

AS/NZS 61558.2.16:2010  
IEC 61558-2-16 Ed 1.1  
(Incorporating Amendment Nos 1, 2 and 3)  
(IEC TEXT)

AS/NZS 61558.2.16:2010

Australian/New Zealand Standard™

**Safety of transformers, reactors, power  
supply units and similar products for  
voltages up to 1 100 V**

**Part 2.16: Particular requirements and  
tests for switch mode power supply  
units and transformers for switch mode  
power supply units**



## **AS/NZS 61558.2.16:2010**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-002, Safety of Household and Similar Electrical Appliances and Small Power Transformers. It was approved on behalf of the Council of Standards Australia on 17 March 2010 and on behalf of the Council of Standards New Zealand on 19 March 2010.

This Standard was published on 31 May 2010.

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The following are represented on Committee EL-002:

- Australian Industry Group
  - A3 | National Retailers Association (Australia)
  - Business New Zealand
  - Consumer Electronic Suppliers Association, Australia
  - Consumers' Federation of Australia
  - Electrical regulatory authorities, Australia
  - Electrical Compliance Testing Association
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  - A3 | Testing Interests New Zealand
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AS/NZS 61558.2.16:2010  
(Incorporating Amendment Nos 1 and 2)

## Australian/New Zealand Standard™

### **Safety of transformers, reactors, power supply units and similar products for voltages up to 1 100 V**

### **Part 2.16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units**

First edition AS/NZS 61558.2.16:2010.  
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## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

## AS/NZS 61558.2.16:2010

**Safety of transformers, reactors, power supply units and similar products  
for voltages up to 1 100 V –**
**Part 2.16: Particular requirements and tests for switch mode power supply units and  
transformers for switch mode power supply units**
**Foreword**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-002 - Safety of Household and Similar Electrical Appliances and Small Power Transformers to supersede AS/NZS 61558.2.17:2001 three years from the date of publication. During this period it is anticipated that regulatory authorities will approve transformers for switch mode power supplies to either standard.

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 switch mode power supply units and transformers for switch mode power supply units which can form the basis for approval by regulatory authorities.

The text IEC 61558-2-16 Ed 1, prepared by IEC Technical Committee 96, was submitted to the Standards Australia/Standards New Zealand Combine Procedure (dual public comment and committee vote) for adoption of the IEC standard as a Standards Australia/Standards New Zealand joint standard.

This standard incorporates Amendment No. 1 (October 2010), Amendment No. 2 (June 2012) and Amendment No. 3 (June 2014). The changes introduced by Amendments are indicated in the text by a marginal bar and amendment number against the part affected. Where an application date other than immediate is applicable to an amendment the date of application (DOA) is indicated by the marginal bar against the part affected. The application date of the changes introduced by Amendment 3 is 31 May 2016. Up until this date it is anticipated that regulatory authorities will approve switch mode power supply units and transformers for switch mode power supply units to AS/NZS 61558.2.16:2010 + A1:2010 + A2:2012 or AS/NZS 61558.2.16:2010 + A1:2010 + A2:2012 + A3:2014.

This Standard is an adoption with national modifications of the first edition of IEC 61558-2-16:2009, *Safety of transformers, reactors, power supply units and similar products for voltages up to 1 100 V – Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units* and its amendment 1. It has been varied as indicated to take account of Australian and New Zealand conditions.

This part 2 has to be used in conjunction with the latest edition of AS/NZS 61558.1 *Safety of Power Transformers, Power Supplies, Reactors and Similar Products – Part 1: General requirements and tests* and its amendments. It was established on the basis of the 2008 edition of that standard. Amendments and revisions of Part 1 have also to be taken into account and the dates when such changes become applicable will be stated in the relevant amendment or revision of Part 1.

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 and tests for switch mode power supply units and transformers for switch mode power supply units*.

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

### 3 AS/NZS 61558.2.16:2010 + A1 + A2 + A3

NOTE 1 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;
- additional annexes are lettered AA, BB, etc.;
- subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letters AZ.

NOTE 2 The following print types are used:

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

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

p NOTE 3 In this document, p is used in the margin to indicate instructions for preparing a consolidated version.

A2 | The essential safety requirements in AS/NZS 3820<sup>1</sup> that could be applicable to requirements and tests for switch mode power supply units and transformers for switch mode power supply units are covered by this standard.

A3 | The national variations to the IEC 61558-2-16 Ed 1.1 form the Australian and New Zealand national variations for purposes of the IECEE scheme for recognition of results of testing to standards for safety of electrical equipment (the CB scheme).

There are no national variations from the IEC Standard from which this standard is adopted, other than those listed in Annex ZZ to AS/NZS 61558.1.

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<sup>1</sup> AS/NZS 3820 *Essential safety requirements for low voltage electrical equipment*

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