<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Product Description</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementatio n Rules</th>
<th>Relevant National Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric wires &amp; cables (CABL)</td>
<td>Polyvinyl chloride insulated cables of rated voltage up to and including 450/750V V 70 only</td>
<td>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.</td>
<td>GB/T5023.1-5-2008 GB/T5023.6-2006 GB/T5023.7-2008</td>
<td>No Deviation</td>
<td>CNCA-01C-002: 2007</td>
<td>AS/NZS 3191:2008 (NEQ) Or IEC 60227-1:2007 ed3 IEC 60227-2:2003 ed2.1 IEC 60227-3:1997 ed2.1 IEC 60227-4:1997 ed2.1 or IEC 60227-5:2003 IEC 60227-6:2001 ed3 IEC 60227-7:2003 ed1.1</td>
</tr>
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<td>Product Category</td>
<td>Specified Product</td>
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<td>Applicable Deviation</td>
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<tr>
<td><strong>Switches for Circuit, Installation Protective and Connection Devices</strong></td>
<td>General</td>
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<tr>
<td><strong>Appliance Couplers for Household and Similar General Purpose</strong></td>
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<td>An electrical device which— (a) to two-pole appliance couplers for a.c. only; (b) with or without earthing contact; and (c) has a maximum rating of 16 A; (d) has a voltage greater than 50V but not exceeding 250V or 50Hz or 60Hz; (f) for household and similar general purposes and intended for the connection of a supply cord to electrical appliances or other electrical equipment;</td>
<td>GB17465.1-2009</td>
<td>No Deviation</td>
<td>CNCA-01C-006:2011</td>
<td>IEC 60320.1:2007 ed2.1</td>
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<td>IEC 60320-2-2:1998 ed2.0</td>
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<td>IEC 60320-2-3:2005</td>
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<td>IEC 60320-2-4:2005 ed1.0</td>
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<tr>
<td><strong>Switches for Household and Similar Fixed-Electrical Installations</strong></td>
<td>Wall switch</td>
<td>An electrical device which— (a) is an air-break switch; (b) is for connection to the wiring of an electrical installation; (c) is primarily for mounting on a vertical surface; (d) is manually opened and manually closed; and (e) has a rating not exceeding 20 A.</td>
<td>AS/NZS 3133:2008 + am1 and am2 (GB16915.1-2003)</td>
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<td>CNCA-01C-004:2011</td>
<td>AS/NZS 3133:2008 + A1 + A2 (NEQ)</td>
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<td>Product Category</td>
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<td>Applicable Deviation</td>
<td>Implementation Rules</td>
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<td>Low-voltage Electrical Apparatus</td>
<td>AC Semiconductor Motor Controllers And Starters</td>
<td>This standard applies to controllers and starters, which may include a series mechanical switching device intended to be connected to circuits. The controllers and starters are not normally designed to interrupt short-circuit currents. Therefore, suitable short-circuit protection should form part of the installation, but not necessarily of the controller or starter. 1. AC semiconductor motor controller: semiconductor switching device that provides the starting function for an a.c. motor and an OFF-state. 2. Semiconductor motor starter: a.c. semiconductor motor controller with suitable overload protection, rated as a unit.</td>
<td>GB 14048.1-2006</td>
<td>Test of resistance to Damp heat (Humidity Test) GB 14048.1-2006 Annex K</td>
<td>CNCA-01C-011:2007</td>
<td>IEC 60947-1:2001 MOD</td>
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<td>GB 14048.6-2008</td>
<td>No Deviation</td>
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<td>IEC 60947-4-2:2002 IDT</td>
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<td>Over-current protective circuit-breakers for household and similar uses</td>
<td>Circuit-breaker which- (a) is an enclosed air-break switch; (b) opens a low voltage circuit automatically under predetermined conditions of overcurrent; (c) is for the protection against the overcurrents of wiring installation of buildings or similar applications; (d) is designed for use by un instructed people and for not being maintained; (e) is for operation at 50Hz; (f) has a rated voltage more than 36V a.c. and not exceeding 440V a.c.(between phases) and a rated current not exceeding 125A and a rated short-circuit capacity not exceeding 25000A;</td>
<td>GB10963.1-2005</td>
<td>Variations to IEC 60898-1, Ed. 1.2 (2003) for application in New Zealand Clause 5.3.1 Immediately after Table 1 insert the following text: The marking of the rated voltage or rated voltage range of single phase circuit-breakers shall cover 230 V and for multi-phase circuit-breakers, 400 V. 6 Delete item a) and replace with the following: a) the name or registered trade mark or mark of the manufacturer or of the responsible vendor; 8.1.4.4 After the NOTE insert the following: Compliance is checked by inspection and, if necessary, by chemical analysis.</td>
<td>CNCA-01C-012:2007</td>
<td>AS/NZS 60898.1:2004</td>
<td>S</td>
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<tr>
<td>Product Category</td>
<td>Specified Product</td>
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<tr>
<td>Electric Tools</td>
<td>General</td>
<td>GB3883.1-2008</td>
<td>GB3883.1 amended as follows:</td>
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<td>Clause 1.1 Delete the last two paragraphs of the requirement.</td>
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<td>5.7.1 Replace Clause 5.7.1 with the following variation:</td>
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<td>5.7.1 Tools for a.c. only are tested with a.c. at 50 Hz and those for a.c./d.c. are tested at a.c. 50 Hz or d.c., whichever is the more unfavourable supply.</td>
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<td>8.1 After the first paragraph insert the following variation:</td>
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<td>Tools intended for connection to the supply mains other than class III tools and tools that are required by the standard to be supplied from a transformer, shall be marked with</td>
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<td>- a rated voltage of at least:</td>
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<td>- 230 V for single phase tools;</td>
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<td>- 400 V for polyphase tools.</td>
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<td>or</td>
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<td>- a rated voltage range that includes:</td>
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<td>- 230 V for single phase tools;</td>
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<td>- 400 V for polyphase tools.</td>
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<td>8.12 Replace the second paragraph with the following variation:</td>
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<td>They shall be written in English.</td>
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<td>8.12.2 After item b) 5) insert the following variation:</td>
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<td>301) Recommendation that the tool always be supplied via residual current device with a rated residual current of 30 mA or less</td>
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<td>After item d) 5) insert the following variation:</td>
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<td>301) For tools with a water supply intended to be supplied by an isolating transformer, the method of supply shall be specified, including details of the isolating transformer to be used.</td>
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<td>14.6 In item c) replace the third paragraph with the following variation:</td>
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<td>Where fitted in the supply cord, the residual current device shall be within a distance of 0.5 m from the supply or it shall be fitted in the supply plug</td>
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<td>21.13 After the NOTE insert the following variation:</td>
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<td>NOTE 301 A special test to determine if ceramic material is tightly sintered is as follows.</td>
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<td>The ceramic material is broken into pieces which are immersed in a solution containing 1 g of fuchsine in each 100 g of methylated spirit. The solution is maintained at a pressure not less than 15 MPa for a period so that the product of the test duration in hours and the test pressure in MPa is not less than 180.</td>
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<td>The pieces are removed from the solution, rinsed, dried and broken into smaller pieces.</td>
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<td>The freshly broken surfaces are not to show any trace of dye when examined either with the naked eye or through spectacles or contact lenses if normally worn by the examiner.</td>
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<td>21.16 In the second paragraph, replace the third dash item with the following variation:</td>
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<td>- of class I or class II construction and be designed for use in combination with an isolating transformer having a no-load output voltage not exceeding 115 V and comply with 14.4 and 14.5.</td>
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<td>23.1.4 Replace the requirement with the following variation:</td>
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<td>Isolating transformers and safety isolating transformers shall comply with IEC 61558-2-4 and IEC 61558-2-6 respectively.</td>
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<td>23.301 After 23.5 insert the following variation:</td>
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<td>23.301 Residual current devices supplied with the tool shall comply with AS/NZS 3190 type FS, AS/NZS 61008.1 type A or AS/NZS 61009.1 type A and have a rated residual current not exceeding 30 mA. Compliance is checked by inspection.</td>
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<td>24.1 Delete the second dash item.</td>
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<td>After the fourth dash item insert the following variation:</td>
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<td>Supply cords for single phase tools that are directly connected to the electricity supply mains and have a rated current not exceeding 10 A shall be fitted with an appropriate plug complying with AS/NZS 3112.</td>
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<td>24.4 Replace the third paragraph with the following variation:</td>
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<td>If provided with a plug, power supply cords of single-phase tools having a rated current not exceeding 16 A shall be provided with a plug complying with AS/NZS 3112 or AS/NZS 3123 or IEC 60309.</td>
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<td>29.3 After the test specification insert the following variation:</td>
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<td>NOTE 301 Proof tracking tests are not carried out on parts of phenolic material as test results are not repeatable.</td>
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</tbody>
</table>

Implementation Rules: CNCA-6TC-674:2011

Relevant National Standard: AS/NZS 60745.1:2009
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Product Description</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drills including Impact drills</td>
<td>Drill angle drill</td>
<td>GB3883.1-2008</td>
<td>No Deviation</td>
<td>AS/NZS 60745.1:2009 + IEC 60745-2-1 ed2.1</td>
<td>S &amp; E SDoC</td>
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<td></td>
<td>a. Tools intended for boring holes in various materials, such as metal, plastic, wood and so on.</td>
<td>GB3883.6-2012</td>
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<td></td>
<td>b. There are various speeds, such as single speed, double speed and multi-speed. There is no impact mechanism. In general, series motors are used. Occasionally the three phases asynchronous motors are used.</td>
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<td>a. Tools intended for boring holes in concrete, stone and so on they are similar, in appearance and construction, to drills, but have build-in percussion system. The percussion system can be disengaged, in order to bore holes in metal, plastic and wood etc.</td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
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<td>b. In general, series motors are used.</td>
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<td>b. No impact mechanism in it. The torque can be adjusted and limited.</td>
<td>GB4343.1-2009</td>
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<td>AS/NZS CISPR 14.1:2013</td>
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<td>c. In general, the series motors are used. When use of permanent magnet motors, the supply is provide with power box.</td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td>AS/NZS 81000.3.2:2013</td>
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<td></td>
<td>Impact wrenches (the wrenches without impact mechanism are not covered.)</td>
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<td>a. Tools intended for tightening and loosing screws, nuts and like with wrench sets.</td>
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<td>b. The rotary impact, mechanisms are equipped. In general, the series motors are used.</td>
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<td></td>
<td>c. Occasionally the three phases asynchronous motors are used.</td>
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### Grinders, including Angle grinders, Straight grinders, Die grinders, Grinders with water supply, Polishers and Disk sanders

**Specified Product**
- Polishers and Disk grinders, Grinders, Die grinders, Straight Grinders

**Product Description**
- Grinders, die grinders, valve grinders
- Tools intended for grinding non-smooth metallic surface with various shape small grinding wheels.
- In general, the series motors are used.
- Straight grinders
- Tools intended for grinding non-smooth metallic surface and weld with cylindrical surface of grinder wheel.
- In general, the series motors are used.
- Occasionally the three phases asynchronous motors are used.
- Polishers
- Tools intended for polishing variant material surface with polishing wheel.
- In general, the series motors are used.
- Disk-type sanders
- Tools intended for moving surface material with round-type abrasive papers fitted the basic pad.

**Applicable Standard**
- GB3883.3-2007

**Applicable Deviation**
- GB3883.3 amended as below:

#### 8 Marking and instructions

Replace the existing Subclause 8.1 by the following: 8.1 Addition:

Tools shall also be marked with:
- Rated speed in revolutions per minute;
- Rated capacity in mm;
- Tools provided with a threaded spindle shall be marked with the spindle thread size;
- "Always wear eye protection" or sign M004 of ISO 7010 or the following safety sign:

**WARNING**

- The eye protection symbol may be modified by adding other personal protective equipment such as ear protection, dust mask, etc.

Tools fitted with an electronic speed or load regulator that interrupts the operation of the tool and that allows automatic resumption of the operation of the tool within 2 s shall be fitted with a label permanently attached to the supply cord. The label shall contain the substance of the following warning:

**WARNING:** This tool will restart automatically if stalled. Do not remove this label.

Replace the existing Subclause 8.12.1 by the following:

8.12.1 Addition:

For the following safety instructions specified in 8.12.1.101 to 8.12.1.107, terms such as grinding/grinder, sanding/sander, wire brushing/wire brush, polishing/polisher or cutting-off/cut-off tool are selected as recommended by the manufacturer. These terms in the warnings and headings shall be consistently used or deleted based on the selected operations. The "and"/"or" conjunctions may be used as appropriate.

If the power tool is recommended only for one of the listed operations, the heading of that section is to be used for all warnings.

8.12.1.101 Safety instructions for all operations

Add the following note after the heading "Safety Warnings Common for Grinding, Sanding, Wire Brushing, Polishing or Abrasive Cutting-Off Operations":

**NOTE** In the above heading, those operations not applicable may be omitted.

Replace the existing items b) and j) in 8.12.1.101 by the following:

b) Operations such as grinding, sanding, wire brushing, polishing or cutting-off are not recommended to be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.

**NOTE** List only those operations that were not included in the first warning. If all listed operations are recommended, then this warning may be omitted, but all subsequent warnings are to be given without exclusion.

j) Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

**NOTE** The above warning may be omitted if polishing or sanding are the only recommended operations.

8.12.1.103 Additional safety instructions for grinding and cutting-off operations

Replace the existing item b) in 8.12.1.103 by the following:

b) The guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect the operator from broken wheel fragments, accidental contact with wheel and sparks that could ignite clothing.

**NOTE** The above warning may be omitted for grinders or cut-off grinders with a rated capacity of less than 55 mm.

8.12.1.104 Additional safety instructions for cutting-off operations

Replace the existing item d) in 8.12.1.104 by the following:

d) Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully re-enter the cut. The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.

Replace the existing text of 8.12.2 a) by the following:

8.12.2 a) Addition:

101) Types of accessories in accordance with 8.12.1.101 a)
102) Thickness and diameter of grinding wheels
8.12.2 b) Replace the existing items 102), 103) and 104) by the following new items:

102) Mounting of accessories and use of the correct flanges, use and care of the abrasive product. For reversible flanges, the correct method of fitting the flanges
103) Instruction to the operator on the use of all the different types of wheels specified in the instructions in accordance with 8.12.2 a) 101), e.g. side grinding, peripheral grinding
104) Instruction for the proper type of guard for the type of wheel being used
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<tr>
<td>Sanders</td>
<td>Sanders other than disk type, random orbital sanders, orbital sanders</td>
<td>Sanders equipped with a plate, which performs an orbital oscillating motion parallel to the work surface, in general, series motors are used.</td>
<td>GB3883.1-2009</td>
<td>No Deviation</td>
<td>AS/NZS 60745.2.4 + AS/NZS 60745.2-4:2008 ed2.1</td>
<td>S &amp; E</td>
<td>SDoc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sanding surface material with various shape abrasive papers.</td>
<td>GB3883.4-2012</td>
<td>No Deviation</td>
<td>AS/NZS CISPR 14.1:2013</td>
<td>S &amp; E</td>
<td>SDoc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sanders equipped with a plate, which performs an orbital oscillating motion parallel to the work surface, in general, series motors are used.</td>
<td>GB3843.1-2009</td>
<td>See above</td>
<td>AS/NZS 61000.3.2:2013</td>
<td>S &amp; E</td>
<td>SDoc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sanders other than disk type, random orbital polishers, orbital polishers</td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td>AS/NZS CISPR 14.1:2013</td>
<td>S &amp; E</td>
<td>SDoc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tools intended for sanding surface material with various shape abrasive papers.</td>
<td>GB3843.4-2012</td>
<td>No Deviation</td>
<td>AS/NZS 61000.3.2:2013</td>
<td>S &amp; E</td>
<td>SDoc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sanders equipped with a plate, which performs an orbital oscillating motion parallel to the work surface, in general, series motors are used.</td>
<td>GB3843.1-2009</td>
<td>See above</td>
<td>AS/NZS 61000.3.2:2013</td>
<td>S &amp; E</td>
<td>SDoc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Belt sanders</td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td>AS/NZS CISPR 14.1:2013</td>
<td>S &amp; E</td>
<td>SDoc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>In general, series motors are used.</td>
<td>GB 3883.5-2007</td>
<td>No Deviation</td>
<td>AS/NZS 60745.1:2009 + IEC 60745-2-5:2010 ed5</td>
<td>S &amp; E</td>
<td>SDoc</td>
<td></td>
</tr>
</tbody>
</table>

Add the following text after item 104 and renumber the subsequent items:

105) Instruction for the mounting and securing of the guard identifying allowable adjustments to ensure maximum protection of the operator.

8.12.2.c) After clause 8.12.2.c) insert the following variation:

8.13 Addition:
The size of the label for tools fitted with an electronic speed or load regulator that interrupts the operation of the tool and that allows automatic resumption of the operation of the tool within 2 s shall be approximately 50 mm x 70 mm.
The lettering of the word "WARNING" shall be upper case and be not less than 5 mm high. Other lettering shall be at least 2 mm high.

Add the following additional subclause:

8.101 Tools shall also be marked with an indication of direction of rotation of the spindle. This shall be indicated by an arrow, raised or sunk, or by any other means no less visible and indelible.

23 Replace the text with the following variation:

This clause of Part 1 is applicable except as follows

23.3 Addition:

Electronic speed and load regulators that interrupt the operation of the tool and that allow automatic resumption of the operation of the tool within 2 s are not considered to be overload protection devices.
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Product Description</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
<th>E.S, S &amp; E App or SDoC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotary hammers</td>
<td>Hammers, including Hammers, Hammer drills, rock breaker</td>
<td>a. Tools intended for boring holes in concrete, stone and so on. b. Hammer: equipped with a build-in percussion system which is not influenced by the operator. It has no the capability of rotational motion. c. Rotary hammer: equipped with a build-in percussion system which is not influenced by the operator. It has the capability of rotational motion. d. Hammer drill: it similar to rotary hammer but it able to rotate only with the percussion system disengaged. In general, series motors are used. e. Rock hammer: it is used for boring holes in rock and breaking the rock. It is similar to hammer.</td>
<td>GB3883.1-2005 GB3883.7-2012</td>
<td>GB3883.7 amended as follows: 24 Replace the text with the following variation: This Clause of Part 1 is applicable.</td>
<td>GB3883.7 amended as follows: 24 Replace the text with the following variation: This Clause of Part 1 is applicable.</td>
<td>GB3883.8 amended as follows: 24 Replace the text with the following variation: This Clause of Part 1 is applicable.</td>
<td>GB4343.1-2009 See above</td>
</tr>
<tr>
<td>Sheet metal shears including Shears with double blade edges, Nibblers</td>
<td>Shears including shears with double edges</td>
<td>a. Tools intended for shearing of metal sheet plates. b. The upper blade makes reciprocating motion in order to shearing the metal sheet plate. In</td>
<td>GB3883.1-2005 GB3883.8-2005 (2012)</td>
<td>GB3883.8 amended as follows: 24 Replace the text with the following variation: This Clause of Part 1 is applicable.</td>
<td>GB3883.8 amended as follows: 24 Replace the text with the following variation: This Clause of Part 1 is applicable.</td>
<td>GB3883.8 amended as follows: 24 Replace the text with the following variation: This Clause of Part 1 is applicable.</td>
<td>GB4343.1-2009 See above</td>
</tr>
<tr>
<td>Product Category</td>
<td>Specified Product</td>
<td>Product Description</td>
<td>Applicable Standard</td>
<td>Applicable Deviation</td>
<td>Implementation Rules</td>
<td>Relevant National Standard</td>
<td>E.S., S &amp; E</td>
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<tr>
<td>Tappers</td>
<td></td>
<td></td>
<td></td>
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<td>AS/NZS 61000.3.2:2013</td>
<td></td>
</tr>
<tr>
<td>Internal concrete vibrators</td>
<td>Concrete vibrators (internal vibrators)</td>
<td>a. Tools intended for compacting concrete. The active parts (vibrator bottle) of the vibrator perform low-amplitude vibrations and is immersed into the mass of concrete to be vibrated. b. Three phases asynchronous motors are used. Sometimes the series motors are used. Some tools are sometimes a motor generator is used as power supply.</td>
<td>GB3883.1-2005 GB3883.12-2012 GB4343.1-2009 GB17625.1-2012</td>
<td>GB3883.12 amended as follows: 24 Delete the Modification to 24.4</td>
<td>AS/NZS 60745.1:2009 + AS/NZS 60745.2.12 2009(MOD)</td>
<td>AS/NZS CISPR 14-1:2013</td>
<td>S &amp; E</td>
</tr>
<tr>
<td>Planers</td>
<td></td>
<td>Planers</td>
<td>a. Tools intended for removing surface material. It is equipped with a rotating cutter where the axis of the cutter</td>
<td>GB3883.1-2005 GB 3883.10-2007</td>
<td>Add the following definition: 3.103 Cutting head assembly of blades, cutter block, blade fixing elements, relevant screws and spindle, the whole being ready for working Add the following: 8.12.1.1 Addition</td>
<td>AS/NZS 60745.1:2009 IEC 60745-2-14 : ed2.2</td>
<td>S &amp; E</td>
</tr>
</tbody>
</table>
Planer safety warnings
- Wait for the cutter to stop before setting the tool down. An exposed rotating cutter may engage the surface leading to possible loss of control and serious injury.
- Hold the power tool by insulated gripping surfaces only, because the cutter may contact its own cord. Cutting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against the body leaves it unstable and may lead to loss of control.

Add the following:
19 Mechanical hazards
This clause of Part 1 is applicable except as follows:

19.1 Addition:
For the requirements given in 19.106, 19.107 and 19.108, only the test probe shown in Figure 102 is used.
19.101 The blades when aligned with the fixed shoe shall not project by more than 1,1 mm radially beyond the cutter block (as per dimension "a" in Figure 101).
Compliance is checked by measurement.
19.102 At any depth of cut, the distance "b" (see Figure 101) between the rotating circle of the cutting edges and the trailing edge on the side of the adjustable shoe shall not exceed 5 mm measured radially.
Compliance is checked by measurement and by inspection.
19.103 The blades shall be secured in the cutter block in such a way that friction alone is not relied upon to prevent the ejection of the blades.
Compliance is checked by measurement and by inspection.
19.104 Cutting heads shall be designed and made of such materials that they withstand the forces and loads expected in normal use.
Compliance is checked by the following test:
An overspeed test shall be made on a sample cutting head, equipped with blades for the largest cutting diameter and the largest cutting edge width, the test speed being 1,5 times the rated no-load speed. If applicable, tension elements such as clamping screws shall be tightened in accordance with the instructions required by 8.12.2.
After the test, the cutting head shall not be deformed or cracked, no screws shall be loosened and displacements of detachable parts shall be less than specified in the test procedure.
The test procedure is as follows:
1) Measure the cutting head dimensions.
2) Bring the cutting head to the rated no-load speed, for 1 min.
3) Stop and re-measure the cutting head; measured displacements of the detachable parts of the cutting head shall not be greater than 0,15 mm.
4) Bring the cutting head to the speed, for 1 min.
5) Stop and re-measure the cutting head and compare the results with those obtained from step 3. The compared displacements shall not exceed 0,15 mm.
19.105 The clamping screws or other tensile loaded blade fixing elements used to secure the blades in the cutter block shall be made of steel with a hardness of at least 20 HRC and a tensile strength of at least 800 N/mm².
Clamping screws or bolts shall not project beyond the cutter block as shown in Figure 101.
19.106 It shall not be possible to touch rotating parts from the sides of the planer.
Compliance is checked by the following test:
The planer is positioned with the shoes resting on a flat surface. The accessibility of rotating parts is checked by means of the test probe shown in Figure 102.
19.107 Planers with rabbeting facilities shall be provided with a guard that avoids inadvertent contact at the sides with the blades.
Compliance is checked by inspection and by applying the test probe of Figure 102 without any force with the planer in the same position as required in 19.106.
19.108 It shall not be possible to touch the blades through the chip ejection opening.
Compliance is checked by testing all apertures for chip ejection with the test probe of Figure 102. It shall not be possible to touch the blades in the cutting head at any angle of the probe.
19.109 If a parallel guide is provided, its guiding and top surface shall have no openings or projections. Openings having a maximum dimension not exceeding 10 mm are disregarded.
Planners may be provided with an integrated non-detachable and non-lockable guard which automatically moves to the closed position, where it covers the whole width of the cutting head, when the planer is not in use.
The guard provided shall return automatically to the closed position at the end of the planing operation. The parallel guide and guard shall be so designed that for any cutting with the unused part of the cutting head is covered.
Any contact between guards manufactured from steel and other hard materials and the blades is to be avoided. If either the guard or parallel guide is designed in such a way that elimination of contact with the cutting head cannot be ensured, they shall
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
<th>E.S, S &amp; E</th>
<th>NZ App or SDoC</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
</tbody>
</table>

be manufactured from soft material (e.g. aluminium, plastic, wood).

*Compliance is checked by inspection.*

NOTE Examples of parallel guide and guard are given in Figure 103.

19.110 Planers shall stop within 10 s of switching off, unless the tool is fitted with an automatic closing guard.

*Compliance is checked by inspection and by measurement.*

19.111 If a lift-off device is provided, it shall be designed so that

- it is automatically activated, when the planer is lifted up from a horizontal surface, and
- the blade(s) do not make contact, when the planer is set at maximum depth of cut and placed on a horizontal surface.

*Compliance is checked by inspection.*

Add the following Figures:

![Figure 103 - Examples of parallel guides with typical dimensions and relevant distances](image1.png)

![Figure 104 - Test probe](image2.png)
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
<th>E.S, S &amp; E</th>
<th>NZ App or SDoC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>GB3883.17-2005</td>
<td>No Deviation</td>
<td>AS/NZS 60745-2:17 ed3.0</td>
<td>S &amp; E</td>
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<td></td>
<td></td>
<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td>AS/NZS 61000.3.2:2013</td>
<td>S &amp; E</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 103 – Exception of parallel guide and guard**

Replace the text of Annex K with the following:

**K.1 Addition:**
All clauses of this Part 2 apply unless otherwise specified in this annex.

**K.8.12.1.1 Replacement of this subclause of Part 2:**

Planer safety warnings

- Wait for the cutter to stop before setting the tool down. An exposed rotating cutter may engage the surface leading to possible loss of control and serious injury.
  
  NOTE The above warning applies only to planers without an automatic closing guard.

- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by your hand or against the body leaves it unstable and may lead to loss of control.

**K.12.4 This subclause of Part 2 is not applicable.**

Replace the text of Annex L with the following:

**L.1 Addition:**
All clauses of this Part 2 apply unless otherwise specified in this annex.

- GB4343.1-2009 No Deviation
- GB17625.1-2012 No Deviation
- GB3883.1-2005 No Deviation
- GB3883.17-2005 No Deviation
- GB4343.1-2009 See above
- GB17625.1-2012 No Deviation
<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>b. In general, series motors are used.</td>
<td>Hedge trimmers</td>
<td></td>
<td>GB4343.1-2009</td>
<td>See above</td>
<td></td>
<td>AS/NZS CISPR 14.1:2013</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td></td>
<td>AS/NZS 61000.3.2:2013</td>
<td></td>
</tr>
<tr>
<td>Product Category</td>
<td>Specified Product</td>
<td>Product Description</td>
<td>Applicable Standard</td>
<td>Applicable Deviation</td>
<td>Implementation Rules</td>
<td>Relevant National Standard</td>
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<td></td>
</tr>
<tr>
<td>Electric welding machines</td>
<td>General</td>
<td></td>
<td></td>
<td></td>
<td>CNCA/6TC-015-2011</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Limited duty manual metal arc welding power sources</td>
<td>— with a thermal cut-out device — Used by laymen — Limited to a rated maximum welding current of 160A</td>
<td>GB15579.1-2004 GB15579.6-2008</td>
<td>No Deviation</td>
<td>IEC 60947-6 ed2.0 or AS 60974.6-2006</td>
<td>S &amp; E SDoc</td>
<td></td>
</tr>
</tbody>
</table>
Deals with the safety of electrical appliances for household and similar purposes. May be a source of danger to the public, such as appliances intended to be used by laymen in shops, in offices, in hotels, in light industry and on farms.

If the appliances are intended to be connected to main source power directly, their rated voltage must include 220V and the rated frequency must include 50Hz for single-phase appliances, and for three-phase appliances, their rated voltage must include 380V and the rated frequency must include 50Hz.

Not apply to the appliances intended or designed for industry purpose.

Table 3: After the second row in table 3 insert the following variation:

<table>
<thead>
<tr>
<th>Insulated pins of appliances with pins for insertion into socket-outlets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance is checked by inserting the pins of the appliance into a socket-outlet capable of accepting a plug complying with Figure 2.1(a) of AS/NZS 3112. The socket-outlet has a horizontal pivot at a distance of 8 mm behind the engagement face of the socket-outlet and in the plane of the lower intersection of the centre lines of the contact apertures.</td>
<td></td>
</tr>
<tr>
<td>23.3. Replace the third, fourth and fifth paragraphs of the test specification with the following variation:</td>
<td></td>
</tr>
<tr>
<td>A new sample of the appliance shall be subjected to and shall comply with the test in 2.13.9.2 of AS/NZS 3112.</td>
<td></td>
</tr>
<tr>
<td>22.201 After clause 22.45 insert the following variations:</td>
<td></td>
</tr>
<tr>
<td>22.201 VOID</td>
<td></td>
</tr>
<tr>
<td>22.202 Appliances having integral pins for insertion into socket outlets shall comply with the appropriate requirements of AS/NZS 3112.</td>
<td></td>
</tr>
<tr>
<td>Compliance is checked as specified in Annex J of AS/NZS 3112.</td>
<td></td>
</tr>
<tr>
<td>NOTE 1 Clause J.2.2.3 (Internal connections for plug portions) of AS/NZS 3112 is covered by clause 23 of this standard.</td>
<td></td>
</tr>
<tr>
<td>NOTE 2 Clause J.2.2.6.2 (High voltage test) of AS/NZS 3112, except for the test of the insulation of the insulated pins, is covered by clause 16 of this standard.</td>
<td></td>
</tr>
<tr>
<td>NOTE 3 Clause J.2.2.6.4 (Temperature rise test) of AS/NZS 3112 is covered by clause 11 of this standard.</td>
<td></td>
</tr>
<tr>
<td>NOTE 4 Clause J.2.2.6.7 (Equipment with integral pins intended to be supported by the contacts of a socket-outlet) of AS/NZS 3112 is covered by clause 22.3 of this standard.</td>
<td></td>
</tr>
<tr>
<td>24.1 Before Note 1, insert the following variation:</td>
<td></td>
</tr>
<tr>
<td>NOTE 201 The relevant IEC standard may be replaced with the relevant Australia/New Zealand standard where applicable.</td>
<td></td>
</tr>
<tr>
<td>25.1 After the requirement insert the following variation:</td>
<td></td>
</tr>
<tr>
<td>Supply cords for single-phase portable appliances intended for direct connection to the supply mains, shall be fitted with an appropriate plug complying with AS/NZS 3112.</td>
<td></td>
</tr>
</tbody>
</table>

Table 11: Replace footnote a with the following variation:

\[a\] These cords may only be used if their length does not exceed 2 m between the point where the cord or cord guard enters the appliance and the entry to the plug. However, they cannot be used in class I appliances.

Household refrigerator (Refrigerating appliances, ice cream appliances, ice-makers) 1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.

- Rated voltage of single-phase appliances not exceeding 250 V, of others not exceeding 480 V.

GB4706.1-2005 amended as follows:

- After clause 22.114 insert the following variation:

22.301 Accessible glass panels with an area having any two orthogonal dimensions exceeding 75 mm shall be made from glass that shatters into small pieces when broken. Note: 1 External door finishes made of glass that are covered by a transparent adhesive covering are considered to be accessible. Compliance is checked by the following test, which is performed on two samples. Frames or parts attached to the glass panel to be tested are removed and the glass is placed on a rigid horizontal flat surface. Note 2 The edges of the sample to be tested are contained within a frame of adhesive tape in such a manner that the broken pieces remain in place after breakage but without hindering expansion of the sample.
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Product Description</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
<th>E.S. S &amp; E</th>
<th>NZ App or SDoC</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Effective volume &lt;=500L.</td>
<td></td>
<td></td>
<td>GB4343.1-2009</td>
<td>Subclauses 7.2.1 and 8.4 do not apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Excluding transcritical refrigeration systems</td>
<td></td>
<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric fan</td>
<td>1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson;</td>
<td></td>
<td>GB 4706.1-2005</td>
<td></td>
<td></td>
<td>AS/NZS 60335.1:2002 + A1 + A2 + AS/NZS 60335.2.80 :2004 + A1</td>
<td>S &amp; E</td>
<td>SDoC</td>
</tr>
<tr>
<td></td>
<td>2. Rated voltage of single-phase appliances not exceeding 250 V of others not exceeding 480V;</td>
<td></td>
<td>GB 4706.27-2008</td>
<td>GB 4706.27 amended as follows: 21 Mechanical strength 21.101 Add the following sentence: The test probe is applied with a force not exceeding 5 N.</td>
<td></td>
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<tr>
<td></td>
<td>3. Rotating of the fan blades by motor driving bring into air flowing for ventilating and air exhausting.</td>
<td></td>
<td>GB4343.1-2009</td>
<td>See above</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing machines (washing machine, spin extractors, tumbler dryer)</td>
<td>1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.</td>
<td></td>
<td>GB4706.1-2005</td>
<td>GB4706.26 amended as below: 7.12.1 After the third paragraph insert the following variation: For appliances fitted with a supply cord and plug, the instructions shall include a caution stating that if the appliance is supplied from a cord extension set or electrical portable outlet device the cord extension set or electrical portable outlet device should be positioned so it is not subject to splashing or ingress of moisture.</td>
<td></td>
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<tr>
<td></td>
<td>2. Rated voltage of single-phase appliances not exceeding 250 V of others not exceeding 480V.</td>
<td></td>
<td>GB4706.26-2008</td>
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<td></td>
<td>Used for the clothing and textile items for washing, dewatering. Can be equipped with heat, dehydration and drying device 3. Spin extractors, dehydration function with centrifugal washing machines, which have a capacity not exceeding 10kg of dry cloth.</td>
<td></td>
<td>GB4343.1-2009</td>
<td>See above</td>
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<td></td>
<td></td>
<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
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<tr>
<td>Washing machine</td>
<td>+</td>
<td></td>
<td>GB4706.24-2008</td>
<td>GB4706.24 amended as follows: 3.1.1 The temperature of the water is 65 °C ± 5 °C for appliances without heating elements</td>
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<td>EIC60335-2-7:2008 ed7.0</td>
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<td></td>
<td>GB4343.1-2009</td>
<td>See above</td>
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<td>No Deviation</td>
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<tr>
<td>Clothes dryer</td>
<td>Rotary type (Tumble dryers)</td>
<td></td>
<td>GB 4706.20 amended as below: CLAUSE 7.6 After the existing symbol insert the following variation: ❗ caution, risk of fire 7.12 After the second paragraph, insert the following variation: The meaning of the “caution, risk of fire” symbol shall be explained</td>
<td></td>
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</tbody>
</table>

### Notes
- Oil-affected items can ignite spontaneously, especially when exposed to heat sources such as in a tumble dryer. The items become warm, causing an oxidation reaction in the oil. Oxidation creates heat. If the heat cannot escape, the items can become hot enough to catch fire. Piling, stacking or storing oil-affected items can prevent heat from escaping and so create a fire hazard.
If it is unavoidable that fabrics that contain vegetable or cooking oil or have been contaminated by hair care products be placed in a tumble dryer they should first be washed in hot water with extra detergent - this will reduce, but not eliminate, the hazard.

30 Resistance to heat and fire

Add the following subclause:

30.101 Non-metallic materials in close proximity to heating elements and on which lint could accumulate shall be resistant to spread of fire. This requirement also applies to parts on which burning lint could fall.

Compliance is checked by subjecting non-metallic surfaces located within 75 mm of the heating element to the needle-flame test of Annex E. The test is also applied to surfaces located directly below the heating element. However, parts shielded by a barrier that meets the needle-flame test are not tested.

NOTE It is considered that burning lint will not fail through a barrier with openings having a dimension less than 3 mm. The needle-flame test is not carried out on:
- material classified as V0 or V1 according to IEC 60695-11-10, provided that the test sample was no thicker than the relevant part;
- rotating parts of fans;
- small parts as defined in IEC 60695-2-11.

GB4343.1-2009 See above

GB17625.1-2012 No Deviation

Storage water heaters

Excluding induction heaters

1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.
2. Rated voltage of single-phase appliances not exceeding 250 V, of others not exceeding 480V.
3. With the water storage function and heating water to a certain point (which can be set) of temperature below the boiling point function for ablation, washing and the similar use stationary appliances.
4. Appliances through metal armour heating element, non-metallic armour heating element, electric membrane or similar membrane heating element, or other types of heating elements (such as microwave, electromagnetic heating) to achieve the function of heating water.

GB4706.1-1998 GB4706.1-1998 is identical to IEC60335-1:1991 and is not valid in New Zealand

GB4706.12 amended as below:

3.104 After NOTE 2 insert the following variation:

NOTE 301 Tank-attached and side-fed storage water heaters as described in AS 1056.1, are different forms of a cistern-type water heater and are subject to the requirements which are specified for cistern-type water heater

3.301 After the 3.107 insert the following variation:

3.301 Heat exchange water heater

storage water heater in which cold water is fed into a heat exchanger, such as a coiled tube or similar device, which is itself immersed in a container filled with static heated water or other suitable medium. The static water container is vented to the atmosphere and flow of water is controlled by one or more valves in the outlet system.

NOTE If provision is made for heating water in the heat exchanger by some supplementary means in addition to heat exchange from the static heated water, the heat exchanger is to be regarded as a storage water heater of the appropriate type.

7.1 Replace the first paragraph with the following variation:

Appliances, other than cistern-fed water heaters and cistern-type water heaters shall be marked with the rated pressure in Pascal’s. However, in New Zealand. If the rated pressure does not exceed 0,12 MPa, the rated pressure shall also be marked in working head of water in metres.

Cistern-fed water heaters shall be marked with the rated pressure in working head of water in metres.

Closed water heaters shall be marked with the substance of the following warning:

WARNING: The valve or drain valve outlet pipe must not be sealed or blocked.

Closed water heaters shall be marked with the relief valve setting in kPa and power rating in kW.

Closed water heaters intended for direct connection to the water main shall be marked with a statement that a temperature-operated relief valve is to be fitted in the installation unless it is incorporated in the appliance.

NOTE This valve may be combined with the pressure relief valve if this valve is fitted to the hot water side of the storage water heater.

Heat exchange water heaters shall be marked with a statement that a pressure relief valve is to be fitted in the installation unless it is incorporated in the heat exchanger of the appliance.

Replace the fourth paragraph with the following variation:

Closed water heaters having a rated pressure less than 0.85 MPa and low pressure water heaters shall be marked with a statement that a pressure reducing valve is to be fitted in the installation.

7.12 After the last paragraph insert the following variation:

The instructions for closed water heaters and low-pressure water heaters not designed for connection to a supplementary heat source shall state the substance of the following warning:

DANGER: The operation of the thermal cut-out indicates a possibly dangerous situation. Do not reset the thermal cut-out until the water heater has been serviced by a qualified person.

7.12.1 Replace the last dash item in the first paragraph with the following variation:

the type or characteristics of a pressure reducing valve and the installation details (for appliances having a rated pressure less than 0.85 MPa);

Replace the second paragraph with the following variation:

The instructions for closed water heaters designed for connection to a supplementary heat source shall give details of the installation of control devices and their temperature setting, to prevent operation of the thermal cut-out caused by the heat from
Replace the third paragraph with the following variation:
The instructions for cistern-fed water heaters and low-pressure water heaters designed for connection to a supplementary heat source shall contain the substance of the following warning:

WARNING: Do not connect any restrictor or pressure relief device to the vent pipe of this water heater.

The instructions for closed water heaters shall state the substance of the following warning:

DANGER: Failure to operate the relief valve easing gear to the vent pipe of this water heater.

The instructions for closed water heaters shall state the substance of the following:

If the water supply pressure exceeds the rated pressure, a pressure reducing valve is to be fitted in the installation.

1.7.15 After Clause 7.12.1 insert the following variation:

7.15 Add:

The operating temperature of the temperature cut-out of a closed water heater shall not exceed 95°C. If the appliance is supplied through a pressure reducing valve which is not incorporated in the appliance shall be at least 0.076 MPa.

22.101 Replace the first two paragraphs of the requirement with the following variation:

The rated pressure of closed water heaters intended for direct connection to the water main shall be at least 0.85 MPa.

The rated pressure of closed water heaters and low-pressure water heaters intended to be supplied by a pressure reducing valve which is not incorporated in the appliance shall be at least 0.076 MPa.

22.102 Replace the first dash item with the following variation:

If the appliance is supplied through a pressure reducing valve, the container is subject to twice the working pressure instead:

After the fourth dash item insert the following variation:

1.5 times the pressure measured within the heat exchanger for heat exchange water heaters, when it is sealed at the inlet and outlet with the thermostat short-circuited or otherwise rendered inoperative, the water in the static water tank having been allowed to boil for one hour.

22.106 After the first paragraph of the requirement, insert the following variation:

This requirement also applies to low-pressure water heaters unless they are designed for connection to a supplementary heat source.

22.111 Replace the first paragraph of the requirement with the following variation:

Closed water heaters designed for connection to a supplementary heat source shall be constructed so that during normal use the thermal cut-out does not operate due to heat from the supplementary source.

24.102 Replace Clause 24.102 with the following variation:

24.102 The operating temperature of the thermal cut-out of a closed water heater shall ensure that the water temperature cannot exceed 95 °C.

Compliance is checked by the test of 24.102.1.

24.102.1 Replace the third paragraph with the following variation:

The temperature shall not exceed 95°C.

24.102.2 Replace Clause 24.102.2 with the following variation:

24.102.2 VOID

24.301 After Clause 24.102.2 insert the following variations:

24.301 In Australia, pressure relief valves and temperature-operated pressure relief valves shall be tested and shown to comply with AS 1357.

Compliance is checked by inspection and the appropriate tests

24.302 The operating temperature of the temperature-operated pressure relief valve of a closed water heater shall not exceed
### Instantaneous Water Heaters

1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.
2. Rated voltage of single-phase appliances not exceeding 250 V, of others not exceeding 480 V.
3. With heating the water as flows through the appliances to the temperature below the boiling point function; for bathing, washing and the similar use apparatus.
4. Appliances through metal armor heating element, non-metallic armor heating element, electric membrane or similar membrane heating element, or other means to achieve the function of heating water.

**GB4706.1-2005**

**GB4706.11-2008**

**IEC60335-2-35:2002 (ED) ed4.0**

**GB 4706.11 amended as follows:**

**7.12.1** Add the following to the addition:

In a multiple water outlet system where the water temperature can be set at each individual water outlet, the instructions shall state the substance of the following:

The system shall be installed so that the control for setting the water temperature in normal use installed at a shower outlet shall take priority over any other controls in the system that set the water temperature in normal use at other water outlets.

**Figure 101** After item e insert the following variation:

![Figure 101 - Examples of types of storage water heaters (continued)](image)

**Type**

1. heat exchange water heater

**NOTE 301**

The fire risk warning for portable visibly glowing radiant heaters shall be visible during normal use.

**CLAUSE 7.10**

After the third paragraph insert the following variation:

The fire risk warning for portable visibly glowing radiant heaters shall be visible during normal use.

**NOTE 301** This marking may be provided on a permanent durable label attached to the supply cord at a distance not exceeding 600 mm from the body of the heater.

<table>
<thead>
<tr>
<th>11.2 Replacement:</th>
<th>GB4706.23 amended as below:</th>
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<tbody>
<tr>
<td><strong>CLAUSE</strong></td>
<td><strong>GB4706.23-2007</strong></td>
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<tr>
<td><strong>A4</strong></td>
<td><strong>SDoC</strong></td>
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</table>

### Room Heaters

1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.
2. Rated voltage of single-phase appliances not exceeding 250 V, of others not exceeding 480 V.
3. The heater for heating room.

**GB4706.1-2005**

**GB4706.23-2007**

**IEC60335-2-30:2004 (IDT)**

**GB 4706 amended as follows:**

**3.105** Replace "fireguard" by "within 50 mm of the boundary of a fireguard".

**7.15** After the third paragraph insert the following variation:

The fire risk warning for portable visibly glowing radiant heaters shall be visible during normal use.

**NOTE 301** This marking may be provided on a permanent durable label attached to the supply cord at a distance not exceeding 600 mm from the body of the heater.

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<tr>
<th>11.2 Replacement:</th>
<th>GB4706.23 amended as below:</th>
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<td><strong>CLAUSE</strong></td>
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<tr>
<td><strong>A5</strong></td>
<td><strong>SDoC</strong></td>
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</tbody>
</table>
In the second paragraph, add the following dashed item:

-- heaters for mounting under benches are fixed to the ceiling of the test corner as near as possible to the walls, the distance
between the heater surface and the floor shall be as stated in the instructions.

As a new third paragraph insert the following variation.

Fixed heaters having a supply cord fitted with a plug, are mounted in front of a socket-outlet, with the plug inserted unless
-- the distance between the heater and the wall does not exceed 30mm; or
-- the instructions state that the heater must not be located in front of a socket-outlet;

NOTE 301 The socket-outlet used to supply the heater during the test with the heater mounted in front of a flush
mounted type socket-outlet shall be mounted in the wall of the test corner.

Add the following paragraphs:

For appliances provided with an automatic cord reel, one-third of the total length of the cord is unreeled. The temperature rise of
the cord sheath is determined as near as possible to the hub of the reel and also between the two outermost layers of the cord
on the reel.

For cord storage devices, other than automatic cord reels, that are intended to accommodate the supply cord partially while the
appliance is in operation, 50 cm of the cord is unwound. The temperature rise of the stored part of the cord is determined at the
most unfavourable place.

11.8 Add as a new paragraph to the addition, the following variation.

For fixed heaters mounted in front of a socket-outlet the temperature rise of the plug shall not exceed 45 K

19.1 As a new sentence to the modification insert the following variation:

If relevant, 19.301 is also applicable

Modification: Add the following note:

NOTE 101 For the tests where it is stated that thermal controls that operate during the test of Clause 11 are short-circuitied, the
relevant switching device that disconnects the heating elements and thermal sensor are also short-circuitied.

19.113 As a new paragraph to the modification insert the following variation:

If compliance with 19.13 relies on the operation of a non-self-resetting protective device, the time from energising the heater
elements to the time that the non-self-resetting protective device operates is recorded for the purposes of 19.301.

19.301 After 19.114 insert the following variation:

19.301 If during the test of 19.113, compliance with 19.13 relied on the operation of a non-self-resetting protective device
the fan heater is further tested as follows.

The test of 19.113 is repeated, with the non-self-resetting devices that operated during that test short circuitied.

The time from energising of the heater elements to the time that ignition of any non-metalic part of the appliance occurs, is
recorded.

The time recorded during this test shall exceed the time recorded during the test of 19.113 by not less than 10 s.

For this test, 19.13 is not applicable.

21.1 Replace the first paragraph with the following variation:

Compliance is also checked by the tests of 21.101, 21.102 and 21.301.

Replace the second paragraph of the addition, as modified per Amendment 1, by the following:

For appliances with heating elements that are in direct contact with panels made of glass, ceramic or similar material that are
accessible parts, the impact energy of the blows applied to the panel is 2,00 J.

After 21.103 insert the following subclause 21.301:

21.301 Portable fan heaters having a substantially non-metallic enclosure are subjected to the free fall test,
procedure 1, of IEC 60068-2-32. The test is carried out on a new sample.

The appliance is dropped vertically onto its base from a height of 500 mm.

After the test, the requirements of 8.1, 16.3 and 19.113 shall be met.

The test is not applicable to fan heaters that are also intended to be operated at maximum heat output, with the fan switched
turned off.

Before 22.7 insert the following variation.

22.2 Addition:

Fixed heaters that may be installed in front of a socket-outlet shall incorporate a switch complying with 24.3 or shall contain a
statement in the instructions for installation that a disconnecting switch incorporated in the fixed wiring is to be provided.

Add the following new subclause:

22.110 For heaters intended to be mounted under church benches, metal surfaces accessible to the 75 mm diameter test rod
shall have a non-metallic coating with a thickness of at least 50 microns.

Compliance is checked by inspection and by measurement.

After Clause 22.110 insert the following variations:

22.301 Normally open switches that rely on contact with the floor to keep them in the closed position shall have a manually
independent switching action.

Compliance is checked by inspection and test.

22.302 Portable fan heaters having an enclosure of substantially non-metallic material shall be fitted with a device that
automatically disconnects heating elements from the supply when the heater is placed in any position other than in its position or positions of normal use. Compliance is checked by inspection and manual test.

30.1 Replace the text in the addition with the following variation:

For **portable fan heaters**, other than those with an enclosure of substantially non-metallic material, the temperature rises determined during the tests of Clause 19 are not taken into account.

30.2.1 After the text of the modification insert the following variation:

**Addition:**

- **In fan heaters** having an enclosure of substantially non-metallic material, the non-metallic material
  - in the enclosure, in fan blades and in all structural elements within the enclosure;
  - in components such as thermostats, thermal cut-outs, switches and the like that are mounted within a distance of 25 mm from a heating element;

are subjected to the following tests.

Such parts shall withstand the glow-wire test of IEC 60695-2-11 without ignition, the test being carried out with a severity of 850 °C. However, the glow-wire test is not carried out on parts of material classified as having a glow-wire ignition temperature according to IEC 60695-2-13 of at least 875 °C.

If the glow-wire ignition temperature is not available for a sample with a thickness within ± 0,1 mm of the relevant part, then the test sample shall have a thickness equal to the nearest preferred value specified in IEC 60695-2-13 that is no thicker than the relevant part.

**NOTE 501** The preferred values in IEC 60695-2-13 are 0,75 mm ± 0,1 mm, 1,5 mm ± 0,1 mm and 3,0 mm ± 0,2 mm.

30.101 Add the following:

This test is not carried out on fan heaters that are also intended to be operated at maximum heat output with the fan switched off.

In **Figure 102**, replace the diagram by the following:

1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.
2. Rated voltage not exceeding 250 V.
3. The appliances for purpose of, based on vacuum principle, getting rid of the ground or other surface dust and cleaning dirt, water, animals etc.

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<tbody>
<tr>
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<td>GB4343.1-2009</td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
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</tbody>
</table>

**Vacuum cleaners (Vacuum cleaners and water suction cleaning appliances) Excepting Hand held garden type**

**Appliances for skin and hair care**

1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.
2. Rated voltage of single-phase appliances not exceeding 250 V, of others not exceeding 480 V.

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<tr>
<td>GB4343.1-2009</td>
<td>GB4706.15 amended as follows: 25.14 Replace the last sentence of the second paragraph of the test specification with the following variation: The number of flexings is 10 000, the rate of flexing being 6 per min. 25.15 Insert the following variation: <strong>Modification:</strong> For appliances with a swivel connection, the value of 30 N in Table 10 is increased to 60 N.</td>
<td>See above</td>
<td>AS/NZS CISPR 22/2009 + A4</td>
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<tr>
<td>Product Category</td>
<td>Specified Product</td>
<td>Product Description</td>
<td>Applicable Standard</td>
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<tr>
<td>3. Kitchen machines</td>
<td>1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson. 2. Rated voltage not exceeding 250 V. 3. With a certain weight level flat board, heated by electric heating element, after heating, ironing fabric and smooth it 4. May include related equipment, such as separated water tanks or steam device for its capacity of not exceeding five litres.</td>
<td>GB4706.1-2005 GB4706.14-2008</td>
<td>No Deviation</td>
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<td>3. The personal care appliances for the right hair or skin care.</td>
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<tr>
<td>3. The personal care appliances for the right hair or skin care.</td>
<td>Electric irons</td>
<td>1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson. 2. Rated voltage not exceeding 250 V. 3. With a certain weight level flat board, heated by electric heating element, after heating, ironing fabric and smooth it 4. May include related equipment, such as separated water tanks or steam device for its capacity of not exceeding five litres.</td>
<td>GB4706.1-2005 GB4706.2-2007</td>
</tr>
<tr>
<td>Microwave ovens</td>
<td>1. Intended for household or similar purpose: dangerous to public, including in shops.</td>
<td>GB4706.1-2005 GB4706.21-2008</td>
<td>No Deviation</td>
</tr>
<tr>
<td>Microwave ovens</td>
<td>1. Intended for household or similar purpose: dangerous to public, including in shops.</td>
<td>GB4706.1-2005 GB4706.21-2008</td>
<td>No Deviation</td>
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<tr>
<td>Microwave ovens</td>
<td>1. Intended for household or similar purpose: dangerous to public, including in shops.</td>
<td>GB4706.1-2005 GB4706.21-2008</td>
<td>No Deviation</td>
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</table>

**Implementation Rules**

- **S**
- **SDoC**
- **AS/NZS CISPR 14.1:2013**

**Relevant National Standard**

- **GB4706.1**
- **GB4706.2**
- **GB4706.3**
- **GB4706.4**
- **GB4706.5**
- **GB4706.6**
- **GB4706.14**
- **GB4706.30**
- **GB4706.31**

**Applicable Deviation**

- **See above**
- **No Deviation**

**Note:** An overflow may be achieved by increasing the ingredients in incremental amounts (for example 10%) until overflow is achieved.
<table>
<thead>
<tr>
<th>Product Description</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
<th>NZ App or SDoC</th>
</tr>
</thead>
<tbody>
<tr>
<td>offices, hotels, light industry, farms and other places, used by layperson. 2. Rated voltage not exceeding 250 V. 3. Appliances of using the electromagnetic energy of its frequency between 300 MHz and 30GHz for heating food and beverage in cavity 4. Can be used for food additional features, such as coloring function, barbecue function, steam function 5. Excluding microwave ovens intended to be used on baors ships.</td>
<td>IEC 60335-2-25:2008 IDT</td>
<td>GB 4706.22 amended as below</td>
<td>ed6.0-2010</td>
<td>AS/NZS 60335.2.6 :2008 + A1-A4</td>
<td>SBoC</td>
</tr>
<tr>
<td>Cooking ranges, cooking table, ovens and similar appliances (Stationary cooking ranges, hobs, ovens and similar appliances)</td>
<td>GB4706.1-2005 GB4706.22-2008 IEC60335-2-25:2008 ed1.1 IDT</td>
<td>7.1 After the second paragraph insert the following variation: <strong>Built-in hobs</strong> that require a board in order to meet the temperature limits of 11.8 shall be marked with the substance of the following caution. CAUTION: The surface temperature exceeds 95°C. To avoid a hazard, underbench access must be restricted. Refer to the installation instructions. After the last paragraph insert the following variation: Front surfaces of appliances incorporating ovens or grills shall be marked with symbol no. 5041 from IEC 60417-1 and the words “Hot Surface”, unless the temperature rise of the front surfaces measured during the test of 11.101 and the test of 11.7.102 for pyrolytic self-cleaning ovens when operated under cleaning conditions do not exceed the limits given in Annex ZA. NOTE 301 Some examples of correctly formatted hot surface warning signs are shown in Figure 301. The rules for warning signs in ISO 3864-1 apply to symbol IEC 60417-5041 and the rules for supplementary signs in ISO 3864-1 apply to the words “Hot surface” 7.6 After the first symbol insert the following variation: <strong>[Symbol No. 5041 of IEC 60417-1] caution, hot surface</strong> 7.12 To the second paragraph add the following variation: WARNING: Accessible parts will become hot during use. To avoid burns young children should be kept away. After the last paragraph add the following variation: The instructions for ovens that have a capacity greater than 20 l shall include details indicating the correct installation of the shelves. 7.12.3 After the last paragraph insert the following variation: In addition, for <strong>cooking ranges</strong>, if the cooking range is not provided with a supply cord fitted with a plug or an installation male connector, the instructions shall state the size of the supply cord that has to be used and shall include the substance of the following. If this cooking range is to be connected to a new or upgraded electrical installation, then it must be connected to the supply by a supply cord fitted with:  - an appropriately rated plug that is compatible with the socket-outlet fitted to the final sub-circuit in the fixed wiring that supplies this cooking range; or  - an appropriately rated installation male connector that is compatible with the installation female connector fitted to the final sub-circuit in the fixed wiring that supplies this cooking range. This cooking range must be connected to the supply by a supply cord fitted with an appropriately rated plug that is compatible with the socket-outlet fitted to the final sub-circuit in the fixed wiring that is intended to supply this cooking range. NOTE 301 This information need not be provided for <strong>fixed cooking ranges</strong> other than those that are fixed only by a stabilizing means in order to comply with the test of 20.101. 7.14 After the variation for 7.12.4 insert the following variation: Addition: The marking relating to the supplementary sign containing the words “Hot surface” shall be in letters not less than 5 mm high. The base of the triangle of IEC 60417-5041 shall be not less than 20 mm. 7.15 After the second paragraph insert the following variation: The caution specified in Clause 7.1 for <strong>built-in hobs</strong> shall be marked adjacent to the supply entry on the underside of the <strong>hob</strong>. Symbol IEC 60417-5041 shall be readily visible when the appliance is installed as in normal use.</td>
<td>AS/NZS 60335:2002 + A1-A4 + AS/NZS 60335.2.6 :2008 + A1-A4</td>
<td>S</td>
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</tbody>
</table>
22.301 After 7.102 add the following:

7.102 For cooking ranges that are normally placed on the floor and that have horizontally hinged oven doors with a hinge height of less than 430 mm from the floor, if a stabilizing means is necessary in order to comply with the test of 20.102, then:

 WARNING: In order to prevent tipping of the appliance, this stabilizing means must be installed. Refer to the instructions for installation.

- the stabilizing means shall be marked, in lettering at least 3 mm high, with the substance of the following warning:

NOTE Commonly available fixing hardware, such as screws and bolts, need not be marked or delivered with the appliance.

- the appliance shall be marked, in lettering at least 3 mm high, at the point of supply entry and at least one other point to draw the attention of the user to the need to stabilize the appliance.

Compliance is checked by inspection and measurement.

11.1 Replace the text of the Addition by the following variation:

Compliance is also checked by the tests of 11.101 and 11.301.

11.301 After clause 11.101 insert the following variation:

11.301 Hob elements other than induction hob elements are operated under conditions of normal operation except that:

- the vessel is not covered with a lid;
- the water in the vessel is maintained at a depth between 50 mm and 65 mm by the addition of boiling water if necessary;
- thermal controls are adjusted to the highest setting.

If the appliance contains more than one hob element, the test is carried out with the hob element resulting in the most unfavourable conditions.

The hob element is supplied at 1,15 times its power input measured at rated voltage. The test is continued for a period of 1 h or until steady conditions are established whichever is shorter.

During the test the temperature rises shall not exceed the values specified in 11.8.

20.101 Replace the first paragraph of the test specification by the following:

Compliance is checked by the following test and by the test of 20.102 if relevant.

Add the following paragraph after Note 3:

Cooking ranges are tested without fitting any stabilizing means that are specified in the instructions for installation.

Replace the existing Note 4 by the following:

Damage and deformation of doors and hinges are ignored.

After NOTE 4 insert the following variation:

The test is repeated on cooking ranges that have horizontally hinged oven doors, and that are normally placed on the floor. For this additional test the cooking range is installed with the stabilizing means, if any, installed in accordance with the instructions for installation and the load on the oven doors is increased to 50 kg.

The cooking range shall not tilt.

NOTE 301 Damage and deformation of doors and hinges are neglected.

20.102 After 20.101 add the following:

20.102 For cooking ranges that are normally placed on the floor and that have horizontally hinged oven doors with a hinge height of less than 430 mm from the floor, the test of 20.101 is repeated, except that:

- the cooking range is fitted with the stabilizing means, if any, specified in the instructions for installation;
- the mass of the load on the oven doors is increased to 50 kg, or the mass of 22.5 kg is placed at the centre of the outer edge of the oven door, whichever gives the most unfavourable results. The cooking range shall not tilt.

Damage and deformation of doors and hinges are ignored.

21.101 After the fourth paragraph of the test specification insert the following variation:

Ovens with withdrawable shelves fitted with stops are then tested as follows. The shelves are fully extended to the maximum distance allowed by the stops. An evenly distributed force of 80 N is applied to each shelf, at locations along the front edge of the shelf using a vessel having side dimensions of 200 mm, one side of the vessel being aligned along the front edge of the shelf.

During this test, the shelf shall not tilt downwards by more than 6°.

22.122 After clause 22.119 insert the following:

22.122 Ovens with shelves that can be withdrawn shall be fitted with rest positions to prevent the inadvertent withdrawal of the shelves.

The shelves shall also be constructed to prevent cooking dishes, or the like, from sliding over the rear edge.

Compliance is checked by inspection and by manual test.

22.301 Any socket outlet for general purpose use that is accessible to the user shall:

- comply with AS/NZS 3112;
- have a current rating of 10 A; and
- accept a 3-pin, flat pin plug as described in figure 2.1(a) of AS/NZS 3112.

Compliance is checked by inspection and the appropriate tests.

22.302 Stabilising means provided with cooking ranges in order to achieve compliance with 20.101, shall require two
Independent movements to disengage the appliance or be of a type such that a tool is needed to disengage the appliance.

NOTE Push and twist is considered to be an example of two independent movements.

Compliance is checked by inspection and test.

25 After the first paragraph, insert the following variation:

25.1 Addition:

Cooking ranges shall be provided with a supply cord fitted with a plug or an installation male connector, unless the instructions for installation make reference to the type and size of the supply cord and the rating of the plug or installation male connector, to be used for connecting the appliance to the supply mains.

Figure 104 After Figure 104, insert the following variations:

Figure 101 – Example of correctly formatted hot surface warning signs

Figure 301 – Example of correctly formatted hot surface warning signs

Annex ZA

(normative)

Reduced surface temperatures

This annex is applicable to appliances not marked with symbol no. 5041 from IEC 60417-1 and the words “Hot Surface”.

The temperature rises on front surface of the oven doors are measured on surfaces specified in 11.101 and shall not exceed the values in Table ZA.1.

Table ZA.1 Reduced temperatures for front surfaces of oven doors

<table>
<thead>
<tr>
<th>Surface</th>
<th>Temperature Rise K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal and Painted Metal</td>
<td>30</td>
</tr>
<tr>
<td>Vitreous Enamelled Metal</td>
<td>35</td>
</tr>
<tr>
<td>Glass and ceramic</td>
<td>40</td>
</tr>
<tr>
<td>Plastics having a thickness exceeding 0.3mm</td>
<td>45</td>
</tr>
</tbody>
</table>

The temperature rises on front surface of the oven doors of **pyrolytic self-cleaning ovens** when operated under cleaning.
conditions are measured on surfaces accessible to the test probe of Figure 104 except those areas that are within 10 mm from the edges of the door and those parts that are not accessible to the probe applied perpendicularly to the front surface of the door. They shall not exceed the values in Table 2A.2.

Table 2A.2 Reduced temperatures for front surfaces of oven doors of pyrolytic self-cleaning ovens when operated under cleaning conditions.

<table>
<thead>
<tr>
<th>Surface</th>
<th>Temperature Rise K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal and Painted Metal</td>
<td>35</td>
</tr>
<tr>
<td>Vitreous Enamelled Metal</td>
<td>40</td>
</tr>
<tr>
<td>Glass and ceramic</td>
<td>45</td>
</tr>
<tr>
<td>Plastics having a thickness exceeding 0.3mm</td>
<td>50</td>
</tr>
</tbody>
</table>

Range hoods

1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.
2. Rated voltage not exceeding 250 V.
3. Range Hood of installing at the top of cooking stoves, stove or similar apparatus, used motor drive for the suction air pollution.

GB4706.1-2005
GB4706.28-2008
IEC60335-2-31:2006
GB4706.28 amended as below

22.301 After 22.102,. insert the following variation:
22.301 Where fixing or mounting screws or other fixing devices, that penetrate into the range hood enclosure, are used to attach an attachment to the range hood there shall be pre formed holes in the range hood enclosure and accessory if it is supplied by the range hood manufacturer, or markings on the range hood enclosure and accessory if it is supplied by the range hood manufacturer to indicate the correct location for the screws or fixing devices. Where markings are used the markings shall be clearly visible and legible during installation.

Where the fixing or mounting screw or other fixing device penetrates into the range hood enclosure in areas where live parts are present there shall be no hazard due to screws or fixing devices piercing the wiring or insulation of live parts or making contact with live parts inside the range hood.

Live parts not separated from the fixing or mounting screw or other fixing device by an earthed metal barrier shall not be in an area behind the screw or other fixing device location within the envelope of a cylinder having a diameter of 10mm and a length of 50mm.

Compliance is assessed by inspection and the following test, if applicable.

Directly behind the entry point into the range hood enclosure of any fixing or mounting screw, or other fixing device, an area encompassed by a 10mm diameter cylinder of 50mm length is determined. The axis of the cylinder being aligned with the axis of the entry point that is normal to the surface of the range hood enclosure. There shall be no live parts within the envelope of the cylinder.

Additionally, live parts that may encroach on the envelope of the cylinder shall have a force of 5N applied in the direction towards the cylinder. The live parts shall not enter the envelope of the cylinder.

Appliances for heating liquids

1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.
2. Rated voltage not exceeding 250 V.
3. Using electric element for heating.

GB4706.1-2005
GB4706.19-2008
IEC60335-2-15:2005 IDT

GB 4706.19 amended as below

CLAUSE
7.12 After the last paragraph insert the following variations:

The instructions for kettles shall state the substance of the following.

CAUTION: Do not operate the kettle on an inclined plane. Do not operate the kettle unless the element is fully immersed. Do not move while the kettle is switched on.

The instructions for appliances with enclosures made from polycarbonate material shall state the substance of the following.

CAUTION: To prevent damage to the appliance do not use alkaline cleaning agents when cleaning, use a soft cloth and a mild detergent.

11.7.104 Add the following after the first paragraph:

For automatic espresso coffee makers and espresso coffee makers provided with a coffee pot, the brewing period is the time necessary to produce the maximum quantity of coffee allowed by the timer or by the capacity of the coffee pot.

For manual espresso coffee makers, if the maximum quantity of coffee to be produced is not specified in the instructions, the brewing period is the time necessary to produce 100 ml of coffee for each cycle.

Replace the existing second paragraph by the following:

For espresso coffee-makers having an outlet for supplying steam or hot water, the brewing period is immediately followed by a period during which the steam or water is supplied for the time stated in the instructions or for the following periods, whichever is more unfavourable:

- for espresso coffee-makers having an outlet for supplying steam, 1 min;
- for espresso coffee-makers having an outlet for supplying hot water, the time necessary to produce 100 ml of water.

15 Moisture resistance

15.2 Add the following to the addition:

For coffee makers provided with a removable coffee pot, the liquid container is filled with maximum amount of water containing 1 % NaCl. The funnel is placed in position but without placing the coffee pot in position. The appliance is switched on and operated until the container is empty.
### Electric rice cookers

**1. Intended for household or similar purpose: dangerous to public, including in shops, offices, hotels, light industry, farms and other places, used by layperson.**

**2. Rated voltage not exceeding 250 V.**

**3. Appliances of direct heating or cooling water in the barrels, pipelines or other sources of water available to the appropriate temperature for users to directly drinking.**


<table>
<thead>
<tr>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB4706.19-2004 amended as below</td>
<td></td>
</tr>
</tbody>
</table>

**5.101 Induction rice cookers are tested as motor-operated appliances.**

**7.12 Add the following:**

The instructions shall include the substance of the following:

This appliance is intended to be used in household and similar applications such as:

- staff kitchen areas in shops, offices and other working environments;
- farm houses;
- by clients in hotels, motels and other residential type environments;
- bed and breakfast type environments.

**NOTE 101** If the manufacturer wants to limit the use of the appliance to less than the above, this must be clearly stated in the instructions.

**11 Heating**

Add the following subclause:

**11.7.103** After “Slow cookers,” add “rice cookers.”

---

**Add the following to the modification:**

For rice cookers, the test specified in Part 1 shall be conducted with the rice container in place.

Add the following new subclause:

**15 Moisture resistance**

15.2 Add the following to the addition:

For coffee makers provided with a removable coffee pot, the liquid container is filled with maximum amount of water containing 1 % NaCl. The funnel is placed in position but without placing the coffee pot in position. The appliance is switched on and operated until the container is empty.

Add the following to the modification:

For rice cookers, the test specified in Part 1 shall be conducted with the rice container in place.

Add the following new subclause:

**15.2 Moisture resistance**

Add the following to the addition:

For coffee makers provided with a removable coffee pot, the liquid container is filled with maximum amount of water containing 1 % NaCl. The funnel is placed in position but without placing the coffee pot in position. The appliance is switched on and operated until the container is empty.

### Relevant National Standard

<table>
<thead>
<tr>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
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</thead>
</table>

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**Add the following to the modification:**

For rice cookers, the test specified in Part 1 shall be conducted with the rice container in place.

Add the following new subclause:

**15 Moisture resistance**

15.2 Add the following to the addition:

For coffee makers provided with a removable coffee pot, the liquid container is filled with maximum amount of water containing 1 % NaCl. The funnel is placed in position but without placing the coffee pot in position. The appliance is switched on and operated until the container is empty.

Add the following to the modification:

For rice cookers, the test specified in Part 1 shall be conducted with the rice container in place.

Add the following new subclause:

**15.2 Moisture resistance**

Add the following to the addition:

For coffee makers provided with a removable coffee pot, the liquid container is filled with maximum amount of water containing 1 % NaCl. The funnel is placed in position but without placing the coffee pot in position. The appliance is switched on and operated until the container is empty.

### Relevant National Standard

<table>
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<tr>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
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**Add the following to the modification:**

For rice cookers, the test specified in Part 1 shall be conducted with the rice container in place.

Add the following new subclause:

**15 Moisture resistance**

15.2 Add the following to the addition:

For coffee makers provided with a removable coffee pot, the liquid container is filled with maximum amount of water containing 1 % NaCl. The funnel is placed in position but without placing the coffee pot in position. The appliance is switched on and operated until the container is empty.

Add the following to the modification:

For rice cookers, the test specified in Part 1 shall be conducted with the rice container in place.

Add the following new subclause:

**15.2 Moisture resistance**

Add the following to the addition:

For coffee makers provided with a removable coffee pot, the liquid container is filled with maximum amount of water containing 1 % NaCl. The funnel is placed in position but without placing the coffee pot in position. The appliance is switched on and operated until the container is empty.
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Product Description</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household and Similar Use Appliances</td>
<td></td>
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</tbody>
</table>

- **11.7.104** Add the following after the first paragraph:
  
  For automatic espresso coffee makers and espresso coffee makers provided with a coffee pot, the brewing period is the time necessary to produce the maximum quantity of coffee allowed by the timer or by the capacity of the coffee pot.

- Replace the existing second paragraph by the following:
  
  For espresso coffee makers having an outlet for supplying steam or hot water, the brewing period is immediately followed by a period during which the steam or water is supplied for the time stated in the instructions or for the following periods, whichever is more unfavourable:

  - for espresso coffee makers having an outlet for supplying steam, 1 min;
  - for espresso coffee makers having an outlet for supplying hot water, the time necessary to produce 100 ml of water.

- **15.103** The interior of rice cookers shall not be affected by water.
  
  Compliance is checked by the following test.

  The rice cooker is placed on a horizontal surface, with the rice container removed and 30 ml of water containing approximately 1% NaCl is poured on to the centre of the bottom of the interior of the rice cooker. The saline solution is poured steadily through a tube having an inner diameter of 8 mm and a length of 30 mm, over a period of 2 s, the lower end of the tube being 200 mm above the bottom of the rice cooker.

  NOTE 101 A schematic representation of the test arrangement is shown in Figure 101.

  The rice cooker shall then withstand the electric strength test of 16.3.

- **19 Abnormal operation**

  - **19.13** Add the following:
    
    The temperature rise of the windings of induction rice cookers shall not exceed the values specified in 19.7.

    The electric strength test of induction rice cookers is carried out immediately after switching off the appliance.

  - **25.1** Replace the existing text of the Addition by following variation:

    Appliances incorporating an appliance inlet, other than those standardized as Group 1 in AS/NZS 3109.1 or those standardized in IEC 60320, or those standardized in GB 17465 shall be supplied with a cord set.

- **GB4343.1-2003** See above

- **GB17625.1-2012** No Deviation

  AS/NZS CISPR 14-1:2013

  AS/NZS 61000.3.2:2007
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Product Description</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
<th>E.S, S &amp; E</th>
<th>NZ App or SDo C</th>
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<tbody>
<tr>
<td>Audio &amp; Video products</td>
<td>General</td>
<td></td>
<td>GB8898-2011</td>
<td>For a.c. equipment, the rated frequency shall be 50 Hz or the rated frequency range shall include 50 Hz.</td>
<td>CNCA-QTC-017: 2010</td>
<td>AS/NZS 60065:2012</td>
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<td>For single-phase equipment, the rated voltage shall be at least 230 V or the rated voltage range shall include 230 V.</td>
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<td>For three-phase equipment, the rated voltage shall be at least 400 V or the rated voltage range shall cover 400 V.</td>
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<td>An English version of any necessary the safety instructions and markings must be supplied.</td>
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<td>Plugs for the connection of apparatus to mains-powered socket-outlets shall comply with AS/NZS 3112 or AS/NZS 3123.</td>
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<td>Apparatus with a plug portion, suitable for insertion into a 10 A 3-pin flat pin socket-outlet complying with AS/NZS 3112, shall comply with the requirements of AS/NZS 3112 for equipment with integral pins for insertion into socket-outlets.</td>
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<td>Table 15 In the second and third rows of the first column replace '6' with '7.5'.</td>
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<td>Table 18 In the second and third rows of the first column replace '6' with '7.5'.</td>
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<td>Table 21 In the third and fourth columns delete ‘HB75’ and ‘No requirement’ and replace both with ‘V-1’.</td>
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<td>AS/NZS CISPR 13:2012</td>
<td>S &amp; E</td>
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<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td></td>
<td>AS/NZS 61000.3.2:2013</td>
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</tr>
<tr>
<td>Power Adapters</td>
<td>≥ 36V</td>
<td>For audio/video products use (including charger and discharger) (not including charger for type 5 and type 7 charging batteries use)</td>
<td>GB8898-2011</td>
<td>See above</td>
<td></td>
<td>AS/NZS 60065:2012</td>
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<td>GB1837-2012</td>
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<td>AS/NZS CISPR 13:2012</td>
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<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td>AS/NZS 61000.3.2:2013</td>
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<td>Product Category</td>
<td>Specified Product</td>
<td>Product Description</td>
<td>Applicable Standard</td>
<td>Applicable Deviation</td>
<td>Implementation Rules</td>
<td>Relevant National Standard</td>
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<tr>
<td>Colour television receivers and display monitors with kinds of display types</td>
<td>≥ 38V; A household type and professional equipment (including LCD, POP and back projector) (not including television receivers for vehicle use)</td>
<td>GB8898-2011</td>
<td>Site Above</td>
<td>Add the following after Clause 19.6: 19.201 Additional stability requirements for television receivers Television receivers and display devices that may be used for television purposes, with a mass of 7 kg or more, shall have additional stability requirements. Compliance is checked by inspection and by the tests of 19.201.2.2 and 19.201.3 as applicable. Apparatus designed only for fixing to a wall, ceiling or equipment rack are not required to be subjected to these additional requirements if the marking of 5.4.1 f) is provided on or with the apparatus. 19.201.1 Warning notice Television receivers and display devices that may be used for television purposes, shall be provided with information in the instructions for installation or use, containing the following information or similar: IMPORTANT INFORMATION If a television is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as: • Using cabinets or stands recommended by the manufacturer of the television. • Only using furniture that can safely support the television. • Ensuring the television is not overhanging the edge of the supporting furniture. • Not placing the television on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television to a suitable support. • Not standing the television on cloth or other materials placed between the television and supporting furniture. • Educating children about the dangers of climbing on furniture to reach the television or its controls. Such information should also be provided as a label on the apparatus. 19.201.2 Restraining device 19.201.2.1 Television receivers should be provided with a restraining device such as a fixing point to facilitate restraining the television from toppling forward. 19.201.2.2 Where a restraining device is provided in accordance with 19.201.2.1 information shall be provided in the instructions for installation or use, to ensure correct and safe installation. Such information should also be provided as a label on the television receiver. Any such restraining device shall be capable of withstanding a pull of 100 N in all directions without damage. 19.201.3 Glass slide test Television receivers and display devices that may be used for television purposes, with a mass of 18 kg or more, are placed on a clean, dry, glass covered horizontal surface such that only the supporting feet are in contact with the glass. The glass-covered surface is then tilted in the most unfavourable direction through an angle of 10°. During the tests, the equipment shall not slide.</td>
<td>GB8898-2011</td>
<td>No Deviation</td>
<td>CNCA-01C-017-2010</td>
<td>AS/NZS 60655-2012</td>
</tr>
<tr>
<td>Powered sound boxes with single or multiple speakers, under 500W (R.M.S.) max output sound power</td>
<td>Speaker: Electro-acoustic transducer that converts electrical signals into sounds loud enough to be heard at a distance. Powered sound boxes(es) It should include electrical energy sources besides speaker. For example: There is circuit which is composed of powered components (include: Audio amplification circuit) and power source circuit. Powered sound boxes with single or multiple speakers having total output power above 500W (R.M.S.) are</td>
<td>GB8898-2011</td>
<td>See Above</td>
<td>GB13837-2012</td>
<td>No Deviation</td>
<td>CNCA-01C-017-2010</td>
<td>AS/NZS 60655-2012</td>
<td></td>
</tr>
<tr>
<td>Powered sound boxes with single or multiple speakers, under 500W (R.M.S.) max output sound power</td>
<td>GB13837-2012</td>
<td>No Deviation</td>
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<tr>
<td>Powered sound boxes with single or multiple speakers, under 500W (R.M.S.) max output sound power</td>
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<td>Product Category</td>
<td>Specified Product</td>
<td>Product Description</td>
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<td>Applicable Deviation</td>
<td>Implementation Rules</td>
<td>Relevant National Standard</td>
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<tr>
<td>Audio &amp; Video products</td>
<td>Sound amplifiers</td>
<td>An amplifier that increases the electrical audio signal (or the audio signal from the microphone) to certain amplitude in order to drive the load (speaker) reproduced sound.</td>
<td>GB8898-2011</td>
<td>See Above</td>
<td>CNCA-01C-017: 2010</td>
<td>AS/NZS 60065:2012</td>
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<td>AS/NZS 61000-3-2013</td>
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<td>No Deviation</td>
<td>CNCA-01C-017: 2010</td>
<td>AS/NZS 60065:2012</td>
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<tr>
<td></td>
<td>Tuners, radio receivers</td>
<td>A device (for receiver) used to select signals at a specific radio frequency. The tuner with Ketter diode as the tune component does not include. radio receivers with various frequency bands. Amplitude modulation radio receiver working at long wave or medium wave and receiving the Amplitude modulation broadcast. Frequency modulation radio receiver working at shortwave and receiving the frequency modulation broadcast. Clock radio (including the device also using for radiophone or radiophone)</td>
<td>GB8898-2011</td>
<td>See Above</td>
<td>CNCA-01C-017: 2010</td>
<td>AS/NZS 60065:2012</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>GB13837-2012</td>
<td>No Deviation</td>
<td>AS/NZS CISPR 13:2012</td>
<td>AS/NZS 61000-3-2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GB1765.1-2012</td>
<td>No Deviation</td>
<td>CNCA-01C-017: 2010</td>
<td>AS/NZS 60065:2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio/video recorder/player/dealer with kinds of carrier media (including cassette tape recorder/player, disc player, CD/MD player, CD/VCD/Super VCD/DVD player, MP3 recorder/player, language leaning machine, audio/video processing apparatus, and etc.)</td>
<td>recorder/player/dealer with kinds of carrier media (including disc and cassette tape etc.) The following products are not in CCC scope: CD driver in computer Videocon Digital camera recorder/player/dealer without carrier media (For example: Visual presenter without carrier media)</td>
<td>GB8898-2011</td>
<td>See Above</td>
<td>CNCA-01C-017: 2010</td>
<td>AS/NZS 60065:2012</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>GB13837-2012</td>
<td>No Deviation</td>
<td>AS/NZS CISPR 13:2012</td>
<td>AS/NZS 61000-3-2013</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>GB1765.1-2012</td>
<td>No Deviation</td>
<td>CNCA-01C-017: 2010</td>
<td>AS/NZS 60065:2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video cassette recorders/players component sound (combo audio/video systems)</td>
<td>The combination of the products below: Tape player Radio recorder Sound amplifier with speaker Sound amplifier with VCD Sound amplifier with DVD</td>
<td>GB8898-2011</td>
<td>See Above</td>
<td>CNCA-01C-017: 2010</td>
<td>AS/NZS 60065:2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GB13837-2003</td>
<td>No Deviation</td>
<td>AS/NZS CISPR 13:2012</td>
<td>AS/NZS 61000-3-2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Category</td>
<td>Specified Product</td>
<td>Product Description</td>
<td>Applicable Standard</td>
<td>Applicable Deviation</td>
<td>Implementation Rules</td>
<td>Relevant National Standard</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Audio &amp; Video products</td>
<td>Audio systems with radio, recorder and amplifier etc. Audio systems with video function Audio systems with phonograph</td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td></td>
<td></td>
<td>AS/NZS 61000-3-2:2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For a.c. equipment, the rated frequency shall be 50 Hz or the rated frequency range shall include 50 Hz.

For single-phase equipment, the rated voltage shall be at least 230 V or the rated voltage range shall include 230 V.

For three-phase equipment, the rated voltage shall be at least 400 V or the rated voltage range shall cover 400 V.

An English version of any necessary the safety instructions and markings must be supplied.

For portable a.c. single-phase equipment having a rated current not exceeding 10 A, that is connected to the supply by a supply cord fitted with a plug, the plug shall comply with the appropriate requirements specified in AS/NZS 3112.

For a.c. single-phase equipment having a rated current not exceeding 10 A, that is connected to the supply by pins for insertion into a socket outlet, the pins shall be insulated and comply with the appropriate requirements specified in Appendix J of AS/NZS 3112.

CLAUSE 1.2

1.2.12.201 Insert the following between ‘person, service’ and ‘range, rated frequency’:

POTENTIAL IGNITION SOURCE........ 1.2.12.201

1.2.12.201 POTENTIAL IGNITION SOURCE

Possible fault which can start a fire if the open-circuit voltage measured across an interruption or faulty contact exceeds a value of 50 V (peak) a.c. or d.c. and the product of the peak value of this voltage and the measured r.m.s. current under normal operating conditions exceeds 15 VA.

Such a faulty contact or interruption in an electrical connection includes those which may occur in CONDUCTIVE PATTERNS on PRINTED BOARDS.

NOTE 201 An electronic protection circuit may be used to prevent such a fault from becoming a POTENTIAL IGNITION SOURCE.

NOTE 202 This definition is from AS/NZS 60665:2003.

3.2.5.1 Insert Table 3B as follows:

<table>
<thead>
<tr>
<th>CURRENT of equipment</th>
<th>Minimum conductor size</th>
<th>A</th>
<th>kcmil or mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 0.5 up to</td>
<td></td>
<td>0.5</td>
<td>18 [0.8]</td>
</tr>
<tr>
<td>and including 3</td>
<td></td>
<td>0.75</td>
<td>16 [1.3]</td>
</tr>
<tr>
<td>Over 3 up to and</td>
<td></td>
<td>(0.75)</td>
<td>16 [1.3]</td>
</tr>
<tr>
<td>including 7.5</td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Over 7.5 up to</td>
<td></td>
<td>1.0</td>
<td>14 [1.5]</td>
</tr>
<tr>
<td>and including 10</td>
<td></td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Over 10 up to and</td>
<td></td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>including 16</td>
<td></td>
<td>1.5</td>
<td></td>
</tr>
</tbody>
</table>

2 Delete NOTE 1.

3 Delete Footnote a and replace with the following:

a This nominal cross-sectional area is only allowed for Class II appliances if the length of the power supply cord, measured between the point where the cord, or cord guard, enters the appliance, and the entry to the plug does not exceed 2 m (0.5 mm² three-core supply flexible cords are not permitted; see AS/NZS 3191).

4.1.201 Insert a new Clause 4.1.201 after Clause 4.1.15 as follows:

4.1.201 Display devices used for television purposes

Display devices which may be used for television purposes, with a mass of 7 kg or more, shall comply with the requirements for stability and mechanical hazards, including the additional stability requirements for television receivers, specified in AS/NZS 60665.

4.3.6 Delete the third paragraph and replace with the following:

Equipment with a plug portion, suitable for insertion into a 10 A 3-pin flat-pin socket-outlet complying with AS/NZS 3112 shall comply with the requirements in AS/NZS 3112 for equipment with integral pins for insertion into socket-outlets.

7.3 Add the following before the first paragraph:

Equipment providing functions that fall only within the scope of AS/NZS 60665 and that incorporate a PSTN interface, are not required to comply with this Clause where the only ports provided on the equipment, in addition to a coaxial cable connection and a PSTN interface, are audio or video ports and analogue or data ports not intended to be used for telecommunications purposes.

Switching power supply ±360V GB4943.1-2011 See above AS/NZS 60950.1:2011
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>units for computer, Adapter, Charger etc.</td>
<td>information technology equipment use</td>
<td>GB9254-2008</td>
<td>Subclause 4.2 does not apply to the extent that a warning is not required to be included in the instructions for use.</td>
<td></td>
<td>AS/NZS CISPR 22:2006</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td></td>
<td>AS/NZS 61000.3.2:2013</td>
</tr>
</tbody>
</table>
### 13.3 Resistance to flame and ignition

Replace with:

[Financial and non-financial assets, such as shares, are subject to risk.

**NOTE** - A suitable material is one which conforms to glow wire test at a temperature of 850°C. Parts of insulating material retaining current-carrying parts, SELV parts in position, and external parts of insulating material providing protection against electric shock shall be resistant to flame and ignition.

For materials other than ceramic, compliance is checked by the tests of 13.3.1 and 13.3.2 as appropriate. This requirement does not apply to decorative trims, knobs, wiring insulation and other parts not likely to be ignited or to propagate flames from inside the luminaires.

#### 13.3.1 Parts of insulating material retaining current-carrying parts in position shall withstand the following tests:

- Parts are subjected to a test using a nickel-chromium glow-wire heated to 750 °C. The test apparatus and test procedure shall be those described in GB/T 5169.10
- Any flame or glowing of the sample shall extinguish within 30 s of withdrawing the glow-wire, and any burning or molten drop shall not ignite a single layer of tissue paper specified in 4.187 of ISO 4046-4, spread out horizontally 200 mm ± 5 mm below the sample.
- The requirements of this subclause do not apply in those cases where the luminaires provide an effective barrier to burning drops or where the insulation material is ceramic.

#### 13.3.2 Parts of insulating material which do not retain live parts in position, but which provide protection against electric shock, and parts of insulating material retaining SELV, parts in position shall withstand the following test:

- Parts are subjected to a test using a nickel-chromium glow-wire heated to 650 °C. The test apparatus and test procedure shall be those described in GB/T 5169.10
- Any flame or glowing of the sample shall extinguish within 30 s of withdrawing the glow-wire, and any burning or molten drop shall not ignite a single layer of tissue paper specified in 4.187 of ISO 4046-4, spread out horizontally 200 mm ± 5 mm below the sample.
- The requirements of this subclause do not apply in those cases where the luminaires provide an effective barrier to burning drops or where the insulation material is ceramic.

#### 13.3.3 During the application of the glow-wire tests of Clauses 13.3.1 and 13.3.2, the height and duration of the flames are measured.

In addition, for parts that withstand the glow-wire test but which flame during the application of the glow-wire, the surrounding parts are subjected to the needle-flame test, in accordance with GB/T 5169.5 for the measured duration of the flame or 30 s, whichever is the least, if—
- they are positioned within a distance equal to the height of the flame, and
- they are likely to be impinged upon by the flame.

However, parts shielded by a separate barrier that meets the needle-flame test are not tested.

The needle-flame test is not carried out on parts that are made of material classified as FV-0 or FV-1 according to GB5169.16 The sample of material submitted to the test of GB5169.16 shall be no thicker than the relevant part.

**NOTE:** Parts likely to be impinged upon by the flame are considered to be those within the envelope of a vertical cylinder having a radius of 10 mm and a height equal to the height of the flame, positioned above the point of application of the glow-wire.

If parts, other than enclosures, do not withstand the glow-wire tests of Clauses 13.3.1 and 13.3.2 by failure to extinguish within 30 s after removal of the glow-wire tip, the needle-flame test in accordance with GB/T 5169.5 is made for 30 s on all parts of non-metallic material which are within a distance of 50 mm or which are likely to be impinged upon by flame during the glow-wire tests.

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**Implementation Rules**

- **CNCA-01C-022:**
  - **AS/NZS 60598.1:2003**
  - **E.S. S & E NZ or SDoC**
### Recessed luminaires (Luminaire at voltage above 36) for use in domestic installations

A luminaire intended by the manufacturer to be fully or partly recessed into a mounting surface. Recessed luminaires for use with tungsten filament, tubular fluorescent and other discharge lamps. This section does not cover air-handling luminaires. This section does not apply to air-handling or liquid-cooled luminaries.

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Product Description</th>
<th>Applicable Standard</th>
<th>Applicable Deviation</th>
<th>Implementation Rules</th>
<th>Relevant National Standard</th>
<th>E.S, S &amp; E App or SDoc</th>
<th>NZ App or SDoc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portable general purpose luminaries (Luminaire at voltage above 36)</td>
<td>A luminaire which, in normal use, can be moved from one place to another while connected to the supply. Portable general purpose luminaries, other than handlamps, for use with tungsten filament, tubular fluorescent and other discharge lamps on supply voltages not exceeding 250V.</td>
<td>GB7000.1-2007 GB7000.204-2008</td>
<td>No Deviation</td>
<td>CNCA-01C-022; 2007</td>
<td>AS/NZS 60598.1:2003 +AS/NZS 60598.2.4 2005</td>
<td>S &amp; E APP &amp; SDoc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed general purpose luminaries (Luminaire at voltage above 36)</td>
<td>A luminaire which cannot easily be moved from one place to another, either because the fixing is such that the luminaire can only be removed with the aid of a tool, or because it is intended for use out of easy reach. The fixed luminaries for use with tungsten filament, tubular fluorescent and other discharge lamps.</td>
<td>GB7000.1-2007 GB7000.201-2008</td>
<td>No Deviation</td>
<td>CNCA-01C-022; 2007</td>
<td>AS/NZS 60598.1:2003 + AS/NZS 60598.2.1 1998</td>
<td>S &amp; E SDoc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recessed luminaires (Luminaire at voltage above 36)</td>
<td>A luminaire intended by the manufacturer to be fully or partly recessed into a mounting surface. Recessed luminaries for use with tungsten filament, tubular fluorescent and other discharge lamps. This section does not cover air-handling luminaires. This section does not apply to air-handling or liquid-cooled luminaries.</td>
<td>GB7000.1-2007 GB7000.202-2008</td>
<td>1 Scope Replace the text by the following: Specifies requirements for recessed luminaires incorporating electric light sources for operation from supply voltages up to 1000 V. This section does not apply to air-handling or liquid-cooled luminaires. 2.2 General test requirements Add the following third paragraph: If a luminaire needs a cover (or barrier) to comply with this Standard, it shall be specific to the luminaire model and shall be supplied with the luminaire by the luminaire manufacturer. During testing, the luminaire/cover combination is to be tested as a unit, that is as a luminaire. 2.3 Definitions Replace the text by the following: For the purposes of this section, the definitions of section 1 of IEC 60598-1 and the following apply. Add the following eleven new subclauses: 2.3.1 &quot;C&quot; Closed recessed luminaire A recessed luminaire in which the area that is open between the front and the back is not more than 5 % of the area of the hole.</td>
<td>CNCA-01C-022; 2007</td>
<td>AS/NZS 60598.1:2003 + AS/NZS 60598.2.2 2001</td>
<td>S &amp; E SDoc</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE 1** – If the enclosure does not withstand the glow-wire test, the control gear is considered to have failed to meet the requirement of Clause 13.3 without the need for consequential testing.

**NOTE 2** – If other parts do not withstand the glow-wire test due to ignition of the tissue paper and if this indicates that burning or glowing particles can fall onto an external surface underneath the control gear the control gear is considered to have failed to meet the requirements of Clause 13.3 without the need for consequential testing.

**NOTE 3** – Parts likely to be impinged upon by the flame are considered to be those within the envelope of a vertical cylinder having a radius of 10 mm and a height equal to the height of the flame, positioned above the point of the material supporting, in contact with, or in close proximity to connections. AS/NZS 60598.1:2003
2.3.2 “CA” (Closed and abutted allowing side contact with insulation) recessed luminaire
A closed recessed luminaire that allows building insulation to come into contact with its sides.

2.3.3 “NON IC” (No contact and no covering with insulation) recessed luminaire
A recessed luminaire, which because of its characteristics, may be unsafe if it comes into contact with building insulation and is not allowed to do so.

2.3.4 “IC” (Insulation contact) recessed luminaire
A closed luminaire that allows building insulation to come into contact with its sides and to cover it.

2.3.5 “IC-F” (Insulation contact – fire resistant) recessed luminaire
A closed luminaire that allows building insulation to come into contact with its sides and to cover it and has resistance to heat, fire and tracking.

2.3.6 MIC – Minimum insulation clearance
Minimum distance as specified by the luminaire manufacturer between the top of any building insulation and the building element above it.

2.3.7 SCB – Side clearance to building element
Minimum distance between the side of the recessed luminaire and any building element as specified in AS/NZS 3000 or as specified by the luminaire manufacturer.

2.3.8 HCB – Height clearance to building element
Minimum distance as specified by the luminaire manufacturer between the top of the recessed luminaire and any building element above it.

2.3.9 SCI – Side clearance to insulation
Minimum distance as specified by the luminaire manufacturer between the recessed luminaire and any building insulation.

2.3.10 Building insulation
Thermal, acoustic or similar insulation.

2.3.11 Loose fill insulation
Building insulation that is in the form of small particles or fibres that are blown into place.

2.4 Classification of luminaires (page 2)
Replace the text by the following:
Luminaires shall be classified in accordance with the provisions of IEC 60598.1 and the following.

2.4.1 Classification according to the degree of contact between the luminaire and building insulation around it
Recessed luminaires shall be classified according to their suitability to be in contact with building insulation. They shall be classified as one of the following:
   a) IC-F – building insulation that can safely be continuously exposed to 90°C allowed to abut and cover the luminaire.
   b) IC – building insulation that can safely be continuously exposed to 90°C allowed to abut and cover the luminaire.
   c) CA 80 – building insulation that can safely be continuously exposed to 90°C allowed to abut the luminaire.
   d) CA 135 – building insulation that can safely be continuously exposed to temperatures up to 150°C allowed to abut the luminaire.
   e) NON IC – luminaire not suitable for covering or abutting with building insulation.

2.5 Marking (page 2)
Delete the existing clause 2.5.1.
Add the following seven new subclauses:

2.5.1 Insulating ceiling IC-F mark, symbol
Continuously to 90°C may abut or cover the luminaire. The symbol shall be permanently marked on the back of the fitting, be clearly visible, at least 20 mm high and clearly legible.

The following information shall be included in the manufacturer’s instructions:

| RISK OF FIRE = Required clearance from structural members and building elements |
|---|---|
| SCB = mm | HCB = mm |

2.5.2 Insulating ceiling IC mark, symbol
Type IC recessed luminaire where building insulation that can safely be exposed continuously to temperatures up to 90°C may abut and cover the luminaire. The symbol shall be permanently marked on the back of the fitting, be clearly visible, at least 20 mm high and clearly legible.
2.5.3 Insulating ceiling CA 80 mark, symbol

Type CA 80, closed abutted, recessed luminaire where fixed, building insulating material that can safely be exposed continuously to temperatures up to 90°C must not cover but may closely abut the sides of the luminaire. The symbol shall be permanently marked on the back of the fitting, be clearly visible, at least 20 mm high and clearly legible.

The following information shall be included in the manufacturer’s instructions:

<table>
<thead>
<tr>
<th>RISK OF FIRE</th>
<th>Required clearance from structural members and building elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB = mm</td>
<td>HCB = mm</td>
</tr>
</tbody>
</table>

Where the MIC is greater than 25 mm the MIC dimension shall be included on a label.

2.5.4 Insulating ceiling CA 135 mark, symbol

Type CA 135, closed abutted, recessed luminaire where fixed, building insulating material that can safely be exposed continuously to temperatures up to 150°C must not cover but may closely abut the sides of the luminaire. The symbol shall be permanently marked on the back of the fitting, be clearly visible, at least 20 mm high and clearly legible.

The following information shall be included in the manufacturer’s instructions:

<table>
<thead>
<tr>
<th>RISK OF FIRE</th>
<th>Building insulation must not cover this luminaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIC = mm</td>
<td>SCB = mm</td>
</tr>
<tr>
<td>HCB = mm</td>
<td></td>
</tr>
</tbody>
</table>

Where the MIC is greater than 25 mm the MIC dimension shall be included on a label.

2.5.5 Insulating ceiling NON IC mark, symbol

Recessed luminaire where building insulating material must not cover or come into contact with any part of the luminaire. The symbol shall be permanently marked on the back of the fitting, be clearly visible, at least 20 mm high and clearly legible.

The following information shall be included in the manufacturer’s instructions:

<table>
<thead>
<tr>
<th>RISK OF FIRE</th>
<th>Shall not be installed in residential installations</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIC = mm</td>
<td>SCB = mm</td>
</tr>
<tr>
<td>HCB = mm</td>
<td></td>
</tr>
</tbody>
</table>

Where the SCI is greater than 100 mm the SCI and MIC dimensions shall be included on a label.

2.5.6 Restriction on use of luminaires

All recessed luminaires not marked with one of the symbols for IC-F, IC, CA80 or CA135 shall be marked NON IC and shall have a warning notice on an attached label or given in the manufacturer’s instruction leaflet supplied with the luminaire, that the luminaire shall, under no circumstances be covered or abutted with building insulation or be installed in a residential installation.

2.5.7 Luminaires supplied with control gear

For luminaires supplied with control gear, pictorial diagrams showing safe installation of the control gear above or below building insulation shall be included in the manufacturer’s instructions.

2.6 Construction

Add the following three new subclauses after Table 1:

2.6.1 Thermal protectors

If thermal protectors are used to meet the requirements of Annex ZA they shall comply with the safety requirements specified in...
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>IEC 60730-1</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The number of cycles of operation declared for 6.10 and 6.11 of IEC 60730-1 shall be not less than:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>— self-resetting thermal cut-outs 10,000</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>— voltage maintained non-self-resetting thermal cut-outs 1,000</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>— other non-self-resetting thermal cut-outs 30</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>NOTE – Thermal protectors may be used to prevent maximum temperatures being exceeded during the tests of Annex ZA.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.6.2 Protection against building insulation contact for Type IC-F, IC, CA 80 and CA 135 recessed luminaires
For recessed luminaires classified as IC-F, IC, CA 80 and CA 135 there shall be adequate protection against building insulation contacting the lampholder or the lamp and causing risk of fire.
For IC-F recessed luminaires compliance is determined by applying the test of clause 13.2 for first characteristic numeral 4 of IEC 60529. Additionally, there shall be no openings in horizontal surfaces, or surfaces within 20 degrees of the horizontal, on the top of the recessed luminaire.
For IC, CA 80 and CA 135 recessed luminaires compliance is determined by applying the test probe 1 of IEC 61032 with a force of 3N ± 10% to all surfaces and all openings excluding the opening for the light output. The temperature of any part of the reflector, bracketry, body, lamp or lampholder which the probe contacts shall not exceed 80°C for IC and CA 80 type luminaires or 135°C for CA 135 type luminaires.
For Type IC recessed luminaires that do not have a thermal protector it shall not be possible for the test probe to contact the lamp or the lampholder.

2.6.3 Building insulation abutting or covering luminaires
Building insulation that abuts or covers a recessed luminaire, or is part of a recessed luminaire, or is within 100 mm horizontally of a luminaire shall:
a) Maintain its dimensions and structural integrity when exposed to the maximum surface temperature of the class of luminaire, being 150°C in the case of CA-135 luminaires and 90°C in the case of IC-F, IC and CA-80 luminaires;
b) When intended to be in contact with IC, CA 80 and CA 135 recessed luminaires, withstand a 30 s needle flame test carried out in accordance with IEC 60695.11.5 with the flame applied to all surfaces of the sample.
Loose fill insulation is not permitted to abut or cover luminaires unless specifically allowed by the luminaire manufacturer. Manufacturers shall specify types and/or characteristics of insulation that are safe for use with the luminaire.

2.10 External and internal wiring
Add the following after the third paragraph:
For IC-F recessed luminaires the tests of 2.12 shall be conducted with two supply cables fitted.

2.12 Endurance tests and thermal tests
Add the following after the existing paragraph:
For Type IC-F, IC, CA 80 and CA 135 recessed luminaires the requirements of Annex ZA also apply.
Add the following new Annex:
Annex ZA
(Normative)
ZA.1
Type IC-F, IC, CA 80 and CA 135 recessed luminaires shall be subjected to the following tests and operated as described in clause 12.4.1 of IEC 60598-1. The test shall be conducted on a separate sample to that used for the tests of IEC 60598-1.
ZA.2
The test sample is mounted in a wooden test box with internal dimensions 1200 mm (L) x 450 mm (W) by 300 mm (H) and a base thickness of 15 to 20 mm. The test sample is mounted 75 mm from one wall and centrally in the other horizontal dimension. See figure ZA.1.
Figure ZA.1 – Test box for Type IC-F, IC, CA 80 and CA 135 luminaires

ZA.3
For CA 80 and CA 135 luminaires the test box is filled with a single piece of approximately 200 mm thick glass wool thermal insulation having a thermal resistivity (R-value) of 3.2 such that it closely abuts the test sample without compressing or deforming the insulation.
For IC-F and IC luminaires the test box is completely filled with glass wool thermal insulation fully contacting the luminaire.

ZA.4
Three thermocouples, T1, are mounted on the side of the test box 75 mm from the test sample at the hottest locations. The thermocouples shall be in a vertical plane through the centreline of the test sample.
One thermocouple, T2, is positioned on the ceiling of the test box directly above the test sample at the hottest location and a further thermocouple, T3, is positioned on the mounting ring.

ZA.5 Normal test
The test sample is fitted with the hottest recommended lamp and the test sample operated for six hours or until the fixture has stabilised thermally.
During the test the hottest point on the outer surface of the test sample where it is abutted by insulation (for example, the reflector, bracketry or body) shall be determined, T4, and the temperature measured.
The maximum temperature at any thermocouple shall not exceed the values in table ZA.1.
Additionally, the limits of table 12.1 of IEC 60958.1 shall not be exceeded during the test.

Table ZA.1 – Normal test – Maximum thermocouple temperatures

<table>
<thead>
<tr>
<th>Thermocouple reference (figure ZA.1)</th>
<th>IC-F</th>
<th>IC</th>
<th>CA80</th>
<th>CA135</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1, T2, T3</td>
<td>90°C</td>
<td>90°C</td>
<td>90°C</td>
<td>90°C</td>
</tr>
<tr>
<td>T4</td>
<td>80°C</td>
<td>80°C</td>
<td>85°C</td>
<td>135°C</td>
</tr>
</tbody>
</table>

Thermal protectors shall not operate during the test.

ZA.6 Abnormal test 1
The test box is then completely filled with glass wool insulation and the tests repeated.
The maximum temperature of any thermocouple shall not exceed the values in table ZA.2.

Table ZA.2 – Abnormal test 1 – Maximum thermocouple temperatures

<table>
<thead>
<tr>
<th>Thermocouple reference (figure ZA.1)</th>
<th>IC-F</th>
<th>IC</th>
<th>CA80</th>
<th>CA135</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1, T2, T3</td>
<td>90°C</td>
<td>90°C</td>
<td>90°C</td>
<td>90°C</td>
</tr>
<tr>
<td>T4</td>
<td>90°C</td>
<td>90°C</td>
<td>90°C</td>
<td>150°C</td>
</tr>
</tbody>
</table>

If a thermal protector operates during this test, the test is repeated on a second sample. This second test shall be terminated in the same mode unless the test is otherwise satisfactorily completed.

ZA.7 Replacement lamps test
All luminaires with E27 or B22 lampholders shall meet one of the following requirements:
<table>
<thead>
<tr>
<th>Product Category</th>
<th>Specified Product</th>
<th>Product Description</th>
<th>Applicable Standard</th>
<th>Implementation Rules</th>
<th>Relevant Standard</th>
<th>E.S, S &amp; E</th>
<th>NZ App or SDoC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recessed luminaires (Luminaire at voltage above 36 V for use in other than domestic installations)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquarium luminaires</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mains socket-outlet mounted nightlights</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Category</td>
<td>Specified Product</td>
<td>Product Description</td>
<td>Applicable Standard</td>
<td>Applicable Deviation</td>
<td>Implementation Rules</td>
<td>Relevant National Standard</td>
<td>E.S. &amp; E</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
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<td>---------------------</td>
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<td>----------------------</td>
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<td>--------</td>
</tr>
<tr>
<td>Ground recessed luminaires</td>
<td>This Part 2 of IEC 60598 specifies requirements for ground recessed luminaires incorporating electric light sources for operation from supply voltages up to 1 kV, for indoor or outdoor use, e.g. in gardens, yards, carriageways, parking lots, cycleways, footways, pedestrian areas, swimming pools areas outside zones for SELV, nurseries and similar applications.</td>
<td>GB7000.1-2007, GB7000.213-2008</td>
<td>No Deviation</td>
<td>CNCA-01C-022: 2007</td>
<td>AS/NZS 60598.1 + IEC 60598.2.13</td>
<td>S &amp; E</td>
<td>SDSC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td>CNCA-01C-022: 2007</td>
<td>AS/NZS 60598.1 + AS/NZS 60598.2:10.199</td>
<td>S &amp; E</td>
<td>SDSC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See above</td>
<td></td>
<td>AS/NZS CISPR 15:2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portable luminaires for children</td>
<td>This part of IEC 60598 specifies requirements for portable luminaires for children and for use with tungsten filament lamps or single capped fluorescent lamps on a supply voltage not exceeding 250 V. It is to be read in conjunction with those sections of Part 1 to which reference is made.</td>
<td>GB7000.1-2007, GB7000.4-2007</td>
<td>10.12 Add the following: All external surfaces of a child-appealing luminaire shall be regarded as parts intended to be gripped by hand. The maximum temperature of these parts shall not exceed 50°C for metal parts and 60°C for non-metal parts.</td>
<td>GB17743-2007</td>
<td>See above</td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td>CNCA-01C-022: 2007</td>
<td>AS/NZS 60598.1</td>
<td>IEC 61000-3-2 Ed 2.1 2001</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GB17743-2007</td>
<td>See above</td>
<td>AS/NZS CISPR 15:2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>See above</td>
<td></td>
<td>AS/NZS CISPR 15:2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GB19510.9-2009</td>
<td></td>
<td>+ AS/NZS 61347.2:8:2003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ballasts for discharge lamps (excluding fluorescent lamps)</td>
<td>Ballasts for discharge lamps such as high-pressure mercury vapour, low-pressure sodium vapour, high-pressure sodium vapour and metal halide lamps. The standard covers inductive-type ballasts for use on a.c. supplies up to 1000 V at 50Hz or 60Hz, associated with discharge lamps, having rated wattages, dimensions and characteristics as specified in IEC 60188, IEC60192 AND IEC 60662.</td>
<td>GB19510.1-2009, GB19510.10-2009, GB17743--2007</td>
<td>No Deviation</td>
<td>CNCA-01C-022: 2007</td>
<td>AS/NZS 61347.1:2002 + AS/NZS 61347.2:9:2004</td>
<td>S &amp; E</td>
<td>SDSC</td>
</tr>
<tr>
<td>Product Category</td>
<td>Specified Product</td>
<td>Product Description</td>
<td>Applicable Standard</td>
<td>Applicable Deviation</td>
<td>Implementation Rules</td>
<td>Relevant National Standard</td>
<td>E.S, S &amp; E</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------</td>
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<td>-------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>--------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>a.c. supplied electronic ballasts for fluorescent lamps</td>
<td>Mains-supplied a.c. to a.c. inverter including stabilizing elements for starting and operating one or more tubular fluorescent lamps, generally at high frequency. Electronic ballasts for use on a.c. supplies up to 1,000V at 50Hz or 60Hz with operating frequencies deviating from the supply frequency, associated with fluorescent lamps as specified in IEC 60081 and IEC 60901, and other fluorescent lamps for high-frequency operation.</td>
<td>GB19510.1-2009, GB19510.4-2009</td>
<td>No Deviation</td>
<td>CNCA-01C-022:2007</td>
<td>AS/NZS 61347.1 + AS/NZS 61347.2.3:2004</td>
<td>AS/NZS CISPR 15:2011</td>
<td>S &amp; E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GB17743--2007</td>
<td>See above</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GB17625.1-2012</td>
<td>No Deviation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


3.1.12 remote operation

control of an appliance by a command that can be initiated out of sight of the appliance using means such as telecommunications, sound controls or bus systems

NOTE An infra-red control by itself is not considered one used for remote operation. However, it may be incorporated as part of a system such as a telecommunication, sound control or bus system.

5 General conditions for the tests

5.3 Add the following to the first paragraph:

The test of 19.14 is carried out before the tests of 19.11.

7.5 In the first paragraph of the requirement, replace (in two places) “mean value” by “arithmetic mean value”

7.6 [symbol ISO 7000-0790 (DB:2004-01)] read operator’s manual

7.12 Add the following:

The instructions shall state the substance of the following:

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

8 Protection against access to live parts

8.1.1.1.1 Renumber the existing note as Note 1.

Add the following note after the third paragraph of the test specification:

NOTE 2 “Without appreciable force” is considered to be a force not exceeding 1 N.

8.1.2.2 Renumber the existing note as Note 1.

Add the following note after the first paragraph of the test specification:

NOTE 2 “Without appreciable force” is considered to be a force not exceeding 1 N.

8.1.3 Add the following note after the first paragraph of the test specification:

NOTE 2 “Without appreciable force” is considered to be a force not exceeding 1 N.

Renumber the existing note as Note 2.

8.1.4 Add the following dashed item to the second paragraph of the requirement:

– for voltages having a peak value over 15 kV, the energy in the discharge shall not exceed 350 mJ

Replace the third sentence of the second paragraph of the test specification by the following:

The quantity of electricity and energy in the discharge is measured using a resistor having a nominal non-inductive resistance of 2 000 Ω.

8.2 Replace the test specification by the following:

Compliance is checked by inspection and by applying test probe B of IEC 61032 in accordance with the conditions specified in 8.1.1.

Delete Note 1 and renumber existing Note 2 as Note.

10 Power input and current

12 December 2013
10.1 Add the following to the requirement:
The permissible Deviation apply for both limits of the range for appliances marked with a rated voltage range having limits differing by more than 10 % of the arithmetic mean value of the range.

Delete Notes 2 and 3 and renumber existing Note 1 as Note.

Add the following to the test specification:
The test is carried out at both the upper and lower limits of the ranges for appliances marked with one or more rated voltage ranges, unless the marking of the rated power input is related to the arithmetic mean value of the relevant voltage range, in which case the test is carried out at a voltage equal to the arithmetic mean value of that range.

10.2 Add the following to the requirement:
The permissible Deviation apply for both limits of the range for appliances marked with a rated voltage range having limits differing by more than 10 % of the arithmetic mean value of the range.

In the second paragraph of the test specification, replace “mean value” by “arithmetic mean value”.

Delete Notes 2 and 3 and renumber existing Note 1 as Note.

Add the following to the test specification:
The test is carried out at both the upper and lower limits of the ranges for appliances marked with one or more rated voltage ranges, unless the marking of the rated current is related to the arithmetic mean value of the relevant voltage range, in which case the test is carried out at a voltage equal to the arithmetic mean value of that range.

11 Heating

Table 3 – Maximum normal temperature rises

In the first entry, replace the terms “class A, class E, class B, class F and class H” by the terms “class 105, class 120, class 130, class 155 and class 180” respectively.

Replace the fifth entry by the following:

| Rubber, polyethylene or polyvinyl chloride insulation of internal and external wiring, including supply cords: | 50 |
| – without temperature rating or with a temperature rating not exceeding 75 °C | |
| – with temperature rating (T) where T exceeds 75 °C | T-25 |

Add the following paragraph to footnote a:
The temperature rise limit of windings in transformers and inductors mounted on printed circuit boards is equal to the thermal class of the winding insulation reduced by 25 K provided the largest dimension of the winding does not exceed 5 mm in cross section or length.

Add the following footnote:

j IEC 60227 Types 52 and 53 supply cords have a T rating of 70 °C; IEC 60245 Types 55, 57, 87 supply cords have a T rating of 60 °C; IEC 60227 Types 96 and 57 supply cords have a T rating of 90 °C.

14 Transient overvoltages

Replace the second paragraph of the test specification by the following:
The impulse test voltage has a no-load waveshape corresponding to the 1,2/50 μs standard impulse specified in IEC 61180-1. It is supplied from a generator having a conventional impedance not exceeding 42 Ω. The impulse test voltage is applied three times for each polarity with intervals of at least 1 s.

Delete Note 3.

16 Leakage current and electric strength

16.3 Replace the first paragraph of the test specification by the following:

Immediately after the test of 16.2, the insulation is subjected to a voltage having a frequency of 50 Hz or 60 Hz for 1 min in accordance with IEC 61180-1. The values of the test voltage for different types of insulation are given in Table 7.

Replace Note 2 by the following:

NOTE 2 The characteristics of the high-voltage source used for the test are described in Table 5.

Delete the penultimate paragraph of the test specification.

19 Abnormal operation

19.1 Add the following new paragraph after the third paragraph of the test specification:

Appliances incorporating contactors or relays are subjected to the test of 19.14.

Add the following new subclause:

19.7 In the second paragraph, replace “IEC 60252” by “IEC 60252-1”.

19.11 Replace the second and third paragraphs by the following:

19.11.4 In the first paragraph, replace “switch” by “device” in three places.

In the last paragraph, replace “arresters” by “protective devices”.

The appliance is subjected to the Class 3 voltage dips and interruptions in accordance with IEC 61000-4-11. The values specified in Table 1 and Table 2 of IEC 61000-4-11 are applied at zero crossing of the supply voltage.
Add the following new subclause:

22.14 Appliances are operated under the conditions of Clause 11. Any contactor or relay contact that operates under the conditions of Clause 11 is short-circuited.

NOTE If a relay or contactor with more than one contact is used, all contacts are short-circuited at the same time.

22 Construction

22.2 Replace the second paragraph of the requirement by the following:

Single-pole switches and single-pole protective devices that disconnect heating elements from the supply mains in single-phase, permanently connected class 0I appliances and class I appliances shall be connected to the phase conductor.

22.5 In the requirement, after “charged capacitors” add “having a rated capacitance exceeding 0.1 μF”.

Delete the note.

22.21 Add the following to the requirement:

This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements.

Delete Note 2.

22.32 Add the following paragraph to the requirement:

Insulating material in which heating conductors are embedded is considered to be basic insulation and not reinforced insulation.

Delete Note 1 and renumber existing Note 2 as Note.

22.35 Replace the first paragraph of the requirement by the following:

For constructions other than those of class III, handles, levers and knobs that are held or actuated in normal use shall not become live in the event of a failure of basic insulation. If these handles, levers and knobs are of metal and if their shafts or fixings are likely to become live in the event of a failure of basic insulation, they shall be adequately covered by insulating material or their accessible parts shall be separated from their shafts or fixings by supplementary insulation.

22.40 Add the following new paragraph and note:

Unless the appliance can operate continuously, automatically or remotely without giving rise to a hazard, appliances for remote operation shall be fitted with a switch for stopping the operation of the appliance. The actuating member of this switch shall be easily visible and accessible.

NOTE Examples of appliances that can operate continuously, automatically or remotely without giving rise to a hazard are fans, storage water heaters, air conditioners, refrigerators and drives for awnings, windows, doors, gates and rolling shutters.

22.44 Replace the text by the following:

Appliances shall not have an enclosure that is shaped or decorated like a toy.

NOTE Examples of such enclosures are those representing animals, characters, persons or scale models.

Compliance is checked by inspection.

Add the following new subclauses:

22.49 For remote operation, the duration of operation shall be set before the appliance can be started unless the appliance switches off automatically at the end of a cycle or it can operate continuously without giving rise to a hazard.

Compliance is checked by inspection.

NOTE For appliances such as ovens, the duration of operation has to be set before the appliance can be started. Washing machines and dishwashers are examples of appliances that switch off automatically at the end of a cycle. Fans, storage water heaters, air conditioners and refrigerators are examples of appliances that can operate continuously without giving rise to a hazard.

22.50 Controls incorporated in the appliance, if any, shall take priority over controls actuated by remote operation.

Compliance is checked by inspection and by appropriate tests if necessary.

22.51 A control on the appliance shall be manually adjusted by the setting for remote operation before the appliance can be operated in this mode. There shall be a visual indication on the appliance showing that the appliance is adjusted for remote operation. The manual setting and the visual indication of the remote mode are not necessary on appliances that can

- operate continuously,
- operate automatically,
- be operated remotely,
without giving rise to a hazard.

Compliance is checked by inspection.

NOTE Examples of appliances that can operate continuously, automatically or remotely without giving rise to a hazard are fans, storage water heaters, air conditioners, refrigerators and drives for awnings, windows, doors, gates and rolling shutters.

22.52 Socket-outlets on appliances accessible to the user shall be in accordance with the socket-outlet system used in the country in which the appliance is sold.

Compliance is checked by inspection.

24 Components
24.1 Replace Note 1 by the following:

NOTE 1 Compliance with the IEC standard for the relevant component does not necessarily ensure compliance with the requirements of this standard.

NOTE 2 Motors are not required to comply with IEC 60034-1.

NOTE 3 Unless otherwise specified, the requirements of Clause 29 of this standard apply between live parts of components and accessible parts of the appliance.

NOTE 4 Unless otherwise specified, the requirements of 30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections inside components.

Components that have been previously tested and shown to comply with the requirements for fire requirements in the IEC standard for the relevant component need not be retested provided that:

— the severity specified in the component standard is not less than the severity specified in 30.2 of this standard and

— unless the preselection option is used, the test report for the component states whether it complied with the IEC standard for the relevant component with or without flame. Flames existing for a cumulative time not exceeding 2 seconds during the test are ignored.

If the above two conditions are not satisfied, the component is tested as part of the appliance.

There are two levels of severity specified for appliances for which 30.2.3 is applicable.

Components that have not been previously tested and shown to comply with the IEC standard for the relevant component are tested according to the requirements of 30.2 of this standard.

In the first paragraph of the test specification, replace “24.1.1 to 24.1.6” by “24.1.1 to 24.1.9”.

Renumber Note 2 as Note 5.

Add the following paragraph and Note 6 after Note 5:

Components that have not been previously tested and found to comply with the relevant IEC standard are tested as a part of the appliance and shall additionally comply with the gauging and interchangeability requirements of the relevant IEC standard under the conditions occurring in the appliance.

NOTE 6 Where the relevant IEC standard specifies these gauging and interchangeability requirements at elevated temperatures, the temperatures measured during the tests of Clause 11 are used.

Add the following new subclauses:

24.1.7 If the remote operation of the appliance is via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is IEC 62151.

24.1.8 The relevant standard for thermal links is IEC 60691. Thermal links that do not comply with IEC 60691 are considered to be an intentionally weak part for the purposes of Clause 19

24.1.9 Relays, other than motor starting relays, are tested as part of the appliance. However, they are also tested in accordance with Clause 17 of IEC 60720-1 under the maximum load conditions occurring in the appliance for at least the number of operations in 24.1.4 selected according to the relay function in the appliance.

25 Supply connections and external flexible cords

25.7 Replace the test by the following:

Supply cords shall be one of the following types:

— Rubber sheathed.

  - Their properties shall be at least those of ordinary tough rubber sheathed cords (code designation 60245 IEC 53);
  - NOTE 1 These cords are not suitable for appliances intended to be used outdoors or when they are liable to be exposed to significant amounts of ultraviolet radiation.

— Polychloroprene sheathed.

  - Their properties shall be at least those of ordinary polychloroprene sheathed cords (code designation 60245 IEC 57);
  - NOTE 2 These cords are suitable for appliances intended to be used in low temperature applications.

— Cross-linked polyvinyl chloride sheathed.

  - Their properties shall be at least those of cross-linked polyvinyl chloride sheathed cords (code designation 60245 IEC 87);
  - NOTE 3 These cords are suitable for appliances when they may come into contact with hot surfaces. Due to the composition of the conductors, the cords are suitable for applications where high flexibility is required.

— Polyvinyl chloride sheathed.

  - These cords shall not be used if they are likely to touch metal parts having a temperature rise exceeding 75 K during the test of Clause 11. Their properties shall be at least those of light polyvinyl chloride sheathed cord (code designation 60227 IEC 52), for appliances having a mass not exceeding 3 kg;
  - ordinary polyvinyl chloride sheathed cord (code designation 60227 IEC 53), for other appliances;
  - NOTE 2 These cords are not suitable for appliances when they may come into contact with hot surfaces. Due to the composition of the conductors, the cords are suitable for applications where high flexibility is required.

— Heat resistant polyvinyl chloride sheathed.

  - These cords shall not be used for type X attachment other than specially prepared cords. Their properties shall be at least those of heat-resistant light polyvinyl chloride sheathed cord (code designation 60227 IEC 56), for appliances having a mass not exceeding 3 kg;
  - heat-resistant polyvinyl chloride sheathed cord (code designation 60227 IEC 57), for other appliances.

Compliance is checked by measurement.

26 Terminals for external conductors

26.2 Replace the note by the following:

NOTE Conductors connected by soldering are not considered to be positioned or fixed so that reliance is not placed upon the soldering alone to maintain it in position unless they are held in place near the terminals independently of the solder.

In Table 13, replace the last two rows by the following:

<table>
<thead>
<tr>
<th>&gt;32 and ≤60</th>
<th>&gt;50 and ≤63</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 and 10</td>
<td>10 and 16</td>
</tr>
<tr>
<td>6 to 16</td>
<td>10 to 25</td>
</tr>
</tbody>
</table>

26.3 In the test specification, replace “8.6” by “9.6”. 26.11

Replace Notes 1 and 2 by the following:

NOTE Conductors connected by soldering are not considered to be positioned or fixed so that reliance is not placed upon the soldering alone to maintain it in position unless they are held in place near the terminals independently of the solder.

27 Provision for earthing

27.6 Replace the test by the following:

The printed conductors of printed circuit boards shall not be used to provide earthing continuity in hand-held appliances. They may be used to provide earthing continuity in other appliances if at least two tracks are used with independent soldering points and the appliance complies with 27.5 for each circuit.

Compliance is checked by inspection and by the relevant tests.

28 Screws and connections

Table 14 – Torque for testing screws and nuts
Replace the penultimate row of Table 14 by the following:

<table>
<thead>
<tr>
<th>Power Transformers, Power Supply Units and Similar products</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8.05/2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace the second and third paragraphs of the requirement by the following:</td>
<td>28.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Thread-cutting (self-tapping) screws and thread rolling screws shall only be used for electrical connections if they generate a full form standard machine screw thread. However, thread-cutting (self-tapping) screws shall not be used if they are likely to be operated by the user or installer.</td>
<td>&gt;4.7 and ≤5.3</td>
<td>0.8</td>
</tr>
<tr>
<td>Thread-cutting, thread rolling and space-threaded screws may be used in connections providing earthing continuity provided it is not necessary to disturb the connection</td>
<td>29 Clearances, creepage distances and solid insulation</td>
<td>1.0</td>
</tr>
<tr>
<td>Compliance is checked by the test of 30.2.1. In addition,</td>
<td></td>
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<tr>
<td>– in normal use,</td>
<td>29.2</td>
<td></td>
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<tr>
<td>– during user maintenance,</td>
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<tr>
<td>– when replacing a supply cord having a type X attachment, or</td>
<td></td>
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<tr>
<td>– during installation.</td>
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<tr>
<td>At least two screws must be used for each connection providing earthing continuity unless the screw forms a thread having a length of at least half the diameter of the screw.</td>
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<tr>
<td>Add the following new note:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE 2 Contacts in components such as switch contacts are considered to be connections.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add the following new note:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE 6 For appliances intended for use at altitudes exceeding 2 000 m, the altitude correction factors for clearances specified in Table A.2 of IEC 60664-1 should be taken into account.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace the second sentence of the requirement by the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The tests are carried out on parts of non-metallic material that have been removed from the appliance. When the glow-wire test is carried out, the parts are placed in the same orientation as they would be in normal use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add the following new note:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE 6 In a double insulation system, the working voltage across the complete double insulation system is not divided according to thickness and dielectric constant of the basic insulation and supplementary insulation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 Resistance to heat and fire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.2 Replace the test by the following:</td>
<td>30.2.1</td>
<td></td>
</tr>
<tr>
<td>30.2.1 Parts of non-metallic material are subjected to the glow-wire test of IEC 60695-2-11, which is carried out at 550 °C. The glow-wire test is not carried out on parts of material classified at least HB40 according to IEC 60695-11-10 provided that the test sample used for the classification was no thicker than the relevant part of the appliance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parts for which the glow-wire test cannot be carried out, such as those made of soft or foamy material, shall meet the requirements specified in ISO 9772 for material classified HBF, the test sample used for the classification being no thicker than the relevant part of the appliance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.2.2 For appliances that are operated while unattended, parts of non-metallic material supporting current-carrying connections, and parts of non-metallic material within a distance of 3 mm of such connections, are subjected to the glow-wire test of IEC 60695-2-11. However, the glow-wire test is not carried out on parts of material classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least</td>
<td></td>
<td></td>
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<tr>
<td>– 750 °C, for connections which carry a current exceeding 0.5 A during normal operation,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– 650 °C, for other connections.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If the glow-wire flammability index is not available for a sample with a thickness within ± 0.1 mm of the relevant part, then the test sample shall have a thickness equal to the nearest preferred value specified in IEC 60695-2-12 that is no thicker than the relevant part.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE 1 The preferred values in IEC 60695-2-12 are 0.75 mm ± 0.1 mm, 1.5 mm ± 0.1 mm and 3.0 mm ± 0.2 mm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Where a non-metallic material is within 3 mm of a current carrying connection, but is shielded from the connection by a different material, the glow-wire test of IEC 60695-2-11 is carried out at the relevant temperature with the tip of the glow-wire applied to the interposed shielding material with the shielded material in place and not directly to the shielded material.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The glow-wire test of IEC 60695-2-11 is carried out, the temperatures are</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– 750 °C, for connections that carry a current exceeding 0.5 A during normal operation,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– 650 °C, for other connections.</td>
<td></td>
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</tr>
<tr>
<td>NOTE 1 For parts that have been removed, it is the intention that IEC 60664-1 Clause 4 item c) applies, which states “remove the part under examination in its entirety and test it separately”.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>These tests are not carried out on the insulation of wires.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE 2 Contact in components such as switch contacts are considered to be connections.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE 3 The tip of the glow-wire should be applied to the part in the vicinity of the connection.</td>
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<tr>
<td>This test is not applicable to:</td>
<td></td>
<td></td>
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<tr>
<td>– parts supporting welded connections;</td>
<td></td>
<td></td>
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<tr>
<td>– parts supporting connections in low-power circuits described in 19.11.1;</td>
<td></td>
<td></td>
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<tr>
<td>– soldered connections on printed circuit boards;</td>
<td></td>
<td></td>
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<tr>
<td>– connections on small components on printed circuit boards;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
NOTE 4 Examples of small components are diodes, transistors, resistors, inductors, integrated circuits and capacitors not directly connected to the supply mains. It is also not applicable to
- hand-held appliances;
- appliances that have to be kept switched on by hand or foot;
- appliances that are continuously loaded by hand.

30.2.3 Appliances that are operated while unattended are tested as specified in 30.2.3.1 and 30.2.3.2. However, the tests are not applicable to
- parts supporting welded connections,
- parts supporting connections in low-power circuits described in 19.11.1,
- soldered connections on printed circuit boards,
- connections on small components that are mounted on printed circuit boards
and parts within 3 mm of any of these connections.

NOTE Examples of small components are diodes, transistors, resistors, inductors, integrated circuits and capacitors not directly connected to the supply mains.

30.2.3.1 Parts of non-metallic material supporting connections that carry a current exceeding 0.2 A during normal operation, and parts of non-metallic material within a distance of 3 mm of such connections, are subjected to the glow-wire test of IEC 60695-2-11 with a test severity of 850 °C. However, the glow-wire test is not carried out on parts of material classified as having a glow-wire flammability index of at least 850 °C according to IEC 60695-2-12. If the glow-wire flammability index is not available for a sample with a thickness within ± 0.1 mm of the relevant part, then the test sample shall have a thickness equal to the nearest preferred value specified in IEC 60695-2-12 that is no thicker than the relevant part.

NOTE 1 The preferred values in IEC 60695-2-12 are 0.75 mm ± 0.1 mm, 1.5 mm ± 0.1 mm and 3.0 mm ± 0.2 mm.

NOTE 2 Contacts in components such as switch contacts are considered to be connections.

NOTE 3 The tip of the glow-wire is applied to the part in the vicinity of the connection.

The glow-wire test is also not carried out on small parts that comply with the needle-flame test of Annex E or on small parts of material classified as V-0 or V-1 according to IEC 60695-11-10 provided that the test sample used for the classification was no thicker than the relevant part of the appliance.

NOTE 4 Small parts are as defined in IEC 60695-4.

Where a non-metallic material is within 3 mm of a current carrying connection, but is shielded from the connection by a different material, the glow-wire test of IEC 60695-2-11 is carried out at the relevant temperature with the tip of the glow-wire applied to the interposed shielding material with the shielded material in place and not directly to the shielded material.

30.2.3.2 Parts of non-metallic material supporting current-carrying connections, and parts of non-metallic material within a distance of 3 mm of such connections, are subjected to the glow-wire test of IEC 60695-2-11. However, the glow-wire test is not carried out on parts of material classified as having a glow-wire ignition temperature according to IEC 60695-2-13 of at least
- 775 °C, for connections that carry a current exceeding 0.2 A during normal operation,
- 675 °C, for other connections.

If the glow-wire ignition temperature is not available for a sample with a thickness within ± 0.1 mm of the relevant part, then the test sample shall have a thickness equal to the nearest preferred value specified in IEC 60695-2-13 that is no thicker than the relevant part.

NOTE 1 The preferred values in IEC 60695-2-13 are 0.75 mm ± 0.1 mm, 1.5 mm ± 0.1 mm and 3.0 mm ± 0.2 mm.

Where an non-metallic material is within 3 mm of a current carrying connection, but is shielded from the connection by a different material, the glow-wire test of IEC 60695-2-11 is carried out at the relevant temperature with the tip of the glow-wire applied to the interposed shielding material with the shielded material in place and not directly to the shielded material.

When the glow-wire test of IEC 60695-2-11 is carried out, the temperatures are
- 750 °C, for connections that carry a current exceeding 0.2 A during normal operation,
- 650 °C, for other connections.

NOTE 2 Contacts in components such as switch contacts are considered to be connections.

NOTE 3 The tip of the glow-wire is applied to the part in the vicinity of the connection.

If parts that withstand the glow-wire test of IEC 60695-2-11, but during the test produce a flame that persists for longer than 2 s, then these parts and adjacent parts are further tested as follows. Parts above the connection within the envelope of a vertical cylinder having a diameter of 20 mm and a height of 50 mm are subjected to the needle-flame test of Annex E. However, parts shielded by a flame barrier that meets the needle-flame test of Annex E are not tested.

The needle-flame test is not carried out on parts of material classified as V-0 or V-1 according to IEC 60695-11-10 provided that the test sample used for the classification was no thicker than the relevant part of the appliance.

30.2.4 The base material of printed circuit boards is subjected to the needle-flame test of Annex E. The flame is applied to the edge of the board where the heat sink effect is lowest when the board is positioned as in normal use.

NOTE The test may be carried out on a printed circuit board on which components are mounted. However, ignition of a component is disregarded.

The test is not carried out:
- on printed circuit boards of low-power circuits described in 19.11.1;
- on the printed circuit boards in
  • a metal enclosure that confines flames or burning droplets,
  • hand-held appliances,
  • appliances that have to be kept switched on by hand or foot,
  • appliances that are continuously loaded by hand,
- on a base material classified as V-0 according to IEC 60695-11-10 provided that the test sample used for the classification was no thicker than the printed circuit board.

32 Radiation, toxicity and similar hazards

Replace the existing text by the following:
Appliances shall not emit harmful radiation or present a toxic or similar hazard due to their operation in normal use.

Compliance is checked by the limits or tests specified in Part 2. However, if no limits or tests are specified in Part 2, then the appliance is deemed to comply with the requirement without testing.

Figure 7 Replace Figure 7 by the following:
Annex D
Delete the note.
Replace Annex E by the following:

Annex E
(normative)

Needle-flame test
The needle-flame test is carried out in accordance with IEC 60695-11-5 with the following modifications.
7 Sevities

Replacement:
The duration of application of the test flame is 30 s ± 1 s.

9 Test procedure

9.1 Position of test specimen

Modification:
The specimen is arranged so that the flame can be applied to a vertical or horizontal edge as shown in the examples of Figure 1.

9.2 Application of needle-flame

Modification:
The first paragraph does not apply.

Addition:

If possible, the flame is applied at least 10 mm from a corner.

9.3 Number of test specimens

Replacement:
The test is carried out on one specimen. If the specimen does not withstand the test, the test may be repeated on two additional specimens, both of which shall then withstand the test.

11 Evaluation of test results

Addition:

The duration of burning (t_b) shall not exceed 30 s. However, for printed circuit boards, the duration of burning shall not exceed 15 s.

Annex J (normative)

Coated printed circuit board

The testing of protective coatings of printed circuit boards is carried out in accordance with IEC 60664-3 with the following modifications.

5.7 Conditioning of the test specimens

When production samples are used, three samples of the printed circuit board are tested.

5.7.1 Cold

The test is carried out at –25 °C.

5.7.3 Rapid change of temperature

Severity 1 is specified.

5.9 Additional tests

This subclause is not applicable.

Annex O

Replace Figure O2 by the following:
Annex Q


Bibliography

Add the following reference to the bibliography:

IEC 606/Fire hazard testing – Part 4: Terminology concerning fire tests for electro-technical products