

SINGAPORE STANDARD

SS 490 : Part 2:7 : 2001

(IEC 61347-2-7 : 2000)

(ICS 29.140.99)

SPECIFICATION FOR

Lamp controlgear

*Part 2:7 : Particular requirements for d.c. supplied
electronic ballasts for emergency lighting*

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National Foreword

This Singapore Standard was prepared by the Technical Committee on Lamps and Related Equipment, under the direction of the Electrical and Electronic Product Standards Committee. This part of SS 490 together with SS 490 : Part 1 replaces Section Six of SS 377 Part 1 : 1995 – "D.C. supplied electronic ballasts for tubular fluorescent lamps, Part 1 : General and safety requirements" which is an endorsement of IEC 60924 : 1990. Section Six of IEC 60924 has been replaced by IEC 61347-2-7.

This Singapore Standard is identical to the First Edition of International Standard IEC 61347-2-7 : 2000-10 published by the International Electrotechnical Commission.

This part supplements or modifies the corresponding clauses in SS 490 : Part 1 so as to convert that publication into the Singapore Standard : Particular requirements for d.c. supplied electronic ballasts for emergency lighting.

An editorial amendment is made as follows:

Foreword In the last paragraph before NOTE, *replace* 'public transport' with 'emergency'

Attention is also drawn to the following:

1. Where the words 'this part of IEC 61347' appear, they should be read as 'Part 2:7 of SS 490'.
2. Where the reference 'IEC 61347-1' appears, it should be read as 'Part 1 of Singapore Standard 490'.
3. Where the reference 'IEC 60925' appears, it should be replaced by 'SS IEC 60925 : 1989'.
4. Where the reference 'IEC 60598-2-22' appears, it should be replaced by 'SS 263 : Part 2'.
5. The comma has been used throughout as a decimal marker in IEC 61347-2-7, whereas in Singapore Standards it is a practice to use a full-point on the baseline as the decimal marker.

NOTE

1. *Singapore Standards are subject to periodic review to keep abreast of technological changes and new technical developments. The revisions of Singapore Standards are announced through the issue of either amendment slips or revised editions.*
2. *Compliance with a Singapore Standard does not exempt users from legal obligations.*

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LAMP CONTROLGEAR –

Part 2-7: Particular requirements for d.c. supplied electronic ballasts for emergency lighting

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61347-2-7 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This first edition of IEC 61347-2-7, together with IEC 61347-1, cancels and replaces section six of the first edition of IEC 60924, published in 1990, and constitutes a minor revision.

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 d.c. supplied electronic ballasts for public transport lighting

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.

The text of this standard is based on the following documents:

FDIS	Report on voting
34C/504/FDIS	34C/518/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

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

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 luminaires¹⁾

The committee has decided that the contents of this publication will remain unchanged until 2003. At this date, the publication will be

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

¹⁾ To be published.

LAMP CONTROLGEAR –

Part 2-7: Particular requirements for d.c. supplied electronic ballasts for emergency lighting

1 Scope

This part of IEC 61347 specifies particular safety requirements for d.c. supplied electronic ballasts for maintained and non-maintained emergency lighting purposes.

It includes specific requirements for ballasts and control units for luminaires for emergency lighting as specified by IEC 60598-2-22.

DC supplied electronic ballasts for emergency lighting may or may not include batteries.

This standard also includes all operational requirements which, in the case of other d.c. supplied electronic ballasts, are regarded as performance requirements. This is because non-operational emergency lighting equipment presents a safety hazard.

Performance requirements are the subject of IEC 60925.

2 Normative references

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

IEC 60598-2-22, *Luminaires – Part 2-22: Particular requirements – Luminaires for emergency lighting*

IEC 60742, *Isolating transformers and safety isolating transformers – Requirements*

IEC 60925, *D.C. supplied electronic ballasts for tubular fluorescent lamps – Performance requirements*

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