AS/NZS 62115:2018
(IEC 62115 Ed 2, IDT)

Australian/New Zealand Standard

Electric toys – Safety

Superseding AS/NZS 62115:2011 on 29 June 2021

Includes IEC 62115 Ed 2

AS/NZS 62115:2018

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 5 June 2018 and by the New Zealand Standards Approvals Board on 6 June 2018. It was published on 29 June 2018.

The following interests are represented on Committee EL/2

Association of Accredited Certification Bodies

Australian Industry Group

National Retailers Association (Australia)

Business New Zealand

Consumer Electronic Suppliers Association, Australia

Consumers' Federation of Australia

Electrical Regulatory Authorities, Australia

Electrical consultants

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JAS-ANZ

Testing Interests New Zealand

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This standard was issued in draft form for comment as DR 17914

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

AS/NZS 62115:2018

ELECTRIC TOYS –SAFETY

Foreword

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 62115:2011 three years from the date of publication.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with safety requirements designed to give the user protection against hazards that might occur during normal operation and abnormal operation of the appliance and which may be used as the basis for approval for sale or for connection to the electricity supply mains in Australia and New Zealand.

The text of IEC 62115 Ed 2, prepared by IEC Technical Committee TC 61, was submitted to the Standards Australia/Standards New Zealand Combined Procedure (dual public comment and committee vote) for adoption of the IEC standard as a Standards Australia/Standards New Zealand joint standard.

This edition includes the following significant technical changes with respect to the previous edition:

– the general conditions for tests has been rewritten and modified (Clause 5);
– the criteria for reduced testing has been modified (Clause 6);
– warnings for toys using button batteries or coin batteries have been added (7.3.3.2, 7.3.3.3);
– warnings on ride-on toys have been added (7.5);
– the requirements concerning accessibility of batteries have been updated (13.4.1 and 13.4.2);
– added requirements to cover toys placed above a child (13.4.4);
– added requirements to cover toys connected to other equipment (13.9);
– modified the requirements for safety of toys incorporating optical radiation sources (Annex E), to include requirements for using the technical LED data sheet for checking compliance with the specified accessible emission limits (AEL);
– updated the details for measurements of the optical radiation from the toy (Annex E);
– introduced an informative Annex I concerning measurement methods for toys with an integrated field source generating EMF;
– included a normative Annex J concerning safety of remote controls for electric ride-on toys.

This Standard is an adoption with national modifications of the second edition of IEC 62115 *Electric toys – Safety*).

The essential safety requirements in AS/NZS 3820[1] that could be applicable to requirements for electric toys are covered by this standard.

[1] AS/NZS 3820 *Essential safety requirements for electrical equipment*

The national variations to IEC 62115 Ed 2 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).

The text of the International Standard IEC 62115 Ed 2 was approved as a joint Australia/New Zealand Standard with the agreed national variations as given below.

AUSTRALIAN NATIONAL VARIATIONS

There are no national variations to this standard.

NEW ZEALAND NATIONAL VARIATIONS

There are no national variations to this standard.

Annex ANZ
(normative)
Normative references to international publications with their corresponding joint Australia/New Zealand publications

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.

NOTE When an international publication has been modified by national variations the relevant joint Australia/New Zealand publications applies if the national variations are needed to ensure the safety of the appliance for Australia/New Zealand conditions. These international publications are indicated by (mod). If an international publication is not so indicated, then either it or the listed Australia/New Zealand publication may be used.

Publication	Year	Title	AS/NZS	Year
IEC 60068-2-75:	2014,	*Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*		
IEC TR 60083,		*Plugs and socket-outlets for domestic and similar general use standardized in member countries of IEC*		
IEC 60086-2:	2015,	*Primary batteries – Part 2: Physical and electrical specifications*		
IEC 60068 (All Parts),		*Primary batteries*		
IEC 60335-1 IEC 60335-1:2010/AMD1 IEC 60335-1:2010/AMD2:[2]	2010, 2013, 2016,	*Household and similar electrical appliances – Safety – Part 1: General requirements*		
IEC 60335-2-29:	2016,	*Household and similar electrical appliances – Safety – Part 2-29: Particular requirements for battery chargers*		
IEC 60384-14,		*Fixed capacitors for use in electronic equipment – Part 14: Sectional specification – Fixed capacitors for electromagnetic interference suppression and connection to the supply mains*		
IEC 60417,		*Graphical symbols for use on equipment*		
IEC 60529: IEC 60529/AMD1: IEC 60529/AMD2:[3]	1989, 1999, 2013,	*Degrees of protection provided by enclosures (IP Code)*		
IEC 60695-2-11,		*Fire hazard testing – Part 2-11: Glowing/hot-wire based test methods – Glow-wire flammability test method for end-products (GWEPT)*		

[2] There exists a consolidated edition 5.2 (2016) that includes edition 5 and its Amendment 1 and Amendment

[3] There exists a consolidated edition 2.2 (2013) that includes edition 2 and its Amendment 1 and Amendment 2.

IEC 60695-2-13,		*Fire hazard testing – Part 2-13: Glowing/hot-wire based test methods – Glow-wire ignition temperature (GWIT) test method for materials*
IEC 60695-10-2,		*Fire hazard testing – Part 10-2: Abnormal heat – Ball pressure test method*
IEC 60695-11-5:	2005,	*Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*
IEC 60695-11-10,		*Fire hazard testing – Part 11-10: Test flames – 50 W horizontal and vertical flame test methods*
IEC 60730 (All Parts),		*Automatic electrical controls*
IEC 60730-1: IEC 60730-1:2013/AMD1[4]	2013, 2013,	*Automatic electrical controls – Part 1: General requirements*
IEC 60748-1,		*Thermistors – Directly heated positive temperature coefficient – Part 1: Generic specification*
IEC 60990:	2016,	*Methods of measurement of touch current and protective conductor current*
IEC 61000-4-2:	2008,	*Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test*
IEC 61000-4-3: IEC 61000-4-3/AMD1: IEC 61000-4-3/AMD2:[5]	2006, 2007, 2010,	*Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test*
IEC 61000-4-4:	2012,	*Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test*
IEC 61000-4-5:	2014,	*Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test*
IEC 61000:	2013,	*Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*

[4] There exists a consolidated edition 5.1 (2015) that includes edition 5 and its Amendment 1.

[5] There exists a consolidated edition 3.2 (2010) that includes edition 3 and its Amendment 1 and Amendment 2.

IEC 61000-4-11:	2004,	*Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests*
IEC 61000-4-13 IEC 61000-4-13/AMD1: IEC 61000-4-13/AMD2:[6]	2002, 2009, 2015,	*Electromagnetic compatibility (EMC) – Part 4-13: Testing andmeasurement techniques – Harmonics and interharmonics including mains signalling at a.c. power port, low frequency immunity tests*
IEC 61032,		*Protection of persons and equipment by enclosures – Probes for verification*
IEC 61058-1:	2016,	*Switches for appliances – Part 1: General requirements*
IEC 61058-1-1:	2016	*Switches for appliances – Part 1-1: Requirements for mechanical switches*
IEC 61058-1-2:	2016,	*Switches for appliances – Part 1-2: Requirements for electronic switches*
IEC 61180,		*High-voltage test techniques for low-voltage equipment – Definitions, test and procedure requirements, test equipment*
IEC 61558-2-7,		*Safety of power transformers, power supplies, reactors and similar products – Part 2-7: Particular requirements and tests for transformers and power supplies for toys*
IEC 61558-2-16,		*Safety of transformers, reactors, power supply units and similar products for supply 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*
IEC 62133,		*Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications*
IEC 62233:	2005,	*Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure*

[6] There exists a consolidated edition 1.2 (2015) that includes edition 1 and its Amendment 1 and Amendment 2.