

<b>STN</b>	<b>Merače tepelnej energie</b> <b>Časť 5: Skúšky pri prvotnom overení</b>	<b>STN</b> <b>EN 1434-5+A1</b>  25 8512
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Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/19

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Oznámením tejto normy sa ruší  
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EUROPEAN STANDARD

**EN 1434-5:2015+A1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

**Thermal energy meters - Part 5: Initial verification tests**Compteurs d'énergie thermique - Partie 5 : Essais de  
vérification initiauxThermische Energiemessgeräte - Teil 5: Tests für  
Konformitätsuntersuchungen und Eichungen

This European Standard was approved by CEN on 5 September 2015 and includes Amendment 1 approved by CEN on 5 February 2018.

CEN 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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 1434-5:2015+A1:2019) has been prepared by Technical Committee CEN/TC 176 “Thermal energy meters”, the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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

This document includes Amendment 1 approved by CEN on 5 February 2018.

This document supersedes A1 EN 1434-5:2015 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

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, *Thermal energy meters* consists of the following parts:

- *Part 1: General requirements*
- *Part 2: Constructional requirements*
- *Part 3: Data exchange and interfaces<sup>1)</sup>*
- *Part 4: Pattern approval tests*
- *Part 5: Initial verification tests*
- *Part 6: Installation, commissioning, operational monitoring and maintenance*

In comparison to EN 1434-5:2007, the following changes have been made:

- metrological requirements for smart metering applications are added;
- additional functionalities for smart metering applications are added;
- bath constructions are added;
- tests for cooling applications are added;
- single temperature sensor for smart metering are added;

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<sup>1)</sup> EN 1434-3 is maintained by CEN/TC 294.

**EN 1434-5:2015+A1:2019 (E)**

— test for bi-functional meters for change-over between heating and cooling are added.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies initial verification tests for  $\square A_1$  thermal energy meters  $\square A_1$ .  $\square A_1$  Thermal energy meters  $\square A_1$  are instruments intended for measuring the energy which in a heat-exchange circuit is absorbed (cooling) or given up (heating) by a liquid called the heat-conveying liquid. The  $\square A_1$  thermal energy meter  $\square A_1$  indicates the quantity of heat in legal units.

Electrical safety requirements are not covered by this European Standard.

Pressure safety requirements are not covered by this European Standard.

Surface mounted temperature sensors are not covered by this European Standard.

This standard covers meters for closed systems only, where the differential pressure over the thermal load is limited.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

$\square A_1$  EN 1434-1:2015+A1:2018, *Thermal energy meters — Part 1: General requirements*  $\square A_1$

$\square A_1$  EN 1434-4:2015+A1:2018, *Thermal Energy meters —Part 4: Pattern approval tests*  $\square A_1$

EN 60751, *Industrial platinum resistance thermometers and platinum temperature sensors (IEC 60751)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**