AS 60870.2.1—1998
IEC 60870-2-1:1995

Australian Standard®

# Telecontrol equipment and systems

# Part 2.1: Operating conditions—Power supply and electromagnetic compatibility

[IEC title: Telecontrol equipment and systems, Part 2: Operating conditions—Section 1: Power supply and electromagnetic compatibility]

This Australian Standard was prepared by Committee IT/24, Supervisory Control and Data Acquisition. It was approved on behalf of the Council of Standards Australia on 5 January 1998 and published on 5 April 1998.

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# Part 2.1: Operating conditions—Power supply and electromagnetic compatibility

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# PREFACE

This Standard was prepared by the Standards Australia Committee IT/24, Supervisory Control and Data Acquisition.

The Standard is identical with and has been reproduced from IEC 60870-2-1:1995, *Telecontrol equipment and systems*, Part 2: *Operating conditions*, Section 1: *Power supply and electromagnetic compatibility*.

IEC has decided to apply a new numbering system, the 60000 series, to all its existing and future publications, including amendments to existing Standards. As a consequence, IEC has modified the bibliographic references in its databases to accord with the new numbering system. All IEC publications issued since the beginning of 1997 will carry references in terms of the 60000 series numbering. Publications printed earlier than 1997 will continue to carry the old series of numbers. For example, a reference to the IEC 60870 series of Standards will be to IEC 870 if the current edition of the Standard was printed prior to 1997.

This Standard is identical with a pre-1997 document therefore it uses the old series of numbers.

The objective of this Standard is to provide manufacturers and users of telecontrol equipment and systems with power supply and EMC specifications in order to ensure optimal performance, under all conditions, in Australia.

As this Standard is reproduced from an international Standard, the following applies:

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text ‘this International Standard’ should read ‘this Australian Standard’.

(c) A full point substitutes for a comma when referring to a decimal marker.

The references to international Standards should be replaced by references to the following Australian Standards:

| *Reference to International Standard or other Publication* | | *Australian Standard* | |
|---|---|---|---|
| IEC | | AS | |
| 38 | IEC standard voltages | — | |
| 50 | International Electrotechnical Vocabulary (IEV) | | |
| 50(161) | Chapter 161: Electromagnetic compatibility | — | |
| 60 | High-voltage test techniques | 1931 | High-voltage test techniques (all parts) |
| 664 | Insulation coordination for equipment within low-voltage systems | — | |
| 664-1 | Part 1: Principles, requirements and tests | — | |
| 1000 | Electromagnetic compatibility (EMC) | | |

| IEC | | AS |
|---|---|---|
| 1000-3-2 | Part 3: Limits—Section 2: Limits for harmonic current emissions (equipment input current less than or equal to 16 A per phase) | — |
| 1000-3-3 | Part 3: Limits—Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current less than or equal to 16 A | — |
| 1000-4-1 | Part 4: Testing and measurement techniques—Section 1: Overview of immunity tests—Basic EMC Publication | — |
| 1000-4-2 | Part 4: Testing and measurement techniques—Section 2: Electrostatic discharge immunity test—Basic EMC Publication | — |
| 1000-4-3 | Part 4: Testing and measurement techniques—Section 3: Radiated, radio-frequency, electromagnetic field immunity test | — |
| 1000-4-4 | Part 4: Testing and measurement techniques—Section 4: Electrical fast transient/burst immunity test—Basic EMC Publication | — |
| 1000-4-5 | Part 4: Testing and measurement techniques—Section 5: Surge immunity test—Basic EMC Publication | — |
| 1000-4-6(DIS) | Part 4: Testing and measurement techniques—Section 6: Immunity to conducted disturbances, induced by radio-frequency fields—Basic EMC Publication | — |
| 1000-4-8 | Part 4: Testing and measurement techniques—Section 8: Power frequency magnetic field immunity test—Basic EMC Publication | — |
| 1000-4-9 | Part 4: Testing and measurement techniques—Section 9: Pulse magnetic field immunity test—Basic EMC Publication | — |
| 1000-4-10 | Part 4: Testing and measurement techniques—Section 10: Damped oscillatory magnetic field immunity test—Basic EMC Publication | — |