3.5.5.1, 3.5.11 and Table 3.1. Published on 25 January 1991.

AS 3103/Amdt 2/1992-03-16

STANDARDS AUSTRALIA

Amendment No. 2 to AS 3103—1990 Approval and test specification—Electric room heaters



REVISED TEXT

The 1990 edition of AS 3103 is amended as follows; the amendments should be inserted in the appropriate place.

SUMMARY: This Amendment applies to the Preface, Clauses 1.3, 2.7, 3.5.1, 3.5.4A, 3.5.5.1, 4.2.2, 4.6.1, 4.6.4A and 4.6.5, and Tables 3.1 and 4.1.

Published on 16 March 1992.

proved for publication in New Zealand on behalf of the Standards Council of New Zealand on 13 March 1992.

AS 3103/Amdt 3/1992-10-12



STANDARDS AUSTRALIA

Amendment No. 3 to AS 3103—1990 Approval and test specification—Electric room heaters

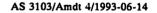
REVISED TEXT

The 1990 edition of AS 3103 is amended as follows; the amendment should be inserted in the appropriate place.

SUMMARY: This Amendment applies to Appendix A.

Published on 12 October 1992.

0





STANDARDS AUSTRALIA

CEN Amendment No. 4 to AS 3103—1990 Approval and test specification—Electric room heaters

REVISED TEXT

The 1990 edition of AS 3103 is amended as follows; the amendments should be inserted in the appropriate place.

SUMMARY: This Amendment applies to Clauses 2.5, 2.8 and 3.5.11.

Published on 14 June 1993.

Australian Standard®

Approval and test specification— Electric room heaters

First published as AS C103—1937. Second edition 1940. Third edition 1952. Revised and redesignated AS 3103—1975. Second edition 1981. Third edition 1985. Fourth edition 1990.

PUBLISHED BY STANDARDS AUSTRALIA (STANDARDS ASSOCIATION OF AUSTRALIA) STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY NSW

ISBN 0 7262 6251 X

PREFACE

This Specification was prepared by the Standards Australia Committee on, Electrical Approvals Standards to supersede AS 3103—1985, *Electric room heaters*.

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 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 was published to incorporate into the Specification Amendments No 1 to 4 to AS 3103—1985 and to effect changes to Section 1, Clauses 1.1 and 1.3 with regard to scope and referenced documents.

This Specification supersedes AS 3103-1985 from date of publication.

Standards Australia desires to call attention to the fact that this Standard does not purport to include all the necessary provisions of a contract.

> SEE AMENDMENT 2

AMDT Page 2 Preface

MAR. 1992 At the end of the Preface, add the following new paragraphs:

The Standards Association of New Zealand wishes to advise that this Specification will supersede NZS 1999:1965 and NZS 6331:1972 from the date of publication of this Amendment.

Standards Australia and the Standards Association of New Zealand advise that this Specification will be published as a Joint Australian/New Zealand Standard at the next printing.

The additional requirements of Clauses 3.5 and 4.6 have been designated as Clauses 3.5.4A and 4.6.4A so as not to require changes to the cross-references of other clauses.

This Amendment forms part of the Specification on publication.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the Head Office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

SECTI		Page D
1.1	DOCUMENTS SCOPE	4
1.1		•.• •
1.2		4 4
1.5	REFERENCED DOCUEMENTS	4 4
		. 4
SECTI	ION 2 GENERAL REQUIREMENTS	
2.1	SCOPE OF SECTION	7
2.2	LIMITATION OF ADJUSTMENTS	. 7
2.3	MEANS OF CONNECTION	. 7
2.4	SWITCHES	· · ·
2.5	TEMPERATURE CONTROL DEVICES	
2.6	LOADING	. , 7
2.7	N/A BWING	7
2.8	HEATING UNITS CONSTRUCTION SEE AMENDMENT	. 8
SECTI		. 0
	· · · · · · · · · · · · · · · · · · ·	
3.1	SCOPE OF SECTION	9
3.2	STABILITY	9
3.3	GUARDING	9
3.4	OVERHEATING PROTECTIVE DEVICES	10
3.5	TESTS	10
SECTI	ON 4 THERMAL STORAGE HEATERS	
4.1	SCOPE OF SECTION	. 14
4.2	CONSTRUCTION	
4.3	STABILITY	14
4.4	GUARDING	14
4.4		. 14
4.5		
	TESTS	14 18

1DT Page 3 Contents N. Retitle Clause 2.8 as CONSTRUCTION.

This Amendment forms part of the Specification 2 years from publication.

AMDT Page 4 Clause 1.3 No. 2 MAR. Add the following r 1992

Add the following referenced Standard:

NZS 6200 Specification for general requirements for electrical apparatus and material This Amendment forms part of the Specification on publication.

STANDARDS AUSTRALIA

Δ

Australian Standard

Approval and test specification—Electric room heaters

SECTION 1 SCOPE, DEFINITIONS, APPLICATION AND REFERENCED DOCUMENTS

SCOPE. This Specification specifies essential safety requirements for electric room heaters, 1.1 as defined in Clause 1.4 below, which are designed for operation at low or medium voltage. This Specification does not apply to the following:

Airconditioning appliances within the scope of AS 3179. (a)

- Electrical heating systems which are designed to heat a room primarily by raising the **(b)** temperature of a floor, wall or ceiling surface.
- Electrically-operated infrared and ultraviolet heating devices which are designed for (c) therapeutic or industrial purposes.
- Electric duct heaters within the scope of AS 3102. (d)

1.2 APPLICATION.

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 heater, and to the insulation or safeguarding of parts which normally carry current or both.

1.2.2 Specific requirements of this Specification. A heater shall be deemed to comply with this Specification only if it complies with all the relevant requirements in Section 2, and with all the appropriate requirements and tests specified in the following Section(s):

Section 3— for heaters such as radiant heaters, panel heaters, fan heaters, liquid filled heaters and convectors; but not including thermal storage heaters.

Section 4— for electrical thermal storage heaters.

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

1.3 REFERENCED DOCUMENTS. The following documents are referred to in this standard: STANDARDS.

Space heating appliances-External temperature limits and primary guards AS 2285

Space heating appliances-Secondary guards AS 2286

Textiles for hospitals and institutions-Blankets. AS 2390

APPROVAL AND TEST SPECIFICATIONS.

- AS 3100 AS 3102 Definitions and general requirements for electrical materials and equipment
- Electric duct heaters
- AS 3109.1 Appliance couplers for household and similar general purposes Part 1: General requirements.
- Motor operated appliances AS 3115
- AS 3161 Thermostats and energy regulators

AS 3179 Refrigerated room air conditioners

AS 3191

Electric flexible cords NZS 6200 >

1.4 DEFINITIONS. For the purpose of this Specification the general definitions below apply.

1.4.1 General definitions.

1.4.1.1 Electric room heater (hereinafter referred to as a 'heater')—an electrical appliance designed for the purpose of heating a room or space by the emission of heat by conduction, radiation, convection, forced air circulation or any combination thereof.

1.4.1.2 Fixed heater-a heater designed to be fastened or otherwise secured at a specific location or a heater which cannot easily be moved from place to place.

1.4.1.3 Portable heater-a heater which can easily be moved from one place to another while connected to the supply.

1.4.1.4 Thermal storage heater—a self-contained heater specifically designed to store heat derived from electrical energy.

COPYRIGHT