

Australian/New Zealand Standard™

Electromagnetic compatibility (EMC)

**Part 3.6: Limits—Assessment of
emission limits for distorting loads
in MV and HV power systems
(IEC 61000-3-6:1996, MOD)**



S t a n d a r d s Australia



STANDARDS
NEW ZEALAND
Patene Aotearoa

AS/NZS 61000.3.6:2001

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 19 October 2000 and on behalf of the Council of Standards New Zealand on 15 December 2000. It was published on 25 January 2001.

The following interests are represented on Committee EL-034:

Australasian Railway Association
Australian Chamber of Commerce & Industry
Australian Consumers Association
Australian Electrical & Electronic Manufacturers Association
Australian Institute of Petroleum
Bureau of Steel Manufacturers of Australia
Electrical Supply Association of New Zealand
Electricity Engineers Association of New Zealand
Electricity Supply Association of Australia
Energy Users Group
Institution of Engineers Australia
Institution of Radio & Electronic Engineers Australia
Major Electricity Users Group New Zealand
Ministry of Economic Development (New Zealand)
Monash University
New Zealand Coordinating Committee on Power & Telecommunication Systems
Safe Food Production, N.S.W.
Sydney Water Corporation
Telstra Corporation
The IREE Society
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 Standards may also be withdrawn.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.

AS/NZS 61000.3.6:2001

Australian/New Zealand Standard™

Electromagnetic compatibility (EMC)

Part 3.6: Limits—Assessment of emission limits for distorting loads in MV and HV power systems (IEC 61000-3-6:1996, MOD)

Originated in Australia as AS 2279.2—1979.
Previous edition AS 2279.2—1991.
Jointly revised and redesignated AS/NZS 61000.3.6:2001.

COPYRIGHT

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

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 3693 9

PREFACE

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

It is one of a series of parts which will replace the AS 2279 series on disturbances in mains supply networks by adopting relevant IEC Standards in the IEC 61000, *Electromagnetic compatibility (EMC)*—Part 3: *Limits* series.

The objective of this series of Standards is to provide manufacturers and suppliers of electricity and users of electrical equipment intended for connection to an electrical network, with limits for voltage disturbances and flicker produced by that equipment and the methods for ascertaining compliance to them in order to maintain electromagnetic compatibility within the electrical network.

This Standard is a modified adoption of the IEC technical report, type 3 IEC 61000-3-6, *Electromagnetic compatibility (EMC)*—Part 3: *Limits*—Section 6: *Assessment of emission limits for distorting loads in MV and HV power systems*—*Basic EMC publication*.

The IEC use the term technical report, type 3 to indicate that the technical committee responsible for writing the document has collected data of a different kind from that which is normally published as an International Standard. For example, this may be state-of-the-art technical data or it may be the presentation of alternative methods of calculation with illustrative examples.

This Australian Standard is structured so that all requirements are in the main Sections of the Standard and all recommendations and illustrative examples are in the Appendices of the Standard.

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

This Standard is Part 3.6 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 2.3 Environment—Description of the environment—Radiated and non-network-frequency-related conducted phenomena
- Part 2.5 Environment—Classification of electromagnetic environments
- 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 3.4 Limits—Limitation of emission of harmonic currents in low-voltage power supply systems for equipment with rated current greater than 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 (this Standard)
- Part 3.7 Limits—Assessment of emission limits for fluctuating loads in MV and HV power systems
- Part 4.1 Testing and measurement techniques—Overview of immunity tests

- 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 4.16 Testing and measurement techniques—Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 Hz.

Where approval is required, this Standard should be read in conjunction with the regulations, service rules, electricity code and installation rules of the electricity distributor approving the connection.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-