AS/NZS 61000.4.16:2002
IEC 61000-4-16:1998
IEC 61000-4-16:1998 Amd.1:2001
IEC 61000-4-16:1998 Amd.2:2009
(Incorporating Amendment No. 1)

Australian/New Zealand Standard™

Electromagnetic compatibility (EMC)

Part 4.16: Testing and measurement techniques—Test for immunity to conducted common mode disturbances in the frequency range 0 Hz to 150 kHz

STANDARDS Australia

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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 27 August 2002 and on behalf of the Council of Standards New Zealand on 20 August 2002.
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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)
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This Standard was issued in draft form for comment as DR 02111.

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PREFACE

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

This Standard incorporates Amendment No. 1 (May 2012). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to establish a common and reproducible basis for testing electrical and electronic equipment with the application of common mode disturbances to power supply, control, signal and communication ports.

This Standard is identical with and has been reproduced from IEC 61000-4-16:1998, *Electromagnetic compatibility (EMC), Part 4-16: Testing and measurement techniques—Test for immunity to conducted common mode disturbances in the frequency range 0 Hz to 150 kHz* and Amendment No. 1:2001, which is incorporated in the source text, and Amendment 2 (2009), which has been added at the end of the document.

A1

This Standard is Part 4.16 of a series, which, when complete, will consist of the following:

AS/NZS
61000 Electromagnetic compatibility (EMC)

- Part 1.1: General—Application and interpretation of fundamental definitions and terms
- Part 2.2: Environment—Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems
- Part 2.3: Environment—Description of the environment—Radiated and non-network-frequency-related conducted phenomena
- Part 2.5: Environment—Classification of electromagnetic environments
- Part 2.12: Environment—Compatibility levels for low-frequency conducted disturbances and signalling in public medium-voltage power supply systems
- Part 3.2: Limits—Limits for harmonic current emissions (equipment input current less than or equal to 16 A per phase)
- Part 3.3: Limits—Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current less than or equal to 16 A
- Part 3.5: Limits—Limitation of voltage fluctuations and flicker in low-voltage power supply systems for equipment with rated current greater than 16 A
- Part 3.6: Limits—Assessment of emission limits for distorting loads in MV and HV power systems
- Part 3.7: Limits—Assessment of emission limits for fluctuating loads in MV and HV power systems
- 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
- 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
- Part 4.1: Testing and measurement techniques—Overview of immunity tests
- Part 4.2: Testing and measurement techniques—Electrostatic discharge immunity test
- Part 4.3: Testing and measurement techniques—Radiated radio-frequency electromagnetic field immunity test
- Part 4.5: Testing and measurement techniques—Surge immunity test
- Part 4.6: Testing and measurement techniques—Immunity to conducted disturbances, induced by radio-frequency fields

Part 4.7: Testing and measurement techniques—General guide on harmonics and interharmonics measurements and instrumentation, for power supply systems and equipment connected thereto

Part 4.8: Testing and measurement techniques—Power frequency magnetic field immunity test

Part 4.16: Testing and measurement techniques—Test for immunity to conducted common mode disturbances in the frequency range 0 Hz to 150 kHz (this Standard)

Part 6.2: Generic standards—Immunity for industrial environments

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.