Australian/New Zealand Standard™

Electric cables— Cross-linked polyethylene insulated— Aerial bundled— For working voltages up to and including 0.6/1(1.2) kV

Part 1: Aluminium conductors

Standards Australia

STANDARDS NEW ZEALAND
Paerewa Aotearoa

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/3, Electric Wires and Cables. It was approved on behalf of the Council of Standards Australia on 31 January 2000 and on behalf of the Council of Standards New Zealand on 25 February 2000. It was published on 7 April 2000.

The following interests are represented on Committee EL/3:

Australasian Railway Association
Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Department of Defence, Australia
Department of Mineral Resources, N.S.W.
Electrical Contractors Association of New Zealand
Electricity Supply Association of Australia
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Part 1: Aluminium conductors

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/3, Electric Wires and Cables, and is based on a draft Standard prepared by representatives from the Electricity Supply Association of Australia and Australian cable manufacturers. It supersedes AS 3560—1991 and NZS/AS 3560—1991, *Electric cables—XLPE insulated—Aerial bundled—For working voltages up to and including 0.6/1 kV*.

The objective of this Standard is to specify construction, dimensions and tests for 0.6/1 kV rated cross-linked polyethylene insulated aerial bundled cables.

This revised Standard differs from the superseded Standard in the following significant ways:

(a) Marking of cores has been changed.

(b) The high voltage test has been increased to 3.75 kV.

(c) Appendix B has been modified and the adhesion slip criteria increased to 3 mm.

(d) X-FP-90 insulation has been deleted.

(e) Table 2.2 has been deleted.

(f) Tests on insulation reference AS/NZS 3808 instead of specifying tests separately.

(g) An optional heat radiation test has been included.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies the construction, dimensions and tests for 0.6/1 kV rated cross-linked polyethylene insulated aerial bundled cables (ABC) of 2, 3 or 4 cores having aluminium conductors with cross-sectional areas of 16 mm^2 to 150 mm^2.

The cables are designed for use with mechanical fittings for aerial bundled cables specified in AS 3766.

Cable construction, identification and preparation for delivery requirements are specified in Section 2 and tests in Section 3.

NOTES:

1 See Appendix A for guidelines on information that should be supplied with enquiries or orders.

2 See Appendix E for technical data on cables and a guide to cable selection.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1125 Conductors in insulated electric cables and flexible cords

2193 Methods for calibrating and grading of force-measuring systems of testing machines

2706 Numerical values—Rounding and interpretation of limiting values

3766 Mechanical fittings for low voltage aerial bundled cables

3983 Metal drums for insulated electric cables and bare conductors

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1660 Test methods for electric cables, cords and conductors (all parts)

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