Australian STANDARD

Edison screw lampholders (IEC 60238, Ed. 8.2 (2011) MOD)

STANDARDS Australia

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- Australasian Fire and Emergency Service Authorities Council
- Australian Industry Group
- Consumers Federation of Australia
- Department of Industry
- Electrical Compliance Testing Association
- Electrical Regulatory Authorities Council
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- Institution of Professional Engineers New Zealand
- Joint Accreditation System of Australia and New Zealand
- Lighting Council Australia
- Lighting Council New Zealand
- Master Electricians Australia
- Ministry of Business, Innovation and Employment, New Zealand

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Australian Standard®

Edison screw lampholders (IEC 61184, Ed. 3.1 (2011) MOD)

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment, to supersede AS/NZS 60238:2007, *Edison screw lampholders (IEC 60238, Ed.8.0 (2004) MOD)* six months from publication. During this period, both editions of the Standard will operate in parallel, then the 2007 edition is anticipated to be withdrawn.

A2 Amendment No. 2, redesignates this Standard from AS/NZS 60238 to AS 60238.

This Standard incorporates Amendment No. 1 (December 2015) and Amendment No. 2 (February 2017). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

This Standard will also operate in parallel with AS/NZS 3140, *Approval and test specification—*
A1 *Edison screw lampholders*.

A2 While this Standard (AS 60238:2015) and AS/NZS 3140 operate in parallel, they are separate stand-alone documents and the chosen Standard (i.e. AS 60238 or AS/NZS 3140) is applied in its entirety. The interchanging of requirements from each Standard is not permitted to determine overall compliance of an edison screw lampholder, except when either Standard specifically references the other Standard's requirements.

The objective of this Standard is to specify particular requirements for Edison screw lampholders used in general purpose lighting.

This Standard is an adoption with national modifications; it has been reproduced from IEC 60238, Ed. 8.2 (2011), *Edison screw lampholders*, its Amendment 1 (2008) and its Amendment 2 (2011), which have been incorporated into the source text. A vertical line in the margin shows where the base publication has been modified by Amendments 1 and 2. This Standard has been varied as indicated to take account of Australian/New Zealand conditions.

The Standard is structured as follows:

(a) Preface (including Australian and Australian/New Zealand references).

(b) IEC 60238, Ed. 8.2 (2011) (unedited from the contents page to the final clause of the IEC Standard).

(c) Appendix ZZ—Australian/New Zealand variations to the IEC Standard.

The variations listed in Appendix ZZ address issues including resistance to flame and ignition.

The variations described in Appendix ZZ form the Australian and New Zealand variations for the purposes of the IECEE CB Scheme for recognition of testing to Standards for safety of electrical equipment (the CB Scheme).

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

As this Standard is reproduced from an International Standard, the following applies:

(i) In the source text 'this International Standard' should read 'this Australian/New Zealand Standard'.

(ii) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian/New Zealand Standard*	
IEC		AS	
60068	Environmental testing	60068	Environmental testing
60068-2-20	Part 2:Tests—Test T: Soldering	60068.2.20	Part 2:Tests—Test T: Soldering
60068-2-75	Part 2-75: Tests—Test Eh: Hammer tests	60068.2.75	Part 2.75: Tests—Test Eh: Hammer tests
		AS/NZS	
60227	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V (series)	60227	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V (series)
60245	Rubber-insulated cables—Rated voltages up to and including 450/475 V (series)	60245	Rubber-insulated cables—Rated voltages up to and including 450/475 V (series)
60335	Safety of household and similar electrical appliances	60335	Household and similar electrical appliances—Safety
60335-1	Part 1: General requirements	60335.1	Part 1: General requirements (IEC 60335-1 Ed 4.2, MOD)
		AS	
60529	Degrees of protection provided by enclosures (IP Code)	60529	Degrees of protection provided by enclosures (IP Code)
		AS/NZS	
60598	Luminaires	60598	Luminaires
60598-1	Part 1: General requirements and tests	60598.1	Part 1: General requirements and tests (IEC 60598-1, Ed. 7.0 (2008) MOD)
60695	Fire hazard testing	60695	Fire hazard testing
60695-2-11	Part 2-11: Glowing/hot-wire based test methods—Glow-wire flammability test method for end-products	60695.2.11	Part 2.11: Glowing/hot-wire based test methods—Glow-wire flammability test method for end-products (IEC 60695-2-11:2000, MOD)
60695-11-5	Part 11-5: Test flames—Needle-flame test method—Apparatus, confirmatory test arrangement and guidance	60695.11.5	Part 11.5: Test flames—Needle-flame test method—Apparatus, confirmatory test arrangement and guidance (IEC 60695-11-5 Ed 1.0, IDT)

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex or appendix to which they apply. A ‘normative’ annex or appendix is an integral part of a Standard, whereas an ‘informative’ annex or appendix is only for information and guidance.

CONTENTS

Page

AUSTRALIAN STANDARD

Edison screw lampholders (IEC 60238, Ed. 8.2 (2011) MOD)

1 General

1.1 Scope

This International Standard applies to lampholders with Edison thread E14, E27 and E40, designed for connection to the supply of lamps and semi-luminaires* only.

It also applies to switched-lampholders for use in a.c. circuits only, where the working voltage does not exceed 250 V r.m.s.

This standard also applies to lampholders with Edison thread E5 designed for connection to the supply mains of series connected lamps, with a working voltage not exceeding 25 V, to be used indoors, and to lampholders with Edison thread E10 designed for connection to the supply mains of series connected lamps, with a working voltage not exceeding 60 V, to be used indoors or outdoors. It also applies to lampholders E10 for building-in, for the connection of single lamps to the supply. These lampholders are not intended for retail sale.

As far as it reasonably applies, this standard also covers lampholders other than lampholders with Edison thread designed for connection of series-connected lamps to the supply.

NOTE This type of lampholder is for example used in Christmas tree lighting chains.

As far as it reasonably applies, this standard also covers adapters.

This standard also covers lampholders which are, wholly or partly, 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 or of the lamp cap, the requirements of the relevant appliance standard shall be observed and tested after building into the appropriate equipment, when that equipment is tested according to its own standard. Such lampholders as well as lampholders provided with a snap-on outer shell, for use by luminaire manufacturers only, are not for retail sale.

This standard applies to lampholders to be used indoors or outdoors in residential as well as in industrial lighting installations. It also applies to candle lampholders. In locations where special conditions prevail, as for street lighting, on board ships, in vehicles and in hazardous locations, e.g. where explosions are liable to occur, special constructions may be required.

NOTE 1 This standard does not apply to three-light lampholders E26d.

NOTE 2 This standard is based on the following data relative to lamps for general lighting service:

– caps E14 are used for lamps with a current not exceeding 2 A;

– caps E27 are used for lamps with a current not exceeding 4 A;

– caps E40 are used for lamps with a current not exceeding 16 A.

NOTE 3 If the nominal voltage of the supply does not exceed 130 V, the maximum current for caps E40 is 32 A (see 4.5 and 5.3).

NOTE 4 Where lampholders are used in luminaires, their maximum operating temperatures are specified in IEC 60598.

* Requirements for lampholders suitable for semi-luminaires are under consideration.

