



SINGAPORE STANDARD

Specification for general requirements for electrical accessories

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This Singapore Standard having been approved by the Electrical and Electronic Product Standards Committee was endorsed by the Standards Council on 31 July 1996.

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The Electrical and Electronic Product Standards Committee appointed by the Standards Council consists of the following members:

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Secretary	:	Mrs Chan-Leow Guat Hiong	Singapore Productivity and Standards Board
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Members	:	Mr Leslie Earnest Mr Lim Boon Kiam Mr Lim Say Leong Mr Ng Kin Ming Mr Sia Teck Mong Mr Sim Wee Meng Mr Tan Hiok Pheng Mr Ting Ik Hing	Public Works Department Jurong Town Corporation Institution of Engineers, Singapore Power Supply Ltd Singapore Electrical Trades Association Land Transport Authority Singapore Productivity and Standards Board Housing and Development Board				

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SINGAPORE STANDARD

SPECIFICATION FOR GENERAL REQUIREMENTS FOR ELECTRICAL ACCESSORIES

FOREWORD

This Singapore Standard was prepared by the Technical Committee on Electrical Accessories under the direction of the Electrical and Electronic Product Standards Committee and constitutes a general revision of SS 241: 1981 which was an endorsement of BS 5733: 1979. BS 5733: 1979 has been superseded by BS 5733: 1995.

This standard based on BS 5733: 1995 specifies requirements and tests to check the safety in normal use of electrical accessories which are not covered by other specific Singapore Standards. Information from BS 5733: 1995 is reproduced by permission of BSI, 389 Chiswick High Road, London, W4 4AL, England.

Acknowledgement is made for the use of information from the above standard.

NOTE

- Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.

1. SCOPE

1.1 This Singapore Standard specifies requirements and tests to check the safety in normal use of electrical accessories which are not covered by other specific Singapore Standards.

Such accessories are intended for use in household, commercial and light industrial premises where:

- the nominal supply voltage does not exceed 250 V a.c. single-phase, 50 Hz to 60 Hz or 250 V d.c.;
- the rated current of the accessory does not exceed 63 A;
- the rated current of an accessory incorporating screwless terminals does not exceed
 13 A.

Unless otherwise stated by the manufacturer, accessories conforming to this standard are intended for connection by cables or flexible cords conforming to SS 358 or IEC 245.

1.2 The standard also covers 'plug-in' and other accessories in which electrical accessory components are incorporated, e.g. plug-pins, socket-contact, switches, terminals, etc.

NOTE. Incorporated electronic components, printed circuit boards, transformers, timers or other control devices should conform to their own relevant Singapore Standards.

- **1.3** Accessories conforming to this standard are suitable for use under the following conditions of service:
 - an ambient temperature in the range -5°C to +40°C, the average value over 24 h not exceeding 35°C;
 - **NOTE 1.** Under normal conditions of use, the available cooling air is subject to natural atmospheric variations of temperature and hence the peak temperature occurs only occasionally during the hot season, and, on those days when it does occur, it does not persist for lengthy periods.
 - a situation not subject to direct radiation from the sun or other source of heat likely to raise temperatures above the limits specified above;
 - an altitude not exceeding 1000 m above sea-level;
 - an atmosphere not subject to excessive pollution by smoke, chemical fumes, rain, spray, prolonged periods of high humidity or other abnormal conditions.

NOTE 2. Accessories conforming to this standard may be suitable for use in other conditions, subject to agreement between manufacturer and user. Information given in a manufacturer's catalogue may take the place of such an agreement.

1.4 Requirements for electromagnetic compatibility are not given, as accessories do not in themselves produce extraneous emissions, nor is their functioning affected by external emissions. Therefore no emission or immunity tests are necessary.

It should be noted that accessories containing active electronic components, other than luminous indicating devices, may be susceptible to, or emit, electromagnetic interference. Tests for these are under consideration.

2. REFERENCES

- **2.1 Normative References.** The standard incorporates, by dated or undated references, provisions from other publications. These normative references are made at the appropriate places in the text and the cited publications are listed on the last page. For dated references, only the edition cited applies; any subsequent amendments to or revisions of the cited publication apply to this only when incorporated in it by amendment or revision. For undated references, the latest edition applies, together with any amendments.
- **2.2** Informative References. This standard refers to other publications that provide information or guidance. Editions of these publications current at the time of issue of this standard are listed on the last page, but reference should be made to the latest editions.

3. **DEFINITIONS**

For the purposes of this Singapore Standard, the following definitions apply:

- **3.1** Accessory. A device associated with an electrical installation excluding the switchgear and cables.
- **3.2 Fixed Accessory.** An accessory intended to be connected to the fixed wiring of an installation.
- **3.3** Flush Accessory. A fixed accessory intended for mounting substantially into a fixed surface, generally into a box.
- 3.4 Surface Accessory. A fixed accessory intended for mounting onto a fixed surface.
- **3.5 Panel Mounted Accessory.** An accessory intended for incorporation into equipment panels or electrical trunking and which depends upon such incorporation for its enclosure.
- **3.6 Portable Accessory.** An accessory not intended for fixed mounting and which may have provision for the connection of a flexible cord.
- **3.7 Rewirable Accessory.** An accessory so constructed that a cable or flexible cord may be fitted or replaced using general purpose tools.
- **3.8 Non-rewirable Accessory.** An accessory supplied complete with an appropriate cable or flexible cord but having no provision for replacement by the user and no provision for dismantling the accessory using general purpose tools.
- **3.9 Fused Accessory.** An accessory having provision, internally, for a replaceable cartridge fuse-link.
- **3.10** Infrequent Use. Use of accessory, which although providing a means of connection between equipment and an electrical supply, is intended only to provide disconnection at infrequent intervals.

NOTE. Examples include the following:

- (a) fuse holders;
- (b) clock connectors;
- (c) accessories requiring connection/disconnection by means of a tool;
- (d) accessories, the connection/disconnection of which is evidently intended to be infrequent, e.g. up to 100 operations during its life expectancy.