# INTERNATIONAL STANDARD

## IEC 60227-4

Edition 2.1 1997-12

Edition 2:1992 consolidated with amendment 1:1987 Polyvinyl chloride insulated caples of rated voltages up to and including 450/750 V – Part 4: Sheathed cables for fixed wiring (https://standardsitehan) Part 4: Sheathed cables for fixed wiring (https://standardsitehan) This English-language version is derived from the original bilingual publication by leaving out all French-language bages. Missing page numbers correspond to the Frenchlanguage pages.



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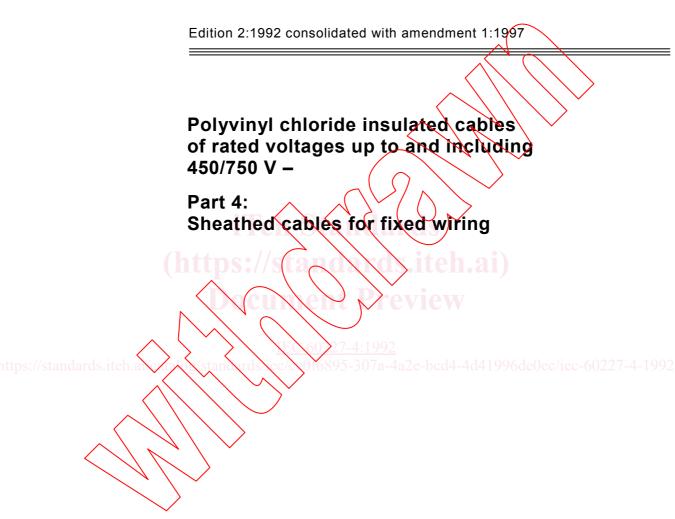
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

## Part 4: Sheathed cables for fixed wiring

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- 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. Then 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.
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This part of International Standard IEC 60227 has been prepared by sub-committee 20B: Low-voltage cables, of IEC technical committee 20: Electric cables.

This consolidated version of IEC 60227-4 consists of the second edition (1992) [documents 20B(CO)/12 and 20B(CO)/12] and its amendment 1 (1997) [documents 20B/227/FDIS and 20B/242/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 2.1.

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

It forms part 4: Sheathed cables for fixed wiring, of IEC 60227: *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V.* The other parts of the complete standard are:

- Part 1: General requirements, issued as IEC 60227-1;
- Part 2: Test methods, issued as IEC 60227-2;
- Part 3: Non-sheathed cables for fixed wiring, issued as IEC 60227-3;
- Part 5: Flexible cables (cords), issued as IEC 60227-5;
- Part 6: Lift cables and cables for flexible connections, issued as IEC 60227-6;
- Part 7: Flexible cables screened and unscreened with two or more conductors, issued as IEC 60227-7.

This part, in conjunction with parts 1 and 2, forms the complete standard for sheathed cables for fixed wiring.

This second edition of IEC 60227-4 replaces the first edition issued in 1979.

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

## Part 4: Sheathed cables for fixed wiring

## 1 General

#### 1.1 Scope

This part of IEC 60227 details the particular specification for light polyvinyr chloride sheathed cables of rated voltage of 300/500 V.

Each cable shall comply with the appropriate requirements given in IEC 60227-1 and the particular requirements of this part.

#### **1.2 Normative references**

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60227. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 60227 are encouraged to investigate the possibility of applying the most recent editions of the normative documents listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60228:1978, Conductors of insulated cables

http IEC 60332-1:1979, Tests on electric cables under fire conditions – Part 1: Test on a single vertical 7-4-1992 insulated wire or cable

IEC 60719:1992, Calculation of the lower and upper limits for the average outer dimensions of cables with circular copper conductors and of rated voltages up to and including 450/750 V

IEC 60811-1-1:1985, Common test methods for insulating and sheathing materials of electric cables – Part 1. Methods for general application – Section One: Measuring of thickness and overall dimensions – Tests for determining the mechanical properties Amendment 1 (1988). Amendment 2 (1989).

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).

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