AS 62054.21—2006

Australian Standard™

Electricity metering (ac)—Tariff and load control

Part 21: Particular requirements for time switches

STANDARDS
Australia

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Australian Electrical and Electronic Manufacturers Association
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Australian Standard™

Electricity metering (ac)—Tariff and load control

Part 21: Particular requirements for time switches

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PREFACE

This Standard was prepared by the joint Standards Australia/Standards New Zealand Committee EL-011, Electricity Metering Equipment to supersede AS 1284.7, *Electricity metering—Internal clocks for meters and load control devices.* 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 requirements and tests for internal clocks for electricity meters.

This Standard is identical with, and has been reproduced from IEC 62054-21, Ed.1.0 (2004), *Electricity metering (ac)—Tariff and load control—Part 21: Particular requirements for time switches (including internal clocks for meters)*.

As this Standard is reproduced from an International Standard, the following applies:

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INTRODUCTION

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 below.

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

[1] To be published.

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Australian Standard

Electricity metering (ac)—Tariff and load control
Part 21: Particular requirements for time switches

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 62054 specifies particular requirements for the type test of newly manufactured indoor time switches with operation reserve that are used to control electrical loads, multi-tariff registers and maximum demand devices of electricity metering equipment.

The time switch keeps the real time, it may keep the date, it may be capable of handling leap years, it may support daylight saving, i.e. it modifies the deviation of local time to GMT according to the relevant regulations. The time switch may have a synchronization capability. The time switch also holds a schedule of switching actions, which may be specified in terms of time, day of the week, date within a month or a year. The time switch controls the output elements depending on the time and the schedule of switching actions stored.

This standard gives no requirements for constructional details internal to the time switch.

In the case where time switch functionality is integrated into multifunction electricity metering equipment, the relevant parts of this standard apply.

This standard covers time switches with analogue mechanical dials or electronic digital displays that are

– synchronous; or
– crystal-controlled.

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 A.

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

When using this standard in conjunction with IEC 62052-21, the requirements of this standard take precedence over those of IEC 62052-21 with regard to any item already covered in it.

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 references 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.

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