AS/NZS IEC 60999.1:2012
IEC 60999-1, Ed.2.0 (1999)

AS/NZS IEC 60999.1:2012

Australian/New Zealand Standard™

# Connecting devices—Electrical copper conductors—Safety requirements for screw-type and screwless-type clamping units

## Part 1: General requirements and particular requirements for clamping units for conductors from 0.2 $mm^2$ up to 35 $mm^2$ (included)

STANDARDS Australia

STANDARDS NEW ZEALAND PAEREWA AOTEAROA

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 27 March 2012 and on behalf of the Council of Standards New Zealand on 29 March 2012.
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The following are represented on Committee EL-004:

Australian Industry Group
Consumer Electronics Suppliers Association
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Electrical Regulatory Authorities Council
Engineers Australia
International Accreditation New Zealand
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*This Standard was issued in draft form for comment as DR AS/NZS IEC 60999.1.*

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# Connecting devices—Electrical copper conductors—Safety requirements for screw-type and screwless-type clamping units

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# PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-004, Electrical Accessories.

The objective of this Standard is to provide the Australian and New Zealand electrical industry, including manufacturers, regulators, test laboratories and certification bodies, with requirements for screw-type and screwless-type clamping units for connecting devices, either as separate entities or as integral parts of equipment, for the connection of electrical copper conductors, rigid (solid or stranded) and/or flexible, having a cross-sectional area of 0.2 mm² up to and including 35 mm² and equivalent AWG sizes with a rated voltage not exceeding 1000 V a.c. with a frequency up to and including 1000 Hz, and 1500 V d.c.

The essential safety requirements in AS/NZS 3820, *Essential safety requirements for electrical equipment*, that could be applicable to screw-type and screwless-type clamping units for conductors from 0.2 $mm^2$ up to 35 $mm^2$ (included) are covered by this Standard, taken in conjunction with any other relevant requirements affecting safety.

This Standard is identical with, and has been reproduced from, IEC 60999-1, Ed.2.0 (1999), *Connecting devices—Electrical copper conductors—Safety requirements for screw-type and screwless-type clamping units*, Part 1: *General requirements and particular requirements for clamping units for conductors from 0,2 $mm^2$ up to 35 $mm^2$ (included)*.

As this Standard is reproduced from an International Standard, the following applies:

(a) Its number appears on the cover and title page while the International Standard number appears only on the cover.

(b) In the source text ‘this part of IEC 60999’ should read ‘this Australian/New Zealand Standard’.

(c) A full point substitutes for a comma when referring to a decimal marker.

Only international references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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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AUSTRALIAN/ NEW ZEALAND STANDARD

# Connecting devices—Electrical copper conductors—Safety requirements for screw-type and screwless-type clamping units

## Part 1:
## General requirements and particular requirements for clamping units for conductors from 0.2 $mm^2$ up to 35 $mm^2$ (included)

### 1 Scope

This part of IEC 60999 applies to screw-type and screwless-type clamping units for connecting devices, either as separate entities or as integral parts of equipment, for the connection of electrical copper conductors (complying with IEC 60228), rigid (solid or stranded) and/or flexible, having a cross-sectional area of 0,2 mm² up to and including 35 mm² and equivalent AWG sizes with a rated voltage not exceeding 1 000 V a.c. with a frequency up to and including 1 000 Hz, and 1 500 V d.c.

It applies to clamping units primarily suitable for connecting unprepared conductors.

This standard does not apply to clamping units

a) for connection by crimping or soldering;

b) for data and signalling circuits;

c) for flat quick-connect terminations, insulation-piercing connecting devices and twist-on connecting devices, which are covered by IEC 61210 [3][1)], IEC 60998-2-3 [1] and IEC 60998-2-4 [2] respectively.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60999. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60999 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60228:1978, *Conductors of insulated cables*

IEC 60228A:1982, *Conductors of insulated cables – First supplement*

IEC 60344:1980, *Guide to the calculation of resistance of plain and coated copper conductors of low-frequency cables and wires*

IEC 61545:1996, *Connecting devices – Devices for the connection of aluminium conductors in clamping units of any material and copper conductors in aluminium bodied clamping units*

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[1)] Figures in square brackets refer to the bibliography.