AS 62053.22—2005
IEC 62053-22, Ed.1.0 (2003)

AS 62053.22—2005

Australian Standard™

Electricity metering equipment (AC)—Particular requirements

Part 22: Static meters for active energy (classes 0.2 S and 0.5 S)

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee EL-011, Electricity Metering. It was approved on behalf of the Council of Standards Australia on 28 April 2005. This Standard was published on 27 May 2005.

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
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 Standards may also be withdrawn.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 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, or write to the Chief Executive, Standards Australia, GPO Box 5420, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 04307.

Australian Standard™

Electricity metering equipment (AC)—Particular requirements

Part 22: Static meters for active energy (classes 0.2 S and 0.5 S)

Originated as AS 1284.9—1993.
Revised and redesignated as AS 62053.22—2005.

Published by Standards Australia GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 6737 0

PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/ Standards New Zealand Committee EL-011, Electricity Metering to supersede AS 1284.9—1993, *Electricity metering* Part 9: *Electronic watthour meters (Classes 0.2 S and 0.5 S).* 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 meter manufacturers with requirements and tests for classes 0.2 and 0.5 watthour meters.

This Standard is identical with, and has been reproduced from IEC 62053-22, Ed.1.0 (2003), *Electricity metering equipment (AC) – Particular requirements – Part 22: Static meters for active energy (classes 0,2 S and 0,5 S)*.

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 international standard’ should read ‘this Australian Standard’.

(c) A full point should be substituted for a comma when referring to a decimal marker.

(d) Any French text on figures should be ignored.

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

Page

INTRODUCTION

References to international standards that are struck through 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.

This part of IEC 62053 is to be used with the following relevant parts of the IEC 62052, IEC 62053 and IEC 62059 series, Electricity metering equipment:

~~IEC 62052-11:2003, *Electricity metering equipment (a.c.) – General requirements, tests and test conditions – Part 11: Metering equipment*~~

AS 62052.11, *Electricity metering equipment (a.c.)—General requirements, tests and test conditions*, Part 11: *Metering equipment*

~~IEC 62053-11:2003, *Electricity metering equipment (a.c.) – Particular requirements – Part 11: Electromechanical meters for active energy (classes 0,5, 1 and 2)*~~

AS 62053.11, *Electricity metering equipment (a.c.)—Particular requirements*, Part 11: *Electromechanical meters for active energy (classes 0,5, 1 and 2)*

Replaces particular requirements of IEC 60521: 1988 (2nd edition)

~~IEC 62053-21:2003, *Electricity metering equipment (a.c.) – Particular requirements –* Part 21: *Static meters for active energy (classes 1 and 2)*~~

AS 62053-21, *Electricity metering equipment (a.c.)—Particular requirements*, Part 21: *Static meters for active energy (classes 1 and 2)*

Replaces particular requirements of IEC 61036: 2000 (2nd edition)

IEC 62053-22:2003, *Electricity metering equipment (a.c.) – Particular requirements – Part 22: Static meters for active energy (classes 0,2 S and 0,5 S)*

Replaces particular requirements of IEC 60687: 1992 (2nd edition)

IEC 62053-31:1998, *Electricity metering equipment (a.c.) – Particular requirements – Part 31: Pulse output devices for electromechanical and electronic meters (two wires only)*

IEC 62053-61:1998, *Electricity metering equipment (a.c.) – Particular requirements – Part 61: Power consumption and voltage requirements*

IEC 62059-11:2002, *Electricity metering equipment (a.c.) – Dependability – Part 11: General concepts*

IEC 62059-21:2002,*Electricity metering equipment (a.c.) – Dependability – Part 21: Collection of meter dependability data from the field*

This part is a standard for type testing electricity meters. It covers the particular requirements for meters, being used indoors. It does not deal with special implementations (such as metering-part and/or displays in separate housings).

This standard is intended to be used in conjunction with IEC 62052-11. When any requirement in this standard concerns an item already covered in IEC 62052-11, the requirements of this standard take precedence over the requirements of IEC 62052-11.

This standard distinguishes:

– between accuracy class index 0,2 S and accuracy class index 0,5 S meters;

– between protective class I and protective class II meters;

– between meters for use in networks equipped with or without earth fault neutralizers.

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

NOTES

AS 62053.22-2005 Electricity metering equipment (AC) - Particular requirements - Static meters for active energy (classes 0.2 S and 0.5 S)