

# INTERNATIONAL STANDARD

**IEC**  
**60183**

Second edition  
1984

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## Guide to the selection of high-voltage cables

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## GUIDE TO THE SELECTION OF HIGH-VOLTAGE CABLES

## FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

## PREFACE

This standard has been prepared by Sub-Committee 20A: High-voltage Cables, of Technical Committee No. 20: Electric Cables.

It forms the second edition of IEC Publication 183.

Drafts were discussed at the meeting held in Florence in 1980. As a result of this meeting, a draft was circulated to the National Committees under the Accelerated Procedure in February 1981 and, as Document 20A(Central Office)82, was submitted to the National Committees for approval under the Six Months' Rule in December 1981.

The National Committees of the following countries voted explicitly in favour of publication:

|          |             |                            |
|----------|-------------|----------------------------|
| Austria  | Egypt       | South Africa (Republic of) |
| Belgium  | France      | Sweden                     |
| Brazil   | Netherlands | Switzerland                |
| Bulgaria | New Zealand | Union of Soviet            |
| Canada   | Norway      | Socialist Republics        |
| China    | Poland      | United Kingdom             |
| Denmark  | Romania     | United States of America   |

Amendments, Document 20A(Central Office)89, were submitted to the National Committees for approval under the Two Months' Procedure in October 1982.

The National Committees of the following countries voted explicitly in favour of publication:

|           |                            |                          |
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| Austria   | Germany                    | Switzerland              |
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| Brazil    | Netherlands                | Socialist Republics      |
| Canada    | New Zealand                | United Kingdom           |
| Egypt     | Norway                     | United States of America |
| Finland   | Poland                     |                          |
| France    | Romania                    |                          |

*Other IEC publications quoted in this standard:*

Publications Nos. 55: Paper-insulated Metal-sheathed Cables for Rated Voltages up to 18/30 kV (with Copper or Aluminium Conductors and Excluding Gas-pressure and Oil-filled Cables).

- 71: Insulation Co-ordination.
- 71-1: Part 1: Terms, Definitions, Principles and Rules.
- 228: Conductors of Insulated Cables.
- 287: Calculation of the Continuous Current Rating of Cables (100% Load Factor).
- 502: Extruded Solid Dielectric Insulated Power Cables for Rated Voltages from 1 kV up to 30 kV.