Gaasiseadmete mehaanilised termostaadid

Mechanical thermostats for gas-burning appliances



FESTI STANDARDI FESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 257:2010 sisaldab Euroopa standardi EN 257:2010 ingliskeelset teksti.

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EUROPEAN STANDARD

EN 257

NORME EUROPÉENNE EUROPÄISCHE NORM

June 2010

ICS 27.060.20

Supersedes EN 257:1992

English Version

Mechanical thermostats for gas-burning appliances

Thermostats mécaniques pour appareils à gaz

Mechanische Temperaturregler für Gasgeräte

This European Standard was approved by CEN on 19 May 2010.

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

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Foreword

This document (EN 257:2010) has been prepared by Technical Committee CEN/TC 58 "Safety and control devices for burners and appliances burning gaseous or liquid fuels", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by December 2010, and conflicting national standards shall be withdrawn at the latest by December 2010.

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

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.

This document supersedes EN 257:1992.

This European Standard is intended to be used in conjunction with EN 13611:2007. This document refers to clauses of EN 13611:2007 or adapts clauses by stating "with the following modification", "with the following addition", "is replaced by the following" or "is not applicable" in the corresponding clause. This European Standard adds clauses or sub clauses to the structure of EN 13611:2007 which are particular to this European Standard. It should be noted that these clauses and sub-clauses are not indicated as an addition.

It should be noted that the following significant technical changes compared to the previous edition have been incorporated in this European Standard:

- a) scope is enlarged to maximum inlet pressures up to and including 50 kPa (500 mbar);
- b) alignment with EN 13611:2007;
- c) updating of Clause 2, normative references;
- d) units of measurement and test conditions are updated according to EN 13611:2007;
- e) requirements and tests concerning durability of elastomers in contact with gas (7.8 of this European Standard) are now totally aligned with EN 13611:2007, 7.8;
- f) marking, installation and operating instructions (Clause 9 of this European Standard) are extended to cover additional information.

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

1 Scope

This European Standard specifies the safety, construction and performance requirements for mechanical thermostats intended for use with gas appliances and similar use, hereafter referred to as 'thermostats'.

This European Standard applies to thermostats with declared maximum inlet pressures up to and including 50 kPa (500 mbar) of nominal connection sizes up to and including DN 50 for use with one or more fuel gases in accordance with EN 437.

This European Standard applies to thermostats controlling the gas flow directly or indirectly through an integral gas valve, and which do not require external electrical energy for their operation.

This European Standard only applies to thermostats used with gas appliances which are not installed in the open air.

Thermostats dealt with in this European Standard are intended for control functions.

2 Normative references

The following referenced documents are indispensable for the application 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 13611:2007, Safety and control devices for gas burners and gas-burning appliances — General requirements

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13611:2007 and the following apply.

3.101

mechanical thermostat

thermostat which controls the temperature by adjusting the flow rate accordingly to the temperature of the sensor without any external energy, such that the temperature remains within defined limits

3.102

adjustable thermostat

mechanical thermostat in which the temperature set-point can be adjusted by the user to anywhere between minimum and maximum values

3.103

fixed setting thermostat

mechanical thermostat that has a preset fixed operating temperature which cannot be adjusted by the user

3.104

snap-acting thermostat

mechanical thermostat with only two positions for the flow rate, i.e. 'full on-off', 'full on-reduced rate' or 'reduced rate-off'

3.105

modulating thermostat

mechanical thermostat which controls the flow rate in accordance with a predetermined and continuous function of the temperature of the temperature sensor