

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)**

STANDARDS
Australia



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Australian Electrical and Electronic Manufacturers Association
Electrical Regulatory Authorities Council
Electricity Engineers Association (New Zealand)
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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.

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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.

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INTRODUCTION

~~This standard distinguishes between protective class I and protective class II tariff and load control equipment.~~

The test levels are regarded as minimum values to guarantee the proper functioning of the equipment under normal working conditions. For special application, other test levels might be necessary and should be agreed on between the user and the manufacturer.

For information, the relevant parts of IEC 62052, IEC 62054 and IEC 62059 are listed:

- | | |
|--------------|--|
| IEC 62052-21 | Electricity metering (a.c.) – General requirements, tests and test conditions – Part 21: Tariff and load control equipment
<i>(Replaces the general requirements of IEC 61037 and IEC 61038.)</i> |
| IEC 62054-11 | Electricity metering (a.c.) – Tariff and load control – Part 11: Particular requirements for electronic ripple control receivers
<i>(Replaces the particular requirements of IEC 61037.)</i> |
| IEC 62054-21 | Electricity metering (a.c.) – Tariff and load control – Part 21: Particular requirements for time switches ¹
<i>(Replaces the particular requirements of IEC 61038.)</i> |
| IEC 62059-11 | Electricity metering equipment (a.c.) – Dependability – Part 11: General concepts |
| IEC 62059-21 | Electricity metering equipment (a.c.) – Dependability – Part 21: Collection of meter dependability data from the field |
| IEC 62059-41 | Electricity metering equipment (a.c.) – Dependability – Part 41: Reliability prediction ² |

¹ To be published.

² To be published.

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Any table, figure or text of the international standard that is struck through is not part of this standard. Any Australian/New Zealand table, figure or text that is added is part of this standard and is identified by shading.

1 Scope

This part of IEC 62052 specifies general requirements for the type test of newly manufactured indoor tariff and load control equipment, like electronic ripple control receivers and time switches that are used to control electrical loads, multi-tariff registers and maximum demand indicator devices.

This standard gives no requirements for constructional details internal to the tariff and load control equipment.

In the case where tariff and load control functionality is integrated into multifunction electricity metering equipment, the relevant parts of this standard apply.

This standard does not cover the acceptance tests and the conformity tests. Nevertheless, an example of what could be an acceptance test is given in Annex F.

The dependability aspect is covered by the documents of the IEC 62059 series.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

References to International standards that are struck through in this clause are replaced by reference to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60050-300:2001 *International Electrotechnical Vocabulary (IEV) – Electrical and electronic measurements and measuring instruments – Part 311: General terms relating to measurements – Part 312: General terms relating to electrical measurements – Part 313: Types of electrical measuring instruments – Part 314: Specific terms according to the type of instrument*~~

~~IEC 60060-1:1989, *High-voltage test techniques – Part 1: General definitions and test requirements*~~