



**SLOVENSKI STANDARD**  
**SIST EN 1434-1:2016/oprA1:2017**  
**01-december-2017**

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**Toplotni števci - 1. del: Splošne zahteve**

Heat meters - Part 1: General requirements

Wärmezähler - Teil 1: Allgemeine Anforderungen

Compteurs d'énergie thermique - Partie 1 : Prescriptions générales

**Ta slovenski standard je istoveten z: EN 1434-1:2015/prA1**

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**ICS:**

17.200.10      Toplota. Kalorimetrija      Heat. Calorimetry

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**EN 1434-1:2015**  
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ICS 17.200.10

English Version

## Thermal energy meters - Part 1: General requirements

Compteurs d'énergie thermique - Partie 1 :  
Prescriptions générales

Wärmezähler - Teil 1: Allgemeine Anforderungen

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 176.

This draft amendment A1, if approved, will modify the European Standard EN 1434-1:2015. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

**Warning** : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 1434-1:2017/prA1:2017) has been prepared by Technical Committee CEN/TC 176 “Thermal energy meters”, the secretariat of which is held by SIS.

This document is currently submitted to the CEN Enquiry.

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

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

**EN 1434-1:2017/prA1:2017 (E)****1 Modification to the English title**

*Replace the the English title with the following:*

"Thermal energy meters — Part 1: General requirements".

*The German title "Wärmezähler — Teil 1: Allgemeine Anforderungen" and the French title "Compteurs d'énergie thermique — Partie 1: Prescriptions générales" remain unchanged.*

**2 Modifications overall the document**

*Overall the document, replace "heat meter" with "thermal energy meter".*

*Overall the document, replace "heating/cooling meter" with "thermal energy meter".*

*Overall the document, replace the references "EN 1434-X:2015" with "EN 1434-X:2015+prA1:2017".*

**3 Modification to Clause 3, "Terms and definitions"**

*Replace "heat meter or cooling meter" with "thermal energy meter" to read:*

**"3.28****meter for smart metering**

thermal energy meter with the capability of data communication and support of smart metering functionalities

Note 1 to entry: Data could be transmitted via user interface and/ or communication interface in fixed time intervals and/or on request.

Note 2 to entry: For more information on smart meters, see standard series EN 13757 and CEN/CLC/ETSI/TR 50572."

**4 Modification to subclause 6.10, "Software"**

*Replace the note with the following:*

"NOTE In WELMEC Software Guide 7-2 (recent issue: May 2015) heat meters belong to P-meters with risk class C."

**5 Modification to the "Bibliography"**

*Replace reference [10] with the following:*

"[10] Directive 2014/32/EU on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments (recasts Measuring Instruments Directive MID)".

**6 Modification to Annex ZA**

*Annex ZA was aligned to the Directive 2014/32/EU (MID). Replace Annex ZA with the following: "*

## Annex ZA (informative)

### Relationship between this European Standard and the essential requirements of Directive 2014/32/EU aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/374 (Field of measuring instruments)" to provide one voluntary means of conforming to essential requirements of Directive 2014/32/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments (recast) Text with EEA relevance.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and Directive 2014/32/EU**

Essential Requirements (ERs) of Directive 2014/32/EU	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
Annex I, Essential Requirements, Definitions:		
Measurand	Scope	In scope of standard defined.
Rated operating conditions	3.4	In standard, specific quantities of values of influences are declared.
Influence quantity	3.6	Formulation in standard is covered by MID
Disturbance	3.8	Formulation in standard is covered by MID.
Critical change value, Material Measure, Direct sales	6.1	Requirements coming from MID.
Climatic environment	Clause 10 Environmental classification	Formulation in standard is covered by MID.
Utility	Clause 10 Environmental classification Clause 12 Information to be made available by the manufacturer or supplier	In standard is information about the obligations of the supplier.
Annex I, Essential Requirements:		
1. Allowable Errors	3.9 Types of errors	Formulation in standard is covered by MID, types of

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		errors are specified.
5. Durability, 6. Reliability	3.24 Durability	Formulation in standard is covered by MID
4. Discrimination and Sensitivity	Clause 5 Rated operating conditions	Formulation in standard is covered by MID
7. Suitability	5.10.2 Suitability	Formulation in standard is covered by MID
12. Conformity evaluation	4.6 Equipment under test Clause 11 Thermal energy meter specification	Formulation in standard is covered by MID
10. Indication of result 11. Further processing of data to include the trading transaction	5.10.4 Indication 6.3 Display 6.10 Software	Formulation in standard is covered by MID
8. Protection against corruption	6.4 Protection against fraud	Formulation in standard is covered by MID
2. Reproducibility	6.8 Reproducibility	Formulation in standard is covered by MID
3. Repeatability	6.9 Repeatability	Formulation in standard is covered by MID
1.3.1 Climatic environments 1.3.2 Mechanical environments 1.3.3 Electromagnetic environments 1.3.4 Other influences	Clause 10 Environmental classification	Formulation in standard is covered by MID. For correspondence between MID classifications and environmental classes in standard, the OIML Recommendation D 11 is referenced.
9. Information to be borne by and to accompany the instrument	Clause 11 Thermal energy meter specification Clause 12 Information to be made available by the manufacturer or supplier	Formulation in standard is covered by MID
Annex (MI-004), Specific Requirements:		Formulation in standard is covered by MID
1. Rated operation conditions	3.4 Rated operating conditions	Formulation in standard is covered by MID
5. Durability	3.24 Durability	Formulation in standard is covered by MID
2. Accuracy classes 3. MPEs applicable	Clause 9 Metrological characteristics	Formulation in standard is covered by MID