

Australian/New Zealand Standard™

**Safety of power transformers, power
supply units and similar**

**Part 2.8: Particular requirements for bell
and chime transformers
(IEC 61558-2-8:1998, MOD)**



Standards Australia



STANDARDS
NEW ZEALAND
Pūrongo Aotearoa

AS/NZS 61558.2.8:2001

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The following interests are represented on Committee EL/2:

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Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Canterbury Manufacturers Association New Zealand
Consumer Electronic Suppliers Association, Australia
Electrical regulatory authorities, Australia
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AS/NZS 61558.2.8:2001
(IEC 61558-2-8:1998, MOD)

Australian/New Zealand Standard™

Safety of power transformers, power supply units and similar -

Part 2.8: Particular requirements for bell and chime transformers
(IEC 61558-2-8:1998, IDT)

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PREFACE

This standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-002- Safety of Household and Similar Electrical Appliances and Small Power Transformers, to supersede, AS/NZS 3108, Chapter 3, Section 3, two years from publication.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with safety requirements for the design, manufacture and testing of bell and chime transformers which can form the basis for approval by regulatory authorities.

This Standard forms the first edition of AS/NZS 61558.2.8 *Safety of power transformers, power supply units and similar - Part 2.8: Particular requirements for bell and chime transformers.*

This Standard is an adoption with national modifications and contains the full text of the first edition of IEC 61558-2-8:1998, *Safety of power transformers, power supply units and similar - Part 2-8: Particular requirements for bell and chime transformers* and has been varied as indicated to take account of Australian and New Zealand conditions. It is to be used in conjunction with the latest edition of AS/NZS 61558.1 and its amendments. It was established on the basis of the first edition (2000) of that standard.

This part 2 supplements or modifies the corresponding clauses of AS/NZS 61558.1 so as to convert it into the Australian/New Zealand Standard: *Safety requirements for bell and chime transformers.*

Where a particular subclause of part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. Where this Standard states "addition", "modification" or "replacement", the relevant text in part 1 is to be adapted accordingly.

NOTE 1 Subclauses, notes, tables and figures which are additional to those in part 1 are numbered starting from 101. Annexes, which are additional to those in part 1 are lettered AA, BB, etc.

Annex ZZ is for information only.

NOTE 2 In this Standard the following print types are used:

- requirements: in arial type;
- *test specifications: in italic type;*
- notes: in small arial type;

Words **in bold** in the text are defined in clause 3.

The numbering of clauses, subclauses, notes, tables, figures and annexes follows that of IEC 61558-2-8:1998. To allow for the introduction of additional material by the IEC, the numbers 101 to 200 have been reserved. To allow for additional material to be introduced by Australia and New Zealand, the numbers 201 to 300 are used to number further clauses, subclauses, notes, tables and figures in part 1. The numbers 301 to 400 are used to number further clauses, subclauses, notes, tables and figures in this part 2. Additional annexes are lettered ZA, ZB and so on.

This scheme has been introduced to reduce the likelihood of the IEC and Australia and New Zealand using the same identifier for different purposes.

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

- (a) Its number does not appear on each page of text and its identity is shown on the cover and title page only.
- (b) In the source text "this International Standard" should read "this Australian/New Zealand Standard".
- (c) A full point substitutes for a comma when referring to a decimal marker.

Variations to IEC 61558-2-8:1998 are indicated at the appropriate places throughout this standard. Strikethrough (~~example~~) identifies IEC tables, figures and passages of text which, for the purposes of this Australian/New Zealand standard are deleted. Where Australian/New Zealand tables, figures or passages of text are added, each is set in its proper place and identified by shading (~~example~~). Added figures are not themselves shaded, but are identified by a shaded border. The variations in this standard do not affect the technical content of IEC 61558-2-8:1998, therefore in terms of ISO/IEC Guide 21 this standard is identical to IEC 61558-2-8:1998.

AUSTRALIA/NEW ZEALAND STANDARD

SAFETY OF SMALL POWER TRANSFORMERS, POWER SUPPLY UNITS AND SIMILAR –

Part 2.8: Particular requirements for bell and chime transformers (IEC 61558-2-8:1998, IDT)

1 Scope

Replacement:

This international standard deals with all aspects of safety such as electrical, thermal and mechanical.

This part 2-8 of IEC 61558 AS/NZS 61558 applies to **fixed**, single-phase, air-cooled (natural or forced), **independent** or **associated safety isolating transformers** for bell and chimes, having a **rated supply voltage** not exceeding 250 V a.c., a **rated frequency** not exceeding 500 Hz, a **rated output** not exceeding 100 VA.

The **no-load output voltage** shall not exceed 33 V a.c. or 46 V ripple free d.c. and the **rated output voltage** shall not exceed 24 V a.c. or 33 V ripple free d.c.

Bell and **chime transformers** are generally intended to supply domestic sound signalling equipment and other similar devices where the load is applied for short periods of time.

NOTE 1 – A partial load may be applied for illumination purposes.

This standard applies to special **safety isolating transformers** (transformer for bell and chime) which are used where **double** or **reinforced insulation** between circuits is required by the installation rules or by the appliance specification.

This standard is applicable to **dry-type transformers**. The windings may be encapsulated or non-encapsulated.

~~NOTE 2 – Attention is drawn to the fact that for transformers intended to be used in tropical countries special requirements may be necessary.~~

NOTE 2. – for the purposes of this standard, Australia and New Zealand are not considered to be tropical;

This standard also applies to transformers incorporating electronic circuits. This standard does not apply to external circuits and their components intended to be connected to the input and output terminals or socket-outlets of the transformer.

2 Normative references

This clause of part 1 is applicable.