

AS 3168—1991

Australian Standard[®]

**Approval and test specification —
Fluorescent lamp ballasts**

[Title allocated by Defence Cataloguing Authority: Ballast, lamp
(Approval and test specification; fluorescent lamps) NSC 6250]

This Australian Standard was prepared by Committee LG/3, Auxiliaries for Discharge Lamps. It was approved on behalf of the Council of Standards Australia on 11 September 1990 and published on 11 February 1991.

The following interests are represented on Committee LG/3:

Association of Consulting Engineers, Australia
Australian Electrical and Electronic Manufacturers Association
Confederation of Australian Industry
Consumer Electronics Suppliers Association
Department of Administrative Services
Electricity Supply Association of Australia
Illuminating Engineering Societies of Australia
Ministry of Housing and Construction, Vic.
Public Works Department, N.S.W.
Railways of Australia Committee
Regulatory authorities (electrical)

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.

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which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.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 3168—1991

Australian Standard[®]

**Approval and test specification —
Fluorescent lamp ballasts**

First published as AS C168—1963.
Second edition 1970.
Revised and redesignated AS 3168—1983.
Second edition 1991.

Incorporating:
Amdt 1—1991

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 6565 9

PREFACE

This Standard was prepared by the Standards Australia Committee on Auxiliaries for Discharge Lamps to supersede AS 3168—1983.

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, *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 Standard, other than in editorial presentation, closely follows IEC 920, *Ballasts for tubular fluorescent lamps—General and safety requirements*; however, some of the requirements of that publication have been modified to take account of local conditions. Also, this edition of this Standard includes requirements for ballasts of the electronic type.

Alignment of this Standard with IEC 920 includes the use of wooden blocks to determine the limitation of ballast heating, which replaces the former method of a test hood.

Modifications from IEC 920 include the rated maximum operating temperature of a ballast case (t_k) for electronic ballasts, and the addition of a requirement that capacitors in excess of 0.1 μF must comply with the relevant requirements of AS 2644, *Capacitors for use in discharge lamp circuits*.

All requirements for electronic ballasts, appearing throughout this Standard, are to be DELETED and reference made to AS 3134 (Int)

© 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

		<i>Page</i>
1	SCOPE	4
2	REFERENCED DOCUMENTS	4
3	DEFINITIONS	4
4	COMPLIANCE WITH APPROVAL AND TEST SPECIFICATIONS	6
5	ENCLOSURE OF INDEPENDENT BALLASTS	6
6	INSULATION OF WINDINGS	6
7	CREEPAGE DISTANCES AND CLEARANCES	6
8	TERMINALS AND CONNECTING FACILITIES	7
9	EQUIPMENT WIRING	7
10	EARTHING OF INDEPENDENT BALLASTS	8
11	FLEXIBLE CORD	8
12	CAPACITORS	8
13	OVERHEATING PROTECTIVE DEVICES	8
14	RESISTANCE TO CORROSION	8
15	MECHANICAL STRENGTH OF INDEPENDENT BALLASTS	8
16	MOISTURE RESISTANCE AND INSULATION	8
17	MARKING	8
18	INFORMATION FOR TEST BALLASTS	9
19	SUPPLY CURRENT	9
20	TESTS	9
APPENDICES		
A	GENERAL CONDITIONS OF TESTING	20
B	MEASUREMENT OF CURRENT WAVEFORM	21
C	THE USE OF CONSTANTS (S) OTHER THAN 4500 FOR THE ENDURANCE TESTS OF REACTIVE BALLASTS	23
D	THERMAL ENDURANCE TEST FOR WINDINGS OF REACTIVE BALLASTS	25
E	CIRCUIT FOR MEASURING CAPACITIVE CURRENT	28

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-