AS/NZS 61000.2.2:2003
IEC 61000-2-2:2002

Australian/New Zealand Standard™

Electromagnetic compatibility (EMC)

Part 2.2: Environment—Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems

Standards Australia

STANDARDS NEW ZEALAND
Paerewa Aotearoa

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-034, Power Quality. It was approved on behalf of the Council of Standards Australia on 10 June 2003 and on behalf of the Council of Standards New Zealand on 24 June 2003. It was published on 24 July 2003.

The following are represented on Committee EL-034:

Australasian Railway Association
Australian Chamber of Commerce and Industry
Australian Consumers Association
Australian Electrical and Electronic Manufacturers Association
Australian Institute of Petroleum
Bureau of Steel Manufacturers of Australia
Electricity Engineers Association (New Zealand)
Electricity Supply Association of Australia
Electricity Supply Association of New Zealand
Institution of Engineers Australia
Major Electricity Users Group New Zealand
Ministry of Economic Development (New Zealand)
Monash University
New Zealand Coordinating Committee on Power & Telecommunication Systems
Sydney Water Corporation
Telstra Corporation
Transpower New Zealand
University of Canterbury New Zealand
University of Wollongong

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Australia web site at www.standards.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 03138.

Australian/New Zealand Standard™

Electromagnetic compatibility (EMC)

Part 2.2: Environment—Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems

First published as AS/NZS 61000.2.2:2003.

Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 5425 2

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-034, Power Quality.

The objective of this Standard is to specify compatibility levels for electromagnetic disturbances of the type which can be expected in public low-voltage power supply systems.

This Standard is identical with and has been reproduced from IEC 61000-2-2:2002, *Electromagnetic compatibility (EMC)*—Part 2-2: *Environment—Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems.*

This Standard is Part 2.2 of a series, which, when complete, will consist of the following:

AS/NZS

61000	Electromagnetic compatibility (EMC)	
61000.1.1	Part 1.1:	General—Application and interpretation of fundamental definitions and terms
61000.2.2	Part 2.2:	Environment—Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems (this Standard)
61000.2.3	Part 2.3:	Environment—Description of the environment—Radiated and non-network-frequency-related conducted phenomena
61000.2.5	Part 2.5:	Environment—Classification of electromagnetic environments
61000.2.12	Part 2.12:	Environment—Compatibility levels for low-frequency conducted disturbances and signalling in public medium-voltage power supply systems
61000.3.2	Part 3.2:	Limits—Limits for harmonic current emissions (equipment input current less than or equal to 16 A per phase)
61000.3.3	Part 3.3:	Limits—Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current less than or equal to 16 A per phase and not subject to conditional connection
61000.3.5	Part 3.5:	Limits—Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current greater than 16 A
61000.3.6	Part 3.6:	Limits—Assessment of emission limits for distorting loads in MV and HV power systems
61000.3.7	Part 3.7:	Limits—Assessment of emission limits for fluctuating loads in MV and HV power systems
61000.3.11	Part 3.11:	Limits—Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems—Equipment with rated current less than or equal to 75 A and subject to conditional connection
61000.3.12	Part 3.12:	Limits—Limitation of emission of harmonic currents in low-voltage power supply systems for equipment with rated current greater than 16 A
61000.4.1	Part 4.1:	Testing and measurement techniques—Overview of immunity tests
61000.4.2	Part 4.2:	Testing and measurement techniques—Electrostatic discharge immunity test
61000.4.3	Part 4.3:	Testing and measurement techniques—Radiated radio-frequency electromagnetic field immunity test
61000.4.5	Part 4.5:	Testing and measurement techniques—Surge immunity test

61000.4.6	Part 4.6:	Testing and measurement techniques—Immunity to conducted disturbances, induced by radio-frequency fields
61000.4.7	Part 4.7:	Testing and measurement techniques—General guide on harmonics and interharmonics measures and instrumentation, for power supply systems and equipment connected thereto
61000.4.8	Part 4.8:	Testing and measurement techniques—Power frequency magnetic field immunity test
61000.4.16	Part 4.16:	Testing and measurement techniques—Test for immunity to conductor common made disturbances in the frequency range 0 Hz to 150 kHz
61000.6.2	Part 6.2:	Generic standards—Immunity for industrial environments

This Standard should be read in conjunction with the regulations, service rules and installation rules of the supply authority approving the connection.

A reference to an International Standard identified in the Normative References Clause by strikethrough (~~example~~) is replaced by a reference to the Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (example). Where the struck-through referenced document and the referenced Australian or Australian/New Zealand Standard are identical, this is indicated in parenthesis after the title of the latter.

In this Standard, the following print types are used:

– requirements proper: in arial type;

– *test specifications: in italic type;*

– explanatory matter: in smaller arial type.

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 standard’ should read ‘this Australian/New Zealand Standard’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.