

Australian/New Zealand Standard™

Accessories for electric cables—Test requirements

Part 2: Impregnated paper-insulated metal-sheathed cables for rated voltages from 1.9/3.3 (3.6) kV up to 19/33 (36) kV (excluding gas-pressure and oil-filled cables)

AS/NZS 4805.2:2003

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The following are represented on Committee EL-003:

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Australian Industry Group
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Department of Defence, Australia
Department of Mineral Resources, NSW
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-003, Electric Wires and Cables.

The objective of this Standard is to specify the type test requirements on accessories for impregnated paper-insulated metal-sheathed cables with rated voltages from 1.9/3.3 (3.6) kV up to 19/33 (36) kV (excluding gas-pressure and oil-filled cables).

This Standard is published in two parts. These are:

AS/NZS

- 4805 Accessories for electric cables—Test requirements
- 4805.1 Part 1: Power cables with extruded insulation for rated voltages from 1.9/3.3 (3.6) kV up to 19/33 (36) kV
- 4805.2 Part 2: Impregnated paper-insulated metal-sheathed cables for rated voltages from 1.9/3.3 (3.6) kV up to 19/33 (36) kV (excluding gas-pressure and oil-filled cables) (this Standard)

In the preparation of these Standards IEC 60502-4, *Power cables with extruded insulation and their accessories for rated voltages from 1 kV ($U_m = 1,2$ kV) up to 30 kV ($U_m = 36$ kV) Part 4: Test requirements on accessories for cables with rated voltages from 6 kV ($U_m = 7,2$ kV) up to 30 kV ($U_m = 36$ kV)*, and IEC 60055-1, *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) Part 1: Tests on cables and their accessories* were considered. The structure of these IEC Standards did not lend themselves to straight adoption so the production of a two part Australian/New Zealand Standard was considered appropriate.

The first part adopts the content of IEC 60502-4. This second part adopts only part of the content of IEC 60055-1 as this IEC Standard covers tests on cables as well as accessories.

The term ‘normative’ has been used in this Standard to define the application of an appendix to which it applies. A normative appendix is an integral part of a Standard.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies the requirements for type testing of accessories for impregnated paper-insulated metal-sheathed cables with rated voltages from 1.9/3.3 (3.6) kV up to 19/33 (36) kV, complying with AS 1026 or IEC 60055-1.

The accessories covered by this Standard are—

- (a) indoor and outdoor terminations of all designs, including those designed for installations in terminal boxes;
- (b) straight joints and branch joints of all designs, suitable for use underground or in air; and
- (c) transition joints connecting paper-insulated cables to cables with extruded insulation.

Accessories for particular cables, such as submarine cables are not included.

Approval to this Standard shall be obtained by carrying out the appropriate tests as set out in this Standard. These type tests shall apply only to new designs of accessories. By agreement with the purchaser, accessories which the manufacturer can demonstrate to have provided satisfactory service experience do not need to be type tested.

It is not necessary to repeat these tests, once successfully completed, unless changes are made in the materials, design or manufacturing process which might affect the performance characteristics.

Test methods are included in IEC 61442.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1026 Electric cables—Impregnated paper insulated—Working voltages up to and including 33 kV

IEC

60050 International Electrotechnical Vocabulary (IEV)

60050-461 Chapter 461: Electric cables

60055 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)

60055-1 Part 1: Tests on cables and their accessories