

**Acceptance inspection of Class 2  
alternating-current watthour meters**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 60514:2002 sisaldab Euroopa standardi EN 60514:1995 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 60514:2002 consists of the English text of the European standard EN 60514:1995.</p> <p>This document is endorsed on 18.12.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English version

## Acceptance inspection of Class 2 alternating-current watthour meters

(IEC 514 : 1975, modified)

Contrôle de réception des compteurs à  
courant alternatif de la classe 2  
(CEI 514 : 1975, modifiée)

Annahmeprüfung von  
Wechselstrom-Wirkverbrauchszählern der  
Klasse 2  
(IEC 514 : 1975, modifiziert)

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## CENELEC

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

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## Foreword

The text of the International Standard IEC 514 : 1975, prepared by IEC TC 13, Equipment for electrical energy measurement and load control, together with common modifications prepared by the Technical Committee CENELEC TC 13, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 60514 on 1994-12-06.

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) 1995-07-15
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1995-07-15

For products which have complied with HD 309.2 S1 : 1979 before 1995-07-15, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-07-15.

Annexes designated 'normative' are part of the body of the standard. Annexes designated 'informative' are given for information only. In this standard, annex A is normative and annex B is informative.

## Common modifications

Delete the introduction and replace 'report' by 'standard' throughout the text.

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## ACCEPTANCE INSPECTION OF CLASS 2 ALTERNATING-CURRENT WATTHOUR METERS

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### 1. Scope

The methods and procedures included in this standard apply to newly manufactured direct connected induction type watthour meters of Class 2, covered by IEC Publication\* 521, which are produced and delivered in large quantities.

They provide for 100% inspection or sampling inspection for acceptance by the purchaser.

### 2. General remarks

2.1 Two methods of acceptance inspection are proposed, namely:

- 100% inspection, and
- sampling inspection.

2.2 The 100% inspection consists of testing all the meters of a batch.

2.3 The sampling inspection is based upon the principles of mathematical statistics and as a consequence certain specified risks are undertaken both by the manufacturer and the purchaser. However, sampling inspection generally is more economical than 100% inspection.

In this report sampling inspection has been planned so that, in practice, the quality of the meter batches can be judged with nearly the same accuracy as with 100% inspection.

2.4 Two methods of sampling inspection are described:

- inspection by attributes;
- inspection by variables.

These two methods have been chosen so that the judgement of quality is virtually the same for both methods.

2.5 Inspection by *attributes* gives results indicating conformity or non-conformity.

It *shall* be applied when the characteristic under inspection cannot be measured.

It *shall* also be applied when a characteristic can be measured but the values are not of normal distribution (Laplace-Gauss).

It *may* be applied, when the distribution is approximately normal, in place of inspection by variables.

The advantage of inspection by attributes is its simplicity of application.

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\* Class 0.5, 1 and 2 alternating-current watthour meters (being printed).