

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Electricity metering equipment – Particular requirements –  
Part 24: Static meters for fundamental component reactive energy  
(classes 0,5S, 1S, 1, 2 and 3)**

**Équipement de comptage de l'électricité – Exigences particulières –  
Partie 24: Compteurs statiques d'énergie réactive de composante fondamentale  
(classes 0,5S, 1S, 1, 2 et 3)**





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## CONTENTS

FOREWORD .....	4
INTRODUCTION .....	6
1 Scope .....	8
2 Normative references .....	9
3 Terms and definitions .....	10
4 Standard electrical values.....	10
4.1 Voltages .....	10
4.2 Currents.....	10
4.2.1 General .....	10
4.2.2 Starting current (see Table 1) .....	10
4.2.3 Minimum current (see Table 2) .....	10
4.2.4 Maximum current.....	10
4.3 Frequencies .....	11
4.4 Power consumption.....	11
5 Construction requirements.....	11
6 Meter marking and documentation .....	11
7 Accuracy requirements .....	11
7.1 General test conditions .....	11
7.2 Methods of accuracy verification .....	11
7.3 Measurement uncertainty .....	11
7.4 Meter constant.....	11
7.5 Initial start-up of the meter .....	11
7.6 Test of no-load condition.....	11
7.7 Starting current test .....	11
7.8 Repeatability test .....	11
7.9 Limits of error due to variation of the current.....	11
7.10 Limits of error due to influence quantities.....	12
7.11 Time-keeping accuracy .....	14
8 Climatic requirements .....	15
9 The effects of external influences .....	15
10 Type test .....	15
Annex A (informative) Comparison of acceptable percentage error limits at reference conditions for meters .....	16
Annex B (informative) Geometric representation of active and reactive power.....	17
Annex C (informative) Influence of the phase displacement of current and voltage transformers on reactive energy measurement.....	19
Annex D (informative) Treatment of harmonics and tests for harmonics .....	20
D.1 Non- sinusoidal conditions and reactive power definition.....	20
D.2 Tests for accuracy under non-sinusoidal conditions .....	20
D.3 Fifth harmonic test .....	21
Annex E (informative) Summary of changes.....	22
Figure A.1 – Acceptable percentage error limits, transformer operated (S) and directly connected meters, $I_n = 5$ A, $I_{max} = 10$ A, PF = 1,0 .....	16

Figure A.2 – Acceptable percentage error limits, transformer operated (S) and directly connected meters, $I_n = 5$ A, $I_{max} = 10$ A, PF = 0,5 inductive / 0,8 capacitive.....	16
Figure B.1 – Recommended geometric representation .....	17
Figure B.2 – Alternative geometric representation.....	18
Table 1 – Starting current .....	10
Table 2 – Minimum current.....	10
Table 3 – Acceptable percentage error limits (single-phase meters and poly-phase meters with balanced loads or single-phase loads) .....	12
Table 4 – Acceptable limits of variation in percentage error due to influence quantities.....	13
Table C.1 – Phase displacements for current transformer connected meters without voltage transformers and corresponding maximum measurement errors for reactive energy .....	19
Table C.2 – Phase displacements for current and voltage transformer connected meters and corresponding maximum measurement errors for reactive energy.....	19

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICITY METERING EQUIPMENT –  
PARTICULAR REQUIREMENTS –****Part 24: Static meters for fundamental component reactive energy  
(classes 0,5 S, 1 S, 1, 2 and 3)**

## FOREWORD

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International Standard IEC 62053-24 has been prepared by IEC technical committee 13: Electrical energy measurement and control.

This second edition cancels and replaces the first edition published in 2014 and its amendment 1:2016. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition: see Annex E.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
13/1804/FDIS	13/1811/RVD
13/1804(F)/FDIS	

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62053 series, published under the general title *Electricity metering equipment – Particular requirements*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 2 years from the date of publication.

## INTRODUCTION

This part of IEC 62053 is to be used with relevant parts of the IEC 62052, IEC 62058 and IEC 62059 series, *Electricity metering equipment*, and with the IEC 62055 series, *Electricity metering – Payment systems*:

IEC 62052-11:2020,	<i>Electricity metering equipment – General requirements, tests and test conditions – Part 11: Metering equipment</i>
IEC 62052-31:2015,	<i>Electricity metering equipment (AC) – General requirements, tests and test conditions – Part 31: Product safety requirements and tests</i>
IEC 62053-11:2003,	<i>Electricity metering equipment (AC) – Particular requirements – Part 11: Electromechanical meters for active energy (classes 0,5, 1 and 2)</i>
IEC 62053-21:2020	<i>Electricity metering equipment – Particular requirements – Part 21: Static meters for AC active energy (classes 0,5, 1 and 2)</i>
IEC 62053-22:2020,	<i>Electricity metering equipment – Particular requirements – Part 22: Static meters for AC active energy (classes 0,1 S, 0,2S and 0,5 S)</i>
IEC 62053-23:2020,	<i>Electricity metering equipment – Particular requirements – Part 23: Static meters for reactive energy (classes 2 and 3)</i>
IEC 62055-31:2005	<i>Electricity metering – Payment systems – Part 31: Particular requirements – Static payment meters for active energy (classes 1 and 2)</i>
IEC 62057-1: –	<i>Test equipment, techniques and procedures for electrical energy meters – Part 1: Stationary Meter Test Units (MTU)</i>
IEC 62058-11:2008,	<i>Electricity metering equipment (AC) – Acceptance inspection – Part 11: General acceptance inspection methods</i>
IEC 62058-21:2008,	<i>Electricity metering equipment (AC) – Acceptance inspection – Part 21: Particular requirements for electromechanical meters for active energy (classes 0,5, 1 and 2)</i>
IEC 62058-31:2008,	<i>Electricity metering equipment (AC) – Acceptance inspection – Part 31: Particular requirements for static meters for active energy (classes 0,2 S, 0,5 S, 1 and 2)</i>
IEC 62059-11:2002,	<i>Electricity metering equipment – Dependability – Part 11: General concepts</i>
IEC 62059-21:2002,	<i>Electricity metering equipment – Dependability – Part 21: Collection of meter dependability data from the field</i>
IEC 62059-32-1:2011,	<i>Electricity metering equipment – Dependability – Part 32-1: Durability – Testing of the stability of metrological characteristics by applying elevated temperature</i>

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

This document is intended to be used in conjunction with IEC 62052-11:2020 and with IEC 62052-31:2015. When any requirement in this document concerns an item already covered in IEC 62052-11:2020 or in IEC 62052-31:2015, the requirements of this document take precedence over the requirements of IEC 62052-11:2020 or of IEC 62052-31:2015.

The test levels are regarded as minimum values that provide for the proper functioning of the meter under normal working conditions. For special applications, additional test levels might be necessary and are subject to an agreement between the manufacturer and the purchaser.