SS 358-5:2025
IEC 60227-5:2024, 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)

Singapore Standards Council

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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 and Electronic Products under the purview of the Electrical and Electronic Standards Committee.

This standard is a revision of SS 358-5:2019. It is an identical adoption of IEC 60227-5:2024, “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.

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INTERNATIONAL STANDARD

Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 5: Flexible cables (cords)

IEC 60227-5:2024-02(en)

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IEC Secretariat
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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INTERNATIONAL STANDARD

Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 5: Flexible cables (cords)

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Part 5: Flexible cables (cords)

FOREWORD

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

This fourth edition cancels and replaces the third edition published in 2011. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) the reference to tests according to IEC 60227-2 has been withdrawn and replaced with a reference to IEC 63294;
b) normative references have been updated.

The text of this International Standard is based on the following documents:

Draft	Report on voting
20/2143/FDIS	20/2156/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all 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.

This document is to be used in conjunction with IEC 60227-1:—[1].

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

[1] Fourth edition under preparation. Stage at the time of publication IEC FDIS 60227-1:2023.

INTRODUCTION

The IEC 60227 series, published under the general title *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V,* consists of the following parts:

IEC 60227-1, General requirements;

IEC 60227-2, Test methods (withdrawn and replaced by IEC 63294);

IEC 60227-3, Non-sheathed cables for fixed wiring;

IEC 60227-4, Sheathed cables for fixed wiring;

IEC 60227-5, Flexible cables (cords);

IEC 60227-6, Lift cables and cables for flexible connections;

IEC 60227-7, Flexible cables screened and unscreened with two or more conductors and of rated voltages up to and including 300/500 V.

This part of IEC 60227, when used in conjunction with IEC 60227-1, forms the complete standard for flexible cables (cords).

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

Part 5: Flexible cables (cords)

1 Scope

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

This document provides the particular requirements for flexible cables (cords) which apply in addition to the appropriate requirements specified in IEC 60227-1, which apply to all cables.

The tests for cables specified in the IEC 60227 series are described in IEC 63294.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 60227-1:—[2], *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 1: General requirements*

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 60811-401, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 401*: *Miscellaneous tests – Thermal ageing methods – Ageing in an air oven*

IEC 60811-405, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 405*: *Miscellaneous tests – Thermal stability test for PVC insulations and PVC sheaths*

IEC 60811-409, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 409*: *Miscellaneous tests – Loss of mass test for thermoplastic insulations and sheaths*

IEC 60811-501, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 501*: *Mechanical tests – Tests for determining the mechanical properties of insulating and sheathing compounds*

IEC 60811-504, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 504*: *Mechanical tests – Bending tests at low temperature for insulation and sheaths*

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[2] Fourth edition under preparation. Stage at the time of publication IEC FDIS 60227-1:2023.