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Australian Standard®

Electric cables—Reeling and trailing—For underground coal mining purposes

AS/NZS 1802:1995
Electric cables—Reeling and trailing—For underground coal mining purposes
(In Professional Package 32A)
54pp II
Specifies the application, materials, construction, dimensions and tests for elastomer insulated and sheathed reeling and trailing electric cables, for use in underground coal mines.
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Australian Electrical and Electronic Manufacturers Association
Department of Defence
Department of Minerals and Energy, New South Wales
Electrical Contractors Associations of Australia
Electrical regulatory authorities
Electricity Supply Association of Australia
Railways of Australia Committee
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Electric cables—Reeling and trailing—For underground coal mining purposes

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PREFACE

This Standard was prepared by the Standards Australia Committee on Electric Wires and Cables to supersede AS 1802—1985: *Reeling and trailing electric cables for underground coal mining purposes*. The Standard aligns with AS 2802—1992: *Electric cables—Reeling and trailing—For mining and general use (Other than underground coal mining)* for cables that have been developed to meet the special requirements of the Australian surface mining industry and the requirements of AS 3007—1987: *Electrical Installations—Surface mines and associated processing plant*.

During preparation of this Standard, extensive consultations were held with cable users, manufacturers of cable and regulatory authorities to establish present requirements, the demand for certain types of cable and the different requirements for the size of earth conductors for cables subject to coal mining regulations and to the conditions specified in AS 3007.

This revised Standard differs from the superseded Standard in the following ways:

- (a) New general-purpose cables having a voltage designation 1.1/1.1 kV, suitable for heavy duty reeling and shuttle car applications, have been added. These cables have been designated 280A and 280B and comprise semiconductive, individually screened power cores. Type 280A has an extruded semiconductive elastomer insulation screen, and Type 280B has a textile-reinforced semiconductive tape insulation screen.
- (b) For Types 280A, 280B and 275 cables, having power conductors with cross-sectional areas in the range up to and including 50 mm², the conductance of the earth conductors has been increased from 50 percent to 75 percent of the conductance of the associated power conductor.

The objective of the introduction of Type 280A and 280B cables is to permit the regulatory authorities to phase out Type 275. The reason is that Type 275 is the only a.c. cable in this Standard not incorporating individually screened power cores.

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