

# ACMA-mandated Electromagnetic Compatibility (EMC) standards

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**Canberra**

Red Building  
Benjamin Offices  
Chan Street  
Belconnen ACT

PO Box 78  
Belconnen ACT 2616

T +61 2 6219 5555  
F +61 2 6219 5353

**Melbourne**

Level 32  
Melbourne Central Tower  
360 Elizabeth Street  
Melbourne VIC

PO Box 13112  
Law Courts  
Melbourne VIC 8010

T +61 3 9963 6800  
F +61 3 9963 6899

**Sydney**

Level 5  
The Bay Centre  
65 Pirrama Road  
Pyrmont NSW

PO Box Q500  
Queen Victoria Building  
NSW 1230

T +61 2 9334 7700 or 1800 226 667  
F +61 2 9334 7799

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Written enquiries may be sent to:

Manager, Editorial Services  
PO Box 13112  
Law Courts  
Melbourne VIC 8010  
Email: [info@acma.gov.au](mailto:info@acma.gov.au)

## Overview

The Australian Communications and Media Authority (ACMA) incorporates the listed standard(s) as mandatory standards under section 162 of the *Radiocommunications Act 1992* as part of the ACMA's Electromagnetic Compatibility (EMC) Regulatory Arrangement.

Suppliers must select an appropriate standard in column 2 of Part 2 of the table below as an applicable standard for a device. If none of the standards listed in Part 2 apply to a device then a generic standard from column 2 of Part 1 becomes the applicable standard for that device. The ACMA only mandates performance requirements in relation to emissions therefore compliance to standards within this list is only required to the extent that matters within the standard that relate to interference to:

- > radiocommunications
- > any uses or functions of devices.

For any corrections or additions, please email [info@acma.gov.au](mailto:info@acma.gov.au).

## Before you start

- > The expiry date of a standard refers to the date the ACMA no longer recognises the standard as an applicable standard for a device. With [Standards Australia](#), the expiry date of these standards occurs two years after the replacement standard is published. For example, when an existing standard is superseded by a newer version, in addition to the newer version, the existing standard will continue to be recognised as an applicable standard for a further two years after the publication date of the newer standard. After two years, however, only the newer version of the standard is recognised. Suppliers should refer to Standards Australia website for relevant publication dates. For EN, IEC and CISPR standards, unless stated otherwise, the expiry date of a standard is taken to be the expiry date published in the [Official Journal of the European Union](#) (OJEU).
- > The applicable standard listed in column 2 is modified by any relevant notes listed in column 10 of the table.
- > In this version of the table, some original columns have been removed as the information was not pertinent. Original column numbers have been retained to align the table with the Radiocommunications (Electromagnetic Compatibility) Standard 2008.
- > For any standard listed with an AC, the ACMA will accept the test report with or without the AC as these are editorial changes.
- > Where a standard specifies immunity, harmonics and flicker, these tests are not required by the ACMA.

Please note: The fourth and fifth columns of the tables have been labelled '7' and '10' respectively. Originally there were 10 columns, however streamlining of the tables has reduced the overall number of columns, and it has been necessary to retain some of the original numbering as they are specifically referenced in legislation.

| Part 1: Generic standards |                     |   |   |                                    |
|---------------------------|---------------------|---|---|------------------------------------|
| 1                         | 2                   | 3   | 7   | 10                                 |
| Item No.                  | Applicable standard | Full title of standard  | Brief description of equipment type   | Remarks                            |
| G1                        | AS/NZS 61000.6.3    | Electromagnetic compatibility (EMC)—Part 6.3: Generic standards—Emission standard for residential, commercial and light-industrial environments | Equipment intended for use in a residential, commercial, or light-industrial environment that is not covered by one of the product family standards | Harmonics and flicker not required |
|                           | EN 61000-6-3        |   |   |                                    |
|                           | IEC 61000-6-3       |   |   |                                    |
| G2                        | AS/NZS 61000.6.4    | Electromagnetic compatibility (EMC)—Part 6.4: Generic standards—Emission standard for industrial environments                                   | All equipment intended for use in an industrial environment that is not covered by one of the product family standards                              | Harmonics and flicker not required |
|                           | EN 61000-6-4        |   |   |                                    |
|                           | IEC 61000-6-4       |   |   |                                    |

Part 2: Product family and equipment standards

| 1      | 2                   | 3  | 7   | 10   |
|--------|---------------------|--|---|--|
| Serial | Applicable standard | Title of standard  | Brief description of equipment to which standard should apply   | Remarks  |
| 1      | EN 50083-2          | Cabled networks for television signals and interactive services—Part 2: Electromagnetic Compatibility for Equipment  | Cable networks for television signals, sound signals and interactive services                                 |  |
| 2      | IEC 60728-2         | Cabled distribution systems for television and sound signals—Part 2: Electromagnetic Compatibility for Equipment   | Cabled distribution systems for television and sound signals  |  |
| 3      | AS CISPR 11         | Industrial scientific and medical (ISM) radio-frequency equipment—<br>Electromagnetic disturbance characteristics—Limits and methods of measurement  | Industrial scientific and medical (ISM) radio-frequency equipment   | The 900 ISM band for Australia is 915–928 MHz, not 902–928 MHz as shown in the standard. 900 MHz ISM devices operating outside 915–928 MHz cannot be used in Australia |
|        | CISPR 11            |  |   |  |
|        | EN 55011            |  |   |  |
| 4      | AS/NZS CISPR 12     | Vehicles, boats and internal combustion engine-driven devices—Radio disturbance characteristics—Limits and methods of measurement for the protection of receivers except those installed in the vehicle/boat/device itself or in adjacent vehicles/boats/devices | Land-based vehicles (including electric powered vehicles), boats and devices with internal combustion engines |  |
|        | EN 55012            |  |   |  |
|        | CISPR 12            |  |   |  |

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| 1      | 2                   | 3  | 7  | 10                               |
|--------|---------------------|--|--|----------------------------------|
| Serial | Applicable standard | Title of standard  | Brief description of equipment to which standard should apply  | Remarks                          |
| 5      | AS/NZS CISPR 14.1   | Electromagnetic Compatibility—<br>Requirements for household appliances,<br>electric tools and similar apparatus—<br>Part 1: Emissions | Household appliances, power tools,<br>battery-operated tools, electric and<br>electronic toys, heating appliances,<br>kitchen machines, motor-operated<br>appliances |                                  |
|        | AS CISPR 14.1       |  |  |                                  |
|        | EN 55014-1          |  |  |                                  |
|        | CISPR 14-1          |  |  |                                  |
| 6      | AS/NZS CISPR 15     | Limits and methods of measurement of<br>radio disturbance characteristics of<br>electrical lighting and similar equipment              | Lighting equipment, lighting<br>accessories such as ballasts,<br>transformers, dimmers   | Testing above 30MHz<br>mandatory |
|        | AS CISPR 15         |  |  |                                  |
|        | EN 55015            |  |  |                                  |
|        | CISPR 15            |  |  |                                  |

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| 1      | 2                   | 3  | 7   | 10   |
|--------|---------------------|--|---|--|
| Serial | Applicable standard | Title of standard  | Brief description of equipment to which standard should apply   | Remarks  |
| 7      | AS/NZS CISPR 32     | Electromagnetic compatibility of multimedia equipment—Emission requirements  | Information technology equipment, modems, fax machines, BPL modems  | AS/NZS CISPR 32 replaces AS/NZS CISPR 13 and AS/NZS CISPR 22 |
|        | EN 55032            |  | Sound and television broadcast receivers, set top boxes, radio receivers, satellite receivers, analog and digital, DVD players, video recorders, CD players, audio amplifiers, surround sound equipment | EN55032 replaces EN55013 EN55022 and EN55103-1               |
|        | CISPR 32            |  | Multimedia equipment intended primarily for professional use  | CISPR 32 replaces CISPR 13 and CISPR 22                      |
| 8      | EN 60974-10         | Arc welding equipment—Part 10: Electromagnetic compatibility (EMC) requirements  | Arc welding equipment   |  |
|        | IEC 60974-10        |  |   |  |
| 9      | EN 50065-1          | Specification for signalling on low-voltage electrical installations in the frequency range 3 kHz to 148.5 kHz. General requirements, frequency bands and electromagnetic disturbances | Signalling on low-voltage electrical installations  |  |

## Part 2: Product family and equipment standards

| 1      | 2                                       | 3  | 7  | 10  |
|--------|---|--|--|---|
| Serial | Applicable standard                     | Title of standard  | Brief description of equipment to which standard should apply  | Remarks   |
| 10     | IEC 61000-3-8                           | Electromagnetic compatibility (EMC)—<br>Part 3: Limits—Section 8: Signalling on<br>low-voltage electrical installations—<br>Emission levels, frequency bands and<br>electromagnetic disturbance levels | Signalling on low-voltage electrical<br>installations  |   |
| 11     | AS 62040.2<br>EN 62040-2<br>IEC 62040-2 | Uninterruptible power systems (UPS)—<br>Part 2: Electromagnetic compatibility<br>(EMC) requirements  | Uninterruptible power systems (UPS)  | Immunity, harmonics<br>and flicker not required |
| 12     | EN 50148                                | Electronic taximeters  | Electronic taximeters  |   |
| 13     | EN60255-26                              | Measuring relays and protection<br>equipment—Part 26: Electromagnetic<br>compatibility requirements  | Measuring relays and protection<br>equipment   |   |
| 14     | EN 50270                                | Electromagnetic compatibility. Electrical<br>apparatus for the detection and<br>measurement of combustible gases,<br>toxic gases or oxygen   | Electrical apparatus for the detection<br>and measurement of combustible<br>gases, toxic gases or oxygen |   |



Part 2: Product family and equipment standards

| 1      | 2                   | 3   | 7   | 10      |
|--------|---------------------|---|---|---------|
| Serial | Applicable standard | Title of standard   | Brief description of equipment to which standard should apply                     | Remarks |
| 15     | EN 60204-31         | Safety of machinery—Electrical equipment of machines—Part 31: Particular safety and EMC requirements for sewing machines, units and systems       | Sewing machines designed specifically for professional use in the sewing industry |         |
|        | IEC 60204-31        |   |   |         |
| 16     | EN 61439-1          | Low-voltage switchgear and control gear assemblies—Part 1: Type-tested and partially type-tested assemblies                                       | Low-voltage switch gear and control gear assemblies                               |         |
|        | IEC 61439-1         | Low-voltage switchgear and control gear assemblies—Part 1: General rules  |   |         |
| 17     | EN 60669-2-1        | Switches for household and similar fixed electrical installations—Part 2-1: Particular requirements—Electronic switches                           | Electronic switches for household and similar use                                 |         |
|        | IEC 60669-2-1       |   |   |         |
| 18     | EN 60669-2-2        | Switches for household and similar fixed electrical installations—Part 2-2: Particular requirements—Electromagnetic remote-control switches (RCS) | Electromagnetic remote-control switches (RCS) for household and similar use       |         |
|        | IEC 60669-2-2       |   |   |         |
| 19     | EN 60669-2-3        | Switches for household and similar fixed electrical installations—Part 2-3: Particular requirements—Time-delay switches (TDS)                     | Time-delay switches (TDS) for household and similar use                           |         |
|        | IEC 60669-2-3       |   |   |         |

Part 2: Product family and equipment standards

| 1      | 2                   | 3  | 7   | 10      |
|--------|---------------------|--|---|---------|
| Serial | Applicable standard | Title of standard  | Brief description of equipment to which standard should apply                   | Remarks |
| 20     | EN 62053-22         | Electricity metering equipment (AC)—<br>Particular requirements—Part 22: Static<br>meters for active energy (classes 0,2 S<br>and 0,5 S)   | Static meters for active energy<br>(classes 0,2 S and 0,5 S)                    |         |
|        | IEC 62053-22        |  |   |         |
| 21     | EN 60730-1          | Automatic electrical controls for<br>household and similar use—Part 1:<br>General requirements   | Automatic electrical controls for<br>household and similar use                  |         |
|        | IEC 60730-1         |  |   |         |
| 22     | EN 60730-2-5        | Automatic electrical controls for household<br>and similar use—Part 2-5: Particular<br>requirements for automatic electrical<br>burner control systems   | Automatic electrical burner control<br>systems for household and similar use    |         |
|        | IEC 60730-2-5       |  |   |         |
| 23     | EN 60730-2-6        | Automatic electrical controls for household<br>and similar use—Part 2-6: Particular<br>requirements for automatic electrical<br>pressure sensing controls including<br>mechanical requirements | Automatic electrical pressure sensing<br>controls for household and similar use |         |
|        | IEC 60730-2-6       |  |   |         |
| 24     | EN 60730-2-7        | Automatic electrical controls for household<br>and similar use. Part 2: Particular<br>requirements for timers and time switches  | Timers and time switches for<br>household and similar use                       |         |
|        | IEC 60730-2-7       |  |   |         |

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| 1      | 2                   | 3   | 7  | 10      |
|--------|---------------------|---|--|---------|
| Serial | Applicable standard | Title of standard   | Brief description of equipment to which standard should apply                          | Remarks |
| 25     | EN 60730-2-8        | Automatic electrical controls for household and similar use—Part 2-8: Particular requirements for electrically operated water valves, including mechanical requirements | Electrically operated water valves for household and similar use                       |         |
|        | IEC 60730-2-8       |   |  |         |
| 26     | EN 60730-2-9        | Automatic electrical controls for household and similar use—Part 2-9: Particular requirements for temperature sensing controls  | Temperature sensing controls for household and similar use                             |         |
|        | IEC 60730-2-9       |   |  |         |
| 27     | EN 60730-2-11       | Automatic electrical controls for household and similar use—Part 2-11: Particular requirements for energy regulators  | Energy regulators for household and similar use  |         |
|        | IEC 60730-2-11      |   |  |         |
| 28     | EN 60730-2-13       | Automatic electrical controls for household and similar use—Part 2-13: Particular requirements for humidity sensing controls  | Humidity sensing controls for household and similar use                                |         |
|        | IEC 60730-2-13      |   |  |         |
| 29     | EN 60730-2-14       | Automatic electrical controls for household and similar use—Part 2-14: Particular requirements for electric actuators   | Electric actuators for household and similar use                                       |         |
|        | IEC 60730-2-14      |   |  |         |
| 30     | IEC 60730-2-15      | Automatic electrical controls for household and similar use—Part 2: Particular requirements for automatic electrical water and air flow sensing controls                | Automatic electrical water and air flow sensing controls for household and similar use |         |
|        | EN 60730-2-15       |   |  |         |

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| 1      | 2                   | 3  | 7   | 10      |
|--------|---------------------|--|---|---------|
| Serial | Applicable standard | Title of standard  | Brief description of equipment to which standard should apply                   | Remarks |
| 31     | EN 60870-2-1        | Telecontrol equipment and systems—<br>Part 2: Operating conditions—Section 1:<br>Power supply and electromagnetic<br>compatibility             | Telecontrol equipment and systems   |         |
|        | IEC 60870-2-1       |  |   |         |
| 32     | EN 60945            | Maritime navigation and radio-<br>communication equipment and systems—<br>General requirements—Methods of testing<br>and required test results | Maritime navigation and radio-<br>communication equipment and systems           |         |
|        | IEC 60945           |  |   |         |
| 33     | EN 60947-1          | Low-voltage switch gear and control<br>gear—Part 1: General rules  | Low voltage switch gear and control<br>gear                                     |         |
| 34     | EN 60947-2          | Low-voltage switchgear and control<br>gear—Part 2: Circuit-breakers  | Circuit breakers  |         |
|        | IEC 60947-2         |  |   |         |
| 35     | EN 60947-3          | Low-voltage switch gear and control<br>gear—Part 3: Switches, disconnectors,<br>switch-disconnectors and fuse-<br>combination units            | Switches, disconnectors, switch-<br>disconnectors and fuse-combination<br>units |         |
|        | IEC 60947-3         |  |   |         |

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| 1      | 2                   | 3  | 7   | 10      |
|--------|---------------------|--|---|---------|
| Serial | Applicable standard | Title of standard  | Brief description of equipment to which standard should apply                                 | Remarks |
| 36     | EN 60947-4-1        | Low-voltage switch gear and control gear—Part 4-1: Contactors and motor-starters—Electromechanical contactors and motor-starters                 | Contactors and motor-starters—<br>Electro-mechanical contactors and motor-starters            |         |
|        | IEC 60947-4-1       |  |   |         |
| 37     | EN 60947-4-2        | Low-voltage switch gear and control gear—Part 4-2: Contactors and motor-starters—AC semiconductor motor controllers and starters                 | Contactors and motor-starters—AC semiconductor motor controllers and starters                 |         |
|        | IEC 60947-4-2       |  |   |         |
| 38     | EN 60947-4-3        | Low-voltage switch gear and control gear—Part 4-3: Contactors and motor-starters—AC semiconductor controllers and contactors for non-motor loads | Contactors and motor-starters—AC semiconductor controllers and contactors for non-motor loads |         |
|        | IEC 60947-4-3       |  |   |         |
| 39     | EN 60947-5-1        | Low-voltage switch gear and control gear—Part 5-1: Control circuit devices and switching elements—<br>Electromechanical control circuit devices  | Control circuit devices and switching elements—Electro-mechanical control circuit devices     |         |
|        | IEC 60947-5-1       |  |   |         |

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| 1      | 2                   | 3  | 7   | 10      |
|--------|---------------------|--|---|---------|
| Serial | Applicable standard | Title of standard  | Brief description of equipment to which standard should apply                             | Remarks |
| 40     | EN 60947-5-2        | Low-voltage switch gear and control gear—Part 5-2: Control circuit devices and switching elements—Proximity switches   | Control circuit devices and switching elements—Proximity switches                         |         |
|        | IEC 60947-5-2       |  |   |         |
| 41     | EN 60947-5-3        | Low-voltage switch gear and control gear—Part 5-3: Control circuit devices and switching elements—Requirements for proximity devices with defined behaviour under fault conditions (PDF) | Proximity devices with defined behaviour under fault conditions                           |         |
|        | IEC 60947-5-3       |  |   |         |
| 42     | EN 60947-5-6        | Low-voltage switch gear and control gear—Part 5-6: Control circuit devices and switching elements—DC interface for proximity sensors and switching amplifiers (NAMUR)                    | DC interface for proximity sensors and switching amplifiers (NAMUR)                       |         |
|        | IEC 60947-5-6       |  |   |         |
| 43     | EN 60947-6-1        | Low-voltage switch gear and control gear—Part 6-1: Multiple function equipment—Transfer switching equipment  | Multiple function equipment—Transfer switching equipment                                  |         |
|        | IEC 60947-6-1       |  |   |         |
| 44     | EN 60947-6-2        | Low-voltage switch gear and control gear—Part 6-2: Multiple function equipment—Control and protective switching devices (or equipment) (CPS)   | Multiple function equipment—Control and protective switching devices (or equipment) (CPS) |         |
|        | IEC 60947-6-2       |  |   |         |

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| 1      | 2                   | 3   | 7   | 10      |
|--------|---------------------|---|---|---------|
| Serial | Applicable standard | Title of standard   | Brief description of equipment to which standard should apply   | Remarks |
| 45     | EN 61008-1          | Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)—<br>Part 1: General rules | Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) |         |
|        | IEC 61008-1         |   |   |         |
| 46     | EN 62053-21         | Electricity metering equipment (AC)<br>—Particular requirements—Part 21:<br>Static meters for active energy<br>(classes 1 and 2)                    | Static meters for active energy<br>(classes 1 and 2)  |         |
|        | IEC 62053-21        |   |   |         |
| 47     | EN 62054-11         | Electricity metering (AC)—Tariff and load control—Part 11: Particular requirements for electronic ripple control receivers                          | Electronic ripple control receivers   |         |
|        | IEC 62054-11        |   |   |         |
| 48     | EN 62054-21         | Electricity metering (AC)—Tariff and load control—Part 21: Particular requirements for time switches  | Time switches   |         |
|        | IEC 62054-21        |   |   |         |
| 49     | EN 62053-23         | Electricity metering equipment (AC)<br>— Particular requirements—Part 23:<br>Static meters for reactive energy<br>(classes 2 and 3)                 | Static meters for reactive energy<br>(classes 2 and 3)  |         |
|        | IEC 62053-23        |   |   |         |

## Part 2: Product family and equipment standards

| 1      | 2                   | 3   | 7   | 10      |
|--------|---------------------|---|---|---------|
| Serial | Applicable standard | Title of standard   | Brief description of equipment to which standard should apply                     | Remarks |
| 50     | EN 61326-1          | Electrical equipment for measurement, control and laboratory use—EMC requirements—Part 1: General requirements  | Electrical equipment for measurement, control and laboratory use                  |         |
|        | IEC 61326-1         |   |   |         |
| 51     | EN 61543            | Residual current-operated protective devices (RCDs) for household and similar use—Electromagnetic compatibility                                       | Residual current-operated protective devices (RCDs) for household and similar use |         |
|        | IEC 61543           |   |   |         |
| 52     | EN 61800-3          | Adjustable speed electrical power drive systems—Part 3: EMC requirements and specific test methods  | Adjustable speed electrical power drive systems                                   |         |
|        | IEC 61800-3         |   |   |         |
| 53     | EN 61812-1          | Specified time relays for industrial use—Part 1: Requirements and tests   | Specified time relays for industrial use  |         |
|        | IEC 61812-1         |   |   |         |
| 54     | EN 300 386          | Electromagnetic compatibility and Radio spectrum Matters (ERM)—Telecommunication network equipment — Electromagnetic Compatibility (EMC) requirements | Telecommunication network equipment   |         |
| 55     | ISO 13766           | Earthmoving Machinery—Electromagnetic compatibility   | Agricultural and forestry machinery   |         |



Part 2: Product family and equipment standards

| 1      | 2                   | 3  | 7   | 10  |
|--------|---------------------|--|---|---|
| Serial | Applicable standard | Title of standard  | Brief description of equipment to which standard should apply | Remarks   |
| 56     | ISO 14982           | Agricultural and forestry machinery—<br>Electromagnetic compatibility—Test<br>methods and acceptance criteria  | Agricultural and forestry machinery                           |   |
| 57     | EN 50561-1          | Power Line Communication Apparatus<br>Used In Low-Voltage Installations—Radio<br>Disturbance Characteristics—Limits And<br>Methods Of Measurement—Part 1:<br>Apparatus For In-Home Use                         | In-home powerline<br>telecommunications equipment             |   |
| 58     | UN ECE R10          | Uniform provisions concerning the<br>approval of vehicles with regard to<br>electromagnetic compatibility  | Motor vehicles and accessories                                | Immunity, harmonics<br>and flicker not required |
| 59     | IEC 61851-21-2      | Electric vehicle conductive charging<br>system—Part 21-2: Electric vehicle<br>requirements for conductive connection to<br>an AC/DC supply—EMC requirements for<br>off board electric vehicle charging systems | Electric vehicle conductive charging<br>systems               |   |