AS/NZS 60925:2005

Australian/New Zealand Standard™

D.C. supplied electronic ballasts for tubular fluorescent lamps—Performance requirements (IEC 60925, Ed. 1.2 (2001) MOD)

STANDARDS Australia

STANDARDS NEW ZEALAND PAEREWA AOTEAROA

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 31 August 2005 and on behalf of the Council of Standards New Zealand on 30 September 2005.
This Standard was published on 29 December 2005.

The following are represented on Committee EL-041:

Association of Consulting Engineers Australia
Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Certification Interests (New Zealand)
Consumers' Federation of Australia
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
Energy Efficiency & Conservation Authority of New Zealand
IES: The Lighting Society
Institution of Professional Engineers 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 Standards may also be withdrawn.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 Web Shop 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 or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 05004.

Australian/New Zealand Standard™

D.C. supplied electronic ballasts for tubular fluorescent lamps—Performance requirements (IEC 60925, Ed. 1.2 (2001) MOD)

First published as AS/NZS 60925:2005.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 7062 2

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 performance requirements for d.c. supplied electronic ballasts for tubular fluorescent lamps up to 250 V.

This Standard is an adoption with national modifications and has been reproduced from IEC 60925, Ed. 1.2 (2001), *DC supplied electronic ballasts for tubular fluorescent lamps–Performance requirements*, and has been varied as indicated to take account of Australian/New Zealand conditions.

Variations to IEC 60925, Ed. 1.2 (2001) are indicated at the appropriate places throughout this standard. Strikethrough (~~example~~) identifies IEC text, tables and figures which, for the purposes of this Australian/New Zealand Standard, are deleted. Where text, tables or figures are added, each is set in its proper place and identified by shading (example). Added figures are not themselves shaded, but are identified by a shaded border.

The important variation for Australian/New Zealand conditions is that 'a.c. ballasts specified in the Standard shall comply with the requirements of relevant Parts of AS/NZS 61347' instead of the requirements of IEC 60924.

Each Standard in Part 2 of 61347 is intended to be used in conjunction with Part 1 of 61347 in order to provide a complete Standard for that specific type of control gear. Where a particular clause of Part 1 is not mentioned in Part 2, that clause applies as far as is reasonable. Where Part 2 states 'addition', 'modification' or 'replacement' the relevant requirements in Part 1 are adapted accordingly. It is to be noted that some parts of the AS/NZS 61347 series differ from parts of IEC 61347 and hence equipment that conforms to the IEC standard may not comply with its AS/NZS counterpart.

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) A full point should be substituted for a comma when referring to a decimal marker.

In this Standard, the following print types are used:

– requirements proper: in arial type;

– *test specifications: in italic type;*

– explanatory matter: in smaller arial type.

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

CONTENTS

Page

NOTES

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard

D.C. supplied electronic ballasts for tubular fluorescent lamps—Performance requirements (IEC 60925, Ed. 1.2 (2001) MOD)

Section one – General performance requirements

1 Scope

This standard specifies general performance requirements for electronic ballasts for use on d.c. supplies having rated voltages not exceeding 250 V, associated with fluorescent lamps complying with IEC 60081. It shall be read in conjunction with AS/NZS 61347.1, AS/NZS 61347.2.4, AS/NZS 61347.2.5, AS/NZS 61347.2.6, and AS/NZS 61347.2.7 ~~IEC 60924~~.

Performance requirements for electronic ballasts for general, public transport and aircraft lighting are specified in Sections Two, Three and Four of this standard.

NOTE 1 In order to obtain satisfactory performance of fluorescent lamps with d.c. supplied electronic ballasts, it is necessary that certain features of their designs be properly co-ordinated. It is essential, therefore, that specifications for them be written in terms of measurement made against some common base-line of reference, which must be reasonably permanent and reproducible.

NOTE 2 These conditions may be fulfilled by reference ballasts. Moreover, the testing of ballasts for fluorescent lamps will, in general, be made with reference lamps and, in particular, by comparing results obtained on such lamps with ballasts to be tested and with a reference ballast as specified in IEC 60921.

1.1 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60081, *Tubular fluorescent lamps for general lighting service*~~

AS/NZS 1782.1, *Double-capped fluorescent lamps—Performance specifications—General*

IEC 60571, *Electronic equipment used on rail vehicles*

~~IEC 60921, *Ballast for tubular lamps: Performance requirements*~~

AS/NZS 60921, *Ballasts for tubular fluorescent lamps—Performance requirements*

~~IEC 60924:1988, *Starting devices (other than glow starters):General and safety requirements*~~

AS/NZS 61347.1, *Lamp controlgear—General and safety requirements*