AS 2629—2008

Australian Standard®

Separable insulated connectors for power distribution systems above 1 kV

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- Australian British Chamber of Commerce
- Australian Electrical and Electronic Manufacturers Association
- Australian Railway Association
- Energy Networks Association
- Engineers Australia
- Testing interests

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee.

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PREFACE

This Standard was reviewed by the Standards Australia Committee EL-007, Power Switchgear to supersede AS 2629—1983.

This Standard is republished from AS 2629—1983, without technical alterations. Referenced documents have been updated.

It applies to a simple and relatively inexpensive method of connection and switching of transformers and other electrical equipment in distribution systems using special flexible cable connectors.

The separable connectors covered by this Standard are intended for use only as a part of a fully protected distribution system.

This Standard illustrates a number of suitable connection interfaces, and users and manufacturers are encouraged to adopt the interface designs shown. However, connectors with interfaces different from those shown in this Standard may be in the course of development.

ANSI/IEEE Standard 386—1977 was used as the basis for this Standard and acknowledgement is made of the assistance received therefrom.

Owing to the fact that separable insulated connectors imported into Australia are manufactured to comply with requirements specified in the country of manufacture and may not be available in a form to comply with all the requirements of AS 1824, *Insulation Coordination*, certain exemptions are permitted in this Standard subject to the agreement of the purchaser.

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STANDARDS AUSTRALIA

Australian Standard

Separable insulated connectors for power distribution systems above 1 kV

S E C T I O N 1 S C O P E A N D G E N E R A L

1.1 SCOPE

This Standard specifies requirements for load-break and dead-break separable insulated connectors and ancillary equipment for use on power distribution systems at alternating voltages above 1 kV.

The Standard applies to separable insulated connectors rated at not more than 1250 A.

NOTE: Load-break connectors are available only for the lower current ratings. The purchaser should obtain information from manufacturers on available current ratings.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS
60270 High-voltage test techniques—Partial discharge measurements

1931 High-voltage test techniques
1931.1 Part 1: General definitions and test requirements

AS/NZS
1429 Electric cables—Polymeric insulated
1429.1 Part 1: For working voltages 1.9/3.3 (3.6) kV up to and including 19/33 (36) kV

IEEE
592 Exposed Semiconducting Shields on High Voltage Cable Joints and Separable Connectors

1.3 SERVICE CONDITIONS

1.3.1 Normal service conditions

Connectors complying with this Standard are suitable for use in clean air and exposure to direct sunlight under the following conditions:

(a) The ambient air temperature does not exceed 40°C, and its average value measured over a period of 24 h does not exceed 35°C.

(b) The ambient air temperature is not less than −10°C.

(c) The maximum temperature due to sunlight does not exceed an equivalent black body temperature of 80°C.

NOTE: For practical purposes this is equivalent to 1.1 kW/m^2.

(d) The altitude does not exceed 1000 m.

(e) The ambient air is not materially polluted by dust, smoke, corrosive or flammable gases and vapours or salt.

NOTE: Sudden drops of temperature of up to 20°C in a period of 20 min and the presence of rain and condensation should be taken into account.