

# Electrical Equipment Safety System

## **Electrical Equipment Safety System:** *In-scope electrical equipment definitions, and risk levels*

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## PREFACE

In-scope electrical equipment is low voltage electrical equipment that is:

- rated at a voltage greater than 50 V AC RMS or 120 V ripple-free DC (low voltage)
- rated at a voltage less than 1000 V AC RMS or 1500 V ripple-free DC (high voltage), and
- designed or marketed as suitable for household, personal or similar use.

It is immaterial whether the equipment is also designed or marketed for commercial or industrial purposes.

In-scope equipment must meet certain requirements based on the identified risk level of the equipment. These levels are broken into three risk level classifications:

- Level 3 in-scope electrical equipment (high risk). This equipment must:
  - be electrically safe and meet the relevant standard
  - be marked with the Regulatory Compliance Mark (RCM)
  - have a valid Australian or New Zealand issued certificate of conformity, and
  - be registered in the national EESS database and linked to the registered responsible supplier.
- Level 2 in-scope electrical equipment (medium risk). This equipment must:
  - be electrically safe and meet the relevant standard
  - be marked with the Regulatory Compliance Mark (RCM)
  - be registered in the national EESS database and linked to the registered responsible supplier, and
  - have a compliance folder which is to be kept with the registered responsible supplier and be made available, upon request, within 10 days.
- Level 1 in-scope electrical equipment (low risk). This equipment must:
  - be electrically safe and meet the relevant standard
  - be marked with the Regulatory Compliance Mark (RCM)
  - have documentary evidence in English, to show that the item meets the relevant standard at the time the item was either manufactured or imported <sup>1</sup> and
  - be linked to the registered responsible supplier.

The relevant standard for certification is the standard as in force from time to time under the relevant AS or AS/NZS designation for the type as on the date when the equipment is certified (edition and amendments as applicable on the date of certification considering any transition dates in the standard, or otherwise as determined by the regulator or SCO Equipment Working Group). This applies to the 'class specification' as listed in this document or other standards as specified by the regulator or SCO Equipment Working Group.


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<sup>1</sup> Evidence must be kept by the responsible supplier for a period of five years from the last day the item is either manufactured or imported by the responsible supplier.


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<p><b>Air conditioner incorporating flammable refrigerant</b></p> <p>An electrical appliance that—</p> <ul style="list-style-type: none"> <li>(a) is for household use; and</li> <li>(b) incorporates motor compressors; and</li> <li>(c) is an electrical appliance designed to provide delivery of conditioned air to an enclosed space, room or zone; and</li> <li>(d) includes a refrigeration system for cooling, heating or dehumidifying the air, including hydronic room fan coil type systems; and</li> <li>(e) is portable, transportable or fixed; and</li> <li>(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.</li> </ul> <p><b>Class specification:</b> AS/NZS 60335.2.40</p>	X			
<p><b>Air conditioner incorporating non-flammable or low flammable refrigerant</b></p> <p>An electrical appliance that—</p> <ul style="list-style-type: none"> <li>(a) is for household use; and</li> <li>(b) incorporates motor compressors; and</li> <li>(c) is an electrical appliance designed to provide delivery of conditioned air to an enclosed space, room or zone; and</li> <li>(d) includes a refrigeration system for cooling, heating or dehumidifying the air, including hydronic room fan coil type systems; and</li> <li>(e) is portable, transportable or fixed; and</li> <li>(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.</li> </ul> <p><b>Note</b> For example if a refrigerant blend has a flammability classification of Class A2/Class A2L then the blend is considered to be a flammable refrigerant and the appliance is as described in <a href="#">‘Air conditioner incorporating flammable refrigerant’</a></p>		X		


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
<b>Class specification:</b> AS/NZS 60335.2.40				
<b>Appliance connector</b>  An electrical device that— (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.  <b>Class specification:</b> Appliance coupler—AS/NZS 60320.1 Sewing machine appliance coupler—AS/NZS 60320.2.1 Interconnection appliance coupler—AS/NZS 60320.2.2	X			
<b>Arc welding machine</b>  An electrical appliance that— (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.  <b>Class specification:</b>	X			<i>* For Class Specification for certification requirements, please refer to the Information bulletins (Information and Advisory notices on the EESS website)</i>


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	3	2	1	
AS 60974.6 for Australia				
<b>Bayonet lampholder</b>  An electrical device that - (a) accommodates a lamp with a bayonet cap of 15 mm or 22 mm nominal diameter; but does not include— (b) a lampholder that by design is restricted to specific appliances by forming part of a structural moulding of the appliance. This exclusion does not apply to lampholders that can be used in luminaires; or (c) a lampholder that is for incorporation in industrial equipment only.  <b>Class specification:</b> AS/NZS 3117 or AS/NZS 61184	X			
<b>Beauty care lamp</b>  An electrical appliance that— (a) is a household type; (b) produces optical radiation for personal, cosmetic or nail hardening purposes; and (c) is portable  <b>Class specification:</b> AS/NZS 60335.2.27 (for appliances for skin exposure to optical radiation) AS/NZS 60335.2.113 (for cosmetic and beauty care appliances incorporating lasers and intense light sources) AS/NZS 60335.2.23 plus exempt group limits from AS/NZS 62471 (for nail hardeners)	X			. Previously named “Therapeutic lamp”.
<b>Blanket</b>  An electrical appliance that— (a) is for application of heat to a bed; (b) is flexible; (c) has a fabric enclosure; and (d) has a projected surface area exceeding 0.6 m <sup>2</sup> ;	X			


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
and includes— (e) any associated power supply or controller.  <b>Class specification:</b> AS/NZS 60335.2.17				
<b>Bread toaster</b>  An electrical appliance that— (a) is a household type; and (b) is for toasting bread or similar foods.  <b>Class specification:</b> AS/NZS 60335.2.9	X			
<b>Building wiring cable</b>  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; b) has an insulated and laid up flat or circular configuration c) is sheathed or unsheathed d) has active phase conductors with nominal cross-sectional area 0.5mm <sup>2</sup> to 16mm <sup>2</sup> e) has an insulation designation of V-75, V-90, V-90HT or X-90; and f) is intended for use in electrical installation at working voltages up to: – i. 450V/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 ( as described in ' <a href="#">supply flexible cord</a> ') k) control 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; ( <b>Note 1:</b> cables that have a conductor flexibility of Class 5 according to AS/NZS 1125 are commonly known as Flexible Cables) m) cables not captured by the scope of AS/NZS 5000.1 or AS/NZS5000.2 ( <b>Note 2:</b> 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 Standards)  <b>Class specification:</b> 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	X			





 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
<p><b>Clothes dryer</b></p> <p>An electrical appliance that —</p> <ul style="list-style-type: none"> <li>(a) is a household type; and</li> <li>(b) is for drying textile material;</li> </ul> <p>but does not include—</p> <ul style="list-style-type: none"> <li>(c) a heated towel rail; or</li> <li>(d) a gas appliance having electrical connections</li> </ul> <p><b>Class specification</b></p> <p>Rotary type—AS/NZS 60335.2.11</p> <p>Cabinet type—AS/NZS 60335.2.43</p>	X			
<p><b>Control or conditioning device</b></p> <p>An electrical device that—</p> <ul style="list-style-type: none"> <li>(a) is a household type;</li> <li>(b) is for controlling or conditioning the electrical input to electrical apparatus via outlet facility(s) of the condition or control device;</li> <li>(c) is portable;</li> </ul> <p><b>Note:</b> for this definition portable includes devices with facilities for permanent installation if manifestly complete and useable without being fixed in position (eg has connection via appliance inlet or supply cord and plug and does not rely on being built in or being installed to prevent access to live parts). This also includes devices connected to supply by pins for engagement with a socket-outlet.</p> <ul style="list-style-type: none"> <li>(d) is self-contained, including devices that receive inputs from external sensors; and</li> <li>(e) connects to supply by means of a flexible cord and plug, appliance inlet or pins for engagement with a socket-outlet.</li> </ul> <p><b>Class specification:</b></p> <p>AS/NZS 3105</p>	X			
<p><b>Cooking appliance—portable type</b></p> <p>An electrical appliance that—</p> <ul style="list-style-type: none"> <li>(a) is a household type;</li> <li>(b) is for cooking or warming food by electrical energy; and</li> <li>(c) is portable.</li> </ul>	X			


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<b>Class specification:</b> Griller, roaster or oven (including breadmaker)—AS/NZS 60335.2.9 Warming plate and similar—AS/NZS 60335.2.12 Frying pan, deep fryer or wok—AS/NZS 60335.2.13 Outdoor barbecue—AS/NZS 60335.2.78				
<b>Cord extension socket</b>  An electrical device that— (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.  <b>Class specification:</b> AS/NZS 3120	X			
<b>Cord-line switch</b>  An electrical device that— (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.  <b>Class specification:</b> AS/NZS 3127	X			
<b>DC isolator</b>  An electrical device that— (a) is an air-break DC. 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.	X			<i>* For certification requirements, please refer to the Information bulletins (Information and Advisory notices on the EESS website)</i>


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
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<p>and includes—</p> <p>(c) any dedicated individual enclosure where the DC isolator is classified as enclosed outdoor</p> <p><b>NOTE 1</b> 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.</p> <p><b>Class specification:</b> AS 60947.3 for Australia</p>				
<p><b>Decorative lighting outfit</b></p> <p>An electrical appliance that—</p> <p>(a) is for decorative, display or illumination purposes;</p> <p>(b) is portable;</p> <p>(c) consists of—</p> <ul style="list-style-type: none"> <li>i. electric light sources or lampholders interconnected by flexible cord of less than 2.5 mm<sup>2</sup> cross-sectional area; or</li> <li>ii. electric light sources within a flexible enclosure;</li> </ul> <p>(d) may be integral with a frame or similar support;</p> <p>and includes—</p> <p>(e) any integral power supply or control device.</p> <p><b>Class specification:</b> Lighting chains and festoon lighting - AS/NZS 60598.2.20 Rope lights - AS/NZS 60598.2.21</p>	X			
<p><b>Dishwashing machine</b></p> <p>An electrical appliance that—</p> <p>(a) is a household type; and</p> <p>(b) is for washing of eating and cooking utensils.</p> <p><b>Class specification:</b> AS/NZS 60335.2.5</p>	X			
<p><b>Double capped light emitting semiconductor lamp</b></p> <p>An electrical appliance that—</p>	X			Also known as "LED Tube".

 Contents <b>Equipment type and definition</b>	Risk Level			Comments
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(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 62560  <b>Class specification:</b> AS/NZS 60598.2.1 Appendix A				
<b>Edison screw lampholder</b>  An electrical device that— (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 that by design is restricted to specific appliances by forming part of a structural moulding of the appliance. This exclusion does not apply to lampholders that can be used in luminaires; or (c) a lampholder that is for incorporation in industrial equipment only.  <b>Class specification:</b> AS/NZS 3140 or AS/NZS 60238	X			
<b>Electric hot water bottle</b>  An electrical appliance that— (a) is for application of heat to parts of the human body; (b) is flexible; (c) contains liquid that is heated by internal electrical parts; and (d) has a projected area not exceeding 0.6 m <sup>2</sup>  <b>Class specification:</b> AS/NZS 60335.2.81	X			
<b>Evaporative cooler</b>  An electrical appliance that – (a) is a device that cools air through evaporation of water; (b) incorporates a fan for moving air; and	X			<i>Portable evaporative  coolers are level 1 as they  are not fixed devices.</i>


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(c) is fixed with one or more vents.  <b>Class specification:</b> AS/NZS 60335.2.98				
<b>Fan</b>  An electrical appliance that— (a) is a household type; (b) has a primary function of moving air in its vicinity for comfort or extraction purposes; and (c) is self-contained and includes— (d) duct fans; (e) any associated ancillary equipment.  <b>Class specification:</b> AS/NZS 60335.2.80	X			<i>Fans that blow a mist of water from a reservoir in front, or attached, or connected to the fan are included.</i>
<b>Fence energizer</b>  An electrical appliance that regulates and controls the supply of electrical energy to an electrical fence.  <b>Class specification:</b> AS/NZS 60335.2.76	X			
<b>Floor polisher/scrubber</b>  An electrical appliance that— (a) is a household type; and (b) is used to polish or scrub floors.  <b>Class specification:</b> AS/NZS 60335.2.10		X		
<b>Fluorescent lamp ballast</b>  An electrical device that— (a) is for controlling the magnitude of current flowing through the discharge path of a fluorescent lamp;	X			


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<p>(b) is of the independent or built-in type intended for use with luminaires (portable or fixed); or</p> <p>(c) is of the integral type, rated at 60 W or less, such that it forms a non-replaceable part of a fluorescent lamp/ballast combination; or</p> <p>(d) is of the adaptor type such that it allows the insertion of a fluorescent lamp into the ballast by the user; but does not include—</p> <p>(e) a ballast that is incorporated in luminaires certified for compliance with the requirements for electrical and electronic equipment with increased safety type protection (Ex e) for use in hazardous locations.</p> <p><b>Class specification:</b>  Integral (self-ballasted lamp) magnetic and electronic types—  AS/NZS 60968  Other magnetic type—AS/NZS 61347.2.8  Other electronic type—AS/NZS 61347.2.3</p>				
<p><b>Fluorescent lamp starter</b></p> <p>An electrical device that—</p> <p>(a) is for starting preheat type fluorescent lamps;</p> <p>(b) is a glow-start type; and</p> <p>(c) has an enclosure of insulating material.</p> <p><b>Class specification:</b>  AS/NZS 60155 (Section 1)</p>	X			
<p><b>Glue gun</b></p> <p>An electrical appliance that—</p> <p>(a) is a household type;</p> <p>(b) is hand held;</p> <p>(c) is for melting and applying sticks of solid adhesive; but does not include—</p> <p>(d) a glue gun promoted exclusively to industry.</p> <p><b>Class specification:</b>  AS/NZS 60335.2.45</p>	X			


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<b>Hair care appliance</b>  An electrical appliance that— (a) is a household type or a commercial hand-held type; and (b) is for drying, styling or the caring of human hair.  <b>Class specification:</b> AS/NZS 60335.2.23	X			
<b>Heating pad - flexible</b>  An electrical appliance that— (a) is for application of heat to parts of the human body; (b) is in the form of a flexible pad; (c) has a projected area not exceeding 0.6 m <sup>2</sup> ; but does not include— (d) an electric hot water bottle.  <b>Class specification:</b> Foot warmer and foot mat—AS/NZS 60335.2.81 Other—AS/NZS 60335.2.17		X		
<b>Hedge clipper</b>  An electrical appliance that— (a) is for trimming hedges; (b) has one of more linear reciprocating cutter blades; and (c) is hand held.  <b>Class specifications:</b> AS/NZS 60745.2.15 (withdrawal date 20 November 2021) or AS/NZS 62841.4.2	X			
<b>Immersion heater</b>  An electrical appliance that— (a) is a household type; (b) is for heating liquid in that it may be immersed; and (c) is self-contained; and includes— (d) aquarium type immersion heaters.  <b>Class specification:</b>	X			


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Aquarium type—AS/NZS 60335.2.55 Portable (other than aquarium) type—AS/NZS 60335.2.74 Fixed type—AS/NZS 60335.2.73				
<b>Insect electrocutor</b>  An electrical appliance that— (a) is a household type; and (b) kills insects by the application of electrical energy.  <b>Class specification:</b> AS/NZS 60335.2.59	X			
<b>Inspection handlamp</b>  An electrical appliance that— (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.  <b>Class specification:</b> AS/NZS 60598.2.8	X			
<b>Iron</b>  An electrical appliance that— (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.  <b>Class specification:</b> Fabric steamer—AS/NZS 60335.2.85 Other—AS/NZS 60335.2.3	X			
<b>Kitchen machine</b>  An electrical appliance that— (a) is a household type; and (b) is for the preparation of food by mechanical means; or	X			





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(c) is for opening cans; or (d) is for sharpening of knives.  <b>Class specification:</b> AS/NZS 60335.2.14				
<b>Lawn care appliance</b>  An electrical appliance that— (a) is a household type; and (b) is for cutting grass or lawn.  <b>Class specification:</b> Mower—AS/NZS 60335.2.77 Trimmer—AS/NZS 60335.2.91 Grass shears—AS/NZS 60335.2.94 Robotic lawn mower—AS/NZS 60335.2.107	X			
<b>Light emitting semiconductor lamp (self-ballasted)</b>  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.  <b>Class specification:</b> AS/NZS 62560	X			<i>Also known as “self-ballasted LED lamp”</i>
<b>Lampholder adaptor</b>  An electrical device that: (a) is for insertion into a lampholder; and (b) may incorporate electronic circuits to control the output; and (c) may incorporate electric circuits for other functions; and	X			


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
(d) has outlet facilities for connection to a flexible cord or has an integral flexible cord; and/or (e) has one or more lampholders  <b>Class specification:</b> AS/NZS 3119				
<b>Liquid heating appliance</b>  An electrical appliance that— (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.  <b>Class specification:</b> Humidifier—AS/NZS 60335.2.98 Other—AS/NZS 60335.2.15	X			
<b>Luminaire—portable type</b>  An electrical appliance that— (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-outlet; (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 electric light sources; 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 that are required to be earthed or double insulated from live parts (excluding live parts of an all insulated lampholder).	X			


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	3	2	1	
but does not include— (h) a simple luminaire - portable type  <b>Class specification:</b> Child appealing type (refer to Item (f))—AS/NZS 60598.2.10 Type fitted with a built-in transformer or convertor—AS/NZS 60598.2.6 Other—AS/NZS 60598.2.4				
<b>Massage appliance</b>  An electrical appliance that— (a) is a household type; (b) is for massaging the human body; (c) is portable; and (d) is self-contained.  <b>Class specification:</b> AS/NZS 60335.2.32	X			
<b>Microwave oven</b>  An electrical appliance that— (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.  <b>Class specification:</b> AS/NZS 60335.2.25	X			
<b>Miniature overcurrent circuit breaker</b>  An electrical device that— (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 10 kA; and (ii) a projected panel mounting area not exceeding 4000 mm <sup>2</sup> per pole; and includes-	X			(c)(i) has a meaning of up to and including 10kA rated current breaking capacity.

 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
(d) miniature overcurrent circuit breakers as defined that are mounted in equipment but does not include— (e) miniature overcurrent circuit breakers as defined but that are intended and marked as being only for use in industrial application; and (f) miniature overcurrent circuit breakers, for mounting in equipment, that are within the scope of IEC 60934.  <b>Class specification:</b> AS 3111, AS/NZS 60898.1 or AS/NZS 60898.2 (or AS/NZS 60947.2 for circuit breakers outside the scope of AS/NZS 60898.2)				
<b>Nightlight—mains socket-outlet mounted</b>  An electrical appliance that— (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.  <b>Class specification:</b> AS/NZS 60598.2.12	X			
<b>Outlet device</b>  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 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.  <b>Class specification:</b> Integral pin type (including travel adaptor)—AS/NZS 3122 Other—AS/NZS 3105	X			


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
<p><b>Over blanket / Duvet / Wrap</b></p> <p>An electrical appliance that—</p> <ul style="list-style-type: none"> <li>(a) is for application of heat to a person by placing or draping over the person;</li> <li>(b) is flexible;</li> <li>(c) does not contain any heated liquid;</li> <li>(d) has a fabric enclosure; and</li> <li>(e) has a projected surface area exceeding 0.6 m<sup>2</sup>;</li> </ul> <p>and includes—</p> <ul style="list-style-type: none"> <li>(f) any associated power supply or controller.</li> </ul> <p><b>Class specification:</b> AS/NZS 60335.2.17</p>	X			
<p><b>Plug</b></p> <p>An electrical device that—</p> <ul style="list-style-type: none"> <li>(a) makes a detachable connection between the contacts of a socket-outlet and the conductors of a flexible cord;</li> <li>(b) has two, three or four pins for insertion into a socket-outlet; and</li> <li>(c) has a rating not exceeding 20 A;</li> </ul> <p>but does not include—</p> <ul style="list-style-type: none"> <li>(d) a plug that is within the scope of AS/NZS 3123 and is intended for industrial use; or</li> <li>(e) a plug that is within the scope of AS/NZS 3131.</li> </ul> <p><b>Class specification:</b> AS/NZS 3112</p>	X			
<p><b>Power line communication device</b></p> <p>An electrical device that—</p> <ul style="list-style-type: none"> <li>(a) is a discrete device with pins for insertion into a socket outlet; and</li> <li>(b) is for the purpose of sending or receiving communication over the installation wiring.</li> </ul> <p><b>Class Specification:</b></p>		X		


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
AS/NZS 60950.1 or AS/NZS 62368.1				
<b>Power supply or charger</b>  An electrical device that— (a) provides an output not exceeding 50V AC. or 120V ripple free DC; and (b) is a type to provide supply to separate luminaires; or (c) is a household type for either charging batteries or to provide supply to separate equipment; but does not include— (d) Information Technology and Audio Visual equipment that can use the output to also transmit data that is not associated with a power supply or charger function.  <b>Class specification:</b>  Safety isolating power supply for general use—AS/NZS 61558.2.16 for switch mode types and AS/NZS 61558.2.6 for others  Power supply for appliances – AS/NZS 60335.1 and the relevant Part 2 of that series  Power supply for toys—AS/NZS 61558.2.7 taking into account AS/NZS 61558.2.16 for switch mode types  Power supply for bells or chimes—AS/NZS 61558.2.8 taking into account AS/NZS 61558.2.16 for switch mode types  Power supply for hand lamps—AS/NZS 61558.2.9 taking into account AS/NZS 61558.2.16 for switch mode types  Power supply (electronic or ferromagnetic types) for use with specific electronic (IT, audio, video) equipment—AS/NZS 60065 or AS/NZS 60950.1 or AS/NZS 62368.1 (these standards cannot be used as substitutes for other power supplies listed in the class specification)  Power supply for lighting purposes— <ul style="list-style-type: none"> <li>• Electronic types:</li> <li>• Light emitting semiconductor driver — AS/NZS 61347.2.13</li> <li>• Other—AS/NZS 61347.2.2</li> <li>• Ferromagnetic type: AS/NZS 61558.2.6</li> </ul> Battery charger—AS/NZS 60335.2.29	X			Note: for fence energizers used with detachable power supplies the power supply <b>must be</b> tested together with the particular fence energizer: Safety isolating power supply for fence energizer—AS/NZS 61558.2.16 for switch mode types together with AS/NZS 60335.2.76 and AS/NZS 61558.2.6 for others together with AS/NZS 60335.2.76
<b>Projector</b>		X		


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
An electrical appliance that— (a) is a household type; and (b) is for projecting an image from a photographic slide or moving film.  <b>Class specification:</b> AS/NZS 60335.2.56				
<b>Range</b>  An electrical appliance that— (a) is a household type; (b) is for cooking food using heat produced by electrical energy; and (c) is stationary.  <b>Class specification:</b> Fixed outdoor barbecue—AS/NZS 60335.2.78 Other—AS/NZS 60335.2.6	X			
<b>Range hood</b>  An electrical appliance that— (a) is a household type; (b) collects and/or filters air; and (c) is for installation above, or adjacent to, a cooking appliance.  <b>Class specification:</b> AS/NZS 60335.2.31	X			
<b>Razor/hair clipper</b>  An electrical appliance that— (a) is a household type; and (b) shaves, cuts or trims human hair.  <b>Class specification:</b> AS/NZS 60335.2.8	X			
<b>Recessed Luminaire—light emitting semiconductor type</b>  An electrical appliance that— (a) incorporates a light emitting semiconductor light source; and		X		


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
(b) has any additional elements necessary for stable operation of the light source incorporated within or permanently connected to the device; and (c) has a rated voltage greater than 50 V and up to and including 250 V; and (d) is designed to recessed into a ceiling, wall or floor. but does not include— (e) a double capped light emitting semiconductor lamp; (f) a light emitting semiconductor lamp (self-ballasted); (g) an electrical device that is intended to product light for illumination purposes in commercial or industrial applications; (h) ground recessed luminaires (IEC 60598-2-13); (i) recessed air handing luminaires (AS/NZS 60598.2.19) (j) recessed liquid cooled luminaires; (k) emergency lighting fixtures (AS/NZS 60598.2.22); (l) fans with integral luminaires (AS/NZS 60335.2.80).  <b>Class specification:</b> AS/NZS 60598.2.2				
<b>Refrigerating appliance</b>  An electrical appliance that— (a) is a household type; and (b) cools and stores food.  <b>Class specification:</b> AS/NZS 60335.2.24	X			
<b>Residual current device</b>  An electrical device that— (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 that 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	X			





 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
(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— (e) a device intended to be used with a particular circuit breaker other than a miniature overcurrent circuit-breaker; or (f) a device intended to protect an electricity supply authority distribution system; or (g) a device covered by AS 2081 and intended for mines use.  <b>Class specification:</b> Without integral overcurrent protection—AS/NZS 3190 or AS/NZS 61008.1 With integral overcurrent protection—AS/NZS 3190 and AS 3111 or AS/NZS 61009.1.				
<b>Room heater</b>  An electrical appliance that— (a) is a household type; and (b) is for heating, by electrical energy, for comfort purposes; and includes— (c) an appliance that accommodates one or more heat lamps; but does not include— (d) an air-conditioning appliance; (e) 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 (f) an under-carpet heating system.  <b>Class specification:</b> Thermal storage type—AS/NZS 60335.2.61 Other—AS/NZS 60335.2.30	X			
<b>Sewing machine</b>  An electrical appliance that— (a) is a household type; and (b) is for stitching fabric or other material.  <b>Class specification:</b>		X		


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
AS/NZS 60335.2.28				
<b>Simple portable luminaire</b>  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 15mm 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.  <b>Class specification:</b> AS 60598.2.4 or AS 60598.2.4 Annex ZA		X		
<b>Socket-outlet</b>  An electrical device that— (a) is for fixing at a point at that 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 rating not exceeding 20 A; but does not include— (e) an outlet within the scope of AS/NZS 3123 or AS/NZS 3131.  <b>Class specification:</b> AS/NZS 3112	X			
<b>Socket-outlet with supply flexible cord</b>	X			Level 3 on 18 December 2021


 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
<p>An electrical device that—</p> <p>(a) is for connection to the supply by a supply flexible cord;</p> <p>(b) incorporates facilities for the insertion of one or more plugs;</p> <p>(c) is designed to be permanently fixed;</p> <p style="padding-left: 40px;">i. in a bench, desk, table or the like or</p> <p style="padding-left: 40px;">ii. on a bench, desk, table or the like; or</p> <p style="padding-left: 40px;">iii. on the floor, ceiling or wall</p> <p>(d) has a rating not exceeding 20 A</p> <p>but does not include</p> <p>(e) an outlet within the scope of AS/NZS 3123 or AS/NZS 3131;</p> <p>(f) socket-outlets that are part of another electrical appliance; or</p> <p>(g) an outlet device (as described in <a href="#">outlet device</a>)</p> <p><b>Class specification:</b> AS/NZS 3112</p> <p><b>Note:</b> Clause 3.9.2 in AS/NZS 3112 requires these devices to comply with relevant clauses of AS/NZS 3105.</p>				
<p><b>Soldering iron</b></p> <p>An electrical appliance that—</p> <p>(a) is for the application or removal of solder; and</p> <p>(b) is hand held;</p> <p>and includes—</p> <p>(c) any integral or associated power supply or controller;</p> <p>but does not include—</p> <p>(d) a soldering iron promoted exclusively to industry.</p> <p><b>Class specification:</b> AS/NZS 60335.2.45</p>	X			
<p><b>Submersible pump</b></p> <p>An electrical appliance that –</p> <p>(a) is for pumping liquids (including a mixture of water and small solids) having a temperature not exceeding 90°C</p> <p>(b) has any electrical part, or enclosure around any electrical part, completely or partially immersed in the liquid being pumped during normal use; and</p> <p>(c) is portable or fixed in position</p>	X			<b>Level 3 on 18 December 2021</b>

 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
<p>and includes –</p> <p>d) any pumps for garden ponds, aquarium pumps, sludge pumps, submersible pumps, table fountain pumps, deep well pump or vertical wet pit pumps where any of these pumps meet (a), (b) and (c)</p> <p>but does not include</p> <p>e) any shower boost pumps, or any vertical wet pit pumps that do not meet (a), (b), and (c); or</p> <p>f) swimming pool or spa equipment.</p> <p><b>Class specification:</b> AS/NZS 60335.2.41</p>				
<p><b>Supply flexible cord</b></p> <p>An electrical cord that—</p> <p>(a) is unshielded and flexible;</p> <p>(b) is designed for use at low voltage;</p> <p>(c) consists of two or three elastomer or PVC insulated cores of multistrand construction;</p> <p>(d) has a cross-sectional area of each conductor not exceeding 2.5 mm<sup>2</sup>; and</p> <p>(e) has for other than tinsel cords, individual wire strands with a diameter not exceeding—</p> <p>(i) 0.21 mm for conductor sizes up to 1 mm<sup>2</sup>; or</p> <p>(ii) 0.26 mm for conductor sizes exceeding 1 mm<sup>2</sup>;</p> <p>Note: this includes interconnection cords</p> <p>but does not include—</p> <p>(f) a flexible cord directly connected to equipment or approved non-rewireable accessories that is marked in accordance with the HAR marking agreement for flexible cords.</p> <p>(g) wiring contained entirely within the enclosure of equipment.</p> <p><b>Class specification:</b> All types—AS/NZS 3191 PVC insulated flexible cord—AS/NZS 60227.5 Rubber insulated flexible cord—AS/NZS 60245.4</p>	X			
<p><b>Swimming pool/spa equipment</b></p>	X			

 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
<p>An electrical appliance or device that—</p> <ul style="list-style-type: none"> <li>(a) is a transportable spa pool or transportable spa bath; or</li> <li>(b) is for circulating air or water in a conventional bath; or</li> <li>(c) is for use in the operation or cleaning of a swimming pool, non-transportable spa-pool or non-transportable spa-bath.</li> </ul> <p>but does not include—</p> <ul style="list-style-type: none"> <li>(d) an appliance or device exclusively promoted for commercial use; or</li> <li>(e) a heat pump.</li> </ul> <p><b>Class specification:</b>            Pump—AS/NZS 60335.2.41            Spa pool, spa-bath or an appliance intended to circulate air or water in a conventional bath— AS/NZS 60335.2.60            UV radiation water treatment appliances—AS/NZS 60335.2.109            Other—AS/NZS 3136</p>				
<p><b>Television receiver—CRT type</b></p> <p>An electrical appliance that—</p> <ul style="list-style-type: none"> <li>(a) is for household use;</li> <li>(b) is for the display of public or subscription television broadcasts; and</li> <li>(c) incorporates a single cathode ray picture tube.</li> </ul> <p><b>Class specification:</b>            AS/NZS 60065 or AS/NZS 62368.1</p>		X		
<p><b>Television receiver—non CRT type</b></p> <p>An electrical appliance that—</p> <ul style="list-style-type: none"> <li>(a) is a device with an integral screen;</li> <li>(b) is for the display of public or subscription television broadcasts or streaming services;</li> </ul> <p>but does not include—</p> <ul style="list-style-type: none"> <li>(c) television receiver—CRT type; or</li> <li>(d) video and image display device.</li> </ul> <p><b>Class specification:</b>            AS/NZS 60065 or AS/NZS 62368.1</p>		X		

 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
<p><b>Tool—portable type</b></p> <p>An electrical motor-operated appliance that—</p> <ul style="list-style-type: none"> <li>(a) is intended to do mechanical work</li> <li>(b) is with or without provisions for mounting on a support</li> <li>(c) is intended or designed to be held or supported by hand during operation</li> </ul> <p>but does not include—</p> <ul style="list-style-type: none"> <li>(d) lawn and garden machinery</li> <li>(e) a tool, portable type, promoted exclusively to industry</li> <li>(f) a transportable tool;</li> <li>(g) a heat gun</li> </ul> <p><b>Note:</b> mechanical work involves operations such as machining, drilling, cutting, sawing, impacting, fixing, and surface preparation</p> <p><b>Class specification:</b></p> <p>AS/NZS 60745.1 plus the appropriate AS/NZS 60745 series Part 2 (until suspended by the relevant AS/NZS 62841 series Part 2, as stated in the relevant AS/ZS 62841 series Part 2); or</p> <p>AS/NZS 62841.1 plus the appropriate AS/NZS 62841 series Part 2 (able to be applied as soon as published); or</p> <p>Where there is not an AS/NZS 60745 series Part 2, or an AS/NZS 62841 series Part 2 – AS/NZS 3160</p>	X			
<p><b>Vacuum cleaner</b></p> <p>An electrical appliance that—</p> <ul style="list-style-type: none"> <li>(a) is a household type;</li> <li>(b) is portable; and</li> <li>(c) removes dust, dirt or moisture and the like from floor coverings by suction; or</li> <li>(d) removes garden refuse from lawns or paths and the like by suction.</li> </ul> <p><b>Class specification:</b></p> <p>Hand held garden type—AS/NZS 60335.2.100</p> <p>Other—AS/NZS 60335.2.2</p>	X			
<p><b>Video and image display device</b></p> <p>An electrical appliance that—</p> <ul style="list-style-type: none"> <li>(a) is a device with an integral screen;</li> </ul>			X	Level 1 equipment not listed in AS/NZS 4417.2

 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
(b) is for connection to a separate image display or image data source; and does not include (c) Television receiver – CRT type; (d) Television receiver – non CRT type, or (e) display devices that are integral with a personal computer.  <b>Class specification:</b>  AS/NZS 62368.1				
<b>Wall switch</b>  An electrical device that— (a) is a household type; (b) is an air-break or electronic switch; (c) is for connection to the wiring of an electrical installation; (d) is primarily for mounting on a vertical surface; (e) is intended to turn a load ON or OFF; and (f) 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.  <b>Class specification:</b> AS/NZS 3133, or For electronic switches – AS/NZS 60669.2.1 – plus AS/NZS 3133 M rating if applicable	X			
<b>Washing machine</b>  An electrical appliance that— (h) is a household type; and (i) is used for washing clothes and other textile materials.  <b>Class specification:</b> AS/NZS 60335.2.7	X			
<b>Water bed heater</b>  An electrical appliance that—		X		

 Contents <b>Equipment type and definition</b>	Risk Level			Comments
	3	2	1	
(a) is for installation under a water bed envelope; and (b) heats water contained in that envelope; and includes— (c) any associated control device.  <b>Class specification:</b> AS/NZS 60335.2.66				
<b>Water heater</b>  An electrical appliance that— (a) is for heating and storage of water for bathing, washing, or similar purposes; (b) incorporates a heating element; (c) is unvented; and (d) has a storage capacity not less than 4.5 L nor more than 680 L; OR (e) is for heating water; (f) is of the instantaneous type; and (g) incorporates live parts in contact with water.  <b>Class specification:</b> Pressure storage—AS/NZS 60335.2.21 Instantaneous—AS/NZS 60335.2.35	X			



## Version control

Version	Description of changes	Document Date
1.0	<ol style="list-style-type: none"> <li>1) Air conditioner incorporating non-flammable or low flammable refrigerant – amendment</li> <li>2) DC isolator – amendment</li> <li>3) Electric hot water bottle – amendment</li> <li>4) Floor polisher/scrubber – amendment</li> <li>5) Glue gun – amended</li> <li>6) Heating pad - flexible – amendment</li> <li>7) Light emitting semiconductor lamp (self-ballasted) - amendment</li> <li>8) Luminaire –portable type – amendment</li> <li>9) Nightlight—mains socket-outlet mounted – amendment</li> <li>10) Over blanket / Duvet / Wrap – amendment</li> <li>11) Projector – amendment</li> <li>12) Simple portable luminaire – introduced</li> </ol>	12 March 2018
2.0	<ol style="list-style-type: none"> <li>1) Beauty care lamp – amendment</li> <li>2) Evaporative cooler – introduced</li> <li>3) Power line communication device – introduced</li> <li>4) Recessed luminaire—light emitting semiconductor type – introduced</li> <li>5) Television receiver—CRT type – amendment</li> <li>6) Television receiver—non CRT type – introduced</li> <li>7) Tool—portable type – amendment</li> <li>8) Water bed heater – amendment</li> </ol>	21 September 2018
3.0	<ol style="list-style-type: none"> <li>1) Bayonet holder – amendment</li> <li>2) Edison screw lampholder – amendment</li> <li>3) Evaporative cooler – amendment</li> <li>4) Fluorescent lamp ballast – amendment</li> <li>5) Lampholder adaptor – amendment</li> <li>6) Power line communication device – amendment</li> <li>7) Recessed Luminaire—light emitting semiconductor type – amendment</li> <li>8) Television receiver—CRT type – amendment</li> <li>9) Television receiver—non CRT type – amendment</li> <li>10) Water bed heater – amendment</li> <li>11) Tool portable type – amendment</li> <li>12) Minor changes for clarification and to align with AS/NZS 4417.2</li> </ol>	11 December 2019
4.0	<ol style="list-style-type: none"> <li>1) Format change to align with EESS style</li> <li>2) Bayonet lampholder – amendment</li> <li>3) Lampholder adaptor – amendment</li> <li>4) Building wiring cables – amendment</li> <li>5) Clothes dryer – amendment</li> <li>6) Edison screw lampholder – amendment</li> <li>7) Fluorescent lamp ballast – amendment</li> <li>8) Hedge clipper – amendment</li> <li>9) Miniature overcurrent circuit breaker – amendment</li> <li>10) Power supply of charger – amendment</li> <li>11) Socket-outlet with supply flexible cord – new definition</li> <li>12) Submersible pump – new definition</li> <li>13) Supply flexible cord – amendment</li> <li>14) Tool – portable type – amendment</li> </ol>	18 March 2021
4.1	<ol style="list-style-type: none"> <li>15) <u>Correct risk level for socket outlet with cord and submersible pump -correction</u></li> </ol>	26 July 2021
4.2	<ol style="list-style-type: none"> <li>1) Fan - correction</li> <li>2) General review – update spelling and punctuation errors</li> <li>3) “Video and image display device” level 1 definition - added</li> </ol>	30 January 2023
4.3	<ol style="list-style-type: none"> <li>1) Add clarification to Preface</li> </ol>	July 2024