SLOVENSKI PREDSTANDARD

SIST EN 215:2004/oprA1:2005

september 2005

Termostatni ventili za ogrevala - Zahteve in preskusne metode - Dopolnilo A1

Thermostatic radiator valves - Requirements and test methods - Amendment A1

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

FINAL DRAFT EN 215:2004

prA1

July 2005

ICS 91.140.10

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 draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/SS H07.

This draft amendment A1, if approved, will modify the European Standard EN 215:2004. 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

| Contents | Page |
|--|------|
| Foreword | 3 |
| Contents | |
| Foreword | |
| Clause 1 Scope | |
| Subclause 3.1.5 Protection cap | |
| Subclause 3.2 Types of thermostatic valves (see Figure 3) | |
| Subclause 3.2.5 Thermostatic valve with pre-setting | 4 |
| Subclause 3.3 Types of connections | 5 |
| Subclause 3.4.4, subclauses 3.5.3 – 3.5.6 Inclusive | |
| Subclause 5.1 DimensionsSubclause 5.3.4 Change of the flow rate by means of the protection cap | |
| Subclause 5.3.5 Sensor temperature at the minimum and maximum setting of the temperature | |
| selector | |
| Subclause 5.3.6 Hysteresis at the nominal flow rate | |
| Subclause 5.3.7 Differential pressure influence | 7 |
| Subclause 5.3.8 Influence of the static pressure | 7 |
| Subclause 5.3.9 Temperature difference between temperature point S and the closing and | _ |
| opening temperature respectively | 7 |
| Subclause 5.3.10 Influence of ambient temperature on thermostatic valves with transmission elements | 7 |
| Subclause 5.3.11 Water temperature effect | 7 |
| Subclause 5.3.12 Response time | |
| • | |
| Clause 6 Test apparatus and methodsSubclause 6.1.2 Apparatus for testing the thermostatic valve in the water bath | |
| Subclause 6.1.2 Apparatus for testing the thermostatic valve in the water bath Subclause 6.1.3 Apparatus for testing the thermostatic valve in the air stream | |
| Subclause 6.2.1 Determination of the characteristic curves | |
| Subclause 6.2.2 Plotting of the theoretical curve | |
| Subclause 6.3.1 Resistance to pressure, leak-tightness of the valve body assembly | |
| Subclause 6.3.2 Leak-tightness of the valve closed mechanically by means of the protection cap. | |
| Subclause 6.3.3 Leak-tightness of the stem seal | |
| Subclause 6.3.4 Resistance of the valve body assembly to a bending moment | |
| Subclause 6.3.5 Resistance of the temperature selector to a torquemoment Subclause 6.3.6 Resistance of the temperature selector to a bending moment | |
| Subclause 6.4.1.1 Nominal flow rate and flow rate at S-1 K | |
| Subclause 6.4.1.2 Characteristic flow rate for thermostatic valves with pre-setting | |
| Subclause 6.4.1.3 – Subclause 6.4.1.5 inclusive | |
| Subclause 6.4.1.6 Change of the flow rate by means of the protection cap | |
| Subclause 6.4.1.7 – subclause 6.4.1.9 inclusive | |
| Subclause 6.4.1.10 | |
| Subclause 6.4.1.11 | |
| Subclause 6.4.1.12 Water temperature influence | |
| Subclause 6.4.1.13 Response time | |
| Subclause 6.5 Test schedule | |
| | 12 |
| Clause 7. Technical information to be published by the manufacturer in the manufacturer's instruction for installation and operation | 42 |
| Instruction for installation and operation | |
| A.6 Marking (This marking does not cover possible certification marking) | |
| | |
| Annex B | |
| Annex C (informative) Test block for thermostatic integrated valves | 14 |

Foreword

This European Standard (EN 215:2004/prA1:2005) has been prepared by CMC.

This European Standard is currently submitted to the Unique Acceptance Procedure.

EN 215:2004/prA1:2005 (E)

Introduce the following modifications in text of EN 215:2004:

Contents

Replace the text of Clause 7 with the following text:

Technical information to be published by the manufacturer

After Annex B add new Annex:

Annex C (informative) Test block for thermostatic integrated valves

Foreword

Replace the 10th paragraph with the following wording:

Annex A is normative; Annexes B and C are informative.

Clause 1 Scope

Replace 2nd paragraph with the following wording:

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.

Subclause 3.1.5 Protection cap

Delete the text of the final sentence

Subclause 3.2 Types of thermostatic valves (see Figure 3)

Amend the subclause title to read:

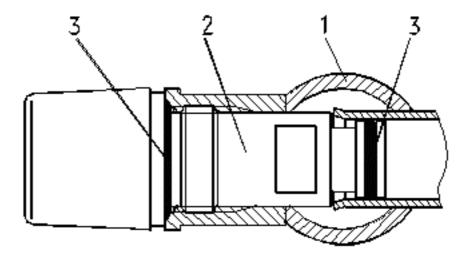
Types of thermostatic head assembly (see Figure 3)

Subclause 3.2.5 Thermostatic valve with pre-setting

After subclause 3.2.5 add new subclause 3.2.6 and new Figure 4:

3.2.6

type of thermostatic integrated valve



Embedded valve including valve seat

Key

- 1 Garniture
- 2 Integrated valve assembly
- 3 Packing seal

Figure 4 - Example of valve integrated in a radiator

Subclause 3.3 Types of connections

Renumber text Figure 4 to Figure 5 in 1st line

Replace Figure 4 with following new Figure 5:

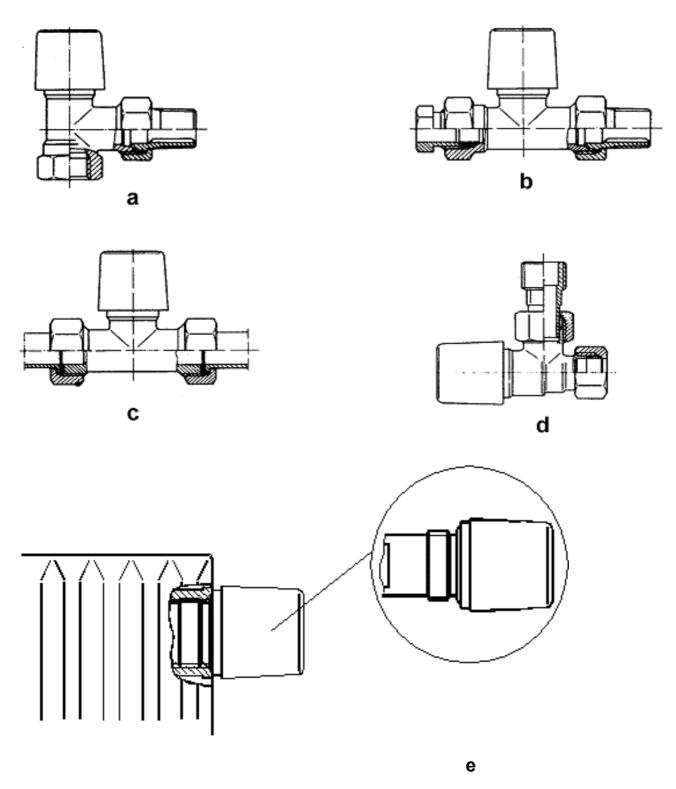


Figure 5a - Internal pipe thread and cone seated union. Figure 5b - Compression fitting and cone seated union

Figure 5c - Washered union connections

Figure 5d - Compression fittings Figure 5e - Integrated valve

Figure 5 - Types of radiator valve connections

Subclause 3.4.4, subclauses 3.5.3 - 3.5.6 Inclusive

Renumber text Figure 5 to Figure 6

Subclause 5.1 Dimensions

Replace the paragraph with the following wording:

Dimensions and connection details for some types of radiator valves are given in Annex A.

Subclause 5.3.4 Change of the flow rate by means of the protection cap

Delete the entire subclause

Subclause 5.3.5 Sensor temperature at the minimum and maximum setting of the temperature selector

Renumber subclause to 5.3.4

Subclause 5.3.6 Hysteresis at the nominal flow rate

Renumber subclause to 5.3.5 and replace with following wording:

The hysteresis determined according to 6.4.1.6 shall not be greater than 1 K and not exceed the value declared by the manufacturer by more than 0,2 K.

Subclause 5.3.7 Differential pressure influence

Renumber subclause to 5.3.6 and replace with following wording:

The differential pressure influence determined according to 6.4.1.7 shall not be greater than 1 K and not exceed the value declared by the manufacturer by more than 0,3 K.

Subclause 5.3.8 Influence of the static pressure

Renumber subclause to 5.3.7 and replace with following wording:

The influence of the static pressure determined according to 6.4.1.8 shall not be greater than 1 K.

Subclause 5.3.9 Temperature difference between temperature point S and the closing and opening temperature respectively

Renumber subclause to 5.3.8 and replace with following wording:

The temperature difference between temperature point S and the closing and opening temperature respectively determined according to 6.4.1.9 shall not be greater than 0.8 K.

Subclause 5.3.10 Influence of ambient temperature on thermostatic valves with transmission elements

Renumber subclause to 5.3.9 and replace with following wording:

The influence of the ambient temperature determined according to 6.4.1.10 shall not be greater than 1,5 K.

Subclause 5.3.11 Water temperature effect

Renumber subclause to 5.3.10 and replace with following wording: