

Regulatory definitions for Australia and New Zealand

This document sets out the regulatory definitions of:

- The Declared Articles for **REAS** under the **NSW Electricity (Consumer Safety) Act 2004**; and
- The Electrical Equipment Safety Scheme (EESS) of Level 2 and 3 in-scope-equipment as published in **AS/NZS 4417.2 Appendix B2 (Combined AS & NZ) and B3 (additional requirements for New Zealand)**. The Appendix B definitions and information are [bracketed] and where requirements vary they are listed in the AU and NZ sections at the end of this document and Level 2 equipment is noted as such.

The Class Specifications or Standards listed at the end of each definition reflects those listed in the New South Wales legislation. These may vary from the requirements in AS/NZS 4417.2. SAA product certification process will use the NSW requirements for Declared Articles or where appropriate, the latest version.

For Non-Declared articles the current version will apply.

All electrical products that fall within one of the following definitions must have certification prior to sale. If you are uncertain if your product is declared please contact SAA Approvals.

A Class Specification that is in the course of being replaced by another Class Specification or Edition, the date when replacement Class Specification takes force is in brackets.

DOA means Date of Application and noted as DOA: dd/mm/yyyy

LED means Light Emitting Diode

NOTE:

Where reference is made to a "part 2" specification, such as, AS/NZS 60335.2.2, AS/NZS 60598.2.1 or AS/NZS 61347.2.3 it also includes the base specification as per AS/NZS 60335.1, AS/NZS 60598.1 or AS/NZS 61347.1 respectively. This also applies for specifications under the AS/NZS 3100 series such as AS/NZS 3112, 3105, 3133 where the applicable clauses of 3100 are required; refer to AS/NZS 3100 clause 1.2.

For REAS, the applicable versions of the part 1's are as follows:

AS/NZS 3100:2009+A1-4 (until 13/01/2019 or AS/NZS 3100:2017+A1

AS/NZS 60335.1:2011+A1-4

AS/NZS 60598.1:2013 (until 24/04/2019 or AS/NZS 60598.1:2017

AS/NZS 60745.1:2009 or AS/NZS 60745.1:2003+A1-3. The 2009 edition will supersede the 2003 and its amendments after all Part 2's of that standard have been superseded. Ref Item 57.

AS/NZS 61347.1:2016

AS/NZS 61535.1:2011

AS/NZS 61558.1:2008+A1-2

AS/NZS 62841.1 means AS/NZS 62841.1:2015+A1

Note: Dates of Application for versions and amendments or part thereof can be taken into account unless otherwise stated by separate lawful notice.

1. Appliance Connector [B.2.1 Appliance connector]

An electrical device which —

- (a) is for attachment to a flexible cord; and
- (b) makes a detachable connection between the conductors of the cord and the pins or contacts of any low voltage appliance or equipment of a type intended or generally used for household applications;

But does not include —

- (c) a connector within the scope of AS/NZS 3123; or
- (d) a plug or socket-outlet within the scope of AS/NZS 3131; or
- (e) an installation coupler within the scope of AS/NZS 61535.1.

Class Specification: Appliance connector: AS/NZS 60320.1:2012
Plug connector: AS/NZS 60320.1:2012 and AS/NZS 60320.2.2:2004
Sewing machine connector: AS/NZS 60320.1:2004
Standard Sheets as appropriate: IEC 60320-1, 60320-2-2 or 60320-3 Ed 1.0:2014

2. Air Conditioner incorporating Flammable Refrigerant [B.2.58] Air conditioner incorporating flammable refrigerant For REAS - This becomes mandatory on 1 July 2020

An electrical appliance that —

- (a) is for household use; and
- (b) incorporates motor compressors; and
- (c) is an electrical appliance designed to provide delivery of conditioned air to an enclosed space, room or zone; and
- (d) includes a refrigeration system for cooling, heating or dehumidifying the air, including hydronic room fan coil type systems; and
- (e) is portable, transportable or fixed; and
- (f) uses refrigerant having a flammability classification of Class 2 or Class 3 in accordance with ISO 817. For refrigerant blends that have more than one flammability classification, the most unfavourable classification is taken.

Class specification: AS/NZS 60335.2.40: 2015

3. Arc Welder Machine [B.2.2 Arc welding machine]

An electrical appliance which —

- (a) is for use in the electric arc welding process;
- (b) is for connection to single phase low voltage supply;
- (c) is fitted with a flexible cord and plug rated at not more than 16 A;
- (d) can easily be moved from one place to another while it is connected to supply; and
- (e) has, for GMAW (gas metal arc welding), GTAW (gas tungsten arc welding), and FCAW (flux cored arc welding) machines, a 100% output rating not exceeding 65 A. The 100% rating is calculated from the square root of the marked duty cycle expressed in decimal form multiplied by the marked output current associated with the duty cycle in amperes;

But does not include —

- (f) an arc welding machine promoted exclusively to industry.

Class Specification: AS 60974.6:2006 or IEC 60974-6:2015

4. Bayonet Lampholder [B.2.3 Bayonet lampholder]

An electrical device which —

- (a) accommodates a lamp with a bayonet cap of 15 mm or 22 mm nominal diameter;

But does not include —

- (b) a lampholder which by design is restricted to specific appliances; or
- (c) a lampholder which is for incorporation in industrial equipment only.

Class Specification: AS 61184:2015+A1-2; or
AS/NZS 3117:2015+A1-2

5. Bayonet Lampholder Adaptor [B.2.4 Bayonet lampholder adaptor]

An electrical device which —

- (a) is for insertion into a B22 bayonet lamp holder; and
- (b) is for connection to a flexible cord; or
- (c) has one or more lamp holders.

Class Specification: AS 3119:2015

6. Blanket [B.2.5 Blanket] [B.2.67 Over blanket / Duvet / Wrap (DOA: 30/06/2018)]

An electrical appliance which —

- (a) is for the application of heat to a bed or human body;
- (b) is flexible;
- (c) has a fabric enclosure; and
- (d) has a projected surface area exceeding 0.6 m²;

and includes —

- (e) any associated power supply or controller.

But does not include —

(f) appliances specifically intended for use under direct medical supervision.

Class Specification: AS/NZS 60335.2.17:2012+A1

7. Bread Toaster [B.2.6 Bread toaster]

An electrical appliance which —

- (a) is a household type; and
- (b) is for toasting bread or similar foods.

Class Specification: AS/NZS 60335.2.9:2009+A1 (until 28 Nov 2017); or
AS/NZS 60335.2.9:2014+A1

8. Building Wiring Cable [See B.2.59 in AU & B.3.1 in NZ sections]

This definition becomes mandatory on 29 January 2018.

A single or multicore electric cable insulated with polymeric materials; that:-

- (a) has one to five conductors of stranded or solid cores of copper conductors; and
- (b) has an insulated and laid up flat or circular configuration; and
- (c) is sheathed or unsheathed; and
- (d) has active phase conductors with a nominal cross-sectional area of 0.5 mm² to 16mm²; and
- (e) has an insulation designation of V-75, V-90, V-90HT or X-90; and
- (f) is intended for use in electrical installations at working voltages up to:-
 - (i) 450/750V; or
 - (ii) 0.6/1 (1.2) kV

But does not include —

- (g) armoured, metallic screened and metal sheathed cables;
- (h) halogen free cables;
- (i) cables with a Fire Rating;
- (j) Supply Flexible cords;
- (k) cables where the insulation of the conductors are not individually coloured;
- (l) cables with a conductor flexibility of Class 5 or greater according to AS/NZS 1125
- (m) cables not captured by the scope of AS/NZS 5000.1 or AS/NZS 5000.2

Class Specification: For working voltages up to 450/750V - AS/NZS 5000.2: 2006; or
For working voltages up to 0.6/1 (1.2)kV – AS/NZS 5000.1:2005.

Note: A Supply Flexible Cord is captured by the definition of 'Supply Flexible Cord' elsewhere in this schedule.

Note: Cables where the insulation of the conductors are not individually coloured are usually considered control cables for specialised purposes.

Note: Cables that have a conductor flexibility of Class 5 according to AS/NZS 1125 are commonly known as Flexible Cable.

Note: Cables used for the 'consumers mains' and Extra Low Voltage cables are previously excluded by the Act by being outside the definition of electrical installation.

Note: The scopes of AS/NZS 5000.1 and AS/NZS 5000.2 do not apply to polymeric insulated cables for special installations and service conditions or for which there are separate Australian/New Zealand Standards.

9. Clothes Dryer [B.2.7 Clothes dryer]

An electrical appliance which —

- (a) is a household type; and
- (b) is for drying textile material.

But does not include —

- (c) a heated towel rail.

Class Specification: Rotary type: AS/NZS 60335.2.11:2009+A1-4 Until 13 Jan 2019) or
AS/NZS 60335.2.11:2017
Cabinet type: AS/NZS 60335.2.43:2005 (R2016)+A1-2
High Speed Spin Extractor: AS/NZS 60335.2.4:2010+A1-3

10. Control or Conditioning Device [B.2.8 Control or conditioning device]

An electrical device which —

- (a) is a household type;
- (b) is for controlling or conditioning the electrical input to electrical apparatus;
- (c) is self-contained and portable; and
- (d) connects to supply by means of a flexible cord and plug, appliance inlet or pins for engagement with a socket-outlet.

Class Specification: AS/NZS 3105:2014+A1

11. Cooking Appliance – Portable Type [B.2.9 Cooking appliance – portable type]

An electrical appliance which —

- (a) is a household type;
- (b) is for cooking or warming food by electrical energy; and
- (c) is portable.

Class Specification:

Griller, roaster or oven (Including breadmaker):	AS/NZS 60335.2.9:2014+A1-3
Warming plate or similar:	AS/NZS 60335.2.12:2004+A1
Frying pan, deep fryer or wok:	AS/NZS 60335.2.13:2010 (until 30 Jun 2019) or AS/NZS 60335.2.13:2017
Outdoor barbecue:	AS/NZS 60335.2.78:2005+A1-2

12. Cord Extension Socket [B.2.10 Cord extension socket]

An electrical device which —

- (a) is for attachment to a flexible cord;
- (b) has a maximum rating of 20 A at low voltage; and
- (c) has contacts whereby a detachable connection may be made with the corresponding pins of a plug or an inlet;

But does not include —

- (d) a connector or appliance connector designated in AS/NZS 3123; or
- (e) a socket-outlet designated in AS/NZS 3131; or
- (f) an installation coupler designated in AS/NZS 61535.1

Class Specification: AS/NZS 3120:2011+A1

13. Cord-Line Switch [B.2.11 Cord-line switch]

An electrical device which —

- (a) is for attachment in a flexible cord;
- (b) manually opens and closes an electrical circuit; and
- (c) has a rating not exceeding 16 A at low voltage;

but does not include —

- (d) bell push and pendant switches.

Class Specification: AS/NZS 3127:2005

14. Decorative Lighting Outfit [B.2.12 Decorative lighting outfit]

An electrical appliance which —

- (a) is for decorative, display or illumination purposes;
- (b) is portable;
- (c) consists of —
 - (i) lamps (including LED types) or lampholders interconnected by flexible cord of less than 2.5 mm² cross-sectional area; or
 - (ii) lamps (including LED types) within a flexible enclosure; and
- (d) may be integral with a frame or similar support and includes —
- (e) any integral power supply or control device.

Class Specification: Rope lights: AS/NZS 60598.2.21:2018 (from 1 Jul 2020)
Other, including lighting chains: AS/NZS 60598.2.20:2018 (from 1 Jul 2020); or
AS/NZS 60598.2.20:2002 (until 30 Jun 2020)

15. Dishwashing Machine [B.2.13 Dishwashing machine]

An electrical appliance which —

- (a) is a household type; and
- (b) is for washing of eating or cooking utensils.

Class Specification: AS/NZS 60335.2.5:2014+A1

16. Double Capped Light Emitting Semiconductor Lamp [B.2.60 Double capped light emitting semiconductor lamp]

An electrical appliance that—

- (a) is a tubular light emitting semiconductor light source;
 - (b) is a double capped lamp; and
 - (c) has integral, built-in or independent control gear
- but does not include—
- (d) a self-ballasted light emitting semiconductor light source within the scope of AS/NZS IEC 62560.

Class specification: AS/NZS 60598.2.1 2014+A1 Appendix A.

17. Edison Screw Lampholder [B.2.14 Edison screw lampholder]

An electrical device which —

- (a) accommodates a lamp with an Edison screw cap of 14 mm or 27 mm nominal outside diameter.

but does not include —

- (b) a lampholder which by design is restricted to specific appliances; or
- (c) a lampholder which is for incorporation in industrial equipment only.

Class Specification: AS/NZS 3140:2014+A1; or
AS/NZS 60238:2015+A1-2

18. Fan [B.2.15 Fan]

An electrical appliance which —

- (a) is a household type;

- (b) has a primary function of moving air in its vicinity for comfort or extraction purposes;
 - (c) is self-contained;
- and includes —
- (d) any associated ancillary equipment.

Class Specification: AS/NZS 60335.2.80:2004+A1 (until 30 Jul 2019) or
AS/NZS 60335.2.80:2016

19. Fence Energiser [B.2.16 Fence energiser]

An electrical appliance which —
regulates and controls the supply of electrical energy to an electric fence.

Class specification: AS/NZS 60335.2.76:2003+A1-4

20. Flexible Heating Pad

[B.2.17 Flexible heating pad (Level 2 - DOA: 30/06/2018)]

[B.2.62 Electric Hot water bottle (DOA: 30/06/2018)]

An electrical appliance which —

- (a) is for application of heat to parts of the human body;
- (b) is in the form of a flexible pad; and
- (c) has a projected area not exceeding 0.6m².

And includes:

- (d) an electric hot water bottle

But does not include:

- (d) appliances specifically intended for use under direct medical supervision.

Class Specification: Foot Warmer and foot mat: AS/NZS 60335.2.81:2012 (until 30 Nov 2019) or

AS/NZS 60335.2.81:2015+A1

Other:

AS/NZS 60335.2.17:2012+A1

21. Floor Polisher/Scrubber [B.2.18 Floor polisher/scrubber (Level 2 - DOA: 30/06/2018)]

An electrical appliance which —

- (a) is a household type; and
- (b) is used to polish or scrub floors.

Class Specification: AS/NZS 60335.2.10:2006+A1

22. Fluorescent Lamp Ballast [B.2.19 Fluorescent lamp ballast]

An electrical device which —

- (a) is for controlling the magnitude of current flowing through the discharge path of a fluorescent lamp;
- (b) is of the independent or built-in type intended for use with luminaires (portable or fixed); or
- (c) is of the integral type, rated at 60W or less, such that it forms a non-replaceable part of a fluorescent lamp/ballast combination; or
- (d) is of the adaptor type such that it allows the insertion of a fluorescent lamp into the ballast by the user;

and includes —

- (e) any capacitor incorporated in or supplied with the ballast;

But does not include —

- (f) a ballast which is incorporated in luminaires certified for compliance with the requirements for electrical equipment with increased safety type protection (Ex e) for use in hazardous locations.

Class Specification:

Integral (self-ballasted) magnetic or electronic type: AS/NZS 60968:2001

Other magnetic type: AS/NZS 61347.2.8:2003

Other Electronic type: AS/NZS 61347.2.3:2016

Fluorescent lamp adaptors (T8:T5): AS/NZS 61347.2.3:2016 +

the relevant requirements of AS/NZS 60598.2.1:2016+A1

23. Glue Gun [B.2.64 Glue gun DOA: 30/06/2018]

For REAS - This becomes mandatory on 1 July 2020

An electrical appliance which —

- (a) is a household type;
- (b) is hand-held; and
- (b) is for melting and applying sticks of solid adhesive.

Class Specification: AS/NZS 60335.2.45:2012

24. Fluorescent Lamp Starter [B.2.20 Fluorescent lamp starter]

An electrical device which —

- (a) is for starting preheat type fluorescent lamps;
- (b) is a glow-start type; and
- (c) has an enclosure of insulating material.

Class Specification: AS/NZS 60155:2000+A1-2

25. Hair Care Appliance [B.2.21 Hair care appliance]

An electrical appliance which —

- (a) is a household type or a commercial hand-held type; and
- (b) is for drying, styling or the caring of human hair.

Class Specification: AS/NZS 60335.2.23:2012+A1 (until 30 Jun 2020); or
AS/NZS 60335.2.23:2017

For Hair Straighteners only —

- (i) The approval period is limited to two years.
- (ii) The test report must indicate testing has been carried out no more than twelve months prior to the application date; and
- (iii) The test report must clearly identify the model number and brand name, or the manufacturer must provide a clear and concise statement that clarifies any deviation from the report details.

26. Hedge Clipper [B.2.22 Hedge clipper]

An electrical appliance which —

- (a) is for trimming hedges; and
- (b) is hand held.

Class Specification: AS/NZS 60745.2.15:2010

27. Immersion Heaters [B.2.23 Immersion heaters]

An electrical appliance which —

- (a) is a household type;
- (b) is for heating liquid in which it may be immersed; and
- (c) is self-contained;

and includes —

- (d) aquarium type immersion heaters.

Class Specification: Aquarium type: AS/NZS 60335.2.55:2011
Portable (other than aquarium) type: AS/NZS 60335.2.74:2005+A1-2
Fixed type: AS/NZS 60335.2.73:2005+A1-2

28. Insect Electrocuter [B.2.24 Insect electrocutor]

An electrical appliance which —

- (a) is a household type; and
- (b) kills insects by the application of electrical energy.

Class Specification: AS/NZS 60335.2.59:2005+A1-3

29. Inspection Handlamp [B.2.25 Inspection handlamp]

An electrical appliance which —

- (a) is for inspection purposes using illumination;
- (b) contains an electric light source; and
- (c) is hand held;

But does not include —

- (d) handlamps with a magnification facility.

Class Specification: AS/NZS 60598.2.8:2015

30. Iron [B.2.26 Iron]

An electrical appliance which —

- (a) is a household type;
- (b) is for smoothing or pressing fabric by the application of heat or steam; and
- (c) is hand held except for any separate steam generator;

and includes —

- (d) any associated equipment.

Class Specification: Fabric steamer type: AS/NZS 60335.2.85:2005+A1
Other type: AS/NZS 60335.2.3:2012+A1

31. Kitchen Machine [B.2.27 Kitchen machine]

An electrical appliance which —

- (a) is a household type; and
- (b) is for the preparation of food by mechanical means; or
- (c) is for opening cans; or
- (d) is for sharpening of knives.

Class Specification: AS/NZS 60335.2.14:2013 (until 30 Jun 2020); or
AS/NZS 60335.2.14:2017

32. Lawn Care Appliance [B.2.28 Lawn care appliance]

An electrical appliance which —

- (a) is a household type; and

(b) is for cutting grass or lawn.

Class Specification: Mower (except for robotic lawn mower):	AS/NZS 60335.2.77:2002+A1
Robotic lawn mower:	AS/NZS 60335.2.107:2013+A1
Trimmer (with non-metallic filament Line or cutter):	AS/NZS 60335.2.91:2008+A1
Trimmer (Other):	AS/NZS 60335.2.91:2008+A1
Grass shears:	AS/NZS 60335.2.94:2008

**33. Light Emitting Semiconductor Lamp (Self Ballasted)
[B.2.65 emitting semiconductor lamp (self-ballasted) (DOA: 30/06/2018)]**

For REAS - This becomes mandatory on 1 July 2020

An electrical appliance that—

- (a) incorporates a light emitting semiconductor light source; and
- (b) has any additional elements necessary for stable operation of the light source incorporated within the lamp body and permanently connected to the light source; and
- (c) has a rated voltage greater than 50 V and up to and including 250 V; and
- (d) is intended for connection to supply via means of lamp cap for insertion into a lampholder.

but does not include—

- (e) a double capped light emitting semiconductor lamp.

Class specification: AS/NZS 62560:2017

34. Liquid Heating Appliance [B.2.29 Liquid heating appliance]

An electrical appliance which —

- (a) is a household type;
- (b) is portable;
- (c) has a capacity not exceeding 10L; and
- (d) heats liquid for —
 - (i) humidifying room air; or
 - (ii) use in, or as, a hot beverage; or
 - (iii) cooking.

Class Specification: Humidifier: AS/NZS 60335.2.98:2005+A1-2
Other: AS/NZS 60335.2.15:2013

35. Luminaire – Portable Type

[B.2.30 Luminaire – portable type] & [B.2.61 Simple portable luminaire (Level 2)] See AU Section

An electrical appliance which —

- (a) is a household type;
- (b) provides illumination or for decorative purposes, produces light;
- (c) is fitted with a supply flexible cord, an appliance inlet socket or a power supply unit with integral pins for insertion into a socket;
- (d) is for standing on a table or floor, or is fitted with a clamp or similar for attachment to vertical or horizontal surfaces;
- (e) is for use with tungsten filament, tubular fluorescent or other discharge lamps or Light Emitting Diode "LED" types; and
- (f) is constructed to represent a model, person or animal and, by its design and materials used, is likely to be treated by a child as a toy; or
- (g) has metal parts which are required to be earthed or double insulated from live parts (excluding live parts of an all insulated lampholder).

Class Specification: Child appealing type (refer to (f)): AS/NZS 60598.2.10:2015
With built-in transformer or convertor: AS/NZS 60598.2.6:1998 (R2013)
Type for Garden Use: AS/NZS 60598.2.7:2005 (R2016)
Other: AS/NZS 60598.2.4:2005+A1 (R2016)

36. Massage Appliance [B.2.31 Massage appliance]

An electrical appliance which —

- (a) is a household type;
- (b) is for massaging the human body;
- (c) is portable; and
- (d) is self-contained.

Class Specification: AS/NZS 60335.2.32:2014

37. Microwave Oven [B.2.32 Microwave oven]

An electrical appliance which —

- (a) is a household type; and
- (b) applies heat to food, liquid or other substances in a chamber by means of high-frequency electromagnetic radiation.

Class Specification: AS/NZS 60335.2.25:2011+A1

38. Miniature Overcurrent Circuit-Breaker [B.2.33 Miniature overcurrent circuit-breaker]

An electrical device which —

- (a) is an enclosed air-break switch;

- (b) opens a low voltage circuit automatically under predetermined conditions of over-current;
- (c) has a nominal rating not exceeding 125 A; and has —
 - (i) a current breaking capacity up to but not including 10 kA; and/or
 - (ii) a projected panel mounting area not exceeding 4000 mm² per pole;
 but does not include —
 - (d) miniature overcurrent circuit-breakers as defined but which:
 - (i) are intended and marked as being only for use in industrial application; or
 - (ii) are intended only for use within and for protection of electrical equipment as distinct from circuit wiring and are appropriately marked .

Class Specification:

AS/NZS 60898.1:2004 and AS/NZS 60898.2:2004 (R2016)
(or AS 60947.2:2015 for DC circuit breakers outside the scope of AS/NZS 60898.2); or
AS/NZS 3111:2009 A1-2

39. Nightlight – Mains Socket-Outlet Mounted

[B.2.66 Nightlight – Mains Socket-Outlet Mounted (Level 3 - DOA: 30/06/2018)]

For REAS - This becomes mandatory on 1 July 2020

An electrical appliance which —

- (a) is a household type;
 - (b) incorporates integral pins for insertion into a socket outlet;
 - (c) is intended to provide a source of low-level illuminance in areas not normally illuminated at night.
- but does not include—

- (d) other appliances with indicator lamps.

Class specification: AS/NZS 60598.2.12:2015

40. Outlet Device [B.2.34 Outlet device]

An electrical device which —

- (a) is a household type;
- (b) as its primary function, extends supply from a socket-outlet;
- (c) is portable;
- (d) incorporates facilities for the insertion of a plug or plugs; and
- (e) has a rating not exceeding 20 A;

but does not include —

- (f) a cord extension set.

Class Specification:

Integral pin type (including travel adaptor): AS/NZS 3122:2015

AS/NZS 3122:2015 is modified to preclude types that can be rewired by the user

Other:

AS/NZS 3105:2014+A1

41. Plug [B.2.35 Plug]

An electrical device which —

- (a) makes a detachable connection between the contacts of a socket-outlet and the conductors of a flexible cord;
- (b) has two, three or four pins for insertion into a socket-outlet; and
- (c) has a maximum rating of 20 A;

but does not include —

- (d) a plug which is within the scope of AS/NZS 3123 and is intended for industrial use; or
- (e) a plug which is within the scope of AS/NZS 3131 or AS/NZS 61535.

Class Specification: AS/NZS 3112:2011+A1-3 (See below)

AS/NZS 3112:2017 (DOA: 13/01/2019)

Note: New requirements have been added to Clause 3.1.2 and, in Paragraphs J2.3, J4.3.1, J4.8.2 through to J4.8.4.1 of Appendix J, new and pre-existing requirements are included which will run concurrently for a period of 18 months until 24/02/2019. Following this period, the pre-existing requirements are withdrawn.

Note: It is intended to preclude plugs of a non-Australian type.

42. Power Supply or Charger [B.2.36 Power supply or charger]

An electrical device which—

- (a) provides an output not exceeding 50 V a.c. or 120 V ripple free d.c.; and
- (b) is a type to provide supply to separate luminaires; or
- (c) is a household type for either charging batteries or to provide a supply to separate equipment.

But does not include:

- (d) Information Technology and Audio Video equipment that can use the output to also transmit data that is not associated with the power supply or charger function.

Class Specification:

General use:

AS/NZS 61558.2.6:2009+A1; or

AS/NZS 61558.2.16:2010+A1-3 (switched-mode types)

- Electronic or transformer types designated for use with specific electronic equipment:
 - AS/NZS 60065:2012+A1 (until 12 Feb 2020); or;
 - AN/NZS 60065:2018; or
 - AS/NZS 60950.1:2015; or
 - AS/NZS 61558.2.16:2010+A1-3 (switched-mode types); or
 - AS/NZS 62368:2018
- Toys:
 - AS/NZS 61558.2.7:2008+A1; or
 - AS/NZS 61558.2.16:2010+A1-3 (switched-mode types)
- Bells or chimes:
 - AS/NZS 61558.2.8:2011+A1; or
 - AS/NZS 61558.2.16:2010+A1-3 (switched-mode types)
- Lighting purposes:
 - Electronic type:
 - LED modules: AS/NZS IEC 61347.2.13:2013
 - Other: AS/NZS 61347.2.2:2007
 - Ferromagnetic type: AS/NZS 61558.2.6:2009+A1
- Handlamps:
 - AS/NZS 61558.2.9:2011+A1
 - AS/NZS 61558.2.16:2010+A1-3 (switched-mode types)
- Fence energisers:
 - AS/NZS 61558.2.6:2009+A1 together with AS/NZS 60335.2.76:2003+A1-4 (R2016); or
 - AS/NZS 61558.2.16:2010+A1-3 together with AS/NZS 60335.2.76:2003+A1-4 (switched-mode types)
- Battery chargers
 - AS/NZS 60335.2.29:2004+A1-2 (until 1 Jul 2020) or
 - AS/NZS 60335.2.29:2017

43. Projector [B.2.37 Projector (Level 2 - DOA: 30/06/2018)]

- An electrical appliance which —
- (a) is a household type; and
 - (b) is for projecting an image from a photographic slide or moving film.

Class Specification: AS/NZS 60335.2.56:2006+A1-2

44. Range [B.2.38 Range]

- An electrical appliance which —
- (a) is a household type;
 - (b) is for cooking food using heat produced by electrical energy; and
 - (c) is stationary.

Class Specification:

- Fixed outdoor barbeque: AS/NZS 60335.2.78:2005+A1-2
- Other: AS/NZS 60335.2.6:2014+A1

45. Range Hood [B.2.39 Range hood]

- An electrical appliance which —
- (a) is a household type;
 - (b) collects and/or filters air; and
 - (c) is for installation above, or adjacent to, a cooking appliance.

Class Specification: AS/NZS 60335.2.31:2013+A1-2

46. Razor/Hair Clipper [B.2.40 Razor/hair clipper]

- An electrical appliance which —
- (a) is a household type; and
 - (b) shaves, cuts or trims human hair.

Class Specification: AS/NZS 60335.2.8:2013+A1

47. Refrigerator/Freezer [B.2.41 Refrigerating appliance]

- An electrical appliance which —
- (a) is a household type; and
 - (b) cools and stores food.

But does not include —

- (c) wine coolers

Class Specification: AS/NZS 60335.2.24:2010+A1

48. Residual Current Device [B.2.42 Residual current device]

An electrical device which —

- (a) isolates or initiates a tripping signal to isolate a low voltage supply to protected circuits, socket-outlets or equipment in the event of a current flow to earth which exceeds a predetermined level;

- (b) may be fixed or portable;
- (c) has a rated residual current not exceeding 300 mA for devices intended for connection to fixed wiring or 30 mA for other devices; and
- (d) has a rated load current not exceeding 125 A for devices intended for connection to fixed wiring or 20 A for other devices;

But does not include —

- (d) a device intended to be used with a particular circuit breaker other than a miniature overcurrent circuit-breaker;
- (e) a device intended to protect an electricity supply authority distribution system; or
- (f) a device covered by AS 2081 and intended for mines use.

Class Specification:

Without integral over-current protection: AS/NZS 61008.1:2015 or AS/NZS 3190:2016

With integral over-current protection: AS/NZS 61009.1:2015: or
AS/NZS 3190:2016 and AS/NZS 3111:2009+A1-2

Type 'B' and 'F' devices: IEC 62423

Type SPE – PRCDs: IEC 62335

Portable types:

- (a) AS/NZS 3190:2016; or
- (b) AS/NZS 3190:2016 together with AS/NZS 3012:2010+A1 (Type PSOA); or
- (c) IEC 61540 and the PRCD and PSOA requirements of AS/NZS 3190.

49. Room Heater [B.2.43 Room heater]

An electrical appliance which —

- (a) is a household type; and
- (b) is for heating, by electrical energy, the atmosphere for comfort purposes;

and includes —

- (c) an appliance that accommodates one or more heat lamps;

But does not include —

- (c) an airconditioning appliance;
- (d) a heating system that is intended to heat the atmosphere of a room primarily by raising the temperature of any floor, wall, or ceiling area; or
- (e) an under-carpet heating system.

Class Specification: Thermal storage type: AS/NZS 60335.2.61:2005+A1-2
Other: AS/NZS 60335.2.30:2009+A1-2 (until 30 Jun 2018); or
AS/NZS 60335.2.30:2015+A1-2

50. Sewing Machine [B.2.44 Sewing machine (Level 2 - DOA: 30/06/2018)]

An electrical appliance which —

- (a) is a household type; and
- (b) is for stitching fabric or other material.

Class Specification: AS/NZS 60335.2.28:2006+A1

51. Socket-Outlet [B.2.45 Socket-outlet]

An electrical device which —

- (a) is for fixing at a point at which fixed wiring terminates;
- (b) provides a detachable connection with the pins of a plug;
- (c) has two, three, or four contacts; and
- (d) has a maximum rating of 20A;

But does not include —

- (d) an outlet within the scope of AS/NZS 3123 or AS/NZS 3131 or AS/NZS 61535.

Class Specification: AS/NZS 3112:2011+A1-3; or
AS/NZS 60884.1:2013 (including Annex ZZ)

Note: In AS/NZS 3112 a transition period of 18 months from the date of publication (24/08/2017) exists for the requirements of particular clauses. In Clause 3.1.2 of AS/NZS 3112, new requirements have been added.

In Paragraphs J2.3, J4.3.1 and J4.8.2 through to J4.8.4.1 of Appendix J, new and pre-existing requirements are included.

During the transition period, the new requirements as detailed above may be applied in lieu of the pre-existing requirements.

All other parts of this Standard take effect from the date of publication.

Note: Socket Outlets shall not allow projected plug portions for any aperture set to be overlapped.

52. Soldering Iron [B.2.46 Soldering iron]

An electrical appliance which —

- (a) is for the application or removal of solder; and
- (b) is hand held;

and includes —

- (c) any integral or associated power supply or controller;

But does not include —

- (d) a soldering iron promoted exclusively to industry.

Class Specification: AS/NZS 60335.2.45:2012

53. Supply Flexible Cord [B.2.47 Supply flexible cord]

An electrical cord which —

- (a) is unscreened and flexible;
- (b) is designed for use at low voltage;
- (c) consists of two or three elastomer or PVC insulated cores of multistrand construction;
- (d) has a cross-sectional area of each conductor not exceeding 2.5 mm²; and
- (e) has for other than tinsel cords, individual wire strandings not exceeding —
 - (i) 0.21 mm for conductor sizes up to 1 mm²; or
 - (ii) 0.26 mm for conductor sizes exceeding 1 mm²;

but does not include —

- (f) a flexible cord directly connected to equipment or approved non-rewirable accessories which is marked in accordance with the CENELEC HAR marking scheme for flexible cords.

Class Specification:

All types:	AS/NZS 3191:2008; or
PVC insulated type:	AS/NZS 60227.5:2003+A1; or
Rubber type:	AS/NZS 60245.4:2003+A1
Halogen-free thermoplastic insulation cord:	EN 50525-3-11:2011
Halogen-free cross-linked insulation cord:	EN 50525-3-21:2011

54. Swimming Pool or Spa Equipment [B.2.48 Swimming pool or spa equipment]

An electrical appliance or device —

- (a) that is a transportable spa pool of transportable spa-bath; or
- (b) that is for circulating air or water in an conventional bath; or
- (c) that is for use in the operation or cleaning of a swimming pool, non-transportable spa pool or non-transportable spa bath;

but does not include —

- (d) an appliance or device exclusively promoted for commercial use; or
- (e) a heat pump.

Class Specification:

Pump:	AS/NZS 60335.2.41:2013
Spa pool/bath or appliance to circulate air or water in a conventional bath:	AS/NZS 60335.2.60:2006+A1
UV Radiation Water treatment appliances:	AS/NZS 60335.2.109:2011+A1-2
Other:	AS/NZS 3136:2001+A1-2

55. Television Receiver [B.2.49 Television receiver (Level 2 - DOA: 30/06/2018)]

An electrical appliance which —

- (a) is for household use;
- (b) is for the display of public or subscription television broadcasts; and
- (c) incorporates a single cathode ray picture tube.

Class Specification: AS/NZS 60065:2012+A1 (until 12/02/2020); or
AS/NZS 60065:2018; or
AS/NZS 62368:2018

56. Therapeutic Lamp [See B.2.50 In AU Section]

An electrical appliance which —

- (a) is a household type; and
- (b) produces ultraviolet or infra-red radiation for personal, therapeutic or cosmetic purposes; and
- (c) is portable.

Class Specification: AS/NZS 60335.2.27:2010+A1-2 (until 30 Jun 2018); or
AS/NZS 60335.2.27:2016+A1

57. Tool – Portable Type [B.2.51 Tool – portable type]

An electrical appliance which —

- (a) is for machining, drilling, sawing, or surface preparation; and
- (b) may be entirely supported by hand during operation;

but does not include —

- (c) a tool, portable type, promoted exclusively to industry.

Class Specification:

- (a) AS/NZS 60745.1 plus the appropriate AS/NZS 60745 Series Part 2
Where the published AS/NZS 60745 Series Part 2 has been withdrawn or does not exist:-
- (b) AS/NZS 62841.1 plus the appropriate AS/NZS 62841 Series Part 2
- (c) Other (where an AS/NZS 60745 Part 2 or AS/NZS 62841 Part 2 is not available) AS/NZS 3160

58. Vacuum Cleaner [B.2.52 Vacuum cleaner]

An electrical appliance which —

- (a) is a household type;
- (b) is portable; and
- (c) removes dust, dirt or moisture and the like from floor coverings by suction; or
- (d) removes garden refuse from lawns or paths and the like by suction.

Class Specification: Hand held garden type: AS/NZS 60335.2.100:2003

Other: AS/NZS 60335.2.2:2010+A1-4

59. Wall Switch [B.2.53 Wall switch]

An electrical device which —

- (a) is a household type; and
- (b) is an air-break switch or, from 1 July 2020 an [electronic switch]; and
- (c) is for connection to the wiring of an electrical installation; and
- (d) is primarily for mounting on a vertical surface; and
- (e) is intended to turn a load ON or OFF; and
- (e) has a rating not exceeding 20 A.

but does not include—

- (g) automatic operation by means of motion sensors such as Passive Infrared sensors, Microwave sensors, Ultrasonic sensors or the like.

Class Specification: AS/NZS 3133:2013+A1-2; or

AS/NZS 60669.1:2013 and AS/NZS 60669.2.1:2013 [plus AS/NZS 3133 M rating if applicable]

60. Washing Machine [B.2.54 Washing machine]

An electrical appliance which —

- (a) is a household type; and
- (b) is intended for washing clothes and other textile materials.

Class Specification: AS/NZS 60335.2.7:2012+A1-2

61. Water Bed Heater [B.2.55 Water bed heater]

An electrical appliance which —

- (a) is for installation under a water bed envelope; and
- (b) heats water contained in that envelope;

and includes —

- (c) any associated control device.

Class Specification: AS/NZS 60335.2.66:2012

62. Water Heater [B.2.56 Water heater]

An electrical appliance which —

- (a) (i) is for heating and storage of water for bathing, washing, or similar purposes;
- (ii) incorporates a heating element;
- (iii) is unvented; and
- (iv) has a storage capacity not less than 4.5 L not more than 680 L;

or

- (b) (i) is for heating water;
- (ii) is of the instantaneous type; and
- (iii) incorporates live parts in contact with water.

Class Specification:

Pressure Storage type: AS/NZS 60335.2.21:2013+A1

Instantaneous type: AS/NZS 60335.2.35:2013+A1

[B.2] Australia Regulatory Definitions – additions, different requirements or changed levels

[B.2.50] Therapeutic Lamp (Level 2 - DOA: 30/06/2018)

An electrical appliance which —

- (a) is a household type; and
- (b) produces ultraviolet or infra-red radiation for personal, therapeutic or cosmetic purposes; and
- (c) is portable.

Class Specification: AS/NZS 60335.2.27:2010+A1-2 (until 30 Jun 2018); or

AS/NZS 60335.2.27:2016+A1

[B.2.58] Air conditioner incorporating non-flammable or low flammable refrigerant (Level 2)

An electrical appliance that—

- (a) is for household use; and
- (b) incorporates motor compressors; and
- (c) is an electrical appliance designed to provide delivery of conditioned air to an enclosed space, room or zone; and

(d) includes a refrigeration system for cooling, heating or dehumidifying the air, including hydronic room fan coil type systems; and

(e) is portable, transportable or fixed; and

(f) uses a refrigerant having a flammability classification of Class 1 or Class 2L in accordance with ISO 817. For refrigerant blends that have more than one flammability classification, the most unfavourable classification is taken.

Note: For example if a refrigerant blend has a flammability classification of A2/A2L then the blend is considered to be a flammable refrigerant and the appliance is as described in B.2.57.

Class specification: AS/NZS 60335.2.40

[B.2.59] Building wiring cable (Level 3)

An electric cable that—

(a) has 1–5 conductors of stranded or solid cores of copper conductors;

(b) has an insulated and laid up flat or circular configuration;

(c) is sheathed or unsheathed insulated cable;

(d) is intended for use at a rated voltage of between 200 and 250 V, single phase, or between 350 and 450 V, multi-phase, rms, a.c., between conductors or to earth;

(e) is intended for use in buildings or similar structures; and

(f) has a nominal cross-sectional area per conductor from 0.5 mm² to 16 mm²;

but does not include—

(g) armoured, metallic screened and metal sheathed cables.

Class specification: For working voltages up to 0.6/1 (1.2) kV—AS/NZS 5000.1

For working voltages up to 450/750 V—AS/NZS 5000.2

[B.2.61] Simple portable luminaire (Level 2 - DOA: 30/06/2018)

A portable luminaire, in which the supply flexible cord (including any associated cord line switch) is terminated to a single lampholder that is mounted on a non-flexible, non-articulated stem in which the cord may be enclosed, that—

(a) only includes one or more of the following components that comply with the relevant Standards:

Edison screw lampholder to accommodate screw cap of 14 mm or 27 mm nominal outside diameter or bayonet cap lampholder that accommodates a lamp with a bayonet cap of 15 mm or 22 mm nominal diameter, a cord line switch, supply flexible cord and plug; and

(b) is for use with light sources that have bases for insertion into E27, E14, B15 or B22 lampholders; and

(c) is of the ordinary type for indoor use only;

but does not include—

(d) a transformer;

(e) a dimmer or touch controls or other electronic devices or portable luminaires of type covered in AS/NZS 60598.2.8 and 60598.2.10.

Class specification: AS/NZS 60598.2.4 or AS/NZS 60598.2.4 Annex ZA

[B.2.63] DC Isolator (Level 3 - DOA: 30/06/2018)

An electrical device that—

(a) is an air-break d.c. rated isolator; and

(b) is for connection to the wiring of a household photovoltaic (PV) electrical installation, other household renewable energy installation, or household energy storage installation.;

and includes

(c) any dedicated individual enclosure where the dc isolator is classified as enclosed outdoor

NOTE 1 A 'dedicated individual enclosure' includes a single dc isolator in an enclosure or multiple dc isolators in a common enclosure, but does not include the enclosure where the dc isolator is to be installed integral within a power conditioning equipment (PCE) enclosure or is to be installed in an enclosure that complies with a relevant standard for assemblies for use in photovoltaic networks.

NOTE 2 For New Zealand see B.3.14

Class specification: AS/NZS 60947.3

[B.2.67] Over blanket / Duvet / Wrap (Level 3 - DOA: 30/06/2018)

An electrical appliance that—

(a) is for application of heat to a person by placing or draping over the person;

(b) is flexible;

(c) does not contain any heated liquid;

(d) has a fabric enclosure; and

(e) has a projected surface area exceeding 0.6 m²;

and includes—

(e) any associated power supply or controller.

Class specification: AS/NZS 60335.2.17

[B.3] ADDITIONAL NEW ZEALAND REGULATORY DEFINITIONS (Level2)

[B.3.1] Building wiring cable

An electric cable that—

- (a) has 1–5 conductors of stranded or solid cores of copper conductors;
- (b) has an insulated and laid up flat or circular configuration;
- (c) is sheathed to provide mechanical protection to the insulation;
- (d) is intended for use at a rated voltage of between 200 and 250 V, single phase, or between 350 and 450 V, multi-phase, r.m.s., a.c., between conductors or to earth;
- (e) is intended for use in buildings or similar structures; and
- (f) has a cross-sectional area per conductor of between 0.5 mm² and 16 mm².

Class specification: For working voltages up to 0.6/1 (1.2) kV: AS/NZS 5000.1
For working voltages up to 450/750 V: AS/NZS 5000.2

[B.3.2] Cord extension set

An electrical device that—

- (a) is a household type;
 - (b) as its primary function, extends supply from a socket-outlet;
 - (c) is portable;
 - (d) incorporates one extension socket-outlet at the end;
 - (e) has a rating not exceeding 20 A; and
 - (f) does not incorporate integral pins for insertion into a socket outlet;
- but does not include—
- (g) an outlet device.

Class specification: AS/NZS 3199

[B.3.3] Touch dimmer

An electrical device that—

- (a) is an electronically operated switch for direct or indirect operation of lamp circuits or the speed of motors; and
- (b) utilises direct or indirect contact of a person with live parts for its operation.

Class specification: IEC 60669-2-1

[B.3.4] Light fitting

An electrical device that—

- (a) is intended to produce light for illumination purposes in domestic or similar applications;
- (b) has a rating up to and including 500 W;
- (c) is for use with tungsten filament, light emitting semiconductors, tubular fluorescent or other discharge lamps; and
- (d) may also incorporate automatic controls, such as passive infrared motion detectors.

It does not include—

An electrical device that is intended to produce light for illumination purposes in commercial or industrial applications.

Class specification: AS/NZS 60598.2.1, AS/NZS 60598.2.2 or IEC 61347-2-13 as appropriate

[B.3.5] Drive for garage doors for residential use

An electrical device that includes the motor and other components that controls the movement of a garage door for residential use

Class specification: AS/NZS 60335.2.95

[B.3.6] Drive for horizontally and vertically moving gates, doors and windows for household and similar purposes

An electrical device that includes the motor and other components that controls the movement of the movable part of a gate, door or window that is operated by the drive

Class specification: AS/NZS 60335.2.103

[B.3.7] Battery operated fence energizer

A battery operated electrical appliance that regulates and controls the supply of electrical energy to an electrical fence.

Class specification: AS/NZS 60335.2.76

[B.3.8] Battery operated tool – portable type

An electrical appliance that—

- (a) is for machining, drilling, sawing, or surface preparation; and
- (b) may be entirely supported by hand during operation;

but does not include—

- (c) a tool, portable type, promoted exclusively to industry.

Class specification: AS/NZS 60745 series of standards

[B.3.9 Electrically operated toy

Electrically operated product intended for use by children under 14 years old for playing purposes that is operated by –

- (a) batteries; or
- (b) the supply mains through a transformer for toys and using the supply mains as the only source of electrical energy; or
- (c) batteries and either simultaneously or alternatively the supply mains through a transformer for toys

Class specification: AS/NZS 62115

[B.3.10 Appliance for skin exposure to ultraviolet radiation

Electric appliance incorporating emitters for exposing the skin to ultraviolet radiation, for household and commercial use

Class specification: AS/NZS 60335.2.27

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