Low-frequency cables and wires with PVC insulation and PVC sheath –
Part 1:
General test and measuring methods
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-FREQUENCY CABLES AND WIRES
WITH PVC INSULATION AND PVC SHEATH –

Part 1: General test and measuring methods

FOREWORD

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International Standard IEC 60189-1 has been prepared by subcommittee 46C: Wires and symmetric cables, of IEC technical committee 46: Cables, wires, waveguides, r.f. connectors, r.f. and microwave passive components and accessories.


This edition is a significant revision of general tests and measuring methods.

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

<table>
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<tr>
<th>FDIS</th>
<th>Report on voting</th>
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<tr>
<td>46C/820/FDIS</td>
<td>46C/828/RVD</td>
</tr>
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</table>
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.

The list of all the parts of the IEC 60189 series, under the general title *Low-frequency cables and wires with PVC insulation and PVC sheath*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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- withdrawn;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.

A bilingual version of this publication may be issued at a later date.
1 Scope

This part of IEC 60189 specifies mechanical, electrical and climatic test methods for low-frequency cables and wires designed for use in telecommunication inside plant and equipment and in electronic devices employing similar techniques.

NOTE The other parts of IEC 60189 describe the construction and characteristics of each type of cable and wire.

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.

IEC 60028, International standard of resistance for copper

IEC 60068 (all parts), Environmental testing

IEC 60332-1 (all parts), Tests on electric and optical fibre cables under fire conditions – Part 1: Test for vertical flame propagation for a single insulated wire or cable

IEC 60332-2 (all parts), Tests on electric and optical fibre cables under fire conditions – Part 2: Test for vertical flame propagation for a single small insulated wire or cable


IEC 60811-1-4:1985, Common test methods for insulating and sheathing materials of electric cables – Part 1: Methods for general application – Section Four: Test at low temperature

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

IEC 60885-1:1987, Electrical test methods for electric cables – Part 1: Electrical tests for cables, cords and wires for voltages up to and including 450/750 V

ISO 6892:1998, Metallic materials – Tensile testing at ambient temperature