

SS 358 : Part 5 : 2019
IEC 60227-5 : 2011, IDT
(ICS 29.060.20)

SINGAPORE STANDARD

**Polyvinyl chloride insulated cables of rated
voltages up to and including 450/750 V**

– Part 5 : Flexible cables (cords)

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The organisations in which the experts of the Working Group are involved are:

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Singapore Electrical Contractors and Licensed Electrical Workers Association

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National Foreword

This Singapore Standard was prepared by the Working Group on Electric Cables set up by the Technical Committee on Electrical & Electronic Products under the purview of EESC.

This standard is identical with ISO/IEC 60227-5:2011, "Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 5: Flexible cables (cords)", published by the International Electrotechnical Commission.

SS 358 comprises the following four parts under the general title, "Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V":

- Part 1: General requirements
- Part 2: Test methods
- Part 3: Non-sheathed cables for fixed wiring
- Part 5: Flexible cables (cords)

NOTE 1 – Reference to International Standards are replaced by applicable Singapore Standards.

NOTE 2 – Where numerical values are expressed as decimals, the comma is read as a full point.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *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. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "Mature standards". Mature Standards will not be subject to further review, unless there are requests to review such standards.*
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3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**POLYVINYL CHLORIDE INSULATED CABLES
OF RATED VOLTAGES UP TO AND INCLUDING 450/750 V –**

Part 5: Flexible cables (cords)

FOREWORD

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International Standard IEC 60227-5 has been prepared by IEC technical committee 20: Electric cables.

This third edition of IEC 60227-5 cancels and replaces the second edition published in 1997, Amendment 1 (1997) and Amendment 2 (2003). The document 20/1263/FDIS, circulated to the National Committees as Amendment 3, led to the publication of this new edition.

The main change with respect to the previous edition is as follows:

- Inclusion of a test for long term resistance of insulation to d.c in 4.4.

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

FDIS	Report on voting
20/1263/FDIS	20/1273/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 2.

A list of all the parts in the IEC 60227 series, published under the general title *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability 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.

POLYVINYL CHLORIDE INSULATED CABLES OF RATED VOLTAGES UP TO AND INCLUDING 450/750 V –

Part 5: Flexible cables (cords)

1 General

1.1 Scope

This part of IEC 60227 details the particular specifications for polyvinyl chloride insulated flexible cables (cords), of rated voltages up to and including 300/500 V.

All cables comply with the appropriate requirements given in IEC 60227-1 and each individual type of cable complies with the particular requirements of this part.

1.2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE The IEC 60811 series is currently undergoing a revision, which will lead to a restructuring of its parts. A description of this, as well as a cross-reference table between the current and planned parts will be given in IEC 60811-100.

IEC 60227-1:2007, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 1: General requirements*

IEC 60227-2:1997, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 2: Test methods*
Amendment 1 (2003)

IEC 60228, *Conductors of insulated cables*

IEC 60332-1-2, *Tests on electric and optical fibre cables under fire conditions – Part 1-2: Test for vertical flame propagation for a single insulated wire or cable – Procedure for 1 kW pre-mixed flame*

IEC 60811-1-1:1993, *Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section 1: Measurement of thickness and overall dimensions – Tests for determining the mechanical properties*
Amendment 1 (2001)

IEC 60811-1-2:1985, *Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section Two: Thermal ageing methods*
Amendment 1 (1989)
Amendment 2 (2000)

IEC 60811-1-4:1985, *Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section Four: Tests at low temperature*
Amendment 1 (1993)
Amendment 2 (2001)

IEC 60811-3-1:1985, *Common test methods for insulating and sheathing materials of electric cables – Part 3: Methods specific to PVC compounds – Section One: Pressure test at high temperature – Tests for resistance to cracking*

Amendment 1 (1994)

Amendment 2 (2001)

IEC 60811-3-2:1985, *Common test methods for insulating and sheathing materials of electric cables – Part 3: Methods specific to PVC compounds – Section Two: Loss of mass test – Thermal stability test*

Amendment 1 (1993)

Amendment 2 (2003)