AS 62053.61:2018

Australian STANDARD

Electricity metering equipment (a.c.)—Particular requirements

Part 61: Power consumption and voltage requirements (IEC 62053-61:1998, MOD)

STANDARDS Australia

AS 62053.61:2018

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Australian Chamber of Commerce and Industry
Australian Energy Council
Australian Energy Market Operator
Australian Industry Group
Consumers' Federation of Australia
Electrical Regulatory Authorities Council
Energy Networks Australia
National Electrical and Communications Association
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Preface

This Standard was prepared by the Standards Australia Committee EL-011, Electricity Metering Equipment.

The objective of this Standard applies only to newly manufactured "combined meters", measuring more than one type of electric energy (e.g. active and reactive) and meters integrating additional functions which are not in the scope of the AS 62052.11, AS 62053.21, AS 62053.22 and AS 62063.23 standards; these additional functions, all related to electric energy metering are, for instance, maximum demand indicator, time switches, ripple control or radio receivers, etc.

This Standard is an adoption with national modifications, and has been reproduced from, IEC 62053-61:1998 (ED 1.0), *Electricity metering equipment (a.c.) — Particular requirements — Part 61: Power consumption and voltage requirements*.

Appendix ZZ lists the variations for the application of this Standard in Australia.

As this document has been reproduced from an International Standard, the following applies:

(a) In the source text "this part of IEC 62053" and "this International Standard" should read "this Australian Standard".

(b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ELECTRICITY METERING EQUIPMENT (AC) – PARTICULAR REQUIREMENTS –

Part 61: Power consumption and voltage requirements

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
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International Standard IEC 62053-61 has been prepared by IEC technical committee 13: Equipment for electrical energy measurement and load control.

The text of this standard is based on the following documents:

FDIS	Report on voting
13/1135/FDIS	13/1143/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This standard shall be used in conjunction with IEC 61036.

ELECTRICITY METERING EQUIPMENT (AC) – PARTICULAR REQUIREMENTS –

Part 61: Power consumption and voltage requirements

1 Scope

This International Standard applies only to newly manufactured ”combined meters”, measuring more than one type of electric energy (e.g. active and reactive) and meters integrating additional functions which are not in the scope of the IEC 60687, IEC 61036, IEC 61268 standards and the standard in preparation for static apparent energy meters; these additional functions, all related to electric energy metering are, for instance, maximum demand indicator, time switches, ripple control or radio receivers, etc.

When other devices and functions not related to electric energy metering and billing are enclosed in the same meter case (such as power line carrier devices, load curve recording devices, telephone and radio transceiver or network current and voltage measurement and analysis devices, etc.) this standard applies only to the energy metering and processing section.

For all the meter characteristics and functions already described in existing standards, these standards will apply for the corresponding characteristics and functions.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 62053. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 62053 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60687:1992, *Alternating current static watt-hour meters for active energy (classes 0,2 S and 0,5 S)*

IEC 61036:1996, *Alternating current static watt-hour meters for active energy (classes 1 and 2)*

IEC 61268:1995, *Alternating current static var-hour meters for reactive energy (classes 2 and 3)*

3 Definitions

For the purpose of this International Standard, the following definitions apply.

3.1
multi-energy meter
meter which, in a single case, measures two or three types of energies (watt-hour, var-hour, VA-hour)