AS 61184:2022

Australian STANDARD®

STANDARDS Australia

Bayonet lampholders (IEC 61184:2017 (ED. 4.1) MOD)

currently in preview, click buy full versi

AS 61184:2022

This Australian Standard ® was prepared by EL-041, Lamps and Related Equipment. It was approved on behalf of the Council of Standards Australia on 20 April 2022.

This Standard was published on 13 May 2022.

The following are represented on Committee EL-041:

Australian Industry Group
Better Regulation Division (Fair Trading, Safework NSW, TestSafe)
CHOICE
Consumer Electronics Suppliers Association
Consumers Federation of Australia
Department of Industry, Science, Energy and Resources (Australian Government)
Electrical Compliance Testing Association of Australia
Electrical Regulatory Authorities Council, Australia
Energy Efficiency Council
IES: The Lighting Society
Joint Accreditation System of Australia and New Zealand
Lighting Council Australia
Master Electricians Australia

This Standard was issued in draft form for comment as DR AS 61184:2021.

currently in preview, click buy full version

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:
www.standards.org.au

ISBN 978 1 76113 718 1

Bayonet lampholders (IEC 61184:2017 (ED. 4.1) MOD)

Originated as AS/NZS 61184:2007.
Revised and redesignated as AS 61184:2015.
Third edition 2022.

© IEC Geneva Switzerland 2022 — All rights reserved
© Standards Australia Limited 2022

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of either the IEC or the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth). If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please see the contact details on the back cover or the contact us page of the website for further information.

currently in preview, click buy full version

Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee, EL-041, Lamps and Related Equipment, to supersede AS 61184:2015, *Bayonet lampholders (IEC 61184, Ed. 3.1 (2011) MOD)*.

AS 61184:2015 will also remain current for three years after the date of publication of this document and after this time it will be superseded by AS 61184:2022. Regulatory authorities that reference this document in regulation may apply these requirements at a different time. Users of this document should consult with these authorities to confirm their requirements.

This document will also operate in parallel with AS/NZS 3117, *Approval and test specification—Bayonet lampholders*.

While this document (AS 61184:2022) and AS/NZS 3117 operate in parallel, they are separate stand-alone documents and the chosen Standard (i.e. AS 61184 or AS/NZS 3117) is applied in its entirety. The interchanging of requirements from each Standard is not permitted to determine overall compliance of a bayonet lampholder, except when either Standard specifically references the other Standard's requirements.

The objective of this document is to specify particular requirements for bayonet lampholders used in general purpose lighting.

The essential safety requirements of AS/NZS 3820, *Essential safety requirements for electrical equipment*, that could be applicable to bayonet lampholders are covered by this document, taken in conjunction with any other relevant requirements affecting safety.

The major changes in this edition are as follows:

(a) Creepage and clearance — a note in Table 8 has been added in relation to tracking on glass, ceramic and other inorganic materials.

(b) The calculation method in Clause 21 for ball pressure has been deleted.

This document is an adoption with national modifications and has been reproduced from the red line version of IEC 61184:2017+AMD1:2019 CSV, *Bayonet lampholders*, and has been varied as indicated to take account of Australian conditions.

The variations listed in Appendix ZZ address issues including resistance to flame and ignition. Appendix ZZ has been added at the end of the source text.

The variations described in Appendix ZZ form the Australian variations for the purpose of the CB Scheme for recognition of testing to standards for safety of electrical equipment (the CB Scheme).

This document is structured as follows:

(i) Preface.

(ii) IEC 61184:2017+AMD1:2019 CSV (unedited red line version from the contents page to the final clause of the source document).

(iii) Appendix ZZ — Australian variations to the source document.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

© Standards Australia Limited 2022

currently in preview, click buy full version

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

urrently in preview, click buy full versi

© Standards Australia Limited 2022

CONTENTS

© Standards Australia Limited 2022

currently in preview. click buy full version

urrently in preview, click buy full versi

© Standards Australia Limited 2022

INTERNATIONAL ELECTROTECHNICAL COMMISSION

_____

BAYONET LAMPHOLDERS

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
6) All users should ensure that they have the latest edition of this publication.
7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

DISCLAIMER
This Consolidated version is not an official IEC Standard and has been prepared for user convenience. Only the current versions of the standard and its amendment(s) are to be considered the official documents.

This Consolidated version of IEC 61184 bears the edition number 4.1. It consists of the fourth edition (2017-05) [documents 34B/1898/FDIS and 34B/1905/RVD] and its amendment 1 (2019-12) [documents 34B/2030/CDV and 34B/2041A/RVC]. The technical content is identical to the base edition and its amendment.

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

Currently in preview, click buy for full version

© Standards Australia Limited 2022

International Standard IEC 61184 has been prepared by subcommittee 34B: Lamp caps and holders, of IEC technical committee 34: Lamps and related equipment.

This fourth edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) Restructuring of the standard in accordance with IEC Directives Part 2.

b) Clause 18: Update on creepage distances and clearances;

c) Addition of Annex B.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

In this standard, the following print types are used:

– requirements proper: in roman type;

– *test specifications: in italic type;*

– notes: in small roman type.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

urrently in preview, click buy full versi

© Standards Australia Limited 2022

INTRODUCTION

This document covers safety requirements for bayonet lampholders and includes references to IEC 60061 (all parts) for the control of interchangeability and safety of the cap and holder fit.

NOTE Safety requirements ensure that electrical equipment constructed in accordance with these requirements does not endanger the safety of persons, domestic animals or property when properly installed and maintained and used in applications for which it was intended.

The thermal characteristics of lampholders are specified by the rated operating temperature (symbol T), which is the highest temperature for which the lampholder is designed. The temperature rating and the resistance to heat specified in this document are based on two different principles, as presently found in IEC 60238 for Edison screw lampholders and in other national standards for bayonet lampholders. After experience, it may be possible to rationalize the systems in future editions of this document.

INTRODUCTION to Amendment 1

Some changes and corrections needed for IEC 61184 became obvious during the work on the fourth edition of IEC 61184.

Change 1:

Actual lamp holder safety standards require a ball pressure test in line with IEC 60695-10-2 in sections "Resistance to heat, fire and tracking". Within this test there is an alternative depth indentation method described for the calculation of the indentation diameter.

This alternative calculation option was removed from the latest edition of IEC 60695-10-2 dated 2014 and during its meeting held in Sydney in 2018, SC 34B/WG1 agreed to delete the alternative method as well from IEC 61184.

Change 2:

Based on IEC 60664-1:2007, 4.8.1.5 "Non tracking materials":

"For glass, ceramics or other inorganic insulating materials which do not track, creepage distances need not be greater than their associated clearance for the purpose of insulation coordination. The dimensions of this table are appropriate."

This is not completely reflected in TC 34 standards as revised recently. For applications with ELV it is of high importance whether the creepage distance shall be 0,6 mm or may be 0,2 mm in the case where inorganic insulating material is used.

Currently in preview, click buy full version

© Standards Australia Limited 2022

BAYONET LAMPHOLDERS

1 Scope

This document applies to bayonet lampholders B15d and B22d for connection of lamps and semi-luminaires to a supply voltage of 250 V.

This document also covers lampholders which are integral with a luminaire or intended to be built into appliances. It covers the requirements for the lampholder only.

For all other requirements, such as protection against electric shock in the area of the terminals, the requirements of the relevant appliance standard are observed and tested after building into the appropriate equipment, when that equipment is tested according to its own standard. Lampholders for use by luminaire manufacturers only are not for retail sale.

Where lampholders are used in luminaires, their maximum operating temperatures are specified in IEC 60598-1.

B15d denotes the cap/holder fit as defined by IEC 60061-1, sheet 7004-11 and IEC 60061-2, sheet 7005-16 with the corresponding gauges.

B22d denotes the cap/holder fit as defined by IEC 60061-1, sheet 7004-10 and IEC 60061-2, sheet 7005-10 with the corresponding gauges.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60061 (all parts), *Lamp caps and holders together with gauges for the control of interchangeability and safety* (available at http://std.iec.ch/iec60061)

IEC 60061-1, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps*

IEC 60061-2, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 2: Lampholders*

IEC 60061-3, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 3: Gauges*

IEC 60068-2-75:2014, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60112:2003, *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*
IEC 60112:2003/AMD1:2009

IEC 60227 (all parts), *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*

© Standards Australia Limited 2022