ELEKTRIMÕÕTESEADMED VAHELDUVVOOLULE. OSA 2: ERINÕUDED. ELEKTROMEHAANILISED AKTIIVENERGIA ARVESTID (KLASS A JA B)

Electricity metering equipment (a.c.) - Part 2: Particular requirements - Electromechanical meters for active energy (class indexes A and B)

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

See Eesti standard EVS-EN 50470-2:2007+A1:2019 sisaldab Euroopa standardi EN 50470-2:2006 ingliskeelset teksti ja selle muudatuse A1:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 50470-2:2007+A1:2019 consists of the English text of the European standard EN 50470-2:2006 and its amendment A1:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 27.10.2006, muudatus A1 07.12.2018.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation. Date of Availability of the European standard is 27.10.2006, for A1 07.12.2018.
Sellesse standardisse on muudatus A1 sisse viidud ja tehtud muudatused tähistatud püstkriipsuga lehe välisveerisel. Standard on kättesaadav Eesti Standardikeskusest.	The amendment A1 has been incorporated into this standard and changes have been marked by a vertical line on the outer row of the page. The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROOPA STANDARD
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English Version

Electricity metering equipment (a.c.) - Part 2: Particular requirements - Electromechanical meters for active energy (class indexes A and B)

Equipement de comptage d'électricité (c.a.) - Partie 2: Prescriptions particulières - Compteurs électromécaniques d'énergie active (classes de précision A et B)

Wechselstrom-Elektrizitätszähler - Teil 2: Besondere Anforderungen - Elektromechanische Wirkverbrauchszähler der Genauigkeitsklassen A und B

This European Standard was approved by CENELEC on 2006-05-01. Amendment A1 was approved by CENELEC on 2018-08-27. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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This European Standard and its Amendment A1 exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 13, Equipment for electrical energy measurement and load control.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50470-2 on 2006-05-01.

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2007-05-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2009-05-01

This EN 50470-2 is related to EN 62053-11:2003, *Electricity metering equipment (a.c.) – Particular requirements – Part 11: Electromechanical meters for active energy (classes 0,5, 1 and 2)*.

The structure of the two standards is similar, modifications in this European Standard are provided in the perspective of compliance with the Essential Requirements of the Directive 2004/22/EC on Measuring Instruments (MID).

This standard is to be used with EN 50470-1:2006, *Electricity metering equipment (a.c.) – Part 1: General requirements, tests and test conditions – Metering equipment (class indexes A, B and C).*

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and covers essential requirements of EC Directive 2004/22/EC. See Annex ZZ.

EN 50470-2:2006/A1:2018 foreword

This document (EN 50470-2:2006/A1:2018) has been prepared by CLC/TC 13 “Electrical energy measurement and control”.

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2019-08-27
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2021-08-27

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

Introduction

The purpose of this amendment is to identify and remove all safety related requirements and tests of EN 50470-2:2006 that are replaced and extended by the complete set of requirements and tests in EN 62052-31:2016.

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1 Scope

This European Standard applies to newly manufactured electromechanical watt-hour meters intended for residential, commercial and light industrial use, of class indexes A and B, for the measurement of alternating current electrical active energy in 50 Hz networks. It specifies particular requirements and type test methods.

It applies to electromechanical watt-hour meters for indoor and outdoor application, consisting of a measuring element and register(s) enclosed together in a meter case. It also applies to operation indicator(s) and test output(s).

If the meter has (a) measuring element(s) for more than one type of energy (multi-energy meters), or when other functional elements, like maximum demand indicators, electronic tariff registers, time switches, ripple control receivers, data communication interfaces etc. are enclosed in the meter case (multi-function meters) then this standard applies only for the active energy metering part.

This standard distinguishes between:

– meters of class indexes A and B;
– direct connected and transformer operated meters;
– meters for use in networks equipped with or without earth fault neutralizers.

It does not apply to:

– watt-hour meters where the voltage across the connection terminals exceeds 600 V (line-to-line voltage for meters for polyphase systems);
– portable meters.

The safety aspect is covered by EN 62052 31:2016.

Regarding acceptance tests see EN 62058 11:20 and EN 62058 21:20.

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.

Publication	Year	Title
EN 50470-1 + A1	2006 2018	*Electricity metering equipment (a.c.) – Part 1: General requirements, tests and test conditions – Metering equipment (class indexes A, B and C)*
EN 62052-31	2016	*Electricity metering equipment (AC) – General requirements, tests and test conditions – Part 31: Product safety requirements and tests (IEC 62052-31:2015)*

3 Terms, definitions and abbreviations

For the purposes of this document, the terms and definitions given in EN 50470-1 apply.