NEGARA BRUNEI DARUSALAM

# BRUNEI DARUSSALAM STANDARD
# PIAWAI BRUNEI DARUSSALAM

PBD IEC 61347-2-8:2008
IEC 61347-2-8:2008
Edition 1.1

# LAMP CONTROL GEAR PART 2-8 – PARTICULAR REQUIREMENTS FOR BALLASTS FOR FLUORESCENT LAMPS

ENERGY DIVISION, PRIME MINISTER'S OFFICE
IN COLLABORATION WITH MINISTRY OF DEVELOPMENT
NEGARA BRUNEI DARUSSALAM

## FOREWORD

This Brunei Darussalam Electrical Standard was prepared by the Technical Committee on Electrical Standards [TECO (Electrical)], Energy Division at Prime Minister's Office in collaboration with the authority of the standards committee, Construction Planning and Research Unit (CPRU), Ministry of Development, Brunei Darussalam with the objective of developing the National Electrical Standards for electrical products, systems, equipment and facilities for the local industries and consumers with reference to international standards, guidelines and procedures. In developing the national electrical standards, the aim is to promote quality, technical integrity, health, safety and environmental standards for the local industries and consumers.

This Brunei Darussalam Electrical Standard is an adoption of the International Electro technical Commission IEC 61347-2-8: 2008 (Edition 1.1) standard and implements it as the Brunei Darussalam National Standard.

Attention is drawn to the fact that this Brunei Darussalam Electrical Standard does not confer any immunity from legal obligations in any contract for compliance to the Standard.

The National Electrical Standards are subject to periodical review according to the current needs of the local industries and consumers to keep abreast of progress in the industries and consumers concerned. Suggestions of amendments will be recorded and in due course brought to the notice of the committees concerned.

## COMMITTEE MEMBERS

The Technical Committee on Electrical Standards [TECO (Electrical)] was tasked by the Energy Division at the Prime Minister's Office in collaboration with Construction Planning and Research Unit (CPRU), Ministry of Development, Brunei Darussalam for the preparation of this Brunei Darussalam Electrical Standard. The members of the Technical Committee are as follows:

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PIAWAI BRUNEI DARUSSALAM – BRUNEI DARUSSALAM STANDARD

# CEI
# IEC
# 61347-2-8

# INTERNATIONAL STANDARD

Edition 1.1

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## Lamp controlgear –

## Part 2-8:
## Particular requirements for ballasts for fluorescent lamps

Reference number
CEI/IEC 61347-2-8:2000+A1:2006

**PBD IEC 61347-2-8:2008 (Published by IEC in 2006)**
**This IEC International Standard has been adopted by CPRU, Ministry of Development, Negara Brunei Darussalam as a national standard under the IEC Affiliate Country Programme**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

# LAMP CONTROLGEAR –

## Part 2-8: Particular requirements for ballasts for fluorescent lamps

## FOREWORD

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International Standard IEC 61347-2-8 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This consolidated version of IEC 61347-2-8 consists of the first edition (2000) [documents 34C/505/FDIS and 34C/519/RVD] and its amendment 1 (2006) [documents 34C/708/FDIS and 34C/716/RVD].

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience.

It bears the edition number 1.1.

A vertical line in the margin shows where the base publication has been modified by amendment 1.

PBD IEC 61347-2-8:2008 (Published by IEC in 2006)

This standard shall be used in conjunction with IEC 61347-1. It was established on the basis of the first edition (2000) of that standard.

This part 2 supplements or modifies the corresponding clauses in IEC 61347-1 so as to convert that publication into the IEC standard: Particular requirements for ballasts for fluorescent lamps.

NOTE In this standard, the following print types are used:

- Requirements proper: in roman type.
- *Test specifications: in italic type.*
- Explanatory matter: in smaller roman type.

Annexes A to I form an integral part of this standard.

Annex J is for information only.

IEC 61347 consists of the following parts under the general title *Lamp controlgear:*

- Part 1: General and safety requirements
- Part 2-1: Particular requirements for starting devices (other than glow starters)
- Part 2-2: Particular requirements for d.c. or a.c. supplied electronic step-down convertors for filament lamps
- Part 2-3: Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps
- Part 2-4: Particular requirements for d.c. electronic ballasts for general lighting
- Part 2-5: Particular requirements for d.c. supplied electronic ballasts for public transport lighting
- Part 2-6: Particular requirements for d.c. supplied electronic ballasts for aircraft lighting
- Part 2-7: Particular requirements for d.c. supplied electronic ballasts for emergency lighting
- Part 2-8: Particular requirements for ballasts for fluorescent lamps
- Part 2-9: Particular requirements for ballasts for discharge lamps (excluding fluorescent lamps)
- Part 2-10: Particular requirements for electronic invertors and convertors for high-frequency operation of cold start tubular discharge lamps (neon tubes)
- Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires [1)]

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result 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.

1) To be published.

PBD IEC 61347-2-8:2008 (Published by IEC in 2006)

# INTRODUCTION

This first edition of IEC 61347-2-8, published in conjunction with IEC 61347-1, represents an editorial review of IEC 60920. The formatting into separately published parts provides for ease of future amendments and revisions. Additional requirements will be added as and when a need for them is recognized.

This standard, and the parts which make up IEC 61347-2, in referring to any of the clauses of IEC 61347-1, specify the extent to which such a clause is applicable and the order in which the tests are to be performed; they also include additional requirements, as necessary. All parts which make up IEC 61347-2 are self-contained and, therefore, do not include references to each other.

Where the requirements of any of the clauses of IEC 61347-1 are referred to in this standard by the phrase "The requirements of clause n of IEC 61347-1 apply", this phrase is interpreted as meaning that all requirements of the clause in question of part 1 apply, except any which are clearly inapplicable to the specific type of lamp controlgear covered by this particular part of IEC 61347-2.

# LAMP CONTROLGEAR –

## Part 2-8: Particular requirements for ballasts for fluorescent lamps

## 1 Scope

This part of IEC 61347 specifies safety requirements for ballasts, excluding resistance types, for use on a.c. supplies up to 1 000 V at 50 Hz or 60 Hz, associated with fluorescent lamps with or without pre-heated cathodes operated with or without a starter or starting device and having rated wattages, dimensions and characteristics as specified in IEC 60081 and 60901.

This standard applies to complete ballasts and to their component parts such as reactors, transformers and capacitors. Particular requirements for thermally protected ballasts are given in annex B.

Ballasts for conventional operation of lamps at mains frequency are covered, while a.c. supplied electronic ballasts for high frequency operation are excluded. These are specified in IEC 61347-2-3.

Capacitors having a capacitance greater than 0,1 µF are covered by IEC 61048 and IEC 61049. Capacitors having a capacitance less than or equal to 0,1 µF are specified in IEC 60384-14.

Performance requirements are the subject of IEC 60921.

## 2 Normative references

For the purpose of this part of IEC 61347, the normative references given in clause 2 of IEC 61374-1 which are mentioned in this standard apply, together with the following normative references:

IEC 61347-1, *Lamp controlgear – Part 1: General and safety requirements*

## 3 Definitions

For the purpose of this part of IEC 61347, the definitions of clause 3 of IEC 61347-1 apply, together with the following:

**3.1**
**rated temperature rise of a ballast winding**
$\Delta t$
temperature rise assigned by the manufacturer under the conditions specified in this standard

NOTE The specifications for the supply and mounting conditions of the ballast are given in annex H.

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