AS/NZS IEC 60998.1:2012

Australian/New Zealand Standard™

Connecting devices for low-voltage circuits for household and similar purposes

Part 1: General requirements

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 8 June 2012 and on behalf of the Council of Standards New Zealand on 8 June 2012.
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The following are represented on Committee EL-004:

Australian Industry Group
Consumer Electronics Suppliers Association
Consumers Federation of Australia
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
Engineers Australia
International Accreditation New Zealand
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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS IEC 60998.1.

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Part 1: General requirements

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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 60998.1:1998, *Connecting devices for low-voltage circuits for household and similar purposes*, Part 1: *General requirements*.

The objective of this Standard is to provide Australian and New Zealand electrical industries with general requirements for connecting devices as separate entities for the connection of two or more electrical copper conductors.

The essential safety requirements in AS/NZS 3820, *Essential safety requirements for electrical equipment* that could be applicable to connecting devices for low voltage circuits for households are covered by this Standard.

This Standard is identical with, and has been reproduced from IEC 60998-1, Ed.2.0 (2002), *Connecting devices for low-voltage circuits for household and similar purposes*—Part 1*: General requirements*. This edition incorporates IEC Interpretation Sheet 1 (2005).

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 60998' should read 'this part of AS/NZS 60998'.

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

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Reference to International Standard		*Australian/New Zealand Standard*	
IEC		AS	
60068	Basic environmental testing procedures	60068	Environmental testing
60068-2-32	Part 2-32: Tests—Test Ed: Free fall	60068.2.32	Part 2.32: Tests—Test Ed: Free fall
60068-2-75	Part 2-75: Tests—Test Ed: Hammer tests	60068.2.75	Part 2.75: Tests—Test Ed: Hammer tests
		AS/NZS	
60695	Fire hazard testing	60695	Fire hazard testing
60695-2-10	Part 2-10: Glowing/hot-wire based test methods—Glow-wire apparatus and common test procedure	60695.2.10	Part 2.10: Glowing/hot wire based test methods—Glow-wire apparatus and common test procedure
ISO		AS	
2093	Electroplated coatings of tin—Specification and test methods	4169	Electroplated coatings—Tin and tin alloys

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

The term 'informative' has been used in this Standard to define the application of the annex to which it applies. An 'informative' approach is only for information and guidance.

CONTENTS

FOREWORD

In this publication, the following print types are used:

– requirements proper: in roman type;

– *test specifications: in italic type;*

– explanatory matter: in smaller roman type.

AUSTRALIAN/NEW ZEALAND STANDARD

Connecting devices for low-voltage circuits for household and similar purposes

Part 1: General requirements

1 Scope

This part of IEC 60998 applies to connecting devices as separate entities for the connection of two or more electrical copper conductors (complying with IEC 60228 or IEC 60344) rigid (solid or stranded) or flexible, having a cross-sectional area of 0,2 mm^2 up to and including 35 mm^2 and equivalent AWG conductors with a rated voltage not exceeding 1 000 V a.c. up to and including 1 000 Hz and 1 500 V d.c. where electrical energy is used for household and similar purposes.

NOTE Rated connecting capacities lower than 0,5 mm^2 are referred to IEC 60344 and rated connecting capacities equal to, or higher than, 0,5 mm^2 are referred to IEC 60228.

Connecting devices that require the use of special tools other than for twist-on connecting devices and insulation piercing connecting devices do not comply with this standard.

This standard contains the general requirements to be used together with the relevant Part 2, containing detailed particular requirements for

– devices with screw-type clamping units (IEC 60998-2-1);
– devices with screwless-type clamping units (IEC 60998-2-2);
– devices with insulation piercing clamping units (IEC 60998-2-3);
– devices with twist-on connecting devices (IEC 60998-2-4);
– devices with connecting boxes (junction and/or tapping) (IEC 60998-2-5).

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 60068-2-32:1975, *Basic environmental testing procedures – Part 2: Tests – Test Ed: Free fall*

IEC 60068-2-75:1997, *Environmental testing – Part 2: Tests – Test Eh: Hammer tests*

IEC 60112:1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*

IEC 60228:1978, *Conductors of insulated cables*
Amendment 1 (1993)

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