
Kotli za gretje - 6. del: Kotli z ventilatorskimi gorilniki - Posebne zahteve za delovanje in energijske lastnosti grelnikov sanitarne vode in kombiniranih kotlov z razprševalnimi oljnimi gorilniki z nazivno močjo do vključno 70 kW - Dopnilo A1

Heating boilers - Part 6: Heating boilers with forced draught burners - Specific requirements for the domestic hot water operation and energy performance of water heaters and combination boilers with atomizing oil burners of nominal heat input not exceeding 70 kW

Heizkessel - Teil 6: Heizkessel mit Gebläsebrennern - Spezielle Anforderungen an die trinkwasserseitige Funktion und energetische Bewertung von Wassererwärmern und von Kombi-Kesseln mit Ölzerstäubungsbrennern mit einer Nennwärmeleistung kleiner als oder gleich 70 kW

Chaudières de chauffage - Partie 6 : Chaudières avec brûleurs à air soufflé - Exigences spécifiques à la fonction eau chaude sanitaire et à la performance énergétique des préparateurs d'eau chaude et des chaudières à deux services avec brûleurs fioul à pu

Ta slovenski standard je istoveten z: EN 303-6:2019/prA1

ICS:

27.060.30	Grelniki vode in prenosniki toplote	Boilers and heat exchangers
91.140.65	Oprema za ogrevanje vode	Water heating equipment

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ICS

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Heating boilers - Part 6: Heating boilers with forced draught burners - Specific requirements for the domestic hot water operation and energy performance of water heaters and combination boilers with atomizing oil burners of nominal heat input not exceeding 70 kW

Chaudières de chauffage - Partie 6 : Chaudières avec brûleurs à air soufflé - Exigences spécifiques à la fonction eau chaude sanitaire et à la performance énergétique des préparateurs d'eau chaude et des chaudières à deux services avec brûleurs fioul à pu

Heizkessel - Teil 6: Heizkessel mit Gebläsebrennern - Spezielle Anforderungen an die trinkwasserseitige Funktion und energetische Bewertung von Wassererwärmern und von Kombi-Kesseln mit Ölzerstäubungsbrennern mit einer Nennwärmeleistung kleiner als oder gleich 70 kW

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 57.

This draft amendment A1, if approved, will modify the European Standard EN 303-6:2019. 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.

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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 303-6:2019/prA1:2022) has been prepared by Technical Committee CEN/TC 57 “Central heating boilers”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, ZB, ZC and ZD, which is an integral part of EN 303-6:2019.

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EN 303-6:2019/prA1:2022 (E)**1 Modification in Clause 6**

In 6.3.2.2.3, after the 2nd indent paragraph

Replace the paragraph and Formula (1) by the following:

It is assumed that the mean water temperature (T_0) of the tank at moment t_1 is equal to the arithmetic mean of the inlet and outlet temperatures at that moment:

$$T_0 = \frac{T_e + T_s}{2} \quad (1)$$

The preliminary conditions are met if this temperature T_0 is equal to $(65 \pm 2) ^\circ\text{C}$.

In 6.3.2.2.3, after Formula (5)

Replace the key with the following

- q_{a45} are the losses of the tank for a temperature rise of 45 K, in kilowatts (kW);
- $t_2 - t_1$ is the period of cooling, in hours (h);
- T_0 is the mean water temperature of the tank at moment t_1 , in degrees Celsius ($^\circ\text{C}$);
- T_{fc} is the corrected mean water temperature of the tank at moment t_2 , in degrees Celsius ($^\circ\text{C}$);
- T_{amb} is the mean ambient temperature during cooling, in degrees Celsius ($^\circ\text{C}$);
- V is the water capacity of the tank (including the water in any integral heat exchanger), in litres (l).
This value is declared by the manufacturer and checked from the drawings.

2 Modification in Clause 8

In 8.5, after Formula (16)

Replace the key with the following

- $Q_{elec,cor}$ is the corrected total electrical energy, in kWh;
- $Q_{elec,m}$ is the measured total electrical energy, in kWh;
- D_{H2O} is the measured energy delivered to the water according to 5.3, in kWh;
- D_{ref} is the total delivered energy of used tapping cycle, value from Tables 1, 2, 3, 4, 5, 6 and, in kWh.

In 8.6.3 after Formula (18)

Replace the key with the following

- $Q_{elec,cor,stby}$ is the daily consumption of auxiliary energy in standby mode, in kWh;
- $Q_{elec,m}$ is the auxiliary energy measured during the test in standby mode, in kWh;
- t_a is the duration of the test in hour ($t_a = 1$ h for the appliances without control cycle).

8.7, after Formula (19)

Replace the key with the following

- $Q_{elec,cor,off}$ is the daily consumption of auxiliary energy in off mode, in kWh;
- $Q_{elec,m,off}$ is the auxiliary energy measured during the test in off mode, in kWh.

3 Modification in Clause 10

Replace the title of Clause 10 and replace the first 5 paragraphs until first indent by the following:

10 Water heater parameters

10.1 Water heating energy efficiency

The water heating energy efficiency (η_{wh}), in %, expressed on GCV is calculated by:

— for appliances without smart control:

$$\eta_{wh} = \frac{Q_{ref}}{(Q_{fuel} + CC \cdot Q_{elec,cor})} \cdot 100 \quad (23)$$

— for appliances with smart control:

$$\eta_{wh} = \frac{Q_{ref}}{(Q_{fuel} + CC \cdot Q_{elec,cor}) \cdot (1 - SCF \cdot smart) + Q_{cor}} \cdot 100 \quad (24)$$

After Formula (24), replace the key with the following

Q_{ref} is the theoretical water energy delivered by the tapping cycle used, value from Tables 1, 2, 3, 4, 5, 6 and 7, in kWh;

CC is the Conversion coefficient from electricity to fossil fuel = 2,5;

NOTE CC is a coefficient reflecting the estimated average EU generation efficiency referred to in Directive 2006/32/EC of the European Parliament and of the Council 16.

$Q_{elec,cor}$ is the consumption of electricity for water heating over 24 consecutive hours under the declared load profile, expressed in kWh, in terms of final energy; measured according to 8.5

Q_{fuel} is the daily fuel consumption for domestic hot water over 24 consecutive hours under the declared load profile, expressed in kWh, in terms of GCV; measured according to 8.4.1

4 Modification in annexes

Replace Annexes ZA to ZD by the following:

Annex ZA (informative)

Relationship between this European Standard and the ecodesign requirements of Commission Regulation (EU) No 814/2013 [OJ L 239, 6.9.2013] aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/534/C(2015) 2625 final to provide one voluntary means of conforming to the ecodesign requirements of Commission Regulation (EU) No 814/2013 of 2nd August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks [OJ L 239, 6.9.2013].

Once this standard is cited in the Official Journal of the European Union under that Regulation, 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 ecodesign requirements of that Regulation and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Commission Regulation (EC) No 814/2013 2nd August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks [OJ L 239, 6.9.2013] and Commission's standardization request M/534/C(2015) 2625 final

Ecodesign Requirements of Regulation (EU) No 814/2013	Clause(s)/subclause(s) of this EN	Remarks/Notes
Annex II, 1.1 water heating energy efficiency	10.1	

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the products falling within the scope of this standard.

Annex ZB (informative)

Relationship between this European Standard and the energy labelling requirements of Commission Regulation (EU) No 812/2013 [OJ L 239, 6.9.2013] aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/534/C(2015) 2625 final to provide one voluntary means of conforming to the energy labelling requirements of Commission Regulation (EU) No 812/2013 of 18th February 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to energy labelling of water heaters, hot water storage tanks and packages of water heater and solar device [OJ L 239, 6.9.2013]

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

Table ZB.1 — Correspondence between this European Standard and Commission Regulation (EU) No 812/2013 18th February 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to energy labelling of water heaters, hot water storage tanks and packages of water heater and solar device [OJ L 239, 6.9.2013] and Commission's standardization request M/534/C(2015) 2625 final

Ecodesign Requirements of Regulation (EU) No 812/2013	Clause(s)/subclause(s) of this EN	Remarks/Notes
Annex III, point 1.1.1 and Annex VIII, 2 Annual Fuel Consumption (AFC)	10.2	
Annex III, point 1.1.1 and Annex VIII, 2 Annual Electricity Consumption (AEC)	10.3	

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Annex ZC (informative)

Relationship between this European Standard and the ecodesign requirements of Commission Regulation (EU) No 813/2013 [OJ L 239, 6.9.2013] aimed to be covered

This European Standard has been prepared under a Commission's standardization request M/535/C(2015) 2626 final to provide one voluntary means of conforming to the ecodesign requirements of Commission Regulation (EU) No 813/2013 of 2nd August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters [OJ L 239, 6.9.2013].

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

Table ZC.1 — Correspondence between this European Standard and Commission Regulation (EU) No 813/2013 2nd August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters [OJ L 239, 6.9.2013] and Commission's standardization request M/535/C(2015) 2626 final

Ecodesign Requirements of Regulation (EU) No 813/2013	Clause(s)/subclause(s) of this EN	Remarks/Notes
Annex II, 2 water heating energy efficiency	10.1	

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