

Australian/New Zealand Standard™

**Connecting devices – Flat quick-connect terminations for electrical copper conductors – Safety requirements (IEC 61210:2010 (ED. 2.0), MOD)**



AS/NZS 61210:2019

This Joint Australian/New Zealand Standard™ was prepared by Joint Technical Committee EL-004, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 30 January 2019 and by the New Zealand Standards Approval Board on 30 January 2019.

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The following are represented on Committee EL-004:

- Association of Accredited Certification Bodies
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- Australian Industry Group
- Consumer Electronics Suppliers Association
- Consumers Federation of Australia
- Electrical Compliance Testing Association of Australia
- Electrical Regulatory Authorities Council
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- International Accreditation New Zealand
- Joint Accreditation System of Australia and New Zealand
- National Electrical and Communications Association
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This Standard was issued in draft form for comment as DR AS/NZS 61210:2018.

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**Connecting devices – Flat quick-connect terminations for electrical copper conductors – Safety requirements (IEC 61210:2010 (ED. 2.0), MOD)**

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## Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-004, Electrical Accessories, to supersede AS/NZS 61210:2002, *Connecting devices — Flat quick-connect terminations for electrical copper conductors — Safety requirements (IEC 61210:1993, MOD)*.

The objective of this Standard is to apply to non-insulated flat quick-connect terminations consisting of a male tab of size 2.8 mm, 4.8 mm, 6.3 mm or 9.5 mm with hole or dimple detents and a mating female connector for use as either an incorporated or an integrated part of an equipment or of a component, or as a separate entity.

This Standard establishes uniform requirements for the dimensions, performance characteristics and test program.

The connected electrical copper conductors will be flexible or rigid stranded, having a cross-sectional area up to and including 6 mm<sup>2</sup> or rigid solid having a cross-sectional area up to and including 2.5 mm<sup>2</sup>. This Standard is not to be used for connecting aluminium conductors.

The rated voltage is not to exceed 1 000 V a.c. with a frequency up to and including 1 000 Hz, and 1 500 V d.c., and having the temperature limits applicable to materials used within this Standard.

This Standard is an adoption with national modifications, and has been reproduced from, IEC 61210:2010 (ED 2.0), *Connecting devices — Flat quick-connect terminations for electrical copper conductors — Safety requirements*. The modifications are additional requirements and are set out in Appendix ZZ, which has been added at the end of the source text.

Appendix ZZ, lists the variations to IEC 61210:2010 for the application of this Standard in Australia and New Zealand.

As this document has been reproduced from an International Standard, the following applies:

- (a) In the source text “this International Standard” should read “this Australian/New Zealand Standard”.
- (b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**CONNECTING DEVICES –  
FLAT QUICK-CONNECT TERMINATIONS  
FOR ELECTRICAL COPPER CONDUCTORS –  
SAFETY REQUIREMENTS**

FOREWORD

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International Standard IEC 61210 has been prepared by subcommittee 23F: Connecting devices, of IEC technical committee 23: Electrical accessories.

This second edition cancels and replaces the first edition published in 1993 and constitutes a merge between the first edition of IEC 61210 published by SC23F and IEC 60760 published in 1989 by SC48B. This second edition does not introduce major technical modifications.

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

FDIS	Report on voting
23F/200/FDIS	23F/202/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

# CONNECTING DEVICES – FLAT QUICK-CONNECT TERMINATIONS FOR ELECTRICAL COPPER CONDUCTORS – SAFETY REQUIREMENTS

## 1 Scope

This International Standard applies to non-insulated flat quick-connect terminations consisting of a male tab of size 2,8 mm, 4,8 mm, 6,3 mm or 9,5 mm with hole or dimple detents and a mating female connector for use as either an incorporated or an integrated part of an equipment or of a component, or as a separate entity. This standard establishes uniform requirements for the dimensions, performance characteristics and test program.

The connected electrical copper conductors shall be flexible or rigid stranded, having a cross-sectional area up to and including 6 mm<sup>2</sup> or rigid solid having a cross-sectional area up to and including 2,5 mm<sup>2</sup>. This standard shall not be used for connecting aluminum conductors.

The rated voltage shall not exceed 1 000 V a.c. with a frequency up to and including 1 000 Hz, and 1 500 V d.c., and having the temperature limits applicable to materials used within this standard.

NOTE 1 This standard, where applicable, may be used for conductors made of material other than copper.

NOTE 2 For reasons of safety, it is recommended that flat quick-connect terminations beyond the scope of this standard should not be interchangeable with those of this standard.

NOTE 3 This standard does not apply to female connectors with positive locking means.

NOTE 4 The flat quick-connect terminations covered by this standard are not intended to be disconnected by pulling on the cable.

NOTE 5 Annex D provides additional information on non international units.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*

IEC 60352-2:2006, *Solderless connections – Part 2: Crimped connections – General requirements, test methods and practical guidance*

ISO 1456:2009, *Metallic and other inorganic coatings – Electrodeposited coatings of nickel, nickel plus chromium, copper plus nickel and of copper plus nickel plus chromium*

ISO 2081:2008, *Metallic and other inorganic coatings – Electroplated coatings of zinc with supplementary treatments on iron or steel*

ISO 2093:1986, *Electroplated coatings of tin – Specification and test methods*