

SVENSK STANDARD

SS-EN 215:2019



Fastställt/Approved: 2019-09-23
Utgåva/Edition: 2
Språk/Language: engelska/English
ICS: 17.200.20;91.140.10;97.100.10

Termostatstyrda radiatorventiler – Fordringar och provningsmetoder

Thermostatic radiator valves – Requirements and test methods

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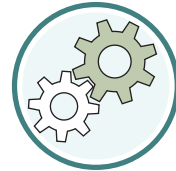
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Denna standard ersätter SS-EN 215:2004, utgåva 1 och SS-EN 215:2004/A1:2006, utgåva 1.

The European Standard EN 215:2019 has the status of a Swedish Standard. This document contains the official version of EN 215:2019.

This standard supersedes the SS-EN 215:2004, edition 1 and SS-EN 215:2004/A1:2006, edition 1.

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EUROPEAN STANDARD

EN 215

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2019

ICS 91.140.10

Supersedes EN 215:2004

English Version

Thermostatic radiator valves - Requirements and test methods

Robinets thermostatiques d'équipement du corps de chauffe - Exigences et méthodes d'essai

Thermostatische Heizkörperventile - Anforderungen und Prüfung

This European Standard was approved by CEN on 29 July 2019.

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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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 215:2019) has been prepared by Technical Committee CEN/TC 130 “Space heating appliances without integral heat sources”, the secretariat of which is held by UNI.

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 March 2020, and conflicting national standards shall be withdrawn at the latest by March 2020.

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This document supersedes EN 215:2004/A1:2006.

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1 Scope

This document specifies definitions, requirements and test methods for thermostatic radiator valves referred to hereafter as thermostatic valves.

This standard applies to two port thermostatic valves with or without pre-setting facility and thermostatic integrated valves with or without pre-setting facility for fitting to radiators in wet central heating installations up to a water temperature of 120 °C and a nominal pressure of PN 10.

This standard further specifies the dimensions, the materials and the connection details of four series of straight and angle pattern thermostatic radiator valves of nominal pressure \leq PN 10.

This standard can be used as reference in a CEN/CENELEC Certification Mark System on thermostatic radiator valves.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 1982, *Copper and copper alloys — Ingots and castings*

EN 12164, *Copper and copper alloys — Rod for free machining purposes*

EN 12168, *Copper and copper alloys — Hollow rod for free machining purposes*

EN 12420, *Copper and copper alloys — Forgings*

EN 12449, *Copper and copper alloys — Seamless, round tubes for general purposes*

EN ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation (ISO 228-1)*

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 965-1, *ISO general purpose metric screw threads — Tolerances — Part 1: Principles and basic data*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

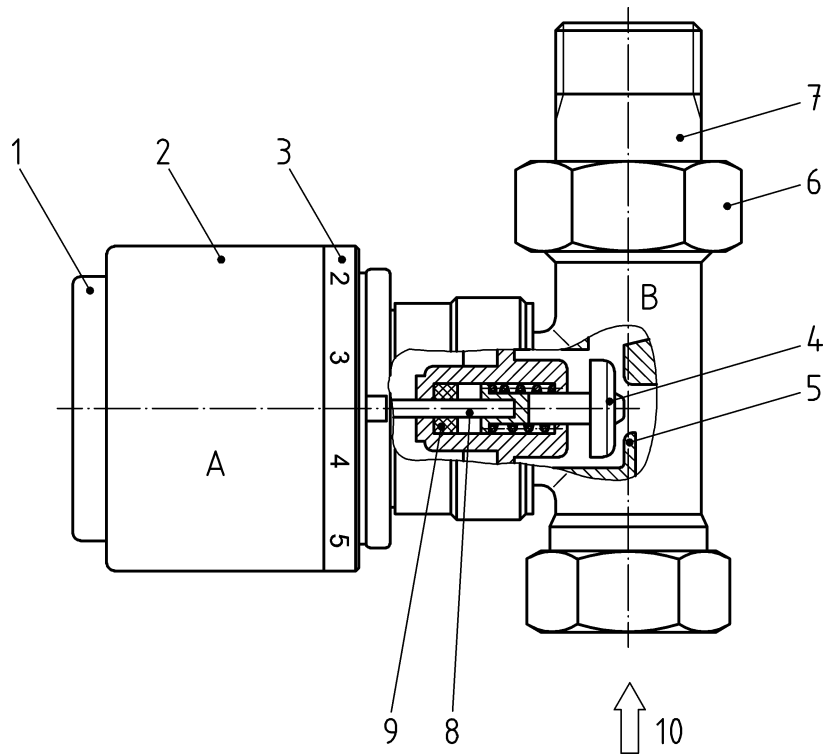
3.1

thermostatic valve to control the room temperature

thermostatic head assembly and thermostatic valve assembly or the thermostatic integrated valve assembly

Note 1 to entry: See Figure 1 for components of the thermostatic radiator valve.

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Key

A	thermostatic head assembly	5	valve seat
B	valve body assembly	6	union nut
1	sensor	7	tailpiece
2	temperature selector	8	valve stem
3	temperature selector scale	9	stem seal
4	valve disc	10	flow direction arrow

Figure 1 — Schematic drawing of the assembly of a thermostatic valve with integral sensor

3.1.1

sensor

part of the thermostatic valve to collect the temperature (controlled value)

Note 1 to entry: See Figure 2.

3.1.2

transmission unit

part of the thermostatic valve that converts a change of temperature or pressure of the sensor into a linear movement of the valve stem

Note 1 to entry: See Figure 2.

3.1.3

transmission element

part of the thermostatic valve (e. g. capillary) that transmits the volume or pressure changes from the sensor or temperature selector to the transmission unit

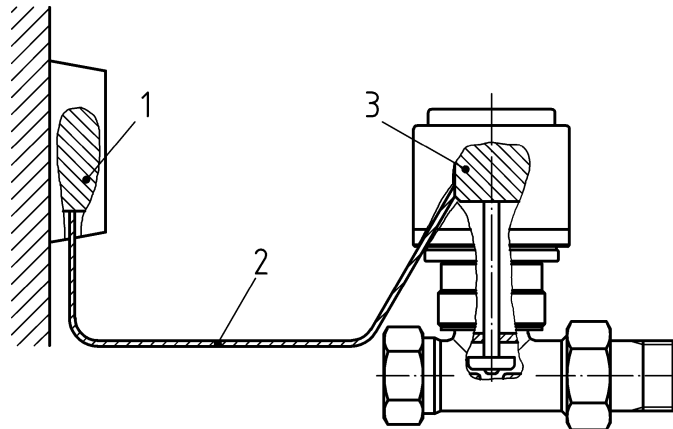
Note 1 to entry: See Figure 2.

3.1.4

thermostatic element

section containing all parts that are filled with the expansion medium

EXAMPLE Sensor, transmission element and transmission unit, shown as cross hatched parts in Figure 2.



Key

- 1 sensor
- 2 transmission element
- 3 transmission unit

Figure 2 — Thermostatic element

3.1.5

protection cap

device that protects the valve stem and thread before the initial fitting of the thermostatic head assembly

3.2

types of thermostatic head assembly

3.2.1

thermostatic valve with integral sensor

valve where the sensor, transmission unit and temperature selector constitute an assembly which is incorporated with the valve body assembly

Note 1 to entry: See Figure 3.

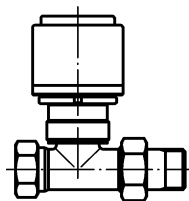


Figure 3 — Thermostatic valve with integral sensor