

Australian Standard™

**Electricity metering equipment (ac)—  
General requirements, tests and test  
conditions**

**Part 21: Tariff and load control  
equipment  
(IEC 62052-21, Ed. 1.0 (2004) MOD)**



This Australian Standard was prepared by Committee EL-011, Electricity Metering Equipment. It was approved on behalf of the Council of Standards Australia on 19 January 2006.

This Standard was published on 15 February 2006.

---

The following are represented on Committee EL-011:

Australian Chamber of Commerce and Industry  
Australian Electrical and Electronic Manufacturers Association  
Electrical Regulatory Authorities Council  
Electricity Engineers Association (New Zealand)  
Energy Networks Association  
Engineers Australia  
Ministry of Economic Development (New Zealand)  
NEMMCO  
National Measurement Institute

---

### **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 Standards may also be withdrawn.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 Standards can be found by visiting the Standards Web Shop at [www.standards.com.au](http://www.standards.com.au) and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.org.au](mailto:mail@standards.org.au), or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

*This Standard was issued in draft form for comment as DR 05139.*

AS 62052.21—2006

Australian Standard™

**Electricity metering equipment (ac)—  
General requirements, tests and test  
conditions**

**Part 21: Tariff and load control  
equipment  
(IEC 62052-21, Ed. 1.0 (2004) MOD)**

First published as AS 62052.21—2006.

**COPYRIGHT**

© Standards Australia

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.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7251 X

## PREFACE

This Standard was prepared by the joint Standards Australia/Standards New Zealand Committee EL-011, Electricity Metering Equipment. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian, rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide electricity utilities and manufacturers with type tests for tariff and load control equipment for electricity metering equipment.

This Standard is an adoption with national modifications and has been reproduced from IEC 62052-21, Ed.1.0 (2004), *Electricity metering equipment (ac)—General requirements, tests and test conditions—Part 21: Tariff and load control equipment*, and has been varied as indicated to take account of Australian climatic conditions and fundamental technological differences.

Variations to IEC 62052-21, Ed.1.0 (2004) are indicated at the appropriate places throughout this standard. Strikethrough (~~example~~) identifies IEC text, tables and figures which, for the purposes of this Australian Standard, are deleted. Where text, tables or figures are added, each is set in its proper place and identified by shading (**example**). Added figures are not themselves shaded, but are identified by a shaded border.

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 ‘part of IEC 62052’ should read ‘AS 62052.21’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a standard, whereas an informative annex is only for information and guidance.

## CONTENTS

	<i>Page</i>
INTRODUCTION .....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	4
3.1 General definitions .....	4
3.2 Definitions related to electronic ripple control receivers .....	4
3.3 Definitions related to the ripple control code and to the control element .....	6
3.4 Definitions related to time switches .....	7
3.5 Definitions related to the output elements .....	8
3.6 Definitions of mechanical elements .....	8
3.7 Definitions of insulations .....	9
3.8 Definitions of influence quantities .....	10
3.9 Definition of tests .....	11
4 Standard electrical values .....	11
4.1 Standard reference voltage ( $U_n$ ) .....	11
4.2 Standard reference frequency ( $f_n$ ) .....	11
5 Mechanical requirements and tests .....	12
5.1 General mechanical requirements .....	12
5.2 Case .....	12
5.3 Window .....	13
5.4 Terminals, terminal block(s), <del>protective earth terminal</del> .....	13
5.5 Terminal cover(s) .....	14
5.6 Clearance and creepage distances .....	15
5.7 Insulating encased tariff and load control equipment of protective class II .....	16
5.8 Resistance to heat and fire .....	16
5.9 Protection against penetration of dust and water .....	16
5.10 Void .....	17
5.11 Void .....	17
5.12 Marking of tariff and load control equipment .....	17
6 Climatic conditions, requirements and tests .....	18
6.1 Temperature range .....	18
6.2 Relative humidity .....	18
6.3 Tests of the effect of the climatic environments .....	18
7 Electrical requirements and tests .....	19
7.1 Supply voltage .....	19
7.2 Heating .....	21
7.3 Insulation .....	21
7.4 Output elements .....	23
7.5 Functional requirements and tests .....	27
7.6 Electromagnetic compatibility (EMC) .....	27
7.7 Radio interference suppression .....	30
8 Test conditions and type test .....	30
8.1 Test conditions .....	30
8.2 Type test .....	30

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
-