

**ELEKTRIMÕÕTESEADMED VAHELDUVVPOOLULE. 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 STANDARDI EESSÕNA**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. |
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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)

Équipement 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

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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- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2009-05-01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

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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 | <i>Electricity metering equipment (a.c.) – Part 1: General requirements, tests and test conditions – Metering equipment (class indexes A, B and C)</i> |
| EN 62052-31 | 2016 | <i>Electricity metering equipment (AC) – General requirements, tests and test conditions – Part 31: Product safety requirements and tests (IEC 62052-31:2015)</i> |

3 Terms, definitions and abbreviations

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