

Australian/New Zealand Standard™

**Auxiliaries for lamps—D.C. or A.C.
supplied electronic step-down
convertors for filament lamps—
General and safety requirements
(IEC 61046:1993, MOD)**



Standards Australia



STANDARDS
NEW ZEALAND
Pūrongo Aotearoa

AS/NZS 61046:2001

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-041, Lamps and Related Equipment. It was approved on behalf of the Council of Standards Australia on 21 March 2001 and on behalf of the Council of Standards New Zealand on 4 May 2001. It was published on 5 May 2001.

The following interests are represented on Committee EL-041:

Association of Consulting Engineers Australia
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Electrical Compliance Testing Association of Australia
Electrical Regulatory Authorities Council (Australia)
Energy Efficiency and Conservation Authority of New Zealand
Illuminating Engineering Society of Australia and New Zealand
International Accreditation New Zealand
Ministry of Economic Development, New Zealand

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Australia web site at www.standards.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

Australian/New Zealand Standard™

Auxiliaries for lamps—D.C. or A.C. supplied electronic step-down convertors for filament lamps— General and safety requirements (IEC 61046:1993, MOD)

First published as AS/NZS 61046:2001.

COPYRIGHT

© Standards Australia/Standards New Zealand

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 the publisher.

Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 3857 5

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment.

The objective of this Standard is to provide the lighting industry with general and safety requirements for electronic step-down convertors for use on d.c. supplies up to 250 V or a.c. supplies up to 1 000 V and rated output voltage less than or equal to 50 V r.m.s., for use with tungsten-halogen or other filament lamps.

This Standard has been adopted with national modifications from IEC 61046:1993, *Auxiliaries for lamps—D.C. or A.C. supplied electronic step-down convertors for filament lamps—General and safety requirements*, including Amendment 1:1995. The changes made by Amendment 1 are indicated by a marginal bar against each clause, table or figure that is affected.

Variations to IEC 61046:1993 are indicated at appropriate places throughout this Standard. Strikethrough identifies IEC tables, figures and passages of text which, for the purpose of this Australian/New Zealand Standard, are deleted. Where Australian/New Zealand tables, figures or passages of text are added, each is set in its proper place and identified by shading. The variations are listed in Annex ZZ for easy reference.

A reference to an International Standard identified in the Normative References Clause by strikethrough (~~example~~) is replaced by a reference to the Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (example). Where the struck-through referenced document and the referenced Australian or Australian/New Zealand Standard are identical, this is indicated in parenthesis after the title of the latter.

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

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'this International Standard' should read 'this Australian/New Zealand Standard'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.
- (d) French text on figures should be ignored.

In this Standard, the following print types are used:

- (i) Requirements proper: in arial type.
- (ii) *Test specifications: in italic type.*
- (iii) Notes: in smaller arial type.

The term 'normative' has been used in this Standard to define the application of the annex to which it applies. A 'normative' annex is an integral part of a Standard.

To assist the reader, editorial corrections have been made to Table C.6 and to Table C.7 Item 4)c).

Attention is drawn to Electromagnetic Compatibility (EMC) schemes introduced in their respective countries by the Australian Communications Authority (ACA) and the Ministry of Economic Development, New Zealand to manage the use and performance of devices that either intentionally or unintentionally emit electromagnetic energy in the radiofrequency spectrum. Mandated Standards form an integral part of the EMC compliance schemes. Electrical lighting products fall within the scope of AS/NZS 4051, *Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment*. AS/NZS 4051 has been reproduced from IEC/CISPR 15 (same title) but contains some changes to limits to protect local radio services.

Information on EMC compliance for lighting equipment is to be found on the Internet at <http://www.aca.gov.au/standards/emc.htm> and for NZ at <http://www.moc.govt.nz/rsm>

CONTENTS

	<i>Page</i>
INTRODUCTION	iv
SECTION 1: GENERAL REQUIREMENTS	
1 General	1
2 Definitions	4
3 General requirements	6
4 General notes on tests.....	6
5 Classification	7
6 Marking	7
7 Terminals and cords	8
8 Provisions for earthing.....	9
9 Construction	9
10 Creepage distances and clearances	10
11 Protection against accidental contact with live parts	10
12 Moisture resistance and Insulation.....	11
13 Electric strength	12
14 Transformer heating	13
15 Abnormal conditions	13
16 Fault conditions	14
17 Screws, current-carrying parts and connections.....	15
18 Resistance to heat and fire	15
19 Resistance to corrosion	17
Annex A Test to establish whether a conductive part is a live part which may cause an electric shock	19
Annex B Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps with means of protection against overheating	20
Annex C Particular additional requirements for independent SELV d.c. or a.c. supplied electronic step-down convertors for filament lamps.....	23
Annex ZZ Variations to IEC 61046:1993 for application in Australia and New Zealand	42

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](#)
-