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AMENDMENT 3
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incorporating amendments 1 (1988) and 2 (1989)

Amendment 3

Low-frequency cables and wires with PVC insulation and PVC sheath

Part 1: General test and measuring methods

*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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FOREWORD

This amendment has been prepared by Sub-Committee 46C: Wires and symmetric cables, of IEC Technical Committee No. 46: Cables, wires, waveguides, R.F. connectors, and accessories for communication and signalling.

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

Amendments	Six Months' Rule/DIS	Reports on Voting
3	46C(CO)202	46C(CO)206
2	46C(CO)193	46C(CO)197
1	46C(CO)186	46C(CO)192

Full information on the voting for the approval of this amendment can be found in the Voting Report indicated in the above table.

The text of Amendment 3 is indicated by a vertical line in the margin.

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3.4 Stripping properties of Insulation

3.4.2 *Second method*

Delete from the title: "(for solid conductor only)"

Amend the third paragraph as follows:

The sample shall then be cut at D and the insulation at C, about 85 mm and 75 mm respectively from the stripped end in the case of solid conductors, or at about 55 mm and 45 mm respectively from the stripped end in the case of stranded conductors. This leaves a length of 50 mm of undisturbed insulation in the case of solid conductors and of 20 mm in the case of stranded conductors. The insulation between C and D shall be stripped from the conductor, care being taken neither to displace the remaining part of the insulation nor to damage the conductor.

Insert, before the existing clause 4.7, the new clause 4.7 as follows:

4.7 Combined shrinkage and heat shock test

(This test only applies to insulations with an outer diameter less than 1,5 mm.)

For routine tests, it is accepted, as an alternative, to group shrinkage test and heat shock test by carrying out the combined test specified hereunder. The two tests specified in clauses 4.5 and 4.6 shall be considered as reference tests.

The object of this test is to determine the extent to which the insulation shrinks or withstands damage with variations in temperature. The test shall be carried out in accordance with the method specified in 9.1 of IEC 811-3-1, except that each sample shall be wound helically for three complete contiguous turns around a mandrel of diameter having a value, rounded off to the nearest whole millimetre of three times the mean overall diameter of the insulated conductor.

Also, the ends which shall be clearly cut (without stripped ends) shall extend at right angles to the mandrel in opposite directions for a length of 50 mm.

The amount of shrinkage of the insulation from the conductor ends shall be measured and shall be recorded as a percentage of the tail length (50 mm).

In case of doubt, test should be carried out in accordance with clauses 4.5 and 4.6.

Renumber the existing clause 4.7 as 4.8, as follows:

4.8 Solder test on tinned conductors

and add a new penultimate paragraph as follows:

Alternatively for special applications, compliance shall be checked by the solder globule method specified in 4.8 of IEC 68-2-20: (1979) – Basic environmental testing procedures, Part 2: Tests – Test T: Soldering.

This method applies when specified in other parts of the standard.
