Elektrimõõteseadmed vahelduvvoolule. Osa 3: Erinõuded. Staatilised aktiivenergia arvestid (klass A, B ja C)

Electricity metering equipment (a.c.) - Part 3: Particular requirements - Static meters for active energy (class indexes A, B and C)

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50470-3:2007 sisaldab Euroopa standardi EN 50470-3:2006 ingliskeelset teksti.	This Estonian standard EVS-EN 50470-3:2007 consists of the English text of the European standard EN 50470-3:2006.
Standard on kinnitatud Eesti Standardikeskuse 14.12.2006 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 14.12.2006 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 27.10.2006.	Date of Availability of the European standard text 27.10.2006.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 91.140.50

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50470-3

October 2006

ICS 91.140.50

English version

Electricity metering equipment (a.c.)
Part 3: Particular requirements - Static meters for active energy (class indexes A, B and C)

Equipement de comptage d'électricité (c.a.)
Partie 3: Prescriptions particulières - Compteurs statiques d'énergie active (classes de précision A, B et C)

Wechselstrom-Elektrizitätszähler
Teil 3: Besondere Anforderungen - Elektronische Wirkverbrauchszähler der Genauigkeitsklassen A, B und C

This European Standard was approved by CENELEC on 2006-05-01. 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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CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 50470-3:2006 E

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 50470-3 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 50470-3 is related to:

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

– EN 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)*.

The structure of the standards is similar, modifications in this Euroepan 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.

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1 Scope

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

It applies to static 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, B and C;
- 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;
- reference meters.

Methods for acceptance testing are covered by the IEC 62058 series of standards [1)].

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	2006	*Electricity metering equipment (a.c.) – Part 1: General requirements, tests and test conditions – Metering equipment (class indexes A, B and C)*
EN 62059-41	2006	*Electricity metering equipment – Dependability – Part 41: Reliability prediction* (IEC 62059-41:2006)

3 Terms, definitions and abbreviations

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

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1) At draft stage.